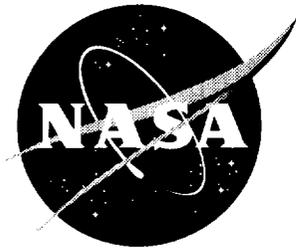


NASA Contractor Report 201731, Vol. II



# Survey Summary of AGATE Concepts Demonstration at Annual NATA Convention March 24-26, 1997

*Volume II - Original Survey Data*

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Research Triangle Park, North Carolina*

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December 1997

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## **Abstract**

An AGATE Concepts Demonstration was conducted at the Annual National Air Transportation Association (NATA) Convention in 1997. Following a 5-minute introductory briefing, an interactive simulation of a single-pilot, single-engine aircraft was conducted. The participant was able to take off, fly a brief enroute segment, fly a Global Positioning System (GPS) approach and landing, and repeat the approach and landing segment. The participant was provided an advanced “highway-in-the-sky” presentation on both a simulated head-up display and on a large LCD head-down display to follow throughout the flight. A single-lever power control and display concept was also provided for control of the engine throughout the flight. A second head-down, multifunction display in the instrument panel provided a moving map display for navigation purposes and monitoring of the status of the aircraft’s systems.

An estimated 100 people observed or participated in the demonstration and 68 surveys were collected. The pilot ratings of the participants ranged from student to Air Transport Rating with an average of 6089 hours total flight time. The performance of the participants was surprisingly good considering the minimal training in a completely new system concept. The overwhelming response was that technologies that simplify piloting tasks are enthusiastically welcomed by pilots of all experience levels. The increase in situation awareness and use of the head-up display were universally accepted and lauded as steps in the right direction.



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## **APPENDIX D**

### **AGATE Concepts Demonstration Original Data**



# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |   |  |   |
|---|--|---|
| <p>1. Where do you live?<br/>(State's Initials) <u>ZH</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>0</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>0</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>0</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>0</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input checked="" type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input type="checkbox"/> "Flew" demonstrator<br/>2 <input checked="" type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input checked="" type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input type="checkbox"/> Do not use any<br/>2 <input checked="" type="checkbox"/> Flight-display simulation<br/>3 <input checked="" type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|--|---|

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20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

- \_\_\_ Normal operating procedures
- \_\_\_ Abnormal operating Proceed.
- \_\_\_ Emergency procedures
- \_\_\_ Missed approach procedures
- \_\_\_ Flt. maneuvers (e.g., stalls, etc)
- \_\_\_ Decision making & problem solving

\_\_\_ Communications

\_\_\_ Navigation

\_\_\_ Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

\_\_\_ Desktop computer-based training aids for pilots and technician training

\_\_\_ Use of AGATE airplane cockpit as ground flight simulator

\_\_\_ Performance-based certification, instead of set flight time requirements

\_\_\_ Computer record keeping for pilot training and certification

\_\_\_ Flight and control system design to simplify pilot tasks and training

\_\_\_ Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

**"Thank you for your important insights."**

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |  |   |  |
|--|---|--|
| <p>1. Where do you live?<br/>(State's Initials) _____</p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input checked="" type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>0</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>1200</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? _____</p> | <p>11. How many hours do you fly on your aircraft per year? <u>0</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|--|---|--|

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20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training
21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective
22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower
23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_
24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- 5 Normal operating procedures
  - 3 Abnormal operating Proceed.
  - 3 Emergency procedures
  - 4 Missed approach procedures
  - 4 Flt. maneuvers (e.g., stalls, etc)
  - 5 Decision making & problem solving
25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- 5 Communications
  - 5 Navigation
  - \_\_\_ Other: \_\_\_\_\_
  - 5 Desktop computer-based training aids for pilots and technician training
  - 5 Use of AGATE airplane cockpit as ground flight simulator
  - 5 Performance-based certification, instead of set flight time requirements
  - 5 Computer record keeping for pilot training and certification
  - 5 Flight and control system design to simplify pilot tasks and training
  - 5 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same. CAN CONCENTRATE ON MOST CRITICAL PROBLEMS FIRST
27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why? VISUAL REPRESENTATION OF DESIRED FLIGHT PATH, STANDARDIZATION OF TECHNIQUE
28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why? OVER RELIANCE ON TECHNOLOGY VS FLYING SKILLS

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |  |  |  |
|--|--|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>AK</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input checked="" type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>50</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>460</u></p> <p>6. Are you a flight instructor now?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input checked="" type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input checked="" type="checkbox"/> Private Pilot<br/>2 <input checked="" type="checkbox"/> Commercial Pilot<br/>3 <input checked="" type="checkbox"/> Instrument Rating<br/>4 <input checked="" type="checkbox"/> ATP<br/>5 <input checked="" type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>11</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>3600</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input checked="" type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input checked="" type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input checked="" type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
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20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

- Normal operating procedures
- Abnormal operating Proceed.
- Emergency procedures
- Missed approach procedures
- Flt. maneuvers (e.g., stalls, etc)
- Decision making & problem solving

Communications

Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

- Desktop computer-based training aids for pilots and technician training
- Use of AGATE airplane cockpit as ground flight simulator
- Performance-based certification, instead of set flight time requirements
- Computer record keeping for pilot training and certification
- Flight and control system design to simplify pilot tasks and training
- Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

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NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |  |   |  |
|--|---|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>CA</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input checked="" type="checkbox"/> ATP <u>Not a pilot</u></p> <p>3. Do you have an instrument rating?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? _____</p> <p>5. Enter your total pilot flying hours in GA airplanes? _____</p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? _____</p> | <p>11. How many hours do you fly on your aircraft per year? _____</p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the main type of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input checked="" type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input checked="" type="checkbox"/> Other: <u>None</u></p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input type="checkbox"/> "Flew" demonstrator<br/>2 <input checked="" type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|--|---|--|

4

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training
21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective
22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- Normal operating procedures
  - Abnormal operating Proceed.
  - Emergency procedures
  - Missed approach procedures
  - Flt. maneuvers (e.g., stalls, etc)
  - Decision making & problem solving

- Communications
- Navigation
- Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,
- Desktop computer-based training aids for pilots and technician training
  - Use of AGATE airplane cockpit as ground flight simulator
  - Performance-based certification, instead of set flight time requirements
  - Computer record keeping for pilot training and certification
  - Flight and control system design to simplify pilot tasks and training
  - Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

*increase, head-up display allows pilot to look up, rather than slow at instruments*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

"Thank you for your important insights."

3/26/97

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- Where do you live?  
(State's Initials) CA
- What is your highest flight rating?  
1  Student  
2  Private Pilot  
3  Commercial Pilot  
4  ATP
- Do you have an instrument rating?  
1  Yes  
2  No
- How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? 0
- Enter your total pilot flying hours in GA airplanes? 5,000
- Are you a flight instructor now?  
1  Yes  
2  No
- Do you own or manage an FBO?  
1  Yes  
2  No
- If you own or manage a flight school, check type:  
1  Part 61 N/A  
2  Part 141
- Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)  
1  Private Pilot  
2  Commercial Pilot  
3  Instrument Rating  
4  ATP N/A  
5  CFI
- How many general aviation airplanes does your business have? 0

- How many hours do you fly on your aircraft per year? 0
- What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?  
1  no change  
2  10% increase  
3  25% increase ✓  
4  50% increase  
5  100% or more increase
- What is the main type of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business  
1  Single Piston Engine  
2  Twin Piston Engine  
3  Single Engine Turboprop  
4  Twin Turboprop  
5  Jet  
6  Helicopters  
7  Other \_\_\_\_\_
- If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)  
1  Aircraft R&D, Manufact.  
2  Airplane sales  
3  Aircraft components  
4  Aircraft services  
5  Pilot flight training  
6  Training other than pilots  
7  Aviation training aids  
8  Commuter, charter, Medevac or air taxi  
9  Insurance  
10  Aircraft renting or leasing  
11  Other: GOVERNMENT

- How did you take part in the AGATE concept demonstration?  
1  "Flew" demonstrator  
2  Observed
- Will the display concepts demonstrated change a pilot's situation awareness?  
1  Greatly increase it  
2  Somewhat increase it  
3  No change  
4  Somewhat reduce it  
5  Greatly reduce it
- What is the value of the "Heads-Up" display concept compared to current GA displays?  
1  Greatly increased value  
2  Somewhat higher value  
3  No change  
4  Somewhat less value  
5  Far less value
- How do you think the graphic "Highway in the Sky" would affect pilot tasks?  
1  Far easier  
2  Somewhat easier  
3  No change  
4  Somewhat more difficult  
5  Far more difficult
- What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)  
1  Do not use any  
2  Flight-display simulation  
3  Integrated display & flight control simulations  
4  Various other individual piloting & A/C systems

45

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

4 Normal operating procedures

4 Abnormal operating Proceed.

4 Emergency procedures

4 Missed approach procedures

3 Fit. maneuvers (e.g., stalls, etc)

4 Decision making & problem solving

3 Communications

3 Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

5 ~~4~~ Desktop computer-based training aids for pilots and technician training

4 Use of AGATE airplane cockpit as ground flight simulator

4 ~~5~~ Performance-based certification, instead of set flight time requirements

4 Computer record keeping for pilot training and certification

5 Flight and control system design to simplify pilot tasks and training

5 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same. *"CAN" HELP PILOTS "VISUALIZE" SITUATION, CAN ASSIST IN TEACHING POSITIONAL AWARENESS.*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why? *HIGHWAY IN THE SKY CONCEPT, HEADS-UP DISPLAY, WORKLOAD REDUCTION.*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

?

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

• Please provide only one answer (the most important one) to each question, unless requested otherwise.

• Leave a question blank if it does not apply or if you do not know the answer.

- |   |  |  |
|---|--|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>GA</u></p> <p>2. What is your highest flight rating?<br/>1 <input checked="" type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>70</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>70</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? _____</p> | <p>11. How many hours do you fly on your aircraft per year? <u>70</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input checked="" type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input type="checkbox"/> Greatly increase it<br/>2 <input checked="" type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input type="checkbox"/> Do not use any<br/>2 <input checked="" type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|--|--|

# 6

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

4 Normal operating procedures

5 Abnormal operating Proceed.

5 Emergency procedures

4 Missed approach procedures

3 Fit. maneuvers (e.g., stalls, etc)

3 Decision making & problem solving

2 Communications

4 Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

3 Desktop computer-based training aids for pilots and technician training

3 Use of AGATE airplane cockpit as ground flight simulator

3 Performance-based certification, instead of set flight time requirements

3 Computer record keeping for pilot training and certification

3 Flight and control system design to simplify pilot tasks and training

4 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same. *WOULD INCREASE DUE TO INFORMATION BEING AVAILABLE IN MANNER THAT IS LOGICAL AND EASILY ACCESSIBLE.*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why? *THE DISPLAY OF VITAL INFORMATION.*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why? *THE ~~OR~~ ABSENCE OF FLARELS ETC. AUTO POWER SETTINGS. PILOT'S WILL LOOSE OR NOT GAIN VALUABLE FLIGHT TECHNIQUES.*

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |  |  |  |
|--|--|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>CO</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input checked="" type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>300</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>500</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>250</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>30-40</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input checked="" type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input checked="" type="checkbox"/> Twin Turboprop<br/>5 <input checked="" type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input checked="" type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input checked="" type="checkbox"/> Other: <u>Pro Mn</u></p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input type="checkbox"/> Greatly increase it<br/>2 <input checked="" type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input type="checkbox"/> Far easier<br/>2 <input checked="" type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|--|--|--|

#7

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

4 Normal operating procedures

3 Abnormal operating Proceed.

4 Emergency procedures

5 Missed approach procedures

4 Fit. maneuvers (e.g., stalls, etc)

4 Decision making & problem solving

4 Communications

5 Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

3 Desktop computer-based training aids for pilots and technician training

4 Use of AGATE airplane cockpit as ground flight simulator

4 Performance-based certification, instead of set flight time requirements

5 Computer record keeping for pilot training and certification

5 Flight and control system design to simplify pilot tasks and training

4 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

*IT would increase for low time pilots and remain the same for high time pilot*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

*Integrated Controls & Single Lever Control - Simpler - Tell you when you should be*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

*None - Very good.*

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

• Please provide only one answer (the most important one) to each question, unless requested otherwise.

• Leave a question blank if it does not apply or if you do not know the answer.

- |  |   |  |
|--|---|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>CT</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input checked="" type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>360</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>14,400</u></p> <p>6. Are you a flight instructor now?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input checked="" type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input checked="" type="checkbox"/> Private Pilot<br/>2 <input checked="" type="checkbox"/> Commercial Pilot<br/>3 <input checked="" type="checkbox"/> Instrument Rating<br/>4 <input checked="" type="checkbox"/> ATP<br/>5 <input checked="" type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>28</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>4000</u><br/><i>each a/c</i></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input checked="" type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input checked="" type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input checked="" type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input type="checkbox"/> Greatly increase it<br/>2 <input checked="" type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input type="checkbox"/> Far easier<br/>2 <input checked="" type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input checked="" type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|--|---|--|

F\*8

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- \_\_\_ Normal operating procedures
  - \_\_\_ Abnormal operating Proceed.
  - \_\_\_ Emergency procedures
  - \_\_\_ Missed approach procedures
  - \_\_\_ Flt. maneuvers (e.g., stalls, etc)
  - \_\_\_ Decision making & problem solving

- \_\_\_ Communications
- \_\_\_ Navigation
- \_\_\_ Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

- \_\_\_ Desktop computer-based training aids for pilots and technician training
- \_\_\_ Use of AGATE airplane cockpit as ground flight simulator
- \_\_\_ Performance-based certification, instead of set flight time requirements
- \_\_\_ Computer record keeping for pilot training and certification
- \_\_\_ Flight and control system design to simplify pilot tasks and training
- \_\_\_ Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

**"Thank you for your important insights."**

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

<p>1. Where do you live? (State's Initials) <u>FL</u></p> <p>2. What is your highest flight rating?          1 <input type="checkbox"/> Student          2 <input type="checkbox"/> Private Pilot          3 <input type="checkbox"/> Commercial Pilot <i>NOT A. PILOT</i>          4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?          1 <input type="checkbox"/> Yes          2 <input checked="" type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>NONE</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>18</u></p> <p>6. Are you a flight instructor now?          1 <input type="checkbox"/> Yes          2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?          1 <input checked="" type="checkbox"/> Yes          2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:          1 <input type="checkbox"/> Part 61          2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)          1 <input type="checkbox"/> Private Pilot          2 <input type="checkbox"/> Commercial Pilot          3 <input type="checkbox"/> Instrument Rating          4 <input type="checkbox"/> ATP          5 <input type="checkbox"/> CFI <i>N/A</i></p> <p>10. How many general aviation airplanes does your business have? <u>1</u></p>	<p>11. How many hours do you fly on your aircraft per year? <u>0</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?          1 <input type="checkbox"/> no change          2 <input type="checkbox"/> 10% increase          3 <input type="checkbox"/> 25% increase          4 <input checked="" type="checkbox"/> 50% increase          5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business          1 <input type="checkbox"/> Single Piston Engine          2 <input checked="" type="checkbox"/> Twin Piston Engine          3 <input type="checkbox"/> Single Engine Turboprop          4 <input checked="" type="checkbox"/> Twin Turboprop          5 <input type="checkbox"/> Jet          6 <input type="checkbox"/> Helicopters          7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)          1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.          2 <input type="checkbox"/> Airplane sales          3 <input type="checkbox"/> Aircraft components          4 <input checked="" type="checkbox"/> Aircraft services          5 <input type="checkbox"/> Pilot flight training          6 <input type="checkbox"/> Training other than pilots          7 <input type="checkbox"/> Aviation training aids          8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi          9 <input type="checkbox"/> Insurance          10 <input type="checkbox"/> Aircraft renting or leasing          11 <input type="checkbox"/> Other: _____</p>	<p>15. How did you take part in the AGATE concept demonstration?          1 <input checked="" type="checkbox"/> "Flew" demonstrator          2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?          1 <input checked="" type="checkbox"/> Greatly increase it          2 <input type="checkbox"/> Somewhat increase it          3 <input type="checkbox"/> No change          4 <input type="checkbox"/> Somewhat reduce it          5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?          1 <input checked="" type="checkbox"/> Greatly increased value          2 <input type="checkbox"/> Somewhat higher value          3 <input type="checkbox"/> No change          4 <input type="checkbox"/> Somewhat less value          5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?          1 <input checked="" type="checkbox"/> Far easier          2 <input type="checkbox"/> Somewhat easier          3 <input type="checkbox"/> No change          4 <input type="checkbox"/> Somewhat more difficult          5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)          1 <input checked="" type="checkbox"/> Do not use any          2 <input type="checkbox"/> Flight-display simulation          3 <input type="checkbox"/> Integrated display &amp; flight control simulations          4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> <p><i>PLAY w/ various simulation PROGRAMS -</i></p>
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H 9

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

*believe it would be faster*

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

3 Normal operating procedures

4 Abnormal operating Proceed.

5 Emergency procedures

4 Missed approach procedures

2 Fit. maneuvers (e.g., stalls, etc)

5 Decision making & problem solving

2 Communications

5 Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

5 Desktop computer-based training aids for pilots and technician training

5 Use of AGATE airplane cockpit as ground flight simulator

5 Performance-based certification, instead of set flight time requirements

5 Computer record keeping for pilot training and certification

5 Flight and control system design to simplify pilot tasks and training

5 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same. *Everything is displayed so pilot would always be aware - one less thing to think about.*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why? *Highway in the sky and Road signs*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

~~None~~ *NONE - NOW - NEED TIME TO THINK!*

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

<p>1. Where do you live? (State's Initials) <u>FL</u></p> <p>2. What is your highest flight rating?          1 <input type="checkbox"/> Student          2 <input type="checkbox"/> Private Pilot          3 <input type="checkbox"/> Commercial Pilot          4 <input checked="" type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?          1 <input checked="" type="checkbox"/> Yes          2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>6000 710</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>6000</u></p> <p>6. Are you a flight instructor now?          1 <input checked="" type="checkbox"/> Yes          2 <input type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?          1 <input type="checkbox"/> Yes          2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:          1 <input type="checkbox"/> Part 61          2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)          1 <input type="checkbox"/> Private Pilot          2 <input type="checkbox"/> Commercial Pilot          3 <input type="checkbox"/> Instrument Rating          4 <input checked="" type="checkbox"/> ATP          5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>3</u></p>	<p>11. How many hours do you fly on your aircraft per year? <u>750</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?          1 <input type="checkbox"/> no change          2 <input checked="" type="checkbox"/> 10% increase          3 <input type="checkbox"/> 25% increase          4 <input type="checkbox"/> 50% increase          5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business          1 <input type="checkbox"/> Single Piston Engine          2 <input checked="" type="checkbox"/> Twin Piston Engine          3 <input type="checkbox"/> Single Engine Turboprop          4 <input type="checkbox"/> Twin Turboprop          5 <input type="checkbox"/> Jet          6 <input type="checkbox"/> Helicopters          7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)          1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.          2 <input type="checkbox"/> Airplane sales          3 <input type="checkbox"/> Aircraft components          4 <input type="checkbox"/> Aircraft services          5 <input type="checkbox"/> Pilot flight training          6 <input type="checkbox"/> Training other than pilots          7 <input type="checkbox"/> Aviation training aids          8 <input checked="" type="checkbox"/> Commuter, charter, Medevac or air taxi          9 <input type="checkbox"/> Insurance          10 <input type="checkbox"/> Aircraft renting or leasing          11 <input type="checkbox"/> Other: _____</p>	<p>15. How did you take part in the AGATE concept demonstration?          1 <input type="checkbox"/> "Flew" demonstrator          2 <input checked="" type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?          1 <input checked="" type="checkbox"/> Greatly increase it          2 <input type="checkbox"/> Somewhat increase it          3 <input type="checkbox"/> No change          4 <input type="checkbox"/> Somewhat reduce it          5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?          1 <input checked="" type="checkbox"/> Greatly increased value          2 <input type="checkbox"/> Somewhat higher value          3 <input type="checkbox"/> No change          4 <input type="checkbox"/> Somewhat less value          5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?          1 <input type="checkbox"/> Far easier          2 <input checked="" type="checkbox"/> Somewhat easier          3 <input type="checkbox"/> No change          4 <input type="checkbox"/> Somewhat more difficult          5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)          1 <input type="checkbox"/> Do not use any          2 <input type="checkbox"/> Flight-display simulation          3 <input type="checkbox"/> Integrated display &amp; flight control simulations          4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p>
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20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

- \_\_\_ Normal operating procedures
- \_\_\_ Abnormal operating Proceed.
- \_\_\_ Emergency procedures
- \_\_\_ Missed approach procedures
- \_\_\_ Flt. maneuvers (e.g., stalls, etc)
- \_\_\_ Decision making & problem solving

\_\_\_ Communications

\_\_\_ Navigation

\_\_\_ Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

\_\_\_ Desktop computer-based training aids for pilots and technician training

\_\_\_ Use of AGATE airplane cockpit as ground flight simulator

\_\_\_ Performance-based certification, instead of set flight time requirements

\_\_\_ Computer record keeping for pilot training and certification

\_\_\_ Flight and control system design to simplify pilot tasks and training

\_\_\_ Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

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**"Thank you for your important insights."**

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

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- Leave a question blank if it does not apply or if you do not know the answer.

- |  |  |  |
|--|--|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>FL</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input checked="" type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>150</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>26,000+</u></p> <p>6. Are you a flight instructor now?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input checked="" type="checkbox"/> Part 61<br/>2 <input checked="" type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input checked="" type="checkbox"/> Private Pilot<br/>2 <input checked="" type="checkbox"/> Commercial Pilot<br/>3 <input checked="" type="checkbox"/> Instrument Rating<br/>4 <input checked="" type="checkbox"/> ATP<br/>5 <input checked="" type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>18</u></p> | <p>11. How many hours do you fly on your aircraft per year? <del>2000</del> <u>800/ea</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input checked="" type="checkbox"/> 10% increase<br/>3 <input checked="" type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input type="checkbox"/> Single Piston Engine<br/>2 <input checked="" type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input checked="" type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|--|--|--|

# 11

20. List your uses of desktop computer-based flight training aids. (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

- Normal operating procedures
- Abnormal operating Proceed.
- Emergency procedures
- Missed approach procedures
- Fit. maneuvers (e.g., stalls, etc)
- Decision making & problem solving

Communications

Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

Desktop computer-based training aids for pilots and technician training

Use of AGATE airplane cockpit as ground flight simulator

Performance-based certification, instead of set flight time requirements

Computer record keeping for pilot training and certification

Flight and control system design to simplify pilot tasks and training

Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same. *IMMEDIATE VISUAL CONCEPT - MORE ACCURATE RESPONSE*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why? *1st VISUAL, 2ND SINGLE CONTROL*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

*NO CONCEPT - BUT COST & TROUBLE WITH IMPLEMENTATION.*  
*What happens if "Thank you for your important insights," learn proficiency with this concept & then step back to 1940's instrument flying??*

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |   |   |  |
|---|---|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>FL</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input checked="" type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>1,000</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>12,000</u></p> <p>6. Are you a flight instructor now?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>3</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>1,000</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input checked="" type="checkbox"/> no change <u>5%</u><br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the main type of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input type="checkbox"/> Single Piston Engine<br/>2 <input checked="" type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input checked="" type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|---|--|

12

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

- Normal operating procedures
- Abnormal operating Proceed.
- Emergency procedures
- Missed approach procedures
- Fit. maneuvers (e.g., stalls, etc)
- Decision making & problem solving

Communications

Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

Desktop computer-based training aids for pilots and technician training

Use of AGATE airplane cockpit as ground flight simulator

Performance-based certification, instead of set flight time requirements

Computer record keeping for pilot training and certification

Flight and control system design to simplify pilot tasks and training

Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

**"Thank you for your important insights."**

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

1. Where do you live?  
(State's Initials) FLA.
2. What is your highest flight rating?
  - 1  Student
  - 2  Private Pilot
  - 3  Commercial Pilot
  - 4  ATP
3. Do you have an instrument rating?
  - 1  Yes
  - 2  No
4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? 500
5. Enter your total pilot flying hours in GA airplanes? 5,000
6. Are you a flight instructor now?
  - 1  Yes
  - 2  No
7. Do you own or manage an FBO?
  - 1  Yes
  - 2  No
8. If you own or manage a flight school, check type:
  - 1  Part 61
  - 2  Part 141
9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)
  - 1  Private Pilot
  - 2  Commercial Pilot
  - 3  Instrument Rating
  - 4  ATP
  - 5  CFI
10. How many general aviation airplanes does your business have? 5
11. How many hours do you fly on your aircraft per year? 2,000
12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?
  - 1  no change
  - 2  10% increase
  - 3  25% increase
  - 4  50% increase
  - 5  100% or more increase
13. What is the main type of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business
  - 1  Single Piston Engine
  - 2  Twin Piston Engine
  - 3  Single Engine Turboprop
  - 4  Twin Turboprop
  - 5  Jet
  - 6  Helicopters
  - 7  Other B-727
14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)
  - 1  Aircraft R&D, Manufact.
  - 2  Airplane sales
  - 3  Aircraft components
  - 4  Aircraft services
  - 5  Pilot flight training
  - 6  Training other than pilots
  - 7  Aviation training aids
  - 8  Commuter, charter, Medevac or air taxi
  - 9  Insurance
  - 10  Aircraft renting or leasing
  - 11  Other: \_\_\_\_\_
15. How did you take part in the AGATE concept demonstration?
  - 1  "Flew" demonstrator
  - 2  Observed
16. Will the display concepts demonstrated change a pilot's situation awareness?
  - 1  Greatly increase it
  - 2  Somewhat increase it
  - 3  No change
  - 4  Somewhat reduce it
  - 5  Greatly reduce it
17. What is the value of the "Heads-Up" display concept compared to current GA displays?
  - 1  Greatly increased value
  - 2  Somewhat higher value
  - 3  No change
  - 4  Somewhat less value
  - 5  Far less value
18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?
  - 1  Far easier
  - 2  Somewhat easier
  - 3  No change
  - 4  Somewhat more difficult
  - 5  Far more difficult
19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)
  - 1  Do not use any
  - 2  Flight-display simulation
  - 3  Integrated display & flight control simulations
  - 4  Various other individual piloting & A/C systems

#13

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training
21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective
22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_
24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- 1 Normal operating procedures
  - 2 Abnormal operating Proceed.
  - 3 Emergency procedures
  - 4 Missed approach procedures
  - 5 Flt. maneuvers (e.g., stalls, etc)
  - 6 Decision making & problem solving

- 7 Communications
  - 8 Navigation
  - 9 Other: \_\_\_\_\_
25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,
- 1 Desktop computer-based training aids for pilots and technician training
  - 1 Use of AGATE airplane cockpit as ground flight simulator
  - 2 Performance-based certification, instead of set flight time requirements
  - 3 Computer record keeping for pilot training and certification
  - 4 Flight and control system design to simplify pilot tasks and training
  - 5 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.
- IMPROVE, NO MAN-MADE DISTRACTIONS
27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?
- VERY EASY TO LEARN
28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?
- COST???? FAA IMPLEMENTATION.

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |  |  |  |
|--|--|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>FL</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input checked="" type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>600</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>35,000</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input checked="" type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input checked="" type="checkbox"/> Private Pilot<br/>2 <input checked="" type="checkbox"/> Commercial Pilot<br/>3 <input checked="" type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>11</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>600</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input checked="" type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input checked="" type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|--|--|--|

H14

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
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  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
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  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

- Normal operating procedures
- Abnormal operating Proceed.
- Emergency procedures
- Missed approach procedures
- Flt. maneuvers (e.g., stalls, etc)
- Decision making & problem solving

- Communications
- Navigation
- Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

- Desktop computer-based training aids for pilots and technician training
- Use of AGATE airplane cockpit as ground flight simulator
- Performance-based certification, instead of set flight time requirements
- Computer record keeping for pilot training and certification
- Flight and control system design to simplify pilot tasks and training
- Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

*IMPROVE -*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

*SIMPLICITY*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

*THEY ALL LOOK GREAT!*

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |   |   |  |
|---|---|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>FL</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input checked="" type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>20</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>2600</u></p> <p>6. Are you a flight instructor now?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input checked="" type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>1</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>300</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input checked="" type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input type="checkbox"/> Single Piston Engine<br/>2 <input checked="" type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input type="checkbox"/> Do not use any<br/>2 <input checked="" type="checkbox"/> Flight-display simulation<br/>3 <input checked="" type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input checked="" type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|---|--|

15

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

5 Normal operating procedures

5 Abnormal operating Proceed.

\_\_\_ Emergency procedures

\_\_\_ Missed approach procedures

\_\_\_ Fit. maneuvers (e.g., stalls, etc)

\_\_\_ Decision making & problem solving

\_\_\_ Communications

\_\_\_ Navigation

\_\_\_ Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

\_\_\_ Desktop computer-based training aids for pilots and technician training

5 Use of AGATE airplane cockpit as ground flight simulator

\_\_\_ Performance-based certification, instead of set flight time requirements

3 Computer record keeping for pilot training and certification

\_\_\_ Flight and control system design to simplify pilot tasks and training

\_\_\_ Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |  |   |  |
|--|---|--|
| <p>1. Where do you live? <u>FL</u><br/>(State's Initials)</p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input checked="" type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>125</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>700</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input checked="" type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input checked="" type="checkbox"/> Private Pilot<br/>2 <input checked="" type="checkbox"/> Commercial Pilot<br/>3 <input checked="" type="checkbox"/> Instrument Rating<br/>4 <input checked="" type="checkbox"/> ATP<br/>5 <input checked="" type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>6</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>125</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input checked="" type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input checked="" type="checkbox"/> Aircraft services<br/>5 <input checked="" type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input checked="" type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input checked="" type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input type="checkbox"/> Greatly increase it<br/>2 <input checked="" type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|--|---|--|

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20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

- Normal operating procedures
- Abnormal operating Proceed.
- Emergency procedures
- Missed approach procedures
- Fit. maneuvers (e.g., stalls, etc)
- Decision making & problem solving

Communications

Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

Desktop computer-based training aids for pilots and technician training

Use of AGATE airplane cockpit as ground flight simulator

Performance-based certification, instead of set flight time requirements

Computer record keeping for pilot training and certification

Flight and control system design to simplify pilot tasks and training

Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

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- Leave a question blank if it does not apply or if you do not know the answer.

- |   |  |  |
|---|--|--|
| <p>1. Where do you live? <u>FL</u><br/>(State's Initials)</p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input checked="" type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>250</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>2000</u></p> <p>6. Are you a flight instructor now?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input checked="" type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input checked="" type="checkbox"/> Private Pilot<br/>2 <input checked="" type="checkbox"/> Commercial Pilot<br/>3 <input checked="" type="checkbox"/> Instrument Rating<br/>4 <input checked="" type="checkbox"/> ATP<br/>5 <input checked="" type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>8</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>16,000</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input checked="" type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input checked="" type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input checked="" type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input type="checkbox"/> Greatly increase it<br/>2 <input checked="" type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input type="checkbox"/> Greatly increased value<br/>2 <input checked="" type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input type="checkbox"/> Far easier<br/>2 <input checked="" type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|--|--|

H17

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training
21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective
22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- 2 Normal operating procedures
  - 2 Abnormal operating Proceed.
  - 3 Emergency procedures
  - 3 Missed approach procedures
  - 2 Flt. maneuvers (e.g., stalls, etc)
  - 2 Decision making & problem solving

1  
 \_\_\_ Communications

1  
 \_\_\_ Navigation

\_\_\_ Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

\_\_\_ Desktop computer-based training aids for pilots and technician training

\_\_\_ Use of AGATE airplane cockpit as ground flight simulator

\_\_\_ Performance-based certification, instead of set flight time requirements

4 Computer record keeping for pilot training and certification

\_\_\_ Flight and control system design to simplify pilot tasks and training

\_\_\_ Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

<p>1. Where do you live? (State's Initials) <u>FL</u></p> <p>2. What is your highest flight rating? 1 <input type="checkbox"/> Student 2 <input type="checkbox"/> Private Pilot 3 <input checked="" type="checkbox"/> Commercial Pilot 4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating? 1 <input checked="" type="checkbox"/> Yes 2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>0</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>300</u></p> <p>6. Are you a flight instructor now? 1 <input type="checkbox"/> Yes 2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO? 1 <input type="checkbox"/> Yes 2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type: 1 <input type="checkbox"/> Part 61 2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all) 1 <input type="checkbox"/> Private Pilot 2 <input type="checkbox"/> Commercial Pilot 3 <input type="checkbox"/> Instrument Rating 4 <input type="checkbox"/> ATP 5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>N/A</u></p>	<p>11. How many hours do you fly on your aircraft per year? <u>N/A</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today? 1 <input type="checkbox"/> no change 2 <input checked="" type="checkbox"/> 10% increase 3 <input type="checkbox"/> 25% increase 4 <input type="checkbox"/> 50% increase 5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business 1 <input checked="" type="checkbox"/> Single Piston Engine 2 <input type="checkbox"/> Twin Piston Engine 3 <input type="checkbox"/> Single Engine Turboprop 4 <input type="checkbox"/> Twin Turboprop 5 <input type="checkbox"/> Jet 6 <input type="checkbox"/> Helicopters 7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one) 1 <input type="checkbox"/> Aircraft R&amp;D, Manufact. 2 <input type="checkbox"/> Airplane sales 3 <input type="checkbox"/> Aircraft components 4 <input type="checkbox"/> Aircraft services 5 <input type="checkbox"/> Pilot flight training 6 <input type="checkbox"/> Training other than pilots 7 <input type="checkbox"/> Aviation training aids 8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi 9 <input type="checkbox"/> Insurance 10 <input type="checkbox"/> Aircraft renting or leasing 11 <input checked="" type="checkbox"/> Other: <u>Human Factors</u></p>	<p>15. How did you take part in the AGATE concept demonstration? 1 <input checked="" type="checkbox"/> "Flew" demonstrator 2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness? 1 <input type="checkbox"/> Greatly increase it 2 <input checked="" type="checkbox"/> Somewhat increase it 3 <input type="checkbox"/> No change 4 <input type="checkbox"/> Somewhat reduce it 5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays? 1 <input checked="" type="checkbox"/> Greatly increased value 2 <input type="checkbox"/> Somewhat higher value 3 <input type="checkbox"/> No change 4 <input type="checkbox"/> Somewhat less value 5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks? 1 <input checked="" type="checkbox"/> Far easier 2 <input type="checkbox"/> Somewhat easier 3 <input type="checkbox"/> No change 4 <input type="checkbox"/> Somewhat more difficult 5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply) 1 <input type="checkbox"/> Do not use any 2 <input type="checkbox"/> Flight-display simulation 3 <input checked="" type="checkbox"/> Integrated display &amp; flight control simulations 4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p>
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#18

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

- 3 Normal operating procedures (med sound/fuel feedback)
- 4 Abnormal operating Proceed.
- 4 Emergency procedures
- 3 Missed approach procedures
- 3 Flt. maneuvers (e.g., stalls, etc)
- 3 Decision making & problem solving

3 Communications

4 Navigation

4  Other: Approaches/Landing - good!

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

5 Desktop computer-based training aids for pilots and technician training

4 Use of AGATE airplane cockpit as ground flight simulator

4 Performance-based certification, instead of set flight time requirements

4 Computer record keeping for pilot training and certification

4 Flight and control system design to simplify pilot tasks and training

5 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same. *The MFD helps the pilot to realize exactly where he is - something that currently takes a great deal of thought. Also, the simulator helps to keep the pilot on course - with less deviations.*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why? *Highway in the sky - easy to follow a route. Simplification - almost anyone can do it!*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why? *The take off trim and airspeed displays were not highlighted like the power display - making them seem less significant (unimportant) to the pilot.*

"Thank you for your important insights."

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NATA Convention, March 24-26, 1997

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- Leave a question blank if it does not apply or if you do not know the answer.

- |  |   |  |
|--|---|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>FL</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input checked="" type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>75</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>400</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>2</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>25</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input checked="" type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input checked="" type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input type="checkbox"/> Greatly increase it<br/>2 <input checked="" type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input type="checkbox"/> Far easier<br/>2 <input checked="" type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|--|---|--|

= 19

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

3 Normal operating procedures

5 Abnormal operating Proceed.

5 Emergency procedures

5 Missed approach procedures

3 Flt. maneuvers (e.g., stalls, etc)

5 Decision making & problem solving

2 Communications

1 Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

4 Desktop computer-based training aids for pilots and technician training

4 Use of AGATE airplane cockpit as ground flight simulator

5 Performance-based certification, instead of set flight time requirements

3 Computer record keeping for pilot training and certification

3 Flight and control system design to simplify pilot tasks and training

3 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same. *Improve*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why? *H.U.D.*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

• Please provide only one answer (the most important one) to each question, unless requested otherwise.

• Leave a question blank if it does not apply or if you do not know the answer.

- |  |   |  |
|--|---|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>FL</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input checked="" type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>20</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>350</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>12</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>20</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input checked="" type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input checked="" type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input type="checkbox"/> Far easier<br/>2 <input checked="" type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input checked="" type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
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E1 20

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training
21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective
22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_
24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- 5 Normal operating procedures
  - 5 Abnormal operating Proceed.
  - 4 Emergency procedures
  - 5 Missed approach procedures
  - 5 Flt. maneuvers (e.g., stalls, etc)
  - 5 Decision making & problem solving

- 5 Communications
  - 5 Navigation
  - 5 Other: \_\_\_\_\_
25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,
- 5 Desktop computer-based training aids for pilots and technician training
  - 5 Use of AGATE airplane cockpit as ground flight simulator
  - 3 Performance-based certification, instead of set flight time requirements
  - 5 Computer record keeping for pilot training and certification
  - 4 Flight and control system design to simplify pilot tasks and training
  - 4 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same. *AGATE DISPLAY WOULD IMPROVE AWARENESS*
27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why? *HUD,*
28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why? *NONE, IT ALL CAN IMPROVE GA SAFETY*

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |   |   |  |
|---|---|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>FL</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input checked="" type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>30</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>550</u></p> <p>6. Are you a flight instructor now?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input checked="" type="checkbox"/> Private Pilot<br/>2 <input checked="" type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>0</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>30</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input checked="" type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input checked="" type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input checked="" type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|---|--|

# 21

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

- 5 Normal operating procedures
- 3 Abnormal operating Proceed.
- 2 Emergency procedures
- 3 Missed approach procedures
- 1 Flt. maneuvers (e.g., stalls, etc)
- 3 Decision making & problem solving

5 Communications

5 Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

4 Desktop computer-based training aids for pilots and technician training

5 Use of AGATE airplane cockpit as ground flight simulator

3 Performance-based certification, instead of set flight time requirements

5 Computer record keeping for pilot training and certification

5 Flight and control system design to simplify pilot tasks and training

5 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same. *IT would improve due to constant position updates*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why? *THE EASE OF FLYING. TAKE AWAY THE COMPLEXITY.*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why? *THE FUNDAMENTALS OF FLYING.*

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |  |   |  |
|--|---|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>FLA</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input checked="" type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>250</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>3000</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input checked="" type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input checked="" type="checkbox"/> Private Pilot<br/>2 <input checked="" type="checkbox"/> Commercial Pilot<br/>3 <input checked="" type="checkbox"/> Instrument Rating<br/>4 <input checked="" type="checkbox"/> ATP<br/>5 <input checked="" type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>14</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>300</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input checked="" type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input checked="" type="checkbox"/> Airplane sales<br/>3 <input checked="" type="checkbox"/> Aircraft components<br/>4 <input checked="" type="checkbox"/> Aircraft services<br/>5 <input checked="" type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input type="checkbox"/> "Flew" demonstrator<br/>2 <input checked="" type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input type="checkbox"/> Do not use any<br/>2 <input checked="" type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|--|---|--|

□ 21

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training
21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
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- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_
24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- Normal operating procedures
  - Abnormal operating Proceed.
  - Emergency procedures
  - Missed approach procedures
  - Flt. maneuvers (e.g., stalls, etc)
  - Decision making & problem solving

- Communications
  - Navigation
  - Other: \_\_\_\_\_
25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,
- Desktop computer-based training aids for pilots and technician training
  - Use of AGATE airplane cockpit as ground flight simulator
  - Performance-based certification, instead of set flight time requirements
  - Computer record keeping for pilot training and certification
  - Flight and control system design to simplify pilot tasks and training
  - Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.
- Same*
27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?
- Easier*
28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?
- Safer*

**"Thank you for your important insights."**

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |   |  |  |
|---|--|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>Fla</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input checked="" type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>400</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>        </u></p> <p>6. Are you a flight instructor now?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input checked="" type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input checked="" type="checkbox"/> Commercial Pilot<br/>3 <input checked="" type="checkbox"/> Instrument Rating<br/>4 <input checked="" type="checkbox"/> ATP<br/>5 <input checked="" type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>6</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>500</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input checked="" type="checkbox"/> 25% increase<br/>4 <input checked="" type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input checked="" type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input checked="" type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input checked="" type="checkbox"/> Aircraft services<br/>5 <input checked="" type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input checked="" type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input checked="" type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input type="checkbox"/> "Flew" demonstrator<br/>2 <input checked="" type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input type="checkbox"/> Greatly increased value<br/>2 <input checked="" type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input type="checkbox"/> Far easier<br/>2 <input checked="" type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input type="checkbox"/> Do not use any<br/>2 <input checked="" type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|--|--|

23

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

4 Normal operating procedures

3 Abnormal operating Proceed.

4 Emergency procedures

5 Missed approach procedures

3 Fit. maneuvers (e.g., stalls, etc)

4 Decision making & problem solving

4 Communications

5 Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

4 Desktop computer-based training aids for pilots and technician training

5 Use of AGATE airplane cockpit as ground flight simulator

3 Performance-based certification, instead of set flight time requirements

2 Computer record keeping for pilot training and certification

4 Flight and control system design to simplify pilot tasks and training

3 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

*You can practice the Approach.*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

*TRACKING and Approach.*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

*TRAIN TAB*

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

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- Leave a question blank if it does not apply or if you do not know the answer.

- |   |   |   |
|---|---|---|
| <p>1. Where do you live?<br/>(State's Initials) <u>FL</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input checked="" type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>50</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>3000</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? _____</p> | <p>11. How many hours do you fly on your aircraft per year? _____</p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input checked="" type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input checked="" type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input checked="" type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input checked="" type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input type="checkbox"/> Do not use any<br/>2 <input checked="" type="checkbox"/> Flight-display simulation<br/>3 <input checked="" type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|---|---|

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20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

- Normal operating procedures
- Abnormal operating Proceed.
- Emergency procedures
- Missed approach procedures
- Fit. maneuvers (e.g., stalls, etc)
- Decision making & problem solving

Communications

Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

Desktop computer-based training aids for pilots and technician training

Use of AGATE airplane cockpit as ground flight simulator

Performance-based certification, instead of set flight time requirements

Computer record keeping for pilot training and certification

Flight and control system design to simplify pilot tasks and training

Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

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|---|---|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>FL</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input checked="" type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>50</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>1000</u></p> <p>6. Are you a flight instructor now?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input checked="" type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input checked="" type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input checked="" type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>1</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>300</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input checked="" type="checkbox"/> 25% increase<br/>4 <input checked="" type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input checked="" type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input type="checkbox"/> "Flew" demonstrator<br/>2 <input checked="" type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input type="checkbox"/> Greatly increased value<br/>2 <input checked="" type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input checked="" type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|---|--|

H 25

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training
21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective
22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_
24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- Normal operating procedures
  - Abnormal operating Proceed.
  - Emergency procedures
  - Missed approach procedures
  - Flt. maneuvers (e.g., stalls, etc)
  - Decision making & problem solving

1 Communications  
3 Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,
- Desktop computer-based training aids for pilots and technician training
  - Use of AGATE airplane cockpit as ground flight simulator
  - Performance-based certification, instead of set flight time requirements
  - Computer record keeping for pilot training and certification
  - Flight and control system design to simplify pilot tasks and training
  - Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.
27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?
28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

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- Leave a question blank if it does not apply or if you do not know the answer.

- |  |  |  |
|--|--|--|
| <p>1. Where do you live? <u>FL</u><br/>(State's Initials)</p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input checked="" type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>2000</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>500</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>90</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>0</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input checked="" type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input checked="" type="checkbox"/> Other: <u>Human Factors Researcher &amp; Professor</u></p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input type="checkbox"/> Greatly increase it<br/>2 <input checked="" type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input checked="" type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input type="checkbox"/> Far easier<br/>2 <input checked="" type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input checked="" type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|--|--|--|

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20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

- Normal operating procedures
- Abnormal operating Proceed.
- Emergency procedures
- Missed approach procedures
- Fit. maneuvers (e.g., stalls, etc)
- Decision making & problem solving

Communications  
 Navigation  
 \_\_\_\_\_ Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

- Desktop computer-based training aids for pilots and technician training
- Use of AGATE airplane cockpit as ground flight simulator
- Performance-based certification, instead of set flight time requirements
- Computer record keeping for pilot training and certification
- Flight and control system design to simplify pilot tasks and training
- Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same. *improve them but they could be improved more if attention was paid H.F.E research in the area, i.e. Velocity vector should ALWAYS Be used - NO A.H.H.de!*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why? *Improved display of basic flight info significantly reduce pilot work load*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why? *see 27 GET RID OF ATTITUDE DISPLAY!*

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |   |   |  |
|---|---|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>FL</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input checked="" type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>150</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>4000</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>6</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>150</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase <u>NA</u><br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input type="checkbox"/> Single Piston Engine<br/>2 <input checked="" type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input checked="" type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|---|--|

15 27

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- Normal operating procedures
  - Abnormal operating Proceed.
  - Emergency procedures
  - Missed approach procedures
  - Flt. maneuvers (e.g., stalls, etc)
  - Decision making & problem solving

Communications

Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

Desktop computer-based training aids for pilots and technician training

Use of AGATE airplane cockpit as ground flight simulator

Performance-based certification, instead of set flight time requirements

Computer record keeping for pilot training and certification

Flight and control system design to simplify pilot tasks and training

Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

*decrease in actuality -*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

*Simplicity, you don't need to understand why  
only follow the path & directions.*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

*Lack of Real world Acuity - almost game like  
Atmosphere - what happens if equipment fails?  
"Thank you for your important insights."*

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

1. Where do you live?  
(State's Initials) FL & VA
2. What is your highest flight rating?  
1  Student  
2  Private Pilot  
3  Commercial Pilot  
4  ATP
3. Do you have an instrument rating?  
1  Yes  
2  No
4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? 0
5. Enter your total pilot flying hours in GA airplanes? 71
6. Are you a flight instructor now?  
1  Yes  
2  No
7. Do you own or manage an FBO?  
1  Yes  
2  No
8. If you own or manage a flight school, check type:  
1  Part 61  
2  Part 141
9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)  
1  Private Pilot  
2  Commercial Pilot  
3  Instrument Rating  
4  ATP  
5  CFI
10. How many general aviation airplanes does your business have? \_\_\_\_\_

11. How many hours do you fly on your aircraft per year? 0
12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?  
1  no change  
2  10% increase  
3  25% increase  
4  50% increase  
5  100% or more increase
13. What is the main type of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business  
1  Single Piston Engine  
2  Twin Piston Engine  
3  Single Engine Turboprop  
4  Twin Turboprop  
5  Jet  
6  Helicopters  
7  Other \_\_\_\_\_
14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)  
1  Aircraft R&D, Manufact.  
2  Airplane sales  
3  Aircraft components  
4  Aircraft services  
5  Pilot flight training  
6  Training other than pilots  
7  Aviation training aids  
8  Commuter, charter, Medevac or air taxi  
9  Insurance  
10  Aircraft renting or leasing  
11  Other: AVN Psychology (Display & Control Sys. S)

15. How did you take part in the AGATE concept demonstration?  
1  "Flew" demonstrator  
2  Observed
16. Will the display concepts demonstrated change a pilot's situation awareness?  
1  Greatly increase it  
2  Somewhat increase it  
3  No change  
4  Somewhat reduce it  
5  Greatly reduce it
17. What is the value of the "Heads-Up" display concept compared to current GA displays?  
*IF you can fly "VFR" ALL the time...*  
1  Greatly increased value  
2  Somewhat higher value  
3  No change  
4  Somewhat less value  
5  Far less value
18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?  
1  Far easier  
2  Somewhat easier  
3  No change  
4  Somewhat more difficult  
5  Far more difficult
19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)  
1  Do not use any  
2  Flight-display simulation  
3  Integrated display & flight control simulations  
4  Various other individual piloting & A/C systems

1-28

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: *Skills tracking is still poor ....*

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

4 Normal operating procedures

5 Abnormal operating Proceed.

5 Emergency procedures

4 Missed approach procedures

4 Flt. maneuvers (e.g., stalls, etc)

5 Decision making & problem solving

5 Communications

5 Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

5 Desktop computer-based training aids for pilots and technician training

3 Use of AGATE airplane cockpit as ground flight simulator

5 Performance-based certification, instead of set flight time requirements

5 Computer record keeping for pilot training and certification

5 Flight and control system design to simplify pilot tasks and training

5 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

*By providing flight guidance cues in the cockpit scene which match "plan view" map imagery, @ least a heightened awareness of position may be realized*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

*The ability to turn night IFR into day VFR is intriguing. The <sup>natural</sup> cues we use to maintain orientation & establish position in flight w/ respect to ground references become available ALL the time; no more hieroglyphics (ha!)!!*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

*The engine & systems monitoring seems on first blush to be more complex than it really is.*

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |   |  |  |
|---|--|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>FLA</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input checked="" type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>0</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>150</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input checked="" type="checkbox"/> Part 61<br/>2 <input checked="" type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input checked="" type="checkbox"/> Private Pilot<br/>2 <input checked="" type="checkbox"/> Commercial Pilot<br/>3 <input checked="" type="checkbox"/> Instrument Rating<br/>4 <input checked="" type="checkbox"/> ATP<br/>5 <input checked="" type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>16</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>1800</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input checked="" type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input checked="" type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input checked="" type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input type="checkbox"/> "Flew" demonstrator<br/>2 <input checked="" type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input type="checkbox"/> Greatly increased value<br/>2 <input checked="" type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|--|--|

#29

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training
21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective
22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower
23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_
24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- Normal operating procedures
  - 3 Abnormal operating Proceed.
  - Emergency procedures
  - 3 Missed approach procedures
  - Fit. maneuvers (e.g., stalls, etc)
  - Decision making & problem solving
25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- 3 Communications
  - 2 Navigation
  - Other: \_\_\_\_\_
  - Desktop computer-based training aids for pilots and technician training
  - Use of AGATE airplane cockpit as ground flight simulator
  - 1 Performance-based certification, instead of set flight time requirements
  - 3 Computer record keeping for pilot training and certification
  - Flight and control system design to simplify pilot tasks and training
  - Unified instrument/private pilot training curriculum
26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.
27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?
28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

**"Thank you for your important insights."**

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

• Please provide only one answer (the most important one) to each question, unless requested otherwise.

• Leave a question blank if it does not apply or if you do not know the answer.

- |   |  |  |
|---|--|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>FL</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input checked="" type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>200</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>7100</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>45+</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>200</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input checked="" type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input checked="" type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input type="checkbox"/> Far easier<br/>2 <input checked="" type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|--|--|

# 30

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training
21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective
22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_
24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- 4 Normal operating procedures
  - 5 Abnormal operating Proceed.
  - 5 Emergency procedures
  - 4 Missed approach procedures
  - 2 Flt. maneuvers (e.g., stalls, etc)
  - 4 Decision making & problem solving

- 4 Communications
- 4 Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,
- 3 Desktop computer-based training aids for pilots and technician training
  - 4 Use of AGATE airplane cockpit as ground flight simulator
  - 5 Performance-based certification, instead of set flight time requirements
  - 4 Computer record keeping for pilot training and certification
  - 3 Flight and control system design to simplify pilot tasks and training
  - 3 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.
- It takes complicated data and groups it into info that is user friendly.*
27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?
- safety and increased learning time.*
28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

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- Leave a question blank if it does not apply or if you do not know the answer.

- |  |  |   |
|--|--|---|
| <p>1. Where do you live?<br/>(State's Initials) <u>FL</u></p> <p>2. What is your highest flight rating?<br/>1 <input checked="" type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? _____</p> <p>5. Enter your total pilot flying hours in GA airplanes? _____</p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>117</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>100</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input checked="" type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|--|--|---|

c31

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- \_\_\_ Normal operating procedures
  - \_\_\_ Abnormal operating Proceed.
  - \_\_\_ Emergency procedures
  - \_\_\_ Missed approach procedures
  - \_\_\_ Flt. maneuvers (e.g., stalls, etc)
  - \_\_\_ Decision making & problem solving

\_\_\_ Communications

\_\_\_ Navigation

\_\_\_ Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

\_\_\_ Desktop computer-based training aids for pilots and technician training

\_\_\_ Use of AGATE airplane cockpit as ground flight simulator

\_\_\_ Performance-based certification, instead of set flight time requirements

\_\_\_ Computer record keeping for pilot training and certification

\_\_\_ Flight and control system design to simplify pilot tasks and training

\_\_\_ Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.
27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?
28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

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# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

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- Leave a question blank if it does not apply or if you do not know the answer.

- |   |  |  |
|---|--|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>Fl.</u></p> <p>2. What is your highest flight rating?<br/>1 <input checked="" type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>3</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? _____</p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? _____</p> | <p>11. How many hours do you fly on your aircraft per year? _____</p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input checked="" type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input type="checkbox"/> Single Piston Engine<br/>2 <input checked="" type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input type="checkbox"/> Greatly increase it<br/>2 <input checked="" type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input type="checkbox"/> Far easier<br/>2 <input checked="" type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|--|--|

#32

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

- Normal operating procedures
- Abnormal operating Proceed.
- Emergency procedures
- Missed approach procedures
- Flt. maneuvers (e.g., stalls, etc)
- Decision making & problem solving

- Communications
- Navigation
- Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

- Desktop computer-based training aids for pilots and technician training
- Use of AGATE airplane cockpit as ground flight simulator
- Performance-based certification, instead of set flight time requirements
- Computer record keeping for pilot training and certification
- Flight and control system design to simplify pilot tasks and training
- Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

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# AGATE Concepts Demonstrator Survey

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- Leave a question blank if it does not apply or if you do not know the answer.

- |  |   |   |
|--|---|---|
| <p>1. Where do you live?<br/>(State's Initials) <u>FL</u></p> <p>2. What is your highest flight rating?<br/>1 <input checked="" type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>0</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? _____</p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? _____</p> | <p>11. How many hours do you fly on your aircraft per year? _____</p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input checked="" type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input type="checkbox"/> "Flew" demonstrator<br/>2 <input checked="" type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|--|---|---|

H33

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- \_\_\_ Normal operating procedures
  - \_\_\_ Abnormal operating Proceed.
  - \_\_\_ Emergency procedures
  - \_\_\_ Missed approach procedures
  - \_\_\_ Flt. maneuvers (e.g., stalls, etc)
  - \_\_\_ Decision making & problem solving

\_\_\_ Communications

\_\_\_ Navigation

\_\_\_ Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

Desktop computer-based training aids for pilots and technician training

Use of AGATE airplane cockpit as ground flight simulator

Performance-based certification, instead of set flight time requirements

Computer record keeping for pilot training and certification

Flight and control system design to simplify pilot tasks and training

Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

**"Thank you for your important insights."**

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |  |  |  |
|--|--|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>GA</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input checked="" type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>300</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>6,000</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>3</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>300</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input checked="" type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input checked="" type="checkbox"/> Other: <u>AVIATION</u><br/><u>Fuels MKTG</u><br/><u>Rep.</u></p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input type="checkbox"/> "Flew" demonstrator"<br/>2 <input checked="" type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|--|--|--|

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20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

Normal operating procedures

Abnormal operating Proceed.

Emergency procedures

Missed approach procedures

Fit. maneuvers (e.g., stalls, etc)

Decision making & problem solving

Communications

Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

Desktop computer-based training aids for pilots and technician training

Use of AGATE airplane cockpit as ground flight simulator

Performance-based certification, instead of set flight time requirements

Computer record keeping for pilot training and certification

Flight and control system design to simplify pilot tasks and training

Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

*Intuitive visual cues will positively improve.*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

**"Thank you for your important insights."**

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

<p>1. Where do you live? (State's Initials) <u>ATL</u></p> <p>2. What is your highest flight rating? 1 <input type="checkbox"/> Student 2 <input checked="" type="checkbox"/> Private Pilot 3 <input type="checkbox"/> Commercial Pilot 4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating? 1 <input type="checkbox"/> Yes 2 <input checked="" type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>100</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>1500</u></p> <p>6. Are you a flight instructor now? 1 <input type="checkbox"/> Yes 2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO? 1 <input checked="" type="checkbox"/> Yes 2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type: 1 <input type="checkbox"/> Part 61 2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all) 1 <input type="checkbox"/> Private Pilot 2 <input type="checkbox"/> Commercial Pilot 3 <input type="checkbox"/> Instrument Rating 4 <input type="checkbox"/> ATP 5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>1</u></p>	<p>11. How many hours do you fly on your aircraft per year? <u>100</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today? 1 <input type="checkbox"/> no change 2 <input type="checkbox"/> 10% increase 3 <input type="checkbox"/> 25% increase 4 <input checked="" type="checkbox"/> 50% increase 5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business 1 <input checked="" type="checkbox"/> Single Piston Engine 2 <input type="checkbox"/> Twin Piston Engine 3 <input type="checkbox"/> Single Engine Turboprop 4 <input type="checkbox"/> Twin Turboprop 5 <input type="checkbox"/> Jet 6 <input type="checkbox"/> Helicopters 7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one) 1 <input type="checkbox"/> Aircraft R&amp;D, Manufact. 2 <input type="checkbox"/> Airplane sales 3 <input type="checkbox"/> Aircraft components 4 <input checked="" type="checkbox"/> Aircraft services 5 <input type="checkbox"/> Pilot flight training 6 <input type="checkbox"/> Training other than pilots 7 <input type="checkbox"/> Aviation training aids 8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi 9 <input type="checkbox"/> Insurance 10 <input type="checkbox"/> Aircraft renting or leasing 11 <input type="checkbox"/> Other: _____</p>	<p>15. How did you take part in the AGATE concept demonstration? 1 <input checked="" type="checkbox"/> "Flew" demonstrator 2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness? 1 <input checked="" type="checkbox"/> Greatly increase it 2 <input type="checkbox"/> Somewhat increase it 3 <input type="checkbox"/> No change 4 <input type="checkbox"/> Somewhat reduce it 5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays? 1 <input checked="" type="checkbox"/> Greatly increased value 2 <input type="checkbox"/> Somewhat higher value 3 <input type="checkbox"/> No change 4 <input type="checkbox"/> Somewhat less value 5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks? 1 <input checked="" type="checkbox"/> Far easier 2 <input type="checkbox"/> Somewhat easier 3 <input type="checkbox"/> No change 4 <input type="checkbox"/> Somewhat more difficult 5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply) 1 <input checked="" type="checkbox"/> Do not use any 2 <input type="checkbox"/> Flight-display simulation 3 <input type="checkbox"/> Integrated display &amp; flight control simulations 4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p>
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20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

- 4  Normal operating procedures
- 4  Abnormal operating Proceed.
- 5  Emergency procedures
- 5  Missed approach procedures
- 3  Fit. maneuvers (e.g., stalls, etc)
- 5  Decision making & problem solving

4 Communications

4 Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

4 Desktop computer-based training aids for pilots and technician training

5 Use of AGATE airplane cockpit as ground flight simulator

5 Performance-based certification, instead of set flight time requirements

5 Computer record keeping for pilot training and certification

5 Flight and control system design to simplify pilot tasks and training

5 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

*Simple, lower cost to maintain.*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

*Higher levels of safety, less cockpit confusion*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

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- Leave a question blank if it does not apply or if you do not know the answer.

- |  |  |   |
|--|--|---|
| <p>1. Where do you live?<br/>(State's Initials) <u>LOWA</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input checked="" type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>4004</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>20,000+</u></p> <p>6. Are you a flight instructor now?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input checked="" type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input checked="" type="checkbox"/> Private Pilot<br/>2 <input checked="" type="checkbox"/> Commercial Pilot<br/>3 <input checked="" type="checkbox"/> Instrument Rating<br/>4 <input checked="" type="checkbox"/> ATP<br/>5 <input checked="" type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>10</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>4000</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input checked="" type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input type="checkbox"/> Single Piston Engine<br/>2 <input checked="" type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input checked="" type="checkbox"/> Other: <u>FLY FREIGHT</u></p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input checked="" type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input type="checkbox"/> Greatly increase it<br/>2 <input checked="" type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input type="checkbox"/> Do not use any<br/>2 <input checked="" type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|--|--|---|

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20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

5 Normal operating procedures

3 Abnormal operating Proceed.

5 Emergency procedures

5 Missed approach procedures

\_\_\_ Flt. maneuvers (e.g., stalls, etc)

\_\_\_ Decision making & problem solving

\_\_\_ Communications

\_\_\_ Navigation

\_\_\_ Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

5 Desktop computer-based training aids for pilots and technician training

3 Use of AGATE airplane cockpit as ground flight simulator

5 Performance-based certification, instead of set flight time requirements

2 Computer record keeping for pilot training and certification

5 Flight and control system design to simplify pilot tasks and training

\_\_\_ Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

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# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

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- |   |   |  |
|---|---|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>IL</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input checked="" type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>400</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>6000</u></p> <p>6. Are you a flight instructor now?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input checked="" type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input checked="" type="checkbox"/> Private Pilot<br/>2 <input checked="" type="checkbox"/> Commercial Pilot<br/>3 <input checked="" type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input checked="" type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>15</u></p> | <p>11. How many hours do you fly on your aircraft per year? <del>200</del><br/><u>500</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input checked="" type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input checked="" type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input checked="" type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input type="checkbox"/> Do not use any<br/>2 <input checked="" type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|---|--|

#37

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training
21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective
22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_
24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- 5 Normal operating procedures
  - 3 Abnormal operating Proceed.
  - 3 Emergency procedures
  - 5 Missed approach procedures
  - 5 Flt. maneuvers (e.g., stalls, etc)
  - 3 Decision making & problem solving

- 2 Communications
  - 5 Navigation
  - Other: \_\_\_\_\_
25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,
- 3 Desktop computer-based training aids for pilots and technician training
  - 4 Use of AGATE airplane cockpit as ground flight simulator
  - 5 Performance-based certification, instead of set flight time requirements
  - 4 Computer record keeping for pilot training and certification
  - 3 Flight and control system design to simplify pilot tasks and training
  - 2 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.
- visually based system will improve situational awareness (HUD)*
27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?
- integrating cockpit displays and training methods*
28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- Where do you live?  
(State's Initials) IL
- What is your highest flight rating?  
1  Student  
2  Private Pilot  
3  Commercial Pilot  
4  ATP
- Do you have an instrument rating?  
1  Yes  
2  No
- How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? 35
- Enter your total pilot flying hours in GA airplanes? 650
- Are you a flight instructor now?  
1  Yes  
2  No
- Do you own or manage an FBO?  
1  Yes  
2  No
- If you own or manage a flight school, check type:  
1  Part 61  
2  Part 141
- Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)  
1  Private Pilot  
2  Commercial Pilot  
3  Instrument Rating  
4  ATP  
5  CFI
- How many general aviation airplanes does your business have? \_\_\_\_\_

- How many hours do you fly on your aircraft per year? 2000
- What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?  
1  no change  
2  10% increase  
3  25% increase  
4  50% increase  
5  100% or more increase
- What is the main type of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business  
1  Single Piston Engine  
2  Twin Piston Engine  
3  Single Engine Turboprop  
4  Twin Turboprop  
5  Jet  
6  Helicopters  
7  Other \_\_\_\_\_
- If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)  
1  Aircraft R&D, Manufact.  
2  Airplane sales  
3  Aircraft components  
4  Aircraft services  
5  Pilot flight training  
6  Training other than pilots  
7  Aviation training aids  
8  Commuter, charter, Medevac or air taxi  
9  Insurance  
10  Aircraft renting or leasing  
11  Other: \_\_\_\_\_

- How did you take part in the AGATE concept demonstration?  
1  "Flew" demonstrator  
2  Observed
- Will the display concepts demonstrated change a pilot's situation awareness?  
1  Greatly increase it  
2  Somewhat increase it  
3  No change  
4  Somewhat reduce it  
5  Greatly reduce it
- What is the value of the "Heads-Up" display concept compared to current GA displays?  
1  Greatly increased value  
2  Somewhat higher value  
3  No change  
4  Somewhat less value  
5  Far less value
- How do you think the graphic "Highway in the Sky" would affect pilot tasks?  
1  Far easier  
2  Somewhat easier  
3  No change  
4  Somewhat more difficult  
5  Far more difficult
- What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)  
1  Do not use any  
2  Flight-display simulation  
3  Integrated display & flight control simulations  
4  Various other individual piloting & A/C systems

HOW ?  
I use MSFS  
v 5.0  
using keyboard/mouse

#38

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

- 3 Normal operating procedures
- 4 Abnormal operating Proceed.
- 5 Emergency procedures
- 3 Missed approach procedures
- 2 Flt. maneuvers (e.g., stalls, etc)
- 3 Decision making & problem solving

AS A SIMULATOR OF EXISTING PROCEDURES

1 Communications

2 Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

\_\_\_\_ Desktop computer-based training aids for pilots and technician training

2 Use of AGATE airplane cockpit as ground flight simulator

4 Performance-based certification, instead of set flight time requirements

1 Computer record keeping for pilot training and certification

5 Flight and control system design to simplify pilot tasks and training

3 Unified instrument/private pilot training curriculum

5 Lowered perceived actual risk of incident/accident (in terms of reliability/safety)

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

clearer picture of what is happening in 3-D.  
less mental gymnastics/arithmetic

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

DEMONSTRATION OF HOW SIMPLER OPERATIONS & GREATER RELIABILITY WILL RESULT FROM CONTINUATION OF AGATE PROGRAM.

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

DEMONSTRATOR IS NOT PARTICULARLY HELPFUL FOR LEARNING/PRACTICING FLIGHT IN EXISTING AIRCRAFT. LET'S

"Thank you for your important insights."

GET THE NEW GENERATION BUILT SO WE HAVE SOMETHING TO PRACTICE IN.

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |   |   |  |
|---|---|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>IL</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input checked="" type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>200</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>4000</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>ONE</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>250</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input checked="" type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|---|--|

539

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training
21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective
22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- 5 Normal operating procedures
  - 5 Abnormal operating Proceed.
  - 5 Emergency procedures
  - 5 Missed approach procedures
  - 5 Fit. maneuvers (e.g., stalls, etc)
  - 5 Decision making & problem solving

5 Communications

5 Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

5 Desktop computer-based training aids for pilots and technician training

5 Use of AGATE airplane cockpit as ground flight simulator

5 Performance-based certification, instead of set flight time requirements

5 Computer record keeping for pilot training and certification

5 Flight and control system design to simplify pilot tasks and training

5 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve decrease or remain the same.

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why? *Heads up Always is BETTER*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why? *NONE, Everything seemed to work together with me, The pilot*

"Thank you for your important insights."

*Sam Finfrack*

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |   |  |  |
|---|--|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>MD</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input checked="" type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>50</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>500</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>2</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>30</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input checked="" type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input checked="" type="checkbox"/> Other: <u>Publications Aviation</u></p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input type="checkbox"/> "Flew" demonstrator<br/>2 <input checked="" type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input type="checkbox"/> Greatly increase it<br/>2 <input checked="" type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input type="checkbox"/> Greatly increased value<br/>2 <input checked="" type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input type="checkbox"/> Far easier<br/>2 <input checked="" type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input checked="" type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|--|--|

#40

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training
21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective
22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

- 3 Normal operating procedures
- 2 Abnormal operating Proceed.
- 2 Emergency procedures
- 5 Missed approach procedures
- 2 Flt. maneuvers (e.g., stalls, etc)
- 5 Decision making & problem solving

\_\_\_ Communications

3 Navigation

\_\_\_ Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

4 Desktop computer-based training aids for pilots and technician training

4 Use of AGATE airplane cockpit as ground flight simulator

\_\_\_ Performance-based certification, instead of set flight time requirements

3 Computer record keeping for pilot training and certification

3 Flight and control system design to simplify pilot tasks and training

4 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |   |   |   |
|---|---|---|
| <p>1. Where do you live?<br/>(State's Initials) <u>ME</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input checked="" type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>325</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>4800</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input checked="" type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input checked="" type="checkbox"/> Private Pilot<br/>2 <input checked="" type="checkbox"/> Commercial Pilot<br/>3 <input checked="" type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input checked="" type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>17</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>500</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input checked="" type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input checked="" type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input checked="" type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input type="checkbox"/> Greatly increased value<br/>2 <input checked="" type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input type="checkbox"/> Far easier<br/>2 <input checked="" type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|---|---|

541

20. List your uses of desktop computer-based flight training aids. (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training
21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective
22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: *Use option based on Fit. selected simulator*
24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- 4 Normal operating procedures
  - ? Abnormal operating Proceed.
  - ? Emergency procedures
  - 4 Missed approach procedures
  - 4 Fit. maneuvers (e.g., stalls, etc)
  - ? Decision making & problem solving

? Communications

8 Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

3 Desktop computer-based training aids for pilots and technician training

3 Use of AGATE airplane cockpit as ground flight simulator

4 Performance-based certification, instead of set flight time requirements

3 Computer record keeping for pilot training and certification

4 Flight and control system design to simplify pilot tasks and training

3 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same. *I am not sure, it depends on what other information the pilot has to use.*
27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why? *Simplified Cockpit, lower work load.*
28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

<p>1. Where do you live? (State's Initials) <u>MI</u></p> <p>2. What is your highest flight rating? 1 <input type="checkbox"/> Student 2 <input type="checkbox"/> Private Pilot 3 <input type="checkbox"/> Commercial Pilot 4 <input checked="" type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating? 1 <input checked="" type="checkbox"/> Yes 2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>700</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>3500</u></p> <p>6. Are you a flight instructor now? 1 <input checked="" type="checkbox"/> Yes 2 <input type="checkbox"/> No</p> <p>7. Do you own or manage an FBO? 1 <input type="checkbox"/> Yes 2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type: 1 <input type="checkbox"/> Part 61 2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all) 1 <input type="checkbox"/> Private Pilot 2 <input type="checkbox"/> Commercial Pilot 3 <input type="checkbox"/> Instrument Rating 4 <input checked="" type="checkbox"/> ATP 5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>7</u></p>	<p>11. How many hours do you fly on your aircraft per year? <u>12,000</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today? 1 <input type="checkbox"/> no change 2 <input checked="" type="checkbox"/> 10% increase 3 <input type="checkbox"/> 25% increase 4 <input type="checkbox"/> 50% increase 5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business 1 <input type="checkbox"/> Single Piston Engine 2 <input type="checkbox"/> Twin Piston Engine 3 <input type="checkbox"/> Single Engine Turboprop 4 <input checked="" type="checkbox"/> Twin Turboprop 5 <input type="checkbox"/> Jet 6 <input type="checkbox"/> Helicopters 7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one) 1 <input type="checkbox"/> Aircraft R&amp;D, Manufact. 2 <input type="checkbox"/> Airplane sales 3 <input type="checkbox"/> Aircraft components 4 <input type="checkbox"/> Aircraft services 5 <input type="checkbox"/> Pilot flight training 6 <input type="checkbox"/> Training other than pilots 7 <input type="checkbox"/> Aviation training aids 8 <input checked="" type="checkbox"/> Commuter, charter, Medevac or air taxi 9 <input type="checkbox"/> Insurance 10 <input type="checkbox"/> Aircraft renting or leasing 11 <input type="checkbox"/> Other: _____</p>	<p>15. How did you take part in the AGATE concept demonstration? 1 <input checked="" type="checkbox"/> "Flew" demonstrator 2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness? 1 <input checked="" type="checkbox"/> Greatly increase it 2 <input type="checkbox"/> Somewhat increase it 3 <input type="checkbox"/> No change 4 <input type="checkbox"/> Somewhat reduce it 5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays? 1 <input checked="" type="checkbox"/> Greatly increased value 2 <input type="checkbox"/> Somewhat higher value 3 <input type="checkbox"/> No change 4 <input type="checkbox"/> Somewhat less value 5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks? 1 <input checked="" type="checkbox"/> Far easier 2 <input type="checkbox"/> Somewhat easier 3 <input type="checkbox"/> No change 4 <input type="checkbox"/> Somewhat more difficult 5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply) 1 <input checked="" type="checkbox"/> Do not use any 2 <input type="checkbox"/> Flight-display simulation 3 <input type="checkbox"/> Integrated display &amp; flight control simulations 4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p>
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20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- 4 Normal operating procedures
  - 3 Abnormal operating Proceed.
  - 3 Emergency procedures
  - 3 Missed approach procedures
  - 3 Fit. maneuvers (e.g., stalls, etc)
  - 2 Decision making & problem solving

2 Communications

5 Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

4 Desktop computer-based training aids for pilots and technician training

5 Use of AGATE airplane cockpit as ground flight simulator

5 Performance-based certification, instead of set flight time requirements

5 Computer record keeping for pilot training and certification

4 Flight and control system design to simplify pilot tasks and training

Other: \_\_\_\_\_ Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot?

Why? HUD, ABLE to see through weather  
Vol. INDICATION ON HUD

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

Auto Flaps, LOSS of "NUMBERS" BASED TRAINING

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |   |   |  |
|---|---|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>MI MI</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input checked="" type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>70</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>1000</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>0</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>150</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input checked="" type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|---|--|

#43

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

- 4 Normal operating procedures
- 4 Abnormal operating Proceed.
- 5 Emergency procedures
- 4 Missed approach procedures
- 4 Flt. maneuvers (e.g., stalls, etc)
- 4 Decision making & problem solving

- \_\_\_ Communications
- \_\_\_ Navigation
- \_\_\_ Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

- 5 Desktop computer-based training aids for pilots and technician training
- 4 Use of AGATE airplane cockpit as ground flight simulator
- 2 Performance-based certification, instead of set flight time requirements
- 2 Computer record keeping for pilot training and certification
- 2 Flight and control system design to simplify pilot tasks and training
- 2 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

*Needs - up display + your panel display*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |   |   |  |
|---|---|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>MI</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input checked="" type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>320</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>1675</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>5</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>300</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input checked="" type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input type="checkbox"/> Single Piston Engine<br/>2 <input checked="" type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input checked="" type="checkbox"/> Other: <u>FBO</u></p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input checked="" type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|---|--|

# 44

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

5 Normal operating procedures

5 Abnormal operating Proceed.

5 Emergency procedures

5 Missed approach procedures

5 Flt. maneuvers (e.g., stalls, etc)

5 Decision making & problem solving

5 Communications

5 Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

5 Desktop computer-based training aids for pilots and technician training

5 Use of AGATE airplane cockpit as ground flight simulator

5 Performance-based certification, instead of set flight time requirements

5 Computer record keeping for pilot training and certification

5 Flight and control system design to simplify pilot tasks and training

5 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

ESSENTIAL INFORMATION PRESENTED IN AN EASIER FORMAT. AVERAGE PILOT WORKLOAD IS GREATLY REDUCED.

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

SIMPLICITY OF OPERATION. LESS SYSTEMS MANAGING

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

ANY SYSTEM THAT MAKES FOR A SAFER PILOT HAS GREAT VALUE FOR A GA PILOT-

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |   |  |  |
|---|--|--|
| <p>1. Where do you live? (State's Initials) <u>MI</u></p> <p>2. What is your highest flight rating?<br/>1 <input checked="" type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>2</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>15</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>3</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>30</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input checked="" type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input checked="" type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input checked="" type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|--|--|

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20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: Slow and complex

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- 5 Normal operating procedures
  - 4 Abnormal operating Proceed.
  - 3 Emergency procedures
  - 5 Missed approach procedures
  - 1 Flt. maneuvers (e.g., stalls, etc)
  - 5 Decision making & problem solving

- 1 Communications
- 5 Navigation
- Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,
- 5 Desktop computer-based training aids for pilots and technician training
  - 5 Use of AGATE airplane cockpit as ground flight simulator
  - 1 Performance-based certification, instead of set flight time requirements
  - 1 Computer record keeping for pilot training and certification
  - 5 Flight and control system design to simplify pilot tasks and training
  - 4 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.
- Improve because of the easyness to make corrections and situation awareness.*
27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?
- Pathway in the sky and unified speed tick any single speed lever, easier to fly.*
28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?
- The price may be big,*

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |   |  |  |
|---|--|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>INN</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input checked="" type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>475</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>38,000</u></p> <p>6. Are you a flight instructor now?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input checked="" type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input checked="" type="checkbox"/> Private Pilot<br/>2 <input checked="" type="checkbox"/> Commercial Pilot<br/>3 <input checked="" type="checkbox"/> Instrument Rating<br/>4 <input checked="" type="checkbox"/> ATP<br/>5 <input checked="" type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>18</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>9,000</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input checked="" type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input type="checkbox"/> Single Piston Engine<br/>2 <input checked="" type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input checked="" type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input type="checkbox"/> Greatly increase it<br/>2 <input checked="" type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input checked="" type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|--|--|

# 46

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: Technology is changing too fast

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- 5 Normal operating procedures
  - 3 Abnormal operating Proceed.
  - 3 Emergency procedures
  - 3 Missed approach procedures
  - 4 Fit. maneuvers (e.g., stalls, etc)
  - 2 Decision making & problem solving

4 Communications

4 Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

5 Desktop computer-based training aids for pilots and technician training

5 Use of AGATE airplane cockpit as ground flight simulator

5 Performance-based certification, instead of set flight time requirements

4 Computer record keeping for pilot training and certification

5 Flight and control system design to simplify pilot tasks and training

3 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same. NOT SURE

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why? COMPUTER ASSISTED DECISION MAKING

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

NOT SURE

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |   |   |  |
|---|---|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>MO</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input checked="" type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>250</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>4000</u></p> <p>6. Are you a flight instructor now?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input checked="" type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input checked="" type="checkbox"/> Private Pilot<br/>2 <input checked="" type="checkbox"/> Commercial Pilot<br/>3 <input checked="" type="checkbox"/> Instrument Rating<br/>4 <input checked="" type="checkbox"/> ATP<br/>5 <input checked="" type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>4</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>2000</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input checked="" type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input checked="" type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input type="checkbox"/> Far easier<br/>2 <input checked="" type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|---|--|

#47

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

2 Normal operating procedures

2 Abnormal operating Proceed.

4 Emergency procedures

4 Missed approach procedures

3 Fit. maneuvers (e.g., stalls, etc)

4 Decision making & problem solving

4 Communications

5 Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

5 Desktop computer-based training aids for pilots and technician training

5 Use of AGATE airplane cockpit as ground flight simulator

5 Performance-based certification, instead of set flight time requirements

4 Computer record keeping for pilot training and certification

4 Flight and control system design to simplify pilot tasks and training

3 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

*Narrows the focus of concentration.*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

*Visualization in low Visibility situations*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

*It does not fly like a plane*

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |   |   |   |
|---|---|---|
| <p>1. Where do you live?<br/>(State's Initials) <u>MO.</u></p> <p>2. What is your highest flight rating?<br/>1 <input checked="" type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>0</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>0</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>0</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>0</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|---|---|

H 48

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training
21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective
22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_
24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- \_\_\_ Normal operating procedures
  - \_\_\_ Abnormal operating Proceed.
  - \_\_\_ Emergency procedures
  - \_\_\_ Missed approach procedures
  - \_\_\_ Flt. maneuvers (e.g., stalls, etc)
  - \_\_\_ Decision making & problem solving

- \_\_\_ Communications
  - \_\_\_ Navigation
  - \_\_\_ Other: \_\_\_\_\_
25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,
- \_\_\_ Desktop computer-based training aids for pilots and technician training
  - \_\_\_ Use of AGATE airplane cockpit as ground flight simulator
  - \_\_\_ Performance-based certification, instead of set flight time requirements
  - \_\_\_ Computer record keeping for pilot training and certification
  - \_\_\_ Flight and control system design to simplify pilot tasks and training
  - \_\_\_ Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.
27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?
28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

**"Thank you for your important insights."**

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |   |  |  |
|---|--|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>MO.</u></p> <p>2. What is your highest flight rating?<br/>1 <input checked="" type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>25</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>25</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input checked="" type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input checked="" type="checkbox"/> Private Pilot<br/>2 <input checked="" type="checkbox"/> Commercial Pilot<br/>3 <input checked="" type="checkbox"/> Instrument Rating<br/>4 <input checked="" type="checkbox"/> ATP<br/>5 <input checked="" type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>1</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>100</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input checked="" type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input checked="" type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input type="checkbox"/> "Flew" demonstrator<br/>2 <input checked="" type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input type="checkbox"/> Greatly increase it<br/>2 <input checked="" type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input type="checkbox"/> Far easier<br/>2 <input checked="" type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|--|--|

#49

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

5 Normal operating procedures

3 Abnormal operating Proceed.

1 Emergency procedures

3 Missed approach procedures

4 Fit. maneuvers (e.g., stalls, etc)

1 Decision making & problem solving

3 Communications

2 Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

3 Desktop computer-based training aids for pilots and technician training

3 Use of AGATE airplane cockpit as ground flight simulator

5 Performance-based certification, instead of set flight time requirements

4 Computer record keeping for pilot training and certification

4 Flight and control system design to simplify pilot tasks and training

3 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

*Remain the same. What do you do if you have computer failure in flight*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why? *A cheaper overall cost. Get more people involved*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

*Emergency procedures.*

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

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- Leave a question blank if it does not apply or if you do not know the answer.

- |  |   |  |
|--|---|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>NC</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input checked="" type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>500</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>1000</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input checked="" type="checkbox"/> Private Pilot<br/>2 <input checked="" type="checkbox"/> Commercial Pilot<br/>3 <input checked="" type="checkbox"/> Instrument Rating<br/>4 <input checked="" type="checkbox"/> ATP<br/>5 <input checked="" type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>4</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>400</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input checked="" type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input checked="" type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input checked="" type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|--|---|--|

# 50

20. List your uses of desktop computer-based flight training aids. (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

- 4 Normal operating procedures
- 2 Abnormal operating Proceed.
- 2 Emergency procedures
- 4 Missed approach procedures
- 4 Flt. maneuvers (e.g., stalls, etc)
- 3 Decision making & problem solving

2 Communications

4 Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

- 4 Desktop computer-based training aids for pilots and technician training
- 4 Use of AGATE airplane cockpit as ground flight simulator
- 3 Performance-based certification, instead of set flight time requirements
- 4 Computer record keeping for pilot training and certification
- 4 Flight and control system design to simplify pilot tasks and training
- 3 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

*allow more time to train that is cost effective*  
*\* PRACTISE = ↑ S.A.*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

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- Leave a question blank if it does not apply or if you do not know the answer.

- |   |  |  |
|---|--|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>NJ</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input checked="" type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>1000</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>10,000</u></p> <p>6. Are you a flight instructor now?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input checked="" type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input checked="" type="checkbox"/> Private Pilot<br/>2 <input checked="" type="checkbox"/> Commercial Pilot<br/>3 <input checked="" type="checkbox"/> Instrument Rating<br/>4 <input checked="" type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>2</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>1000</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input checked="" type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input checked="" type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input checked="" type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input type="checkbox"/> Greatly increased value<br/>2 <input checked="" type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input type="checkbox"/> Far easier<br/>2 <input checked="" type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|--|--|

#51

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

- Normal operating procedures
- Abnormal operating Proceed.
- Emergency procedures
- Missed approach procedures
- Fit. maneuvers (e.g., stalls, etc)
- Decision making & problem solving

Communications

Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

Desktop computer-based training aids for pilots and technician training

Use of AGATE airplane cockpit as ground flight simulator

Performance-based certification, instead of set flight time requirements

Computer record keeping for pilot training and certification

Flight and control system design to simplify pilot tasks and training

Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

*Increase*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

*EASE OF FLYING - IMPROVED SAFETY.*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

*?*

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

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NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |  |  |  |
|--|--|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>NJ</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input checked="" type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>200</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>9000</u></p> <p>6. Are you a flight instructor now?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>70</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>400</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input checked="" type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input checked="" type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input checked="" type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|--|--|--|

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20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

- Normal operating procedures
- Abnormal operating Proceed.
- Emergency procedures
- Missed approach procedures
- Flt. maneuvers (e.g., stalls, etc)
- Decision making & problem solving

Communications

Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

- Desktop computer-based training aids for pilots and technician training
- Use of AGATE airplane cockpit as ground flight simulator
- Performance-based certification, instead of set flight time requirements
- Computer record keeping for pilot training and certification
- Flight and control system design to simplify pilot tasks and training
- Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same. *Increase*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

*Need capability to fly without system*

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |   |  |  |
|---|--|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>NJ</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input checked="" type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>30</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>6,000+</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input checked="" type="checkbox"/> Part 141 <u>NO</u></p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>2</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>0</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input checked="" type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input checked="" type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|--|--|

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20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training
21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective
22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower
23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: NOT Active currently in flying aircraft
24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- Normal operating procedures
  - Abnormal operating Proceed.
  - Emergency procedures
  - Missed approach procedures
  - Flt. maneuvers (e.g., stalls, etc)
  - Decision making & problem solving
25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- Communications
  - Navigation
  - Other: \_\_\_\_\_
  - Desktop computer-based training aids for pilots and technician training
  - Use of AGATE airplane cockpit as ground flight simulator
  - Performance-based certification, instead of set flight time requirements
  - Computer record keeping for pilot training and certification
  - Flight and control system design to simplify pilot tasks and training
  - Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.
27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?
28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |  |   |   |
|--|---|---|
| <p>1. Where do you live?<br/>(State's Initials) <u>NJ</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input checked="" type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>30</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>1,007</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? _____</p> | <p>11. How many hours do you fly on your aircraft per year? <u>30-50</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input checked="" type="checkbox"/> Other: <u>Journalism</u></p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input type="checkbox"/> Do not use any<br/>2 <input checked="" type="checkbox"/> Flight-display simulation<br/>3 <input checked="" type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|--|---|---|

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20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

3 Normal operating procedures

3 Abnormal operating Proceed.

3 Emergency procedures

3 Missed approach procedures

3 Flt. maneuvers (e.g., stalls, etc)

2 Decision making & problem solving

1 Communications

3 Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

5 Desktop computer-based training aids for pilots and technician training

2 Use of AGATE airplane cockpit as ground flight simulator

5 Performance-based certification, instead of set flight time requirements

4 Computer record keeping for pilot training and certification

5 Flight and control system design to simplify pilot tasks and training

5 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

*Graphic display of terrain and desired flight path - especially in head-up display.*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

*~~terrain~~ flight path mapping & terrain presentation*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

*putting the technology in the actual airplane for "rehearsing" flights. The home sim would do as well.*

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

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- Leave a question blank if it does not apply or if you do not know the answer.

- |   |  |   |
|---|--|---|
| <p>1. Where do you live?<br/>(State's Initials) <u>NJ</u></p> <p>2. What is your highest flight rating?<br/>1 <input checked="" type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>12</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>120</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>2</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>10</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input checked="" type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input checked="" type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input checked="" type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|--|---|

HSS

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

\_\_\_ Normal operating procedures

\_\_\_ Abnormal operating Proceed.

Emergency procedures

\_\_\_ Missed approach procedures

\_\_\_ Flt. maneuvers (e.g., stalls, etc)

\_\_\_ Decision making & problem solving

\_\_\_ Communications

\_\_\_ Navigation

\_\_\_ Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

\_\_\_ Desktop computer-based training aids for pilots and technician training

Use of AGATE airplane cockpit as ground flight simulator

\_\_\_ Performance-based certification, instead of set flight time requirements

\_\_\_ Computer record keeping for pilot training and certification

\_\_\_ Flight and control system design to simplify pilot tasks and training

\_\_\_ Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

*workload*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

"Thank you for your important insights."

## AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |  |   |  |
|--|---|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>NY</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input checked="" type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>900</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>23,300</u></p> <p>6. Are you a flight instructor now?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input checked="" type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input checked="" type="checkbox"/> Private Pilot<br/>2 <input checked="" type="checkbox"/> Commercial Pilot<br/>3 <input checked="" type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input checked="" type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>6</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>2000</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input checked="" type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input type="checkbox"/> Single Piston Engine<br/>2 <input checked="" type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input checked="" type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|--|---|--|

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20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training
21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective
22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower
23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_
24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- \_\_\_ Normal operating procedures
  - \_\_\_ Abnormal operating Proceed.
  - \_\_\_ Emergency procedures
  - \_\_\_ Missed approach procedures
  - \_\_\_ Flt. maneuvers (e.g., stalls, etc)
  - \_\_\_ Decision making & problem solving
25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,
- \_\_\_ Communications
  - \_\_\_ Navigation
  - \_\_\_ Other: \_\_\_\_\_
  - \_\_\_ Desktop computer-based training aids for pilots and technician training
  - \_\_\_ Use of AGATE airplane cockpit as ground flight simulator
  - \_\_\_ Performance-based certification, instead of set flight time requirements
  - \_\_\_ Computer record keeping for pilot training and certification
  - 5 Flight and control system design to simplify pilot tasks and training
  - \_\_\_ Unified instrument/private pilot training curriculum
26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.
27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?
28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |  |   |  |
|--|---|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>NY</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input checked="" type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>200</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>10,200</u></p> <p>6. Are you a flight instructor now?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input checked="" type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input checked="" type="checkbox"/> Private Pilot<br/>2 <input checked="" type="checkbox"/> Commercial Pilot<br/>3 <input checked="" type="checkbox"/> Instrument Rating<br/>4 <input checked="" type="checkbox"/> ATP<br/>5 <input checked="" type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>32</u></p> | <p>11. How many hours do you fly on your aircraft per year? _____<br/><u>FLT AVG 4 350</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input checked="" type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input type="checkbox"/> "Flew" demonstrator<br/>2 <input checked="" type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input checked="" type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|--|---|--|

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20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training
21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective
22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_
24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- 5 Normal operating procedures
  - 5 Abnormal operating Proceed.
  - 4 Emergency procedures
  - 5 Missed approach procedures
  - ? Flt. maneuvers (e.g., stalls, etc)
  - 3 Decision making & problem solving

3 Communications

5 Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

3 Desktop computer-based training aids for pilots and technician training

5 Use of AGATE airplane cockpit as ground flight simulator

3 ~~5~~ Performance-based certification, instead of set flight time requirements

5 Computer record keeping for pilot training and certification

4 Flight and control system design to simplify pilot tasks and training

3 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

*By displaying flight path as a geographic concept instead of a Nav Signal Geometric concept, the average pilot could grasp it far better*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot?

*Why? Highway in sky, situational awareness. MAJOR concern: Reliability - An Agate trained pilot in a loss of data/display would have no situational aware.*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

*Single Lever power control. I would rank this as nice to have but not too big a deal.*

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- Where do you live?  
(State's Initials) NV
- What is your highest flight rating?  
1  Student  
2  Private Pilot  
3  Commercial Pilot  
4  ATP
- Do you have an instrument rating?  
1  Yes  
2  No
- How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? 40
- Enter your total pilot flying hours in GA airplanes? 5000
- Are you a flight instructor now?  
1  Yes  
2  No
- Do you own or manage an FBO?  
1  Yes  
2  No
- If you own or manage a flight school, check type:  
1  Part 61  
2  Part 141
- Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)  
1  Private Pilot  
2  Commercial Pilot  
3  Instrument Rating  
4  ATP  
5  CFI
- How many general aviation airplanes does your business have? 25

- How many hours do you fly on your aircraft per year? 500
- What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?  
1  no change  
2  10% increase  
3  25% increase  
4  50% increase  
5  100% or more increase
- What is the main type of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business  
1  Single Piston Engine  
2  Twin Piston Engine  
3  Single Engine Turboprop  
4  Twin Turboprop  
5  Jet  
6  Helicopters  
7  Other \_\_\_\_\_
- If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)  
1  Aircraft R&D, Manufact.  
2  Airplane sales  
3  Aircraft components  
4  Aircraft services  
5  Pilot flight training  
6  Training other than pilots  
7  Aviation training aids  
8  Commuter, charter, Medevac or air taxi  
9  Insurance  
10  Aircraft renting or leasing  
11  Other: \_\_\_\_\_

- How did you take part in the AGATE concept demonstration?  
1  "Flew" demonstrator  
2  Observed
- Will the display concepts demonstrated change a pilot's situation awareness?  
1  Greatly increase it  
2  Somewhat increase it  
3  No change  
4  Somewhat reduce it  
5  Greatly reduce it
- What is the value of the "Heads-Up" display concept compared to current GA displays?  
1  Greatly increased value  
2  Somewhat higher value  
3  No change  
4  Somewhat less value  
5  Far less value
- How do you think the graphic "Highway in the Sky" would affect pilot tasks?  
1  Far easier  
2  Somewhat easier  
3  No change  
4  Somewhat more difficult  
5  Far more difficult
- What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)  
1  Do not use any  
2  Flight-display simulation  
3  Integrated display & flight control simulations  
4  Various other individual piloting & A/C systems

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20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
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  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

- Normal operating procedures
- Abnormal operating Proceed.
- Emergency procedures
- Missed approach procedures
- Fit. maneuvers (e.g., stalls, etc)
- Decision making & problem solving

Communications

Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

Desktop computer-based training aids for pilots and technician training

Use of AGATE airplane cockpit as ground flight simulator

Performance-based certification, instead of set flight time requirements

Computer record keeping for pilot training and certification

Flight and control system design to simplify pilot tasks and training

Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

*DISTRACTION IN CRUISE GREAT FOR APPROACH*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

*IFR Approach*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

*Cruise guidance seems unnecessary*

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |  |  |  |
|--|--|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>NY.</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input checked="" type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>0</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>950</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? _____</p> | <p>11. How many hours do you fly on your aircraft per year? _____</p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input checked="" type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
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20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

- Normal operating procedures
- Abnormal operating Proceed.
- Emergency procedures
- Missed approach procedures
- Flt. maneuvers (e.g., stalls, etc)
- Decision making & problem solving

Communications

Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

- Desktop computer-based training aids for pilots and technician training
- Use of AGATE airplane cockpit as ground flight simulator
- Performance-based certification, instead of set flight time requirements
- Computer record keeping for pilot training and certification
- Flight and control system design to simplify pilot tasks and training
- Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

*Improve*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

<p>1. Where do you live? (State's Initials) <u>NY</u></p> <p>2. What is your highest flight rating? 1 <input checked="" type="checkbox"/> Student 2 <input type="checkbox"/> Private Pilot 3 <input type="checkbox"/> Commercial Pilot 4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>0</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>2</u></p> <p>6. Are you a flight instructor now? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No</p> <p>7. Do you own or manage an FBO? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type: 1 <input type="checkbox"/> Part 61 2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all) 1 <input type="checkbox"/> Private Pilot 2 <input type="checkbox"/> Commercial Pilot 3 <input type="checkbox"/> Instrument Rating 4 <input type="checkbox"/> ATP 5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? _____</p>	<p>11. How many hours do you fly on your aircraft per year? _____</p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today? 1 <input type="checkbox"/> no change 2 <input type="checkbox"/> 10% increase 3 <input type="checkbox"/> 25% increase 4 <input type="checkbox"/> 50% increase 5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business 1 <input type="checkbox"/> Single Piston Engine 2 <input type="checkbox"/> Twin Piston Engine 3 <input type="checkbox"/> Single Engine Turboprop 4 <input type="checkbox"/> Twin Turboprop 5 <input type="checkbox"/> Jet 6 <input type="checkbox"/> Helicopters 7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one) 1 <input type="checkbox"/> Aircraft R&amp;D, Manufact. 2 <input type="checkbox"/> Airplane sales 3 <input type="checkbox"/> Aircraft components 4 <input checked="" type="checkbox"/> Aircraft services 5 <input type="checkbox"/> Pilot flight training 6 <input type="checkbox"/> Training other than pilots 7 <input type="checkbox"/> Aviation training aids 8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi 9 <input type="checkbox"/> Insurance 10 <input type="checkbox"/> Aircraft renting or leasing 11 <input type="checkbox"/> Other: _____</p>	<p>15. How did you take part in the AGATE concept demonstration? 1 <input type="checkbox"/> "Flew" demonstrator 2 <input checked="" type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness? 1 <input type="checkbox"/> Greatly increase it 2 <input type="checkbox"/> Somewhat increase it 3 <input type="checkbox"/> No change 4 <input type="checkbox"/> Somewhat reduce it 5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays? 1 <input type="checkbox"/> Greatly increased value 2 <input type="checkbox"/> Somewhat higher value 3 <input type="checkbox"/> No change 4 <input type="checkbox"/> Somewhat less value 5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks? 1 <input checked="" type="checkbox"/> Far easier 2 <input type="checkbox"/> Somewhat easier 3 <input type="checkbox"/> No change 4 <input type="checkbox"/> Somewhat more difficult 5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply) 1 <input type="checkbox"/> Do not use any 2 <input type="checkbox"/> Flight-display simulation 3 <input type="checkbox"/> Integrated display &amp; flight control simulations 4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p>
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20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
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  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- \_\_\_ Normal operating procedures
  - \_\_\_ Abnormal operating Proceed.
  - \_\_\_ Emergency procedures
  - \_\_\_ Missed approach procedures
  - \_\_\_ Flt. maneuvers (e.g., stalls, etc)
  - \_\_\_ Decision making & problem solving

- \_\_\_ Communications
- \_\_\_ Navigation
- \_\_\_ Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

- Desktop computer-based training aids for pilots and technician training
- Use of AGATE airplane cockpit as ground flight simulator
- \_\_\_ Performance-based certification, instead of set flight time requirements
- \_\_\_ Computer record keeping for pilot training and certification
- \_\_\_ Flight and control system design to simplify pilot tasks and training
- \_\_\_ Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

**"Thank you for your important insights."**

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

<p>1. Where do you live? (State's Initials) <u>OH</u></p> <p>2. What is your highest flight rating? 1 <input type="checkbox"/> Student 2 <input type="checkbox"/> Private Pilot 3 <input type="checkbox"/> Commercial Pilot 4 <input checked="" type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating? 1 <input checked="" type="checkbox"/> Yes 2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>300</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>10,000</u></p> <p>6. Are you a flight instructor now? 1 <input checked="" type="checkbox"/> Yes 2 <input type="checkbox"/> No</p> <p>7. Do you own or manage an FBO? 1 <input checked="" type="checkbox"/> Yes 2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type: 1 <input checked="" type="checkbox"/> Part 61 2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all) 1 <input type="checkbox"/> Private Pilot 2 <input type="checkbox"/> Commercial Pilot 3 <input type="checkbox"/> Instrument Rating 4 <input type="checkbox"/> ATP 5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>0</u></p>	<p>11. How many hours do you fly on your aircraft per year? <u>300</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today? 1 <input type="checkbox"/> no change 2 <input type="checkbox"/> 10% increase 3 <input type="checkbox"/> 25% increase 4 <input type="checkbox"/> 50% increase 5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business 1 <input type="checkbox"/> Single Piston Engine 2 <input checked="" type="checkbox"/> Twin Piston Engine 3 <input type="checkbox"/> Single Engine Turboprop 4 <input type="checkbox"/> Twin Turboprop 5 <input type="checkbox"/> Jet 6 <input type="checkbox"/> Helicopters 7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one) 1 <input type="checkbox"/> Aircraft R&amp;D, Manufact. 2 <input type="checkbox"/> Airplane sales 3 <input type="checkbox"/> Aircraft components 4 <input type="checkbox"/> Aircraft services 5 <input type="checkbox"/> Pilot flight training 6 <input type="checkbox"/> Training other than pilots 7 <input type="checkbox"/> Aviation training aids 8 <input checked="" type="checkbox"/> Commuter, charter, Medevac or air taxi 9 <input type="checkbox"/> Insurance 10 <input type="checkbox"/> Aircraft renting or leasing 11 <input type="checkbox"/> Other: _____</p>	<p>15. How did you take part in the AGATE concept demonstration? 1 <input checked="" type="checkbox"/> "Flew" demonstrator 2 <input checked="" type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness? 1 <input type="checkbox"/> Greatly increase it 2 <input checked="" type="checkbox"/> Somewhat increase it 3 <input type="checkbox"/> No change 4 <input type="checkbox"/> Somewhat reduce it 5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays? 1 <input type="checkbox"/> Greatly increased value 2 <input checked="" type="checkbox"/> Somewhat higher value 3 <input type="checkbox"/> No change 4 <input type="checkbox"/> Somewhat less value 5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks? 1 <input type="checkbox"/> Far easier 2 <input checked="" type="checkbox"/> Somewhat easier 3 <input type="checkbox"/> No change 4 <input type="checkbox"/> Somewhat more difficult 5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply) 1 <input checked="" type="checkbox"/> Do not use any 2 <input type="checkbox"/> Flight-display simulation 3 <input type="checkbox"/> Integrated display &amp; flight control simulations 4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p>
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20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training
21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
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  - 5  Far less effective
22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_
24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- Normal operating procedures
  - Abnormal operating Proceed.
  - Emergency procedures
  - Missed approach procedures
  - Fit. maneuvers (e.g., stalls, etc)
  - Decision making & problem solving

- Communications
  - Navigation
  - Other: \_\_\_\_\_
25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- Desktop computer-based training aids for pilots and technician training
  - Use of AGATE airplane cockpit as ground flight simulator
  - Performance-based certification, instead of set flight time requirements
  - Computer record keeping for pilot training and certification
  - Flight and control system design to simplify pilot tasks and training
  - Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

*Decrease*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

*Simplifications*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

*this will make pilots less aware of the ~~static~~ stationary system like GPS and Loam has done to XC Pilots,  
"Thank you for your important insights."*

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

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- Leave a question blank if it does not apply or if you do not know the answer.

- |   |  |  |
|---|--|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>OH</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input checked="" type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>250</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>3200</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>2</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>500</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input type="checkbox"/> Single Piston Engine<br/>2 <input checked="" type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input checked="" type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input checked="" type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|--|--|

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20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
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  - \_\_\_ Emergency procedures
  - \_\_\_ Missed approach procedures
  - \_\_\_ Flt. maneuvers (e.g., stalls, etc)
  - \_\_\_ Decision making & problem solving

- \_\_\_ Communications
  - \_\_\_ Navigation
  - \_\_\_ Other: \_\_\_\_\_
25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,
- 5 Desktop computer-based training aids for pilots and technician training
  - 3 Use of AGATE airplane cockpit as ground flight simulator
  - 4 Performance-based certification, instead of set flight time requirements
  - 4 Computer record keeping for pilot training and certification
  - 4 Flight and control system design to simplify pilot tasks and training
  - 5 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same. *Heads up, realistic display*
27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why? *Single unified display*
28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |  |   |  |
|--|---|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>PA</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input checked="" type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>50</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>22000</u></p> <p>6. Are you a flight instructor now?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input checked="" type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input checked="" type="checkbox"/> Private Pilot<br/>2 <input checked="" type="checkbox"/> Commercial Pilot<br/>3 <input checked="" type="checkbox"/> Instrument Rating<br/>4 <input checked="" type="checkbox"/> ATP<br/>5 <input checked="" type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>22</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>1200</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input checked="" type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input checked="" type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input checked="" type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: <u>1</u></p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input checked="" type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input checked="" type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|--|---|--|

H63

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- 5 Normal operating procedures
- \_\_\_ Abnormal operating Proceed.
- \_\_\_ Emergency procedures
- \_\_\_ Missed approach procedures
- \_\_\_ Flt. maneuvers (e.g., stalls, etc)
- \_\_\_ Decision making & problem solving

- \_\_\_ Communications
- \_\_\_ Navigation
- \_\_\_ Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

- \_\_\_ Desktop computer-based training aids for pilots and technician training
- 5 Use of AGATE airplane cockpit as ground flight simulator
- \_\_\_ Performance-based certification, instead of set flight time requirements
- \_\_\_ Computer record keeping for pilot training and certification
- \_\_\_ Flight and control system design to simplify pilot tasks and training
- \_\_\_ Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

*Simplisity*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

<p>1. Where do you live? (State's Initials) <u>TX</u></p> <p>2. What is your highest flight rating? 1 <input type="checkbox"/> Student 2 <input type="checkbox"/> Private Pilot 3 <input checked="" type="checkbox"/> Commercial Pilot 4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating? 1 <input checked="" type="checkbox"/> Yes 2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>200</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>500</u></p> <p>6. Are you a flight instructor now? 1 <input checked="" type="checkbox"/> Yes 2 <input type="checkbox"/> No</p> <p>7. Do you own or manage an FBO? 1 <input type="checkbox"/> Yes 2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type: 1 <input type="checkbox"/> Part 61 2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all) 1 <input type="checkbox"/> Private Pilot 2 <input type="checkbox"/> Commercial Pilot 3 <input type="checkbox"/> Instrument Rating 4 <input type="checkbox"/> ATP 5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? _____</p>	<p>11. How many hours do you fly on your aircraft per year? <u>100</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today? 1 <input type="checkbox"/> no change 2 <input type="checkbox"/> 10% increase 3 <input checked="" type="checkbox"/> 25% increase 4 <input type="checkbox"/> 50% increase 5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business 1 <input checked="" type="checkbox"/> Single Piston Engine 2 <input type="checkbox"/> Twin Piston Engine 3 <input type="checkbox"/> Single Engine Turboprop 4 <input type="checkbox"/> Twin Turboprop 5 <input type="checkbox"/> Jet 6 <input type="checkbox"/> Helicopters 7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one) 1 <input type="checkbox"/> Aircraft R&amp;D, Manufact. 2 <input type="checkbox"/> Airplane sales 3 <input type="checkbox"/> Aircraft components 4 <input type="checkbox"/> Aircraft services 5 <input type="checkbox"/> Pilot flight training 6 <input type="checkbox"/> Training other than pilots 7 <input type="checkbox"/> Aviation training aids 8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi 9 <input type="checkbox"/> Insurance 10 <input type="checkbox"/> Aircraft renting or leasing 11 <input checked="" type="checkbox"/> Other: <u>Tooling</u></p>	<p>15. How did you take part in the AGATE concept demonstration? 1 <input checked="" type="checkbox"/> "Flew" demonstrator 2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness? 1 <input type="checkbox"/> Greatly increase it 2 <input checked="" type="checkbox"/> Somewhat increase it 3 <input type="checkbox"/> No change 4 <input type="checkbox"/> Somewhat reduce it 5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays? 1 <input type="checkbox"/> Greatly increased value 2 <input checked="" type="checkbox"/> Somewhat higher value 3 <input type="checkbox"/> No change 4 <input type="checkbox"/> Somewhat less value 5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks? 1 <input type="checkbox"/> Far easier 2 <input checked="" type="checkbox"/> Somewhat easier 3 <input type="checkbox"/> No change 4 <input type="checkbox"/> Somewhat more difficult 5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply) 1 <input checked="" type="checkbox"/> Do not use any 2 <input type="checkbox"/> Flight-display simulation 3 <input type="checkbox"/> Integrated display &amp; flight control simulations 4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p>
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H64

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training
21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective
22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

- 4 Normal operating procedures
- 2 Abnormal operating Proceed.
- 2 Emergency procedures
- 4 Missed approach procedures
- 1 Flt. maneuvers (e.g., stalls, etc)
- 3 Decision making & problem solving

4 Communications

4 Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

2 Desktop computer-based training aids for pilots and technician training

3 Use of AGATE airplane cockpit as ground flight simulator

4 Performance-based certification, instead of set flight time requirements

4 Computer record keeping for pilot training and certification

2 Flight and control system design to simplify pilot tasks and training

3 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same. *Decrease thru ~~excess~~ complacency*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why? *Introduction to flight, reduction in training cost*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why? *Automatic turn coordination*

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |   |   |  |
|---|---|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>VT</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input checked="" type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>75-100</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>250</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input checked="" type="checkbox"/> Private Pilot<br/>2 <input checked="" type="checkbox"/> Commercial Pilot<br/>3 <input checked="" type="checkbox"/> Instrument Rating<br/>4 <input checked="" type="checkbox"/> ATP<br/>5 <input checked="" type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>70</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>100+</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input checked="" type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: <u>NAVJO</u></p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input checked="" type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input checked="" type="checkbox"/> Far easier<br/>2 <input type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|---|---|--|

# 65

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Flt. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.
- Normal operating procedures
  - Abnormal operating Proceed.
  - Emergency procedures
  - Missed approach procedures
  - Flt. maneuvers (e.g., stalls, etc)
  - Decision making & problem solving

Communications

Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

- Desktop computer-based training aids for pilots and technician training
- Use of AGATE airplane cockpit as ground flight simulator
- Performance-based certification, instead of set flight time requirements
- Computer record keeping for pilot training and certification
- Flight and control system design to simplify pilot tasks and training
- Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.
- easier to keep track of where you are*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?
- Computer aided Flight Planner - the Highway in the Sky*

*will help you navigate much easier*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

*?*

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |  |  |  |
|--|--|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>WI</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input checked="" type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>150</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>800</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input checked="" type="checkbox"/> Yes<br/>2 <input type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input checked="" type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input checked="" type="checkbox"/> Private Pilot<br/>2 <input checked="" type="checkbox"/> Commercial Pilot<br/>3 <input checked="" type="checkbox"/> Instrument Rating<br/>4 <input checked="" type="checkbox"/> ATP<br/>5 <input checked="" type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>5</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>150</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input checked="" type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input checked="" type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input type="checkbox"/> Other: _____</p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input type="checkbox"/> "Flew" demonstrator<br/>2 <input checked="" type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input type="checkbox"/> Greatly increase it<br/>2 <input checked="" type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input checked="" type="checkbox"/> Greatly increased value<br/>2 <input type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input type="checkbox"/> Far easier<br/>2 <input checked="" type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|--|--|--|

#66

20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: Cost

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

Normal operating procedures

Abnormal operating Proceed.

Emergency procedures

Missed approach procedures

Fit. maneuvers (e.g., stalls, etc)

Decision making & problem solving

Communications

Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

Desktop computer-based training aids for pilots and technician training

Use of AGATE airplane cockpit as ground flight simulator

Performance-based certification, instead of set flight time requirements

Computer record keeping for pilot training and certification

Flight and control system design to simplify pilot tasks and training

Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

*Improve*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

*Highway Signs*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

"Thank you for your important insights."

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

- |  |  |  |
|--|--|--|
| <p>1. Where do you live?<br/>(State's Initials) <u>VA</u></p> <p>2. What is your highest flight rating?<br/>1 <input type="checkbox"/> Student<br/>2 <input checked="" type="checkbox"/> Private Pilot<br/>3 <input type="checkbox"/> Commercial Pilot<br/>4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>0</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>200</u></p> <p>6. Are you a flight instructor now?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO?<br/>1 <input type="checkbox"/> Yes<br/>2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type:<br/>1 <input type="checkbox"/> Part 61<br/>2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all)<br/>1 <input type="checkbox"/> Private Pilot<br/>2 <input type="checkbox"/> Commercial Pilot<br/>3 <input type="checkbox"/> Instrument Rating<br/>4 <input type="checkbox"/> ATP<br/>5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>3</u></p> | <p>11. How many hours do you fly on your aircraft per year? <u>70</u><br/><i>usually,</i></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today?<br/>1 <input checked="" type="checkbox"/> no change<br/>2 <input type="checkbox"/> 10% increase<br/>3 <input type="checkbox"/> 25% increase<br/>4 <input type="checkbox"/> 50% increase<br/>5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business<br/>1 <input checked="" type="checkbox"/> Single Piston Engine<br/>2 <input type="checkbox"/> Twin Piston Engine<br/>3 <input type="checkbox"/> Single Engine Turboprop<br/>4 <input type="checkbox"/> Twin Turboprop<br/>5 <input type="checkbox"/> Jet<br/>6 <input type="checkbox"/> Helicopters<br/>7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one)<br/>1 <input type="checkbox"/> Aircraft R&amp;D, Manufact.<br/>2 <input type="checkbox"/> Airplane sales<br/>3 <input type="checkbox"/> Aircraft components<br/>4 <input type="checkbox"/> Aircraft services<br/>5 <input type="checkbox"/> Pilot flight training<br/>6 <input type="checkbox"/> Training other than pilots<br/>7 <input type="checkbox"/> Aviation training aids<br/>8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi<br/>9 <input type="checkbox"/> Insurance<br/>10 <input type="checkbox"/> Aircraft renting or leasing<br/>11 <input checked="" type="checkbox"/> Other: <u>Aviation Journalist</u></p> | <p>15. How did you take part in the AGATE concept demonstration?<br/>1 <input checked="" type="checkbox"/> "Flew" demonstrator<br/>2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness?<br/>1 <input type="checkbox"/> Greatly increase it<br/>2 <input type="checkbox"/> Somewhat increase it<br/>3 <input type="checkbox"/> No change<br/>4 <input checked="" type="checkbox"/> Somewhat reduce it<br/>5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays?<br/>1 <input type="checkbox"/> Greatly increased value<br/>2 <input checked="" type="checkbox"/> Somewhat higher value<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat less value<br/>5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks?<br/>1 <input type="checkbox"/> Far easier<br/>2 <input checked="" type="checkbox"/> Somewhat easier<br/>3 <input type="checkbox"/> No change<br/>4 <input type="checkbox"/> Somewhat more difficult<br/>5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply)<br/>1 <input checked="" type="checkbox"/> Do not use any<br/>2 <input type="checkbox"/> Flight-display simulation<br/>3 <input type="checkbox"/> Integrated display &amp; flight control simulations<br/>4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p> |
|--|--|--|

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20. List your uses of desktop computer-based flight training aids (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

- 4 Normal operating procedures
- 3 Abnormal operating Proceed.
- 3 Emergency procedures
- 5 Missed approach procedures
- 2 Fit. maneuvers (e.g., stalls, etc)
- 5 Decision making & problem solving

1 Communications

5 Navigation

Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

- 2 Desktop computer-based training aids for pilots and technician training
- 4 Use of AGATE airplane cockpit as ground flight simulator
- 4 Performance-based certification, instead of set flight time requirements
- 5 Computer record keeping for pilot training and certification
- 5 Flight and control system design to simplify pilot tasks and training
- 4 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same. *Because the display is continuous, without numbers, you are forced to watch it move, prolonging the division of your attention between panel and outside the airplane.*

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why? *It allows much more precise approaches and it is good for navigation, you don't have to constantly check your waypoints and directional indicator.*

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why? *communications - because it really isn't designed to improve communications. Also, it isn't too good for flight maneuvers and stalls, because it still doesn't fly enough like a real aircraft.*

# AGATE Concepts Demonstrator Survey

NATA Convention, March 24-26, 1997

- Please provide only one answer (the most important one) to each question, unless requested otherwise.
- Leave a question blank if it does not apply or if you do not know the answer.

<p>1. Where do you live? (State's Initials) <u>WI</u></p> <p>2. What is your highest flight rating? 1 <input type="checkbox"/> Student 2 <input checked="" type="checkbox"/> Private Pilot 3 <input type="checkbox"/> Commercial Pilot 4 <input type="checkbox"/> ATP</p> <p>3. Do you have an instrument rating? 1 <input checked="" type="checkbox"/> Yes 2 <input type="checkbox"/> No</p> <p>4. How many hours did you fly as a pilot in general aviation airplanes in the last 12 months? <u>150</u></p> <p>5. Enter your total pilot flying hours in GA airplanes? <u>1200</u></p> <p>6. Are you a flight instructor now? 1 <input type="checkbox"/> Yes 2 <input checked="" type="checkbox"/> No</p> <p>7. Do you own or manage an FBO? 1 <input type="checkbox"/> Yes 2 <input checked="" type="checkbox"/> No</p> <p>8. If you own or manage a flight school, check type: 1 <input type="checkbox"/> Part 61 2 <input type="checkbox"/> Part 141</p> <p>9. Check ratings, if any, for which you provide flight training. Applies to your organization if you own or manage a flight school: (Check all) 1 <input type="checkbox"/> Private Pilot 2 <input type="checkbox"/> Commercial Pilot 3 <input type="checkbox"/> Instrument Rating 4 <input type="checkbox"/> ATP 5 <input type="checkbox"/> CFI</p> <p>10. How many general aviation airplanes does your business have? <u>1</u></p>	<p>11. How many hours do you fly on your aircraft per year? <u>200</u></p> <p>12. What do you think the effect would be on your A/C use rate of the new capabilities you have seen demonstrated today? 1 <input type="checkbox"/> no change 2 <input type="checkbox"/> 10% increase 3 <input checked="" type="checkbox"/> 25% increase 4 <input type="checkbox"/> 50% increase 5 <input type="checkbox"/> 100% or more increase</p> <p>13. What is the <u>main type</u> of general aviation airplane you fly? If you are the owner or manager, indicate the main airplane type used in your aviation business 1 <input checked="" type="checkbox"/> Single Piston Engine 2 <input type="checkbox"/> Twin Piston Engine 3 <input type="checkbox"/> Single Engine Turboprop 4 <input type="checkbox"/> Twin Turboprop 5 <input type="checkbox"/> Jet 6 <input type="checkbox"/> Helicopters 7 <input type="checkbox"/> Other _____</p> <p>14. If you earn a living in general aviation, state the primary activity you are engaged in. (Check only one) 1 <input type="checkbox"/> Aircraft R&amp;D, Manufact. 2 <input type="checkbox"/> Airplane sales 3 <input type="checkbox"/> Aircraft components 4 <input type="checkbox"/> Aircraft services 5 <input type="checkbox"/> Pilot flight training 6 <input type="checkbox"/> Training other than pilots 7 <input type="checkbox"/> Aviation training aids 8 <input type="checkbox"/> Commuter, charter, Medevac or air taxi 9 <input type="checkbox"/> Insurance 10 <input type="checkbox"/> Aircraft renting or leasing 11 <input checked="" type="checkbox"/> Other: <u>HAWKERS</u></p>	<p>15. How did you take part in the AGATE concept demonstration? 1 <input checked="" type="checkbox"/> "Flew" demonstrator 2 <input type="checkbox"/> Observed</p> <p>16. Will the display concepts demonstrated change a pilot's situation awareness? 1 <input checked="" type="checkbox"/> Greatly increase it 2 <input type="checkbox"/> Somewhat increase it 3 <input type="checkbox"/> No change 4 <input type="checkbox"/> Somewhat reduce it 5 <input type="checkbox"/> Greatly reduce it</p> <p>17. What is the value of the "Heads-Up" display concept compared to current GA displays? 1 <input checked="" type="checkbox"/> Greatly increased value 2 <input type="checkbox"/> Somewhat higher value 3 <input type="checkbox"/> No change 4 <input type="checkbox"/> Somewhat less value 5 <input type="checkbox"/> Far less value</p> <p>18. How do you think the graphic "Highway in the Sky" would affect pilot tasks? 1 <input checked="" type="checkbox"/> Far easier 2 <input type="checkbox"/> Somewhat easier 3 <input type="checkbox"/> No change 4 <input type="checkbox"/> Somewhat more difficult 5 <input type="checkbox"/> Far more difficult</p> <p>19. What kind of desktop personal computer-based flight training aids, if any, do you use for flight training or to maintain proficiency? (Check all that apply) 1 <input type="checkbox"/> Do not use any 2 <input type="checkbox"/> Flight-display simulation 3 <input type="checkbox"/> Integrated display &amp; flight control simulations 4 <input type="checkbox"/> Various other individual piloting &amp; A/C systems</p>
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20. List your uses of desktop computer-based flight training aids. (All)
- 1  Do not use any
  - 2  Retaining own personal proficiency
  - 3  Private Pilot rating training
  - 4  Instrument (IFR) training
  - 5  Multi-engine ratings
  - 6  Commercial rating
  - 7  ATP training

21. In your opinion, what is the effectiveness of these computer-based flight training aids compared to other available methods for providing the same information and skills. (Check one)
- 1  Far more effective
  - 2  Somewhat more
  - 3  No change
  - 4  Somewhat less
  - 5  Far less effective

22. What effect do these desktop computer-based flight training aids have on the time (calendar) to get a new rating.
- 1  Far faster
  - 2  Somewhat faster
  - 3  No change
  - 4  Somewhat slower
  - 5  Far slower

23. What aspects of desktop computer-based flight training aids are major obstacles to your (wider) use of them. (all)
- 1  Their complexity
  - 2  Computer literacy
  - 3  Home computer costs
  - 4  No credit toward Fit. ratings
  - 5  Time required to use them
  - 6  Limited effectiveness
  - 7  Lack of realism
  - 8  Other: \_\_\_\_\_

24. Rate the likely training value of using the actual AGATE airplane cockpit as a ground flight simulator. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order.

5 Normal operating procedures

5 Abnormal operating Proceed.

5 Emergency procedures

5 Missed approach procedures

5 Fit. maneuvers (e.g., stalls, etc)

5 Decision making & problem solving

\_\_\_ Communications

5 Navigation

\_\_\_ Other: \_\_\_\_\_

25. Based on the demonstration, rate the likely importance of the following capabilities expected from the AGATE program. Enter any rating from 1 = little value to 5 = very great value for each item below. Duplicate ratings are allowed. Do not rank in order,

5 Desktop computer-based training aids for pilots and technician training

5 Use of AGATE airplane cockpit as ground flight simulator

5 Performance-based certification, instead of set flight time requirements

5 Computer record keeping for pilot training and certification

5 Flight and control system design to simplify pilot tasks and training

5 Unified instrument/private pilot training curriculum

26. Why do you think the AGATE display concepts would cause the pilot's situation awareness to improve, decrease or remain the same.

27. What concepts presented in the AGATE Demonstrator do you believe offer the most value to a general aviation pilot? Why?

28. What concepts presented in the Demonstrator do you believe offer the least value to a general aviation pilot? Why?

"Thank you for your important insights."

## **APPENDIX E**

### **NATA AGATE Concepts Demonstration Survey Database**



# NATA 1997 AGATE SURVEY

## AGATE Participant Responses

<p>1. Home state <input style="width: 50px;" type="text"/></p> <p>2. Rating <input style="width: 150px;" type="text"/></p> <p>3. Instrument rated <input type="checkbox"/> No</p> <p>4. 12 Months flt time <input style="width: 50px;" type="text" value="0"/></p> <p>5. Total flight time <input style="width: 50px;" type="text" value="0"/></p> <p>6. Flight Instructor <input type="checkbox"/> No</p> <p>7. Own/mng FBO <input type="checkbox"/> No</p> <p>8. Type flt school <input style="width: 70px;" type="text"/></p> <p>9. Type of Training <input style="width: 200px;" type="text"/></p> <p>10. # of Airplanes <input style="width: 50px;" type="text" value="0"/></p> <p>11. A/C Flt hours <input style="width: 50px;" type="text" value="0"/></p> <p>12. Capabilities Effect <input style="width: 150px;" type="text" value="No change"/></p> <p>13. Main AC type <input style="width: 150px;" type="text"/></p> <p>14. Prim Activity <input style="width: 250px;" type="text"/></p> <p>15. Participation <input style="width: 70px;" type="text" value="Observed"/></p> <p>16. Situation Awareness <input style="width: 100px;" type="text" value="4"/></p> <p>17. Heads-Up value <input style="width: 100px;" type="text" value="1"/></p> <p>18. Highway affect on tasks <input style="width: 150px;" type="text" value="1"/></p>	<p>19. PCATD types <input style="width: 50px;" type="text" value="2,3"/></p> <p>20. PCATD uses <input style="width: 50px;" type="text"/></p> <p>21. PCATD effectiveness <input style="width: 50px;" type="text" value="0"/></p> <p>22. PCATD for new ratings <input style="width: 50px;" type="text" value="0"/></p> <p>23. PCATD obstacles <input style="width: 70px;" type="text"/></p> <p>24. AGATE Training value</p> <p style="padding-left: 20px;">Normal OP <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Abnormal OP <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Emergency Proc. <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Missed approach <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Flt maneuvers <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Decision making <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Communications <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Navigation <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Other <input style="width: 150px;" type="text"/></p> <p>25. AGATE Program Importance</p> <p style="padding-left: 20px;">PCATD <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Imbedded trainer <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Performance based certification <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Computer record keeping <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Flt/Control system design <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Unified curriculum <input style="width: 50px;" type="text" value="0"/></p>
<p>26. Situational Awareness <input style="width: 500px;" type="text"/></p>	
<p>27. Most value <input style="width: 500px;" type="text"/></p>	
<p>28. Least value <input style="width: 500px;" type="text"/></p>	

### AGATE Participant Responses

<p>1. Home state <input style="width: 100px;" type="text"/></p> <p>2. Rating <input style="width: 150px;" type="text" value="Private Pilot"/></p> <p>3. Instrument rated <input style="width: 100px;" type="text" value="No"/></p> <p>4. 12 Months flt time <input style="width: 100px;" type="text" value="0"/></p> <p>5. Total flight time <input style="width: 100px;" type="text" value="260"/></p> <p>6. Flight Instructor <input style="width: 100px;" type="text" value="No"/></p> <p>7. Own/mng FBO <input style="width: 100px;" type="text" value="No"/></p> <p>8. Type flt school <input style="width: 100px;" type="text"/></p> <p>9. Type of Training <input style="width: 200px;" type="text"/></p> <p>10. # of Airplanes <input style="width: 100px;" type="text" value="0"/></p> <p>11. A/C Flt hours <input style="width: 100px;" type="text" value="0"/></p> <p>12. Capabilities Effect <input style="width: 150px;" type="text"/></p> <p>13. Main AC type <input style="width: 150px;" type="text"/></p> <p>14. Prim Activity <input style="width: 250px;" type="text"/></p> <p>15. Participation <input style="width: 100px;" type="text" value="Flew"/></p> <p>16. Situation Awareness <input style="width: 100px;" type="text" value="1"/></p> <p>17. Heads-Up value <input style="width: 100px;" type="text" value="1"/></p> <p>18. Highway affect on tasks <input style="width: 150px;" type="text" value="1"/></p>	<p>19. PCATD types <input style="width: 100px;" type="text" value="1"/></p> <p>20. PCATD uses <input style="width: 100px;" type="text"/></p> <p>21. PCATD effectiveness <input style="width: 100px;" type="text" value="1"/></p> <p>22. PCATD for new ratings <input style="width: 100px;" type="text" value="1"/></p> <p>23. PCATD obstacles <input style="width: 100px;" type="text"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Abnormal OP</td><td><input style="width: 50px;" type="text" value="3"/></td></tr> <tr><td>Emergency Proc.</td><td><input style="width: 50px;" type="text" value="3"/></td></tr> <tr><td>Missed approach</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> <tr><td>Flt maneuvers</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> <tr><td>Decision making</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Communications</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Navigation</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Other</td><td><input style="width: 150px;" type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Imbedded trainer</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Performance based certification</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Computer record keeping</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Flt/Control system design</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Unified curriculum</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> </table>	Normal OP	<input style="width: 50px;" type="text" value="5"/>	Abnormal OP	<input style="width: 50px;" type="text" value="3"/>	Emergency Proc.	<input style="width: 50px;" type="text" value="3"/>	Missed approach	<input style="width: 50px;" type="text" value="4"/>	Flt maneuvers	<input style="width: 50px;" type="text" value="4"/>	Decision making	<input style="width: 50px;" type="text" value="5"/>	Communications	<input style="width: 50px;" type="text" value="5"/>	Navigation	<input style="width: 50px;" type="text" value="5"/>	Other	<input style="width: 150px;" type="text"/>	PCATD	<input style="width: 50px;" type="text" value="5"/>	Imbedded trainer	<input style="width: 50px;" type="text" value="5"/>	Performance based certification	<input style="width: 50px;" type="text" value="5"/>	Computer record keeping	<input style="width: 50px;" type="text" value="5"/>	Flt/Control system design	<input style="width: 50px;" type="text" value="5"/>	Unified curriculum	<input style="width: 50px;" type="text" value="5"/>
Normal OP	<input style="width: 50px;" type="text" value="5"/>																														
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Unified curriculum	<input style="width: 50px;" type="text" value="5"/>																														
<p>26. Situational Awareness</p> <div style="border: 1px solid black; padding: 2px; width: fit-content;">Can consentrate on most critical problems first</div>																															
<p>27. Most value</p> <div style="border: 1px solid black; padding: 2px; width: fit-content;">Visual representation of desired flight path, standardization of technique</div>																															
<p>28. Least value</p> <div style="border: 1px solid black; padding: 2px; width: fit-content;">Over reliance on technology vs. flying skills</div>																															

### AGATE Participant Responses

<p>1. Home state <input type="text" value="AK"/></p> <p>2. Rating <input type="text" value="ATP"/></p> <p>3. Instrument rated <input type="text" value="Yes"/></p> <p>4. 12 Months fll time <input type="text" value="50"/></p> <p>5. Total flight time <input type="text" value="400"/></p> <p>6. Flight Instructor <input type="text" value="Yes"/></p> <p>7. Own/mng FBO <input type="text" value="Yes"/></p> <p>8. Type fll school <input type="text" value="Part 141"/></p> <p>9. Type of Training <input type="text" value="ALL"/></p> <p>10. # of Airplanes <input type="text" value="11"/></p> <p>11. A/C Flt hours <input type="text" value="3600"/></p> <p>12. Capabilities Effect <input type="text" value="50% increase"/></p> <p>13. Main AC type <input type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input type="text" value="Pilot flight training"/></p> <p>15. Participation <input type="text" value="Flew"/></p> <p>16. Situation Awareness <input type="text" value="1"/></p> <p>17. Heads-Up value <input type="text" value="1"/></p> <p>18. Highway affect on tasks <input type="text" value="1"/></p>	<p>19. PCATD types <input type="text" value="1"/></p> <p>20. PCATD uses <input type="text" value="1"/></p> <p>21. PCATD effectiveness <input type="text" value="1"/></p> <p>22. PCATD for new ratings <input type="text" value="1"/></p> <p>23. PCATD obstacles <input type="text" value="7"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input type="text" value="5"/></td></tr> <tr><td>Abnormal OP</td><td><input type="text" value="5"/></td></tr> <tr><td>Emergency Proc.</td><td><input type="text" value="5"/></td></tr> <tr><td>Missed approach</td><td><input type="text" value="5"/></td></tr> <tr><td>Flt maneuvers</td><td><input type="text" value="5"/></td></tr> <tr><td>Decision making</td><td><input type="text" value="5"/></td></tr> <tr><td>Communications</td><td><input type="text" value="5"/></td></tr> <tr><td>Navigation</td><td><input type="text" value="5"/></td></tr> <tr><td>Other</td><td><input type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input type="text" value="5"/></td></tr> <tr><td>Imbedded trainer</td><td><input type="text" value="5"/></td></tr> <tr><td>Performance based certification</td><td><input type="text" value="5"/></td></tr> <tr><td>Computer record keeping</td><td><input type="text" value="5"/></td></tr> <tr><td>Flt/Control system design</td><td><input type="text" value="5"/></td></tr> <tr><td>Unified curriculum</td><td><input type="text" value="5"/></td></tr> </table>	Normal OP	<input type="text" value="5"/>	Abnormal OP	<input type="text" value="5"/>	Emergency Proc.	<input type="text" value="5"/>	Missed approach	<input type="text" value="5"/>	Flt maneuvers	<input type="text" value="5"/>	Decision making	<input type="text" value="5"/>	Communications	<input type="text" value="5"/>	Navigation	<input type="text" value="5"/>	Other	<input type="text"/>	PCATD	<input type="text" value="5"/>	Imbedded trainer	<input type="text" value="5"/>	Performance based certification	<input type="text" value="5"/>	Computer record keeping	<input type="text" value="5"/>	Flt/Control system design	<input type="text" value="5"/>	Unified curriculum	<input type="text" value="5"/>
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<p>27. Most value <input type="text"/></p>																															
<p>28. Least value <input type="text"/></p>																															

### AGATE Participant Responses

<p>1. Home state <input type="text" value="CA"/></p> <p>2. Rating <input type="text"/></p> <p>3. Instrument rated <input type="text" value="No"/></p> <p>4. 12 Months flt time <input type="text" value="0"/></p> <p>5. Total flight time <input type="text" value="0"/></p> <p>6. Flight Instructor <input type="text" value="No"/></p> <p>7. Own/mng FBO <input type="text" value="No"/></p> <p>8. Type flt school <input type="text"/></p> <p>9. Type of Training <input type="text"/></p> <p>10. # of Airplanes <input type="text" value="0"/></p> <p>11. A/C Flt hours <input type="text" value="0"/></p> <p>12. Capabilities Effect <input type="text"/></p> <p>13. Main AC type <input type="text"/></p> <p>14. Prim Activity <input type="text" value="Aircraft services"/></p> <p>15. Participation <input type="text" value="Observed"/></p> <p>16. Situation Awareness <input type="text" value="1"/></p> <p>17. Heads-Up value <input type="text" value="1"/></p> <p>18. Highway affect on tasks <input type="text" value="1"/></p>	<p>19. PCATD types <input type="text" value="1"/></p> <p>20. PCATD uses <input type="text"/></p> <p>21. PCATD effectiveness <input type="text" value="0"/></p> <p>22. PCATD for new ratings <input type="text" value="0"/></p> <p>23. PCATD obstacles <input type="text"/></p> <p>24. AGATE Training value</p> <p style="padding-left: 20px;">Normal OP <input type="text" value="0"/></p> <p style="padding-left: 20px;">Abnormal OP <input type="text" value="0"/></p> <p style="padding-left: 20px;">Emergency Proc. <input type="text" value="0"/></p> <p style="padding-left: 20px;">Missed approach <input type="text" value="0"/></p> <p style="padding-left: 20px;">Flt maneuvers <input type="text" value="0"/></p> <p style="padding-left: 20px;">Decision making <input type="text" value="0"/></p> <p style="padding-left: 20px;">Communications <input type="text" value="0"/></p> <p style="padding-left: 20px;">Navigation <input type="text" value="0"/></p> <p style="padding-left: 20px;">Other <input type="text"/></p> <p>25. AGATE Program Importance</p> <p style="padding-left: 20px;">PCATD <input type="text" value="5"/></p> <p style="padding-left: 20px;">Imbedded trainer <input type="text" value="5"/></p> <p style="padding-left: 20px;">Performance based certification <input type="text" value="2"/></p> <p style="padding-left: 20px;">Computer record keeping <input type="text" value="5"/></p> <p style="padding-left: 20px;">Flt/Control system design <input type="text" value="3"/></p> <p style="padding-left: 20px;">Unified curriculum <input type="text" value="4"/></p>
<p>26. Situational Awareness</p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 10px;">Increase, head-up display allows pilot to look up, rather than down at instruments</div> <p>27. Most value</p> <div style="border: 1px solid black; height: 20px; width: 100%; margin-bottom: 10px;"></div> <p>28. Least value</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	

### AGATE Participant Responses

<p>1. Home state <input type="text" value="CA"/></p> <p>2. Rating <input type="text" value="ATP"/></p> <p>3. Instrument rated <input type="text" value="Yes"/></p> <p>4. 12 Months flt time <input type="text" value="0"/></p> <p>5. Total flight time <input type="text" value="5000"/></p> <p>6. Flight Instructor <input type="text" value="No"/></p> <p>7. Own/mng FBO <input type="text" value="No"/></p> <p>8. Type flt school <input type="text"/></p> <p>9. Type of Training <input type="text"/></p> <p>10. # of Airplanes <input type="text" value="0"/></p> <p>11. A/C Flt hours <input type="text" value="0"/></p> <p>12. Capabilities Effect <input type="text" value="25% increase"/></p> <p>13. Main AC type <input type="text" value="Jet"/></p> <p>14. Prim Activity <input type="text" value="Other: Government"/></p> <p>15. Participation <input type="text" value="Flew"/></p> <p>16. Situation Awareness <input type="text" value="1"/></p> <p>17. Heads-Up value <input type="text" value="1"/></p> <p>18. Highway affect on tasks <input type="text" value="1"/></p>	<p>19. PCATD types <input type="text" value="1"/></p> <p>20. PCATD uses <input type="text" value="1"/></p> <p>21. PCATD effectiveness <input type="text" value="2"/></p> <p>22. PCATD for new ratings <input type="text" value="2"/></p> <p>23. PCATD obstacles <input type="text" value="3,4"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input type="text" value="4"/></td></tr> <tr><td>Abnormal OP</td><td><input type="text" value="4"/></td></tr> <tr><td>Emergency Proc.</td><td><input type="text" value="4"/></td></tr> <tr><td>Missed approach</td><td><input type="text" value="4"/></td></tr> <tr><td>Flt maneuvers</td><td><input type="text" value="3"/></td></tr> <tr><td>Decision making</td><td><input type="text" value="4"/></td></tr> <tr><td>Communications</td><td><input type="text" value="3"/></td></tr> <tr><td>Navigation</td><td><input type="text" value="3"/></td></tr> <tr><td>Other</td><td><input type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input type="text" value="5"/></td></tr> <tr><td>Imbedded trainer</td><td><input type="text" value="4"/></td></tr> <tr><td>Performance based certification</td><td><input type="text" value="4"/></td></tr> <tr><td>Computer record keeping</td><td><input type="text" value="4"/></td></tr> <tr><td>Flt/Control system design</td><td><input type="text" value="5"/></td></tr> <tr><td>Unified curriculum</td><td><input type="text" value="5"/></td></tr> </table>	Normal OP	<input type="text" value="4"/>	Abnormal OP	<input type="text" value="4"/>	Emergency Proc.	<input type="text" value="4"/>	Missed approach	<input type="text" value="4"/>	Flt maneuvers	<input type="text" value="3"/>	Decision making	<input type="text" value="4"/>	Communications	<input type="text" value="3"/>	Navigation	<input type="text" value="3"/>	Other	<input type="text"/>	PCATD	<input type="text" value="5"/>	Imbedded trainer	<input type="text" value="4"/>	Performance based certification	<input type="text" value="4"/>	Computer record keeping	<input type="text" value="4"/>	Flt/Control system design	<input type="text" value="5"/>	Unified curriculum	<input type="text" value="5"/>
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**26. Situational Awareness**

**27. Most value**

**28. Least value**

**AGATE Participant Responses**

<b>1. Home state</b>	<input type="text" value="CA"/>	<b>19. PCATD types</b>	<input type="text" value="2"/>
<b>2. Rating</b>	<input type="text" value="Student"/>	<b>20. PCATD uses</b>	<input type="text" value="3"/>
<b>3. Instrument rated</b>	<input type="text" value="No"/>	<b>21. PCATD effectiveness</b>	<input type="text" value="2"/>
<b>4. 12 Months flt time</b>	<input type="text" value="70"/>	<b>22. PCATD for new ratings</b>	<input type="text" value="2"/>
<b>5. Total flight time</b>	<input type="text" value="70"/>	<b>23. PCATD obstacles</b>	<input type="text" value="3,4"/>
<b>6. Flight Instructor</b>	<input type="text" value="No"/>	<b>24. AGATE Training value</b>	
<b>7. Own/mng FBO</b>	<input type="text" value="No"/>	Normal OP	<input type="text" value="4"/>
<b>8. Type flt school</b>	<input type="text"/>	Abnormal OP	<input type="text" value="5"/>
<b>9. Type of Training</b>	<input type="text"/>	Emergency Proc.	<input type="text" value="5"/>
<b>10. # of Airplanes</b>	<input type="text" value="0"/>	Missed approach	<input type="text" value="4"/>
<b>11. A/C Flt hours</b>	<input type="text" value="70"/>	Flt maneuvers	<input type="text" value="3"/>
<b>12. Capabilities Effect</b>	<input type="text" value="50% increase"/>	Decision making	<input type="text" value="3"/>
<b>13. Main AC type</b>	<input type="text" value="Single Piston Engine"/>	Communications	<input type="text" value="2"/>
<b>14. Prim Activity</b>	<input type="text"/>	Navigation	<input type="text" value="4"/>
<b>15. Participation</b>	<input type="text" value="Flew"/>	Other	<input type="text"/>
<b>16. Situation Awareness</b>	<input type="text" value="2"/>	<b>25. AGATE Program Importance</b>	
<b>17. Heads-Up value</b>	<input type="text" value="1"/>	PCATD	<input type="text" value="3"/>
<b>18. Highway affect on tasks</b>	<input type="text" value="1"/>	Imbedded trainer	<input type="text" value="3"/>
		Performance based certification	<input type="text" value="3"/>
		Computer record keeping	<input type="text" value="3"/>
		Flt/Control system design	<input type="text" value="3"/>
		Unified curriculum	<input type="text" value="4"/>

**26. Situational Awareness**

**27. Most value**

**28. Least value**

### AGATE Participant Responses

<p>1. Home state <input type="text" value="CO"/></p> <p>2. Rating <input type="text" value="ATP"/></p> <p>3. Instrument rated <input type="text" value="Yes"/></p> <p>4. 12 Months flt time <input type="text" value="300"/></p> <p>5. Total flight time <input type="text" value="500"/></p> <p>6. Flight Instructor <input type="text" value="No"/></p> <p>7. Own/mng FBO <input type="text" value="Yes"/></p> <p>8. Type flt school <input type="text"/></p> <p>9. Type of Training <input type="text"/></p> <p>10. # of Airplanes <input type="text" value="80"/></p> <p>11. A/C Flt hours <input type="text" value="375"/></p> <p>12. Capabilities Effect <input type="text" value="25% increase"/></p> <p>13. Main AC type <input type="text" value="Twin Turboprop"/></p> <p>14. Prim Activity <input type="text" value="Commuter, charter, Medevac or air taxi"/></p> <p>15. Participation <input type="text" value="Flew"/></p> <p>16. Situation Awareness <input type="text" value="2"/></p> <p>17. Heads-Up value <input type="text" value="1"/></p> <p>18. Highway affect on tasks <input type="text" value="2"/></p>	<p>19. PCATD types <input type="text" value="1"/></p> <p>20. PCATD uses <input type="text" value="1"/></p> <p>21. PCATD effectiveness <input type="text" value="2"/></p> <p>22. PCATD for new ratings <input type="text" value="2"/></p> <p>23. PCATD obstacles <input type="text" value="4,6,7"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input type="text" value="4"/></td></tr> <tr><td>Abnormal OP</td><td><input type="text" value="3"/></td></tr> <tr><td>Emergency Proc.</td><td><input type="text" value="4"/></td></tr> <tr><td>Missed approach</td><td><input type="text" value="5"/></td></tr> <tr><td>Flt maneuvers</td><td><input type="text" value="4"/></td></tr> <tr><td>Decision making</td><td><input type="text" value="4"/></td></tr> <tr><td>Communications</td><td><input type="text" value="4"/></td></tr> <tr><td>Navigation</td><td><input type="text" value="5"/></td></tr> <tr><td>Other</td><td><input type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input type="text" value="3"/></td></tr> <tr><td>Imbedded trainer</td><td><input type="text" value="4"/></td></tr> <tr><td>Performance based certification</td><td><input type="text" value="4"/></td></tr> <tr><td>Computer record keeping</td><td><input type="text" value="5"/></td></tr> <tr><td>Flt/Control system design</td><td><input type="text" value="5"/></td></tr> <tr><td>Unified curriculum</td><td><input type="text" value="4"/></td></tr> </table>	Normal OP	<input type="text" value="4"/>	Abnormal OP	<input type="text" value="3"/>	Emergency Proc.	<input type="text" value="4"/>	Missed approach	<input type="text" value="5"/>	Flt maneuvers	<input type="text" value="4"/>	Decision making	<input type="text" value="4"/>	Communications	<input type="text" value="4"/>	Navigation	<input type="text" value="5"/>	Other	<input type="text"/>	PCATD	<input type="text" value="3"/>	Imbedded trainer	<input type="text" value="4"/>	Performance based certification	<input type="text" value="4"/>	Computer record keeping	<input type="text" value="5"/>	Flt/Control system design	<input type="text" value="5"/>	Unified curriculum	<input type="text" value="4"/>
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Unified curriculum	<input type="text" value="4"/>																														
<p>26. Situational Awareness</p> <p><input type="text" value="It would increase for low time pilots and remain the same for high time pilots"/></p>																															
<p>27. Most value</p> <p><input type="text" value="Integrated controls and single lever control - simpler - tells you where you should be."/></p>																															
<p>28. Least value</p> <p><input type="text" value="None - very good"/></p>																															

### AGATE Participant Responses

<p>1. Home state <input style="width: 100px;" type="text" value="CT"/></p> <p>2. Rating <input style="width: 150px;" type="text" value="ATP"/></p> <p>3. Instrument rated <input style="width: 100px;" type="text" value="Yes"/></p> <p>4. 12 Months flt time <input style="width: 100px;" type="text" value="300"/></p> <p>5. Total flight time <input style="width: 100px;" type="text" value="14000"/></p> <p>6. Flight Instructor <input style="width: 100px;" type="text" value="Yes"/></p> <p>7. Own/mng FBO <input style="width: 100px;" type="text" value="No"/></p> <p>8. Type flt school <input style="width: 100px;" type="text" value="Part 141"/></p> <p>9. Type of Training <input style="width: 200px;" type="text" value="ALL"/></p> <p>10. # of Airplanes <input style="width: 100px;" type="text" value="28"/></p> <p>11. A/C Flt hours <input style="width: 100px;" type="text" value="400"/></p> <p>12. Capabilities Effect <input style="width: 150px;" type="text" value="10% increase"/></p> <p>13. Main AC type <input style="width: 150px;" type="text" value="Single Engine Turboprop"/></p> <p>14. Prim Activity <input style="width: 250px;" type="text" value="Commuter, charter, Medevac or air taxi"/></p> <p>15. Participation <input style="width: 100px;" type="text" value="Flew"/></p> <p>16. Situation Awareness <input style="width: 100px;" type="text" value="2"/></p> <p>17. Heads-Up value <input style="width: 100px;" type="text" value="1"/></p> <p>18. Highway affect on tasks <input style="width: 150px;" type="text" value="2"/></p>	<p>19. PCATD types <input style="width: 100px;" type="text" value="3"/></p> <p>20. PCATD uses <input style="width: 100px;" type="text"/></p> <p>21. PCATD effectiveness <input style="width: 100px;" type="text" value="0"/></p> <p>22. PCATD for new ratings <input style="width: 100px;" type="text" value="0"/></p> <p>23. PCATD obstacles <input style="width: 100px;" type="text"/></p> <p>24. AGATE Training value</p> <p style="padding-left: 20px;">Normal OP <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Abnormal OP <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Emergency Proc. <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Missed approach <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Flt maneuvers <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Decision making <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Communications <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Navigation <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Other <input style="width: 150px;" type="text"/></p> <p>25. AGATE Program Importance</p> <p style="padding-left: 20px;">PCATD <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Imbedded trainer <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Performance based certification <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Computer record keeping <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Flt/Control system design <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Unified curriculum <input style="width: 100px;" type="text" value="0"/></p>
<p>26. Situational Awareness <input style="width: 500px; height: 20px;" type="text"/></p>	
<p>27. Most value <input style="width: 500px; height: 20px;" type="text"/></p>	
<p>28. Least value <input style="width: 500px; height: 20px;" type="text"/></p>	

### AGATE Participant Responses

<p>1. Home state <input type="text" value="FL"/></p> <p>2. Rating <input type="text"/></p> <p>3. Instrument rated <input type="text" value="No"/></p> <p>4. 12 Months flt time <input type="text" value="0"/></p> <p>5. Total flight time <input type="text" value="180"/></p> <p>6. Flight Instructor <input type="text" value="No"/></p> <p>7. Own/mng FBO <input type="text" value="Yes"/></p> <p>8. Type flt school <input type="text"/></p> <p>9. Type of Training <input type="text"/></p> <p>10. # of Airplanes <input type="text" value="1"/></p> <p>11. A/C Flt hours <input type="text" value="6"/></p> <p>12. Capabilities Effect <input type="text" value="50% increase"/></p> <p>13. Main AC type <input type="text" value="Twin Piston Engine"/></p> <p>14. Prim Activity <input type="text" value="Aircraft services"/></p> <p>15. Participation <input type="text" value="Flew"/></p> <p>16. Situation Awareness <input type="text" value="1"/></p> <p>17. Heads-Up value <input type="text" value="1"/></p> <p>18. Highway affect on tasks <input type="text" value="1"/></p>	<p>19. PCATD types <input type="text" value="1"/></p> <p>20. PCATD uses <input type="text" value="2"/></p> <p>21. PCATD effectiveness <input type="text" value="1"/></p> <p>22. PCATD for new ratings <input type="text" value="2"/></p> <p>23. PCATD obstacles <input type="text"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input type="text" value="3"/></td></tr> <tr><td>Abnormal OP</td><td><input type="text" value="4"/></td></tr> <tr><td>Emergency Proc.</td><td><input type="text" value="5"/></td></tr> <tr><td>Missed approach</td><td><input type="text" value="4"/></td></tr> <tr><td>Flt maneuvers</td><td><input type="text" value="2"/></td></tr> <tr><td>Decision making</td><td><input type="text" value="5"/></td></tr> <tr><td>Communications</td><td><input type="text" value="2"/></td></tr> <tr><td>Navigation</td><td><input type="text" value="5"/></td></tr> <tr><td>Other</td><td><input type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input type="text" value="5"/></td></tr> <tr><td>Imbedded trainer</td><td><input type="text" value="5"/></td></tr> <tr><td>Performance based certification</td><td><input type="text" value="5"/></td></tr> <tr><td>Computer record keeping</td><td><input type="text" value="3"/></td></tr> <tr><td>Flt/Control system design</td><td><input type="text" value="5"/></td></tr> <tr><td>Unified curriculum</td><td><input type="text" value="5"/></td></tr> </table>	Normal OP	<input type="text" value="3"/>	Abnormal OP	<input type="text" value="4"/>	Emergency Proc.	<input type="text" value="5"/>	Missed approach	<input type="text" value="4"/>	Flt maneuvers	<input type="text" value="2"/>	Decision making	<input type="text" value="5"/>	Communications	<input type="text" value="2"/>	Navigation	<input type="text" value="5"/>	Other	<input type="text"/>	PCATD	<input type="text" value="5"/>	Imbedded trainer	<input type="text" value="5"/>	Performance based certification	<input type="text" value="5"/>	Computer record keeping	<input type="text" value="3"/>	Flt/Control system design	<input type="text" value="5"/>	Unified curriculum	<input type="text" value="5"/>
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Computer record keeping	<input type="text" value="3"/>																														
Flt/Control system design	<input type="text" value="5"/>																														
Unified curriculum	<input type="text" value="5"/>																														
<p>26. Situational Awareness</p> <p style="border: 1px solid black; padding: 2px;"><input type="text" value="Everything is displayed so pilot would always be aware - one less thing to thing about"/></p>																															
<p>27. Most value</p> <p style="border: 1px solid black; padding: 2px;"><input type="text" value="Highway in the sky and road signs"/></p>																															
<p>28. Least value</p> <p style="border: 1px solid black; padding: 2px;"><input type="text" value="None - now - need time to think!"/></p>																															

### AGATE Participant Responses

<p>1. Home state <input style="width: 50px;" type="text" value="FL"/></p> <p>2. Rating <input style="width: 150px;" type="text" value="ATP"/></p> <p>3. Instrument rated <input style="width: 50px;" type="text" value="Yes"/></p> <p>4. 12 Months flt time <input style="width: 50px;" type="text" value="750"/></p> <p>5. Total flight time <input style="width: 50px;" type="text" value="6000"/></p> <p>6. Flight Instructor <input style="width: 50px;" type="text" value="Yes"/></p> <p>7. Own/mng FBO <input style="width: 50px;" type="text" value="No"/></p> <p>8. Type flt school <input style="width: 70px;" type="text"/></p> <p>9. Type of Training <input style="width: 250px;" type="text"/></p> <p>10. # of Airplanes <input style="width: 50px;" type="text" value="3"/></p> <p>11. A/C Flt hours <input style="width: 50px;" type="text" value="750"/></p> <p>12. Capabilities Effect <input style="width: 150px;" type="text" value="10% increase"/></p> <p>13. Main AC type <input style="width: 150px;" type="text" value="Twin Piston Engine"/></p> <p>14. Prim Activity <input style="width: 250px;" type="text" value="Commuter, charter, Medevac or air taxi"/></p> <p>15. Participation <input style="width: 70px;" type="text" value="Observed"/></p> <p>16. Situation Awareness <input style="width: 100px;" type="text" value="1"/></p> <p>17. Heads-Up value <input style="width: 100px;" type="text" value="1"/></p> <p>18. Highway affect on tasks <input style="width: 150px;" type="text" value="2"/></p>	<p>19. PCATD types <input style="width: 50px;" type="text"/></p> <p>20. PCATD uses <input style="width: 50px;" type="text"/></p> <p>21. PCATD effectiveness <input style="width: 50px;" type="text" value="0"/></p> <p>22. PCATD for new ratings <input style="width: 50px;" type="text" value="0"/></p> <p>23. PCATD obstacles <input style="width: 70px;" type="text"/></p> <p>24. AGATE Training value</p> <p style="padding-left: 20px;">Normal OP <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Abnormal OP <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Emergency Proc. <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Missed approach <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Flt maneuvers <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Decision making <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Communications <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Navigation <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Other <input style="width: 150px;" type="text"/></p> <p>25. AGATE Program Importance</p> <p style="padding-left: 20px;">PCATD <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Imbedded trainer <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Performance based certification <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Computer record keeping <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Flt/Control system design <input style="width: 50px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Unified curriculum <input style="width: 50px;" type="text" value="0"/></p>
<p>26. Situational Awareness <input style="width: 400px; height: 20px;" type="text"/></p>	
<p>27. Most value <input style="width: 400px; height: 20px;" type="text"/></p>	
<p>28. Least value <input style="width: 400px; height: 20px;" type="text"/></p>	

**AGATE Participant Responses**

<p>1. Home state <input type="text" value="FL"/></p> <p>2. Rating <input type="text" value="ATP"/></p> <p>3. Instrument rated <input type="text" value="Yes"/></p> <p>4. 12 Months flt time <input type="text" value="150"/></p> <p>5. Total flight time <input type="text" value="26000"/></p> <p>6. Flight Instructor <input type="text" value="Yes"/></p> <p>7. Own/mng FBO <input type="text" value="Yes"/></p> <p>8. Type flt school <input type="text" value="Part 61, 141"/></p> <p>9. Type of Training <input type="text" value="ALL"/></p> <p>10. # of Airplanes <input type="text" value="18"/></p> <p>11. A/C Flt hours <input type="text" value="800"/></p> <p>12. Capabilities Effect <input type="text" value="25% increase"/></p> <p>13. Main AC type <input type="text" value="Twin Piston Engine"/></p> <p>14. Prim Activity <input type="text" value="Aircraft services"/></p> <p>15. Participation <input type="text" value="Flew"/></p> <p>16. Situation Awareness <input type="text" value="1"/></p> <p>17. Heads-Up value <input type="text" value="1"/></p> <p>18. Highway affect on tasks <input type="text" value="1"/></p>	<p>19. PCATD types <input type="text" value="1"/></p> <p>20. PCATD uses <input type="text" value="1"/></p> <p>21. PCATD effectiveness <input type="text" value="0"/></p> <p>22. PCATD for new ratings <input type="text" value="0"/></p> <p>23. PCATD obstacles <input type="text"/></p> <p>24. AGATE Training value</p> <p>Normal OP <input type="text" value="5"/></p> <p>Abnormal OP <input type="text" value="5"/></p> <p>Emergency Proc. <input type="text" value="5"/></p> <p>Missed approach <input type="text" value="5"/></p> <p>Flt maneuvers <input type="text" value="3"/></p> <p>Decision making <input type="text" value="5"/></p> <p>Communications <input type="text" value="5"/></p> <p>Navigation <input type="text" value="5"/></p> <p>Other <input type="text"/></p> <p>25. AGATE Program Importance</p> <p>PCATD <input type="text" value="5"/></p> <p>Imbedded trainer <input type="text" value="5"/></p> <p>Performance based certification <input type="text" value="5"/></p> <p>Computer record keeping <input type="text" value="5"/></p> <p>Flt/Control system design <input type="text" value="5"/></p> <p>Unified curriculum <input type="text" value="5"/></p>
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26. Situational Awareness

27. Most value

28. Least value

**AGATE Participant Responses**

<p>1. Home state <input type="text" value="FL"/></p> <p>2. Rating <input type="text" value="ATP"/></p> <p>3. Instrument rated <input type="text" value="Yes"/></p> <p>4. 12 Months flt time <input type="text" value="1000"/></p> <p>5. Total flight time <input type="text" value="12000"/></p> <p>6. Flight Instructor <input type="text" value="Yes"/></p> <p>7. Own/mng FBO <input type="text" value="No"/></p> <p>8. Type flt school <input type="text"/></p> <p>9. Type of Training <input type="text"/></p> <p>10. # of Airplanes <input type="text" value="3"/></p> <p>11. A/C Flt hours <input type="text" value="1000"/></p> <p>12. Capabilities Effect <input type="text" value="No change"/></p> <p>13. Main AC type <input type="text" value="Twin Piston Engine"/></p> <p>14. Prim Activity <input type="text" value="Commuter, charter, Medevac or air taxi"/></p> <p>15. Participation <input type="text" value="Flew"/></p> <p>16. Situation Awareness <input type="text" value="1"/></p> <p>17. Heads-Up value <input type="text" value="1"/></p> <p>18. Highway affect on tasks <input type="text" value="1"/></p>	<p>19. PCATD types <input type="text" value="1"/></p> <p>20. PCATD uses <input type="text" value="1"/></p> <p>21. PCATD effectiveness <input type="text" value="0"/></p> <p>22. PCATD for new ratings <input type="text" value="0"/></p> <p>23. PCATD obstacles <input type="text"/></p> <p>24. AGATE Training value</p> <p>Normal OP <input type="text" value="0"/></p> <p>Abnormal OP <input type="text" value="0"/></p> <p>Emergency Proc. <input type="text" value="0"/></p> <p>Missed approach <input type="text" value="0"/></p> <p>Flt maneuvers <input type="text" value="0"/></p> <p>Decision making <input type="text" value="0"/></p> <p>Communications <input type="text" value="0"/></p> <p>Navigation <input type="text" value="0"/></p> <p>Other <input type="text"/></p> <p>25. AGATE Program Importance</p> <p>PCATD <input type="text" value="0"/></p> <p>Imbedded trainer <input type="text" value="0"/></p> <p>Performance based certification <input type="text" value="0"/></p> <p>Computer record keeping <input type="text" value="0"/></p> <p>Flt/Control system design <input type="text" value="0"/></p> <p>Unified curriculum <input type="text" value="0"/></p>
<p>26. Situational Awareness <input type="text"/></p>	
<p>27. Most value <input type="text"/></p>	
<p>28. Least value <input type="text"/></p>	

**AGATE Participant Responses**

<p>1. Home state <input type="text" value="FL"/></p> <p>2. Rating <input type="text" value="ATP"/></p> <p>3. Instrument rated <input type="text" value="Yes"/></p> <p>4. 12 Months flt time <input type="text" value="500"/></p> <p>5. Total flight time <input type="text" value="5000"/></p> <p>6. Flight Instructor <input type="text" value="Yes"/></p> <p>7. Own/mng FBO <input type="text" value="No"/></p> <p>8. Type flt school <input type="text"/></p> <p>9. Type of Training <input type="text" value="Commercial Pilot, Instrument, ATP"/></p> <p>10. # of Airplanes <input type="text" value="5"/></p> <p>11. A/C Flt hours <input type="text" value="2000"/></p> <p>12. Capabilities Effect <input type="text" value="100% or more increase"/></p> <p>13. Main AC type <input type="text" value="Jet"/></p> <p>14. Prim Activity <input type="text" value="Pilot flight training"/></p> <p>15. Participation <input type="text" value="Flew"/></p> <p>16. Situation Awareness <input type="text" value="1"/></p> <p>17. Heads-Up value <input type="text" value="1"/></p> <p>18. Highway affect on tasks <input type="text" value="1"/></p>	<p>19. PCATD types <input type="text" value="1"/></p> <p>20. PCATD uses <input type="text" value="2"/></p> <p>21. PCATD effectiveness <input type="text" value="1"/></p> <p>22. PCATD for new ratings <input type="text" value="1"/></p> <p>23. PCATD obstacles <input type="text" value="4"/></p> <p>24. AGATE Training value</p> <p>Normal OP <input type="checkbox"/></p> <p>Abnormal OP <input type="checkbox"/></p> <p>Emergency Proc. <input type="checkbox"/></p> <p>Missed approach <input type="checkbox"/></p> <p>Flt maneuvers <input type="checkbox"/></p> <p>Decision making <input type="checkbox"/></p> <p>Communications <input type="checkbox"/></p> <p>Navigation <input type="checkbox"/></p> <p>Other <input type="text"/></p> <p>25. AGATE Program Importance</p> <p>PCATD <input type="checkbox"/></p> <p>Imbedded trainer <input type="checkbox"/></p> <p>Performance based certification <input type="checkbox"/></p> <p>Computer record keeping <input type="checkbox"/></p> <p>Flt/Control system design <input type="checkbox"/></p> <p>Unified curriculum <input type="checkbox"/></p>
<p>26. Situational Awareness <input type="text" value="Improve, No man-made distractions"/></p> <p>27. Most value <input type="text" value="Very easy to learn"/></p> <p>28. Least value <input type="text" value="Cost???? FAA implementation"/></p>	

### AGATE Participant Responses

<p>1. Home state <input style="width: 100px;" type="text" value="FL"/></p> <p>2. Rating <input style="width: 150px;" type="text" value="ATP"/></p> <p>3. Instrument rated <input style="width: 100px;" type="text" value="Yes"/></p> <p>4. 12 Months flt time <input style="width: 100px;" type="text" value="600"/></p> <p>5. Total flight time <input style="width: 100px;" type="text" value="35000"/></p> <p>6. Flight Instructor <input style="width: 100px;" type="text" value="No"/></p> <p>7. Own/mng FBO <input style="width: 100px;" type="text" value="Yes"/></p> <p>8. Type flt school <input style="width: 100px;" type="text" value="Part 61"/></p> <p>9. Type of Training <input style="width: 200px;" type="text" value="Private Pilot, Commercial, Instrument"/></p> <p>10. # of Airplanes <input style="width: 100px;" type="text" value="11"/></p> <p>11. A/C Flt hours <input style="width: 100px;" type="text" value="600"/></p> <p>12. Capabilities Effect <input style="width: 150px;" type="text" value="50% increase"/></p> <p>13. Main AC type <input style="width: 150px;" type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input style="width: 200px;" type="text" value="Commuter, charter, Medevac or air taxi"/></p> <p>15. Participation <input style="width: 100px;" type="text" value="Flew"/></p> <p>16. Situation Awareness <input style="width: 100px;" type="text" value="1"/></p> <p>17. Heads-Up value <input style="width: 100px;" type="text" value="1"/></p> <p>18. Highway affect on tasks <input style="width: 150px;" type="text" value="1"/></p>	<p>19. PCATD types <input style="width: 100px;" type="text" value="1"/></p> <p>20. PCATD uses <input style="width: 100px;" type="text" value="1"/></p> <p>21. PCATD effectiveness <input style="width: 100px;" type="text" value="2"/></p> <p>22. PCATD for new ratings <input style="width: 100px;" type="text" value="2"/></p> <p>23. PCATD obstacles <input style="width: 100px;" type="text" value="6"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Abnormal OP</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Emergency Proc.</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Missed approach</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Flt maneuvers</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Decision making</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Communications</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Navigation</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Other</td><td><input style="width: 150px;" type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input style="width: 50px;" type="text" value="3"/></td></tr> <tr><td>Imbedded trainer</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Performance based certification</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Computer record keeping</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Flt/Control system design</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Unified curriculum</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> </table>	Normal OP	<input style="width: 50px;" type="text" value="5"/>	Abnormal OP	<input style="width: 50px;" type="text" value="5"/>	Emergency Proc.	<input style="width: 50px;" type="text" value="5"/>	Missed approach	<input style="width: 50px;" type="text" value="5"/>	Flt maneuvers	<input style="width: 50px;" type="text" value="5"/>	Decision making	<input style="width: 50px;" type="text" value="5"/>	Communications	<input style="width: 50px;" type="text" value="5"/>	Navigation	<input style="width: 50px;" type="text" value="5"/>	Other	<input style="width: 150px;" type="text"/>	PCATD	<input style="width: 50px;" type="text" value="3"/>	Imbedded trainer	<input style="width: 50px;" type="text" value="5"/>	Performance based certification	<input style="width: 50px;" type="text" value="5"/>	Computer record keeping	<input style="width: 50px;" type="text" value="5"/>	Flt/Control system design	<input style="width: 50px;" type="text" value="5"/>	Unified curriculum	<input style="width: 50px;" type="text" value="5"/>
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Unified curriculum	<input style="width: 50px;" type="text" value="5"/>																														
<p>26. Situational Awareness</p> <p><input style="width: 400px;" type="text" value="Improve"/></p>																															
<p>27. Most value</p> <p><input style="width: 400px;" type="text" value="Simplicity"/></p>																															
<p>28. Least value</p> <p><input style="width: 400px;" type="text" value="They all look great!"/></p>																															

### AGATE Participant Responses

<p>1. Home state <input type="text" value="FL"/></p> <p>2. Rating <input type="text" value="ATP"/></p> <p>3. Instrument rated <input type="text" value="Yes"/></p> <p>4. 12 Months flt time <input type="text" value="80"/></p> <p>5. Total flight time <input type="text" value="2600"/></p> <p>6. Flight Instructor <input type="text" value="Yes"/></p> <p>7. Own/mng FBO <input type="text" value="No"/></p> <p>8. Type flt school <input type="text"/></p> <p>9. Type of Training <input type="text" value="Private Pilot"/></p> <p>10. # of Airplanes <input type="text" value="1"/></p> <p>11. A/C Flt hours <input type="text" value="300"/></p> <p>12. Capabilities Effect <input type="text" value="100% or more increase"/></p> <p>13. Main AC type <input type="text" value="Twin Piston Engine"/></p> <p>14. Prim Activity <input type="text"/></p> <p>15. Participation <input type="text" value="Flew"/></p> <p>16. Situation Awareness <input type="text" value="1"/></p> <p>17. Heads-Up value <input type="text" value="1"/></p> <p>18. Highway affect on tasks <input type="text" value="1"/></p>	<p>19. PCATD types <input type="text" value="2,3,4"/></p> <p>20. PCATD uses <input type="text" value="2,4,5,7"/></p> <p>21. PCATD effectiveness <input type="text" value="1"/></p> <p>22. PCATD for new ratings <input type="text" value="1"/></p> <p>23. PCATD obstacles <input type="text" value="2"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input type="text" value="5"/></td></tr> <tr><td>Abnormal OP</td><td><input type="text" value="5"/></td></tr> <tr><td>Emergency Proc.</td><td><input type="text" value="0"/></td></tr> <tr><td>Missed approach</td><td><input type="text" value="0"/></td></tr> <tr><td>Flt maneuvers</td><td><input type="text" value="0"/></td></tr> <tr><td>Decision making</td><td><input type="text" value="0"/></td></tr> <tr><td>Communications</td><td><input type="text" value="0"/></td></tr> <tr><td>Navigation</td><td><input type="text" value="0"/></td></tr> <tr><td>Other</td><td><input type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input type="text" value="0"/></td></tr> <tr><td>Imbedded trainer</td><td><input type="text" value="5"/></td></tr> <tr><td>Performance based certification</td><td><input type="text" value="0"/></td></tr> <tr><td>Computer record keeping</td><td><input type="text" value="3"/></td></tr> <tr><td>Flt/Control system design</td><td><input type="text" value="0"/></td></tr> <tr><td>Unified curriculum</td><td><input type="text" value="0"/></td></tr> </table>	Normal OP	<input type="text" value="5"/>	Abnormal OP	<input type="text" value="5"/>	Emergency Proc.	<input type="text" value="0"/>	Missed approach	<input type="text" value="0"/>	Flt maneuvers	<input type="text" value="0"/>	Decision making	<input type="text" value="0"/>	Communications	<input type="text" value="0"/>	Navigation	<input type="text" value="0"/>	Other	<input type="text"/>	PCATD	<input type="text" value="0"/>	Imbedded trainer	<input type="text" value="5"/>	Performance based certification	<input type="text" value="0"/>	Computer record keeping	<input type="text" value="3"/>	Flt/Control system design	<input type="text" value="0"/>	Unified curriculum	<input type="text" value="0"/>
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### AGATE Participant Responses

<p>1. Home state <input style="width: 50px;" type="text" value="FL"/></p> <p>2. Rating <input style="width: 150px;" type="text" value="Commercial Pilot"/></p> <p>3. Instrument rated <input style="width: 50px;" type="text" value="Yes"/></p> <p>4. 12 Months flt time <input style="width: 50px;" type="text" value="125"/></p> <p>5. Total flight time <input style="width: 50px;" type="text" value="700"/></p> <p>6. Flight Instructor <input style="width: 50px;" type="text" value="No"/></p> <p>7. Own/mng FBO <input style="width: 50px;" type="text" value="Yes"/></p> <p>8. Type flt school <input style="width: 50px;" type="text" value="Part 141"/></p> <p>9. Type of Training <input style="width: 200px;" type="text" value="ALL"/></p> <p>10. # of Airplanes <input style="width: 50px;" type="text" value="6"/></p> <p>11. A/C Flt hours <input style="width: 50px;" type="text" value="125"/></p> <p>12. Capabilities Effect <input style="width: 150px;" type="text" value="25% increase"/></p> <p>13. Main AC type <input style="width: 150px;" type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input style="width: 250px;" type="text" value="Pilot flight training"/></p> <p>15. Participation <input style="width: 50px;" type="text" value="Flew"/></p> <p>16. Situation Awareness <input style="width: 100px;" type="text" value="2"/></p> <p>17. Heads-Up value <input style="width: 50px;" type="text" value="1"/></p> <p>18. Highway affect on tasks <input style="width: 100px;" type="text" value="1"/></p>	<p>19. PCATD types <input style="width: 50px;" type="text" value="1"/></p> <p>20. PCATD uses <input style="width: 50px;" type="text" value="2,4"/></p> <p>21. PCATD effectiveness <input style="width: 50px;" type="text" value="2"/></p> <p>22. PCATD for new ratings <input style="width: 50px;" type="text" value="2"/></p> <p>23. PCATD obstacles <input style="width: 50px;" type="text" value="4,6,7"/></p> <p>24. AGATE Training value</p> <p style="padding-left: 20px;">Normal OP <input style="width: 50px;" type="text" value="2"/></p> <p style="padding-left: 20px;">Abnormal OP <input style="width: 50px;" type="text" value="4"/></p> <p style="padding-left: 20px;">Emergency Proc. <input style="width: 50px;" type="text" value="4"/></p> <p style="padding-left: 20px;">Missed approach <input style="width: 50px;" type="text" value="5"/></p> <p style="padding-left: 20px;">Flt maneuvers <input style="width: 50px;" type="text" value="2"/></p> <p style="padding-left: 20px;">Decision making <input style="width: 50px;" type="text" value="4"/></p> <p style="padding-left: 20px;">Communications <input style="width: 50px;" type="text" value="5"/></p> <p style="padding-left: 20px;">Navigation <input style="width: 50px;" type="text" value="4"/></p> <p style="padding-left: 20px;">Other <input style="width: 150px;" type="text"/></p> <p>25. AGATE Program Importance</p> <p style="padding-left: 20px;">PCATD <input style="width: 50px;" type="text" value="5"/></p> <p style="padding-left: 20px;">Imbedded trainer <input style="width: 50px;" type="text" value="4"/></p> <p style="padding-left: 20px;">Performance based certification <input style="width: 50px;" type="text" value="4"/></p> <p style="padding-left: 20px;">Computer record keeping <input style="width: 50px;" type="text" value="5"/></p> <p style="padding-left: 20px;">Flt/Control system design <input style="width: 50px;" type="text" value="5"/></p> <p style="padding-left: 20px;">Unified curriculum <input style="width: 50px;" type="text" value="5"/></p>
<p>26. Situational Awareness <input style="width: 400px;" type="text" value="Improve"/></p>	
<p>27. Most value <input style="width: 400px;" type="text"/></p>	
<p>28. Least value <input style="width: 400px;" type="text"/></p>	

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<p>1. Home state <input type="text" value="FL"/></p> <p>2. Rating <input type="text" value="Commercial Pilot"/></p> <p>3. Instrument rated <input type="text" value="Yes"/></p> <p>4. 12 Months fIt time <input type="text" value="250"/></p> <p>5. Total flight time <input type="text" value="2000"/></p> <p>6. Flight Instructor <input type="text" value="Yes"/></p> <p>7. Own/mng FBO <input type="text" value="Yes"/></p> <p>8. Type fIt school <input type="text" value="Part 61"/></p> <p>9. Type of Training <input type="text" value="ALL"/></p> <p>10. # of Airplanes <input type="text" value="8"/></p> <p>11. A/C fIt hours <input type="text" value="10000"/></p> <p>12. Capabilities Effect <input type="text" value="10% increase"/></p> <p>13. Main AC type <input type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input type="text" value="Pilot flight training"/></p> <p>15. Participation <input type="text" value="Flew"/></p> <p>16. Situation Awareness <input type="text" value="2"/></p> <p>17. Heads-Up value <input type="text" value="2"/></p> <p>18. Highway affect on tasks <input type="text" value="2"/></p>	<p>19. PCATD types <input type="text" value="1"/></p> <p>20. PCATD uses <input type="text" value="1"/></p> <p>21. PCATD effectiveness <input type="text" value="2"/></p> <p>22. PCATD for new ratings <input type="text" value="2"/></p> <p>23. PCATD obstacles <input type="text" value="4,6,7"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input type="text" value="2"/></td></tr> <tr><td>Abnormal OP</td><td><input type="text" value="2"/></td></tr> <tr><td>Emergency Proc.</td><td><input type="text" value="3"/></td></tr> <tr><td>Missed approach</td><td><input type="text" value="3"/></td></tr> <tr><td>fIt maneuvers</td><td><input type="text" value="2"/></td></tr> <tr><td>Decision making</td><td><input type="text" value="2"/></td></tr> <tr><td>Communications</td><td><input type="text"/></td></tr> <tr><td>Navigation</td><td><input type="text"/></td></tr> <tr><td>Other</td><td><input type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input type="text"/></td></tr> <tr><td>Imbedded trainer</td><td><input type="text"/></td></tr> <tr><td>Performance based certification</td><td><input type="text"/></td></tr> <tr><td>Computer record keeping</td><td><input type="text" value="5"/></td></tr> <tr><td>fIt/Control system design</td><td><input type="text"/></td></tr> <tr><td>Unified curriculum</td><td><input type="text"/></td></tr> </table>	Normal OP	<input type="text" value="2"/>	Abnormal OP	<input type="text" value="2"/>	Emergency Proc.	<input type="text" value="3"/>	Missed approach	<input type="text" value="3"/>	fIt maneuvers	<input type="text" value="2"/>	Decision making	<input type="text" value="2"/>	Communications	<input type="text"/>	Navigation	<input type="text"/>	Other	<input type="text"/>	PCATD	<input type="text"/>	Imbedded trainer	<input type="text"/>	Performance based certification	<input type="text"/>	Computer record keeping	<input type="text" value="5"/>	fIt/Control system design	<input type="text"/>	Unified curriculum	<input type="text"/>
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### AGATE Participant Responses

<p>1. Home state <input style="width: 50px;" type="text" value="FL"/></p> <p>2. Rating <input style="width: 150px;" type="text" value="Commercial Pilot"/></p> <p>3. Instrument rated <input style="width: 50px;" type="text" value="Yes"/></p> <p>4. 12 Months flt time <input style="width: 50px;" type="text" value="0"/></p> <p>5. Total flight time <input style="width: 50px;" type="text" value="300"/></p> <p>6. Flight Instructor <input style="width: 50px;" type="text" value="No"/></p> <p>7. Own/mng FBO <input style="width: 50px;" type="text" value="No"/></p> <p>8. Type flt school <input style="width: 70px;" type="text"/></p> <p>9. Type of Training <input style="width: 250px;" type="text"/></p> <p>10. # of Airplanes <input style="width: 50px;" type="text" value="0"/></p> <p>11. A/C Flt hours <input style="width: 50px;" type="text" value="0"/></p> <p>12. Capabilities Effect <input style="width: 150px;" type="text" value="10% increase"/></p> <p>13. Main AC type <input style="width: 150px;" type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input style="width: 250px;" type="text" value="Other: Human Factors"/></p> <p>15. Participation <input style="width: 70px;" type="text" value="Flew"/></p> <p>16. Situation Awareness <input style="width: 100px;" type="text" value="2"/></p> <p>17. Heads-Up value <input style="width: 100px;" type="text" value="1"/></p> <p>18. Highway affect on tasks <input style="width: 150px;" type="text" value="1"/></p>	<p>19. PCATD types <input style="width: 50px;" type="text" value="3"/></p> <p>20. PCATD uses <input style="width: 50px;" type="text" value="2"/></p> <p>21. PCATD effectiveness <input style="width: 50px;" type="text" value="2"/></p> <p>22. PCATD for new ratings <input style="width: 50px;" type="text" value="2"/></p> <p>23. PCATD obstacles <input style="width: 70px;" type="text" value="4"/></p> <p>24. AGATE Training value</p> <p style="padding-left: 20px;">Normal OP <input style="width: 50px;" type="text" value="3"/></p> <p style="padding-left: 20px;">Abnormal OP <input style="width: 50px;" type="text" value="4"/></p> <p style="padding-left: 20px;">Emergency Proc. <input style="width: 50px;" type="text" value="4"/></p> <p style="padding-left: 20px;">Missed approach <input style="width: 50px;" type="text" value="3"/></p> <p style="padding-left: 20px;">Flt maneuvers <input style="width: 50px;" type="text" value="3"/></p> <p style="padding-left: 20px;">Decision making <input style="width: 50px;" type="text" value="3"/></p> <p style="padding-left: 20px;">Communications <input style="width: 50px;" type="text" value="3"/></p> <p style="padding-left: 20px;">Navigation <input style="width: 50px;" type="text" value="4"/></p> <p style="padding-left: 20px;">Other <input style="width: 150px;" type="text" value="4 : Approach/landing"/></p> <p>25. AGATE Program Importance</p> <p style="padding-left: 20px;">PCATD <input style="width: 50px;" type="text" value="5"/></p> <p style="padding-left: 20px;">Imbedded trainer <input style="width: 50px;" type="text" value="4"/></p> <p style="padding-left: 20px;">Performance based certification <input style="width: 50px;" type="text" value="4"/></p> <p style="padding-left: 20px;">Computer record keeping <input style="width: 50px;" type="text" value="4"/></p> <p style="padding-left: 20px;">Flt/Control system design <input style="width: 50px;" type="text" value="4"/></p> <p style="padding-left: 20px;">Unified curriculum <input style="width: 50px;" type="text" value="5"/></p>
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**26. Situational Awareness**

The MFD helps the pilot to realize exactly where he is - something that currently takes a great deal of thought. Also, the simulator helps to keep the pilot on course with less deviations

**27. Most value**

Highway in the sky - easy to follow a route. Simplification - almost anyone can do it!

**28. Least value**

The takeoff trim and airspeed displays were not highlighted like the power display - making them seem less significant (unimportant) to the pilot.

### AGATE Participant Responses

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<p>28. Least value <input style="width: 400px;" type="text"/></p>																															

### AGATE Participant Responses

<p>1. Home state <input style="width: 50px;" type="text" value="FL"/></p> <p>2. Rating <input style="width: 150px;" type="text" value="Commercial Pilot"/></p> <p>3. Instrument rated <input style="width: 50px;" type="text" value="Yes"/></p> <p>4. 12 Months fll time <input style="width: 50px;" type="text" value="20"/></p> <p>5. Total flight time <input style="width: 50px;" type="text" value="350"/></p> <p>6. Flight Instructor <input style="width: 50px;" type="text" value="No"/></p> <p>7. Own/mng FBO <input style="width: 50px;" type="text" value="No"/></p> <p>8. Type fll school <input style="width: 70px;" type="text"/></p> <p>9. Type of Training <input style="width: 250px;" type="text"/></p> <p>10. # of Airplanes <input style="width: 50px;" type="text" value="12"/></p> <p>11. A/C Fll hours <input style="width: 50px;" type="text" value="20"/></p> <p>12. Capabilities Effect <input style="width: 150px;" type="text" value="10% increase"/></p> <p>13. Main AC type <input style="width: 150px;" type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input style="width: 250px;" type="text" value="Aircraft R&amp;D, Manufacturer"/></p> <p>15. Participation <input style="width: 70px;" type="text" value="Flew"/></p> <p>16. Situation Awareness <input style="width: 100px;" type="text" value="1"/></p> <p>17. Heads-Up value <input style="width: 100px;" type="text" value="1"/></p> <p>18. Highway affect on tasks <input style="width: 150px;" type="text" value="2"/></p>	<p>19. PCATD types <input style="width: 50px;" type="text" value="4"/></p> <p>20. PCATD uses <input style="width: 50px;" type="text" value="4"/></p> <p>21. PCATD effectiveness <input style="width: 50px;" type="text" value="2"/></p> <p>22. PCATD for new ratings <input style="width: 50px;" type="text" value="2"/></p> <p>23. PCATD obstacles <input style="width: 50px;" type="text" value="2"/></p> <p>24. AGATE Training value</p> <p style="padding-left: 20px;">Normal OP <input style="width: 50px;" type="text" value="5"/></p> <p style="padding-left: 20px;">Abnormal OP <input style="width: 50px;" type="text" value="5"/></p> <p style="padding-left: 20px;">Emergency Proc. <input style="width: 50px;" type="text" value="4"/></p> <p style="padding-left: 20px;">Missed approach <input style="width: 50px;" type="text" value="5"/></p> <p style="padding-left: 20px;">Fll maneuvers <input style="width: 50px;" type="text" value="5"/></p> <p style="padding-left: 20px;">Decision making <input style="width: 50px;" type="text" value="5"/></p> <p style="padding-left: 20px;">Communications <input style="width: 50px;" type="text" value="5"/></p> <p style="padding-left: 20px;">Navigation <input style="width: 50px;" type="text" value="5"/></p> <p style="padding-left: 20px;">Other <input style="width: 150px;" type="text"/></p> <p>25. AGATE Program Importance</p> <p style="padding-left: 20px;">PCATD <input style="width: 50px;" type="text" value="5"/></p> <p style="padding-left: 20px;">Imbedded trainer <input style="width: 50px;" type="text" value="5"/></p> <p style="padding-left: 20px;">Performance based certification <input style="width: 50px;" type="text" value="3"/></p> <p style="padding-left: 20px;">Computer record keeping <input style="width: 50px;" type="text" value="5"/></p> <p style="padding-left: 20px;">Fll/Control system design <input style="width: 50px;" type="text" value="4"/></p> <p style="padding-left: 20px;">Unified curriculum <input style="width: 50px;" type="text" value="4"/></p>
<p>26. Situational Awareness</p> <p style="padding-left: 20px;"><input style="width: 400px;" type="text" value="AGATE Display would improve awareness"/></p>	
<p>27. Most value</p> <p style="padding-left: 20px;"><input style="width: 400px;" type="text" value="HUD"/></p>	
<p>28. Least value</p> <p style="padding-left: 20px;"><input style="width: 400px;" type="text" value="None, it all can improve GA safety"/></p>	

### AGATE Participant Responses

<p>1. Home state <input style="width: 100px;" type="text" value="FL"/></p> <p>2. Rating <input style="width: 200px;" type="text" value="Commercial Pilot"/></p> <p>3. Instrument rated <input style="width: 100px;" type="text" value="Yes"/></p> <p>4. 12 Months flt time <input style="width: 100px;" type="text" value="30"/></p> <p>5. Total flight time <input style="width: 100px;" type="text" value="550"/></p> <p>6. Flight Instructor <input style="width: 100px;" type="text" value="Yes"/></p> <p>7. Own/mng FBO <input style="width: 100px;" type="text" value="No"/></p> <p>8. Type flt school <input style="width: 100px;" type="text"/></p> <p>9. Type of Training <input style="width: 250px;" type="text" value="Private Pilot, Commercial"/></p> <p>10. # of Airplanes <input style="width: 100px;" type="text" value="0"/></p> <p>11. A/C Flt hours <input style="width: 100px;" type="text" value="30"/></p> <p>12. Capabilities Effect <input style="width: 200px;" type="text" value="50% increase"/></p> <p>13. Main AC type <input style="width: 200px;" type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input style="width: 270px;" type="text"/></p> <p>15. Participation <input style="width: 100px;" type="text" value="Flew"/></p> <p>16. Situation Awareness <input style="width: 150px;" type="text" value="1"/></p> <p>17. Heads-Up value <input style="width: 150px;" type="text" value="1"/></p> <p>18. Highway affect on tasks <input style="width: 180px;" type="text" value="1"/></p>	<p>19. PCATD types <input style="width: 100px;" type="text" value="3"/></p> <p>20. PCATD uses <input style="width: 100px;" type="text" value="4"/></p> <p>21. PCATD effectiveness <input style="width: 100px;" type="text" value="1"/></p> <p>22. PCATD for new ratings <input style="width: 100px;" type="text" value="1"/></p> <p>23. PCATD obstacles <input style="width: 100px;" type="text" value="4"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input style="width: 100px;" type="text" value="5"/></td></tr> <tr><td>Abnormal OP</td><td><input style="width: 100px;" type="text" value="3"/></td></tr> <tr><td>Emergency Proc.</td><td><input style="width: 100px;" type="text" value="2"/></td></tr> <tr><td>Missed approach</td><td><input style="width: 100px;" type="text" value="3"/></td></tr> <tr><td>Flt maneuvers</td><td><input style="width: 100px;" type="text" value="1"/></td></tr> <tr><td>Decision making</td><td><input style="width: 100px;" type="text" value="3"/></td></tr> <tr><td>Communications</td><td><input style="width: 100px;" type="text" value="5"/></td></tr> <tr><td>Navigation</td><td><input style="width: 100px;" type="text" value="5"/></td></tr> <tr><td>Other</td><td><input style="width: 180px;" type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input style="width: 100px;" type="text" value="4"/></td></tr> <tr><td>Imbedded trainer</td><td><input style="width: 100px;" type="text" value="5"/></td></tr> <tr><td>Performance based certification</td><td><input style="width: 100px;" type="text" value="5"/></td></tr> <tr><td>Computer record keeping</td><td><input style="width: 100px;" type="text" value="5"/></td></tr> <tr><td>Flt/Control system design</td><td><input style="width: 100px;" type="text" value="5"/></td></tr> <tr><td>Unified curriculum</td><td><input style="width: 100px;" type="text" value="5"/></td></tr> </table>	Normal OP	<input style="width: 100px;" type="text" value="5"/>	Abnormal OP	<input style="width: 100px;" type="text" value="3"/>	Emergency Proc.	<input style="width: 100px;" type="text" value="2"/>	Missed approach	<input style="width: 100px;" type="text" value="3"/>	Flt maneuvers	<input style="width: 100px;" type="text" value="1"/>	Decision making	<input style="width: 100px;" type="text" value="3"/>	Communications	<input style="width: 100px;" type="text" value="5"/>	Navigation	<input style="width: 100px;" type="text" value="5"/>	Other	<input style="width: 180px;" type="text"/>	PCATD	<input style="width: 100px;" type="text" value="4"/>	Imbedded trainer	<input style="width: 100px;" type="text" value="5"/>	Performance based certification	<input style="width: 100px;" type="text" value="5"/>	Computer record keeping	<input style="width: 100px;" type="text" value="5"/>	Flt/Control system design	<input style="width: 100px;" type="text" value="5"/>	Unified curriculum	<input style="width: 100px;" type="text" value="5"/>
Normal OP	<input style="width: 100px;" type="text" value="5"/>																														
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Flt/Control system design	<input style="width: 100px;" type="text" value="5"/>																														
Unified curriculum	<input style="width: 100px;" type="text" value="5"/>																														
<p>26. Situational Awareness</p> <p><input style="width: 450px;" type="text" value="It would improve due to constant position updates"/></p>																															
<p>27. Most value</p> <p><input style="width: 450px;" type="text" value="The ease of flying. Takes away the complexity."/></p>																															
<p>28. Least value</p> <p><input style="width: 450px;" type="text" value="The fundamentals of flying"/></p>																															

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<p>1. Home state <input style="width: 100px;" type="text" value="FL"/></p> <p>2. Rating <input style="width: 200px;" type="text" value="Commercial Pilot"/></p> <p>3. Instrument rated <input style="width: 100px;" type="text" value="Yes"/></p> <p>4. 12 Months flt time <input style="width: 100px;" type="text" value="250"/></p> <p>5. Total flight time <input style="width: 100px;" type="text" value="30000"/></p> <p>6. Flight Instructor <input style="width: 100px;" type="text" value="Yes"/></p> <p>7. Own/mng FBO <input style="width: 100px;" type="text" value="Yes"/></p> <p>8. Type flt school <input style="width: 100px;" type="text" value="Part 61"/></p> <p>9. Type of Training <input style="width: 250px;" type="text" value="ALL"/></p> <p>10. # of Airplanes <input style="width: 100px;" type="text" value="14"/></p> <p>11. A/C Flt hours <input style="width: 100px;" type="text" value="300"/></p> <p>12. Capabilities Effect <input style="width: 200px;" type="text" value="25% increase"/></p> <p>13. Main AC type <input style="width: 200px;" type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input style="width: 250px;" type="text" value="Airplane sales"/></p> <p>15. Participation <input style="width: 100px;" type="text" value="Observed"/></p> <p>16. Situation Awareness <input style="width: 150px;" type="text" value="1"/></p> <p>17. Heads-Up value <input style="width: 150px;" type="text" value="1"/></p> <p>18. Highway affect on tasks <input style="width: 180px;" type="text" value="1"/></p>	<p>19. PCATD types <input style="width: 100px;" type="text" value="2"/></p> <p>20. PCATD uses <input style="width: 100px;" type="text" value="5,6"/></p> <p>21. PCATD effectiveness <input style="width: 100px;" type="text" value="1"/></p> <p>22. PCATD for new ratings <input style="width: 100px;" type="text" value="1"/></p> <p>23. PCATD obstacles <input style="width: 100px;" type="text" value="1"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Abnormal OP</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Emergency Proc.</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Missed approach</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Flt maneuvers</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Decision making</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Communications</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Navigation</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Other</td><td><input style="width: 180px;" type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Imbedded trainer</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Performance based certification</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Computer record keeping</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Flt/Control system design</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Unified curriculum</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> </table>	Normal OP	<input style="width: 50px;" type="text" value="5"/>	Abnormal OP	<input style="width: 50px;" type="text" value="0"/>	Emergency Proc.	<input style="width: 50px;" type="text" value="0"/>	Missed approach	<input style="width: 50px;" type="text" value="0"/>	Flt maneuvers	<input style="width: 50px;" type="text" value="0"/>	Decision making	<input style="width: 50px;" type="text" value="0"/>	Communications	<input style="width: 50px;" type="text" value="0"/>	Navigation	<input style="width: 50px;" type="text" value="0"/>	Other	<input style="width: 180px;" type="text"/>	PCATD	<input style="width: 50px;" type="text" value="5"/>	Imbedded trainer	<input style="width: 50px;" type="text" value="0"/>	Performance based certification	<input style="width: 50px;" type="text" value="0"/>	Computer record keeping	<input style="width: 50px;" type="text" value="0"/>	Flt/Control system design	<input style="width: 50px;" type="text" value="0"/>	Unified curriculum	<input style="width: 50px;" type="text" value="0"/>
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Unified curriculum	<input style="width: 50px;" type="text" value="0"/>																														
<p>26. Situational Awareness <input style="width: 500px;" type="text" value="Same"/></p>																															
<p>27. Most value <input style="width: 500px;" type="text" value="Easier"/></p>																															
<p>28. Least value <input style="width: 500px;" type="text" value="Safer"/></p>																															

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<p>26. Situational Awareness</p> <p style="margin-left: 40px;"><input style="width: 400px;" type="text" value="You can practice the approach"/></p>																															
<p>27. Most value</p> <p style="margin-left: 40px;"><input style="width: 400px;" type="text" value="Tracking and approach"/></p>																															
<p>28. Least value</p> <p style="margin-left: 40px;"><input style="width: 400px;" type="text" value="Trim tab"/></p>																															

### AGATE Participant Responses

<p>1. Home state <input type="text" value="FL"/></p> <p>2. Rating <input type="text" value="Commercial Pilot"/></p> <p>3. Instrument rated <input type="text" value="Yes"/></p> <p>4. 12 Months flt time <input type="text" value="50"/></p> <p>5. Total flight time <input type="text" value="3000"/></p> <p>6. Flight Instructor <input type="text" value="No"/></p> <p>7. Own/mng FBO <input type="text" value="No"/></p> <p>8. Type flt school <input type="text"/></p> <p>9. Type of Training <input type="text"/></p> <p>10. # of Airplanes <input type="text" value="0"/></p> <p>11. A/C Flt hours <input type="text" value="0"/></p> <p>12. Capabilities Effect <input type="text" value="50% increase"/></p> <p>13. Main AC type <input type="text" value="Helicopters"/></p> <p>14. Prim Activity <input type="text" value="Aviation training aids"/></p> <p>15. Participation <input type="text" value="Flew"/></p> <p>16. Situation Awareness <input type="text" value="4"/></p> <p>17. Heads-Up value <input type="text" value="1"/></p> <p>18. Highway affect on tasks <input type="text" value="1"/></p>	<p>19. PCATD types <input type="text" value="2,3"/></p> <p>20. PCATD uses <input type="text"/></p> <p>21. PCATD effectiveness <input type="text" value="0"/></p> <p>22. PCATD for new ratings <input type="text" value="0"/></p> <p>23. PCATD obstacles <input type="text"/></p> <p>24. AGATE Training value</p> <p style="padding-left: 20px;">Normal OP <input type="text" value="0"/></p> <p style="padding-left: 20px;">Abnormal OP <input type="text" value="0"/></p> <p style="padding-left: 20px;">Emergency Proc. <input type="text" value="0"/></p> <p style="padding-left: 20px;">Missed approach <input type="text" value="0"/></p> <p style="padding-left: 20px;">Flt maneuvers <input type="text" value="0"/></p> <p style="padding-left: 20px;">Decision making <input type="text" value="0"/></p> <p style="padding-left: 20px;">Communications <input type="text" value="0"/></p> <p style="padding-left: 20px;">Navigation <input type="text" value="0"/></p> <p style="padding-left: 20px;">Other <input type="text"/></p> <p>25. AGATE Program Importance</p> <p style="padding-left: 20px;">PCATD <input type="text" value="0"/></p> <p style="padding-left: 20px;">Imbedded trainer <input type="text" value="0"/></p> <p style="padding-left: 20px;">Performance based certification <input type="text" value="0"/></p> <p style="padding-left: 20px;">Computer record keeping <input type="text" value="0"/></p> <p style="padding-left: 20px;">FIT/Control system design <input type="text" value="0"/></p> <p style="padding-left: 20px;">Unified curriculum <input type="text" value="0"/></p>
<p>26. Situational Awareness <input type="text"/></p>	
<p>27. Most value <input type="text"/></p>	
<p>28. Least value <input type="text"/></p>	

### AGATE Participant Responses

<p>1. Home state <input style="width: 50px;" type="text" value="FL"/></p> <p>2. Rating <input style="width: 150px;" type="text" value="Commercial Pilot"/></p> <p>3. Instrument rated <input style="width: 50px;" type="text" value="Yes"/></p> <p>4. 12 Months fht time <input style="width: 50px;" type="text" value="30"/></p> <p>5. Total flight time <input style="width: 50px;" type="text" value="1000"/></p> <p>6. Flight Instructor <input style="width: 50px;" type="text" value="Yes"/></p> <p>7. Own/mng FBO <input style="width: 50px;" type="text" value="No"/></p> <p>8. Type fht school <input style="width: 50px;" type="text" value="Part 61"/></p> <p>9. Type of Training <input style="width: 200px;" type="text" value="Private Pilot, Instrument"/></p> <p>10. # of Airplanes <input style="width: 50px;" type="text" value="1"/></p> <p>11. A/C Fht hours <input style="width: 50px;" type="text" value="300"/></p> <p>12. Capabilities Effect <input style="width: 150px;" type="text" value="50% increase"/></p> <p>13. Main AC type <input style="width: 150px;" type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input style="width: 250px;" type="text" value="Pilot flight training"/></p> <p>15. Participation <input style="width: 50px;" type="text" value="Observed"/></p> <p>16. Situation Awareness <input style="width: 50px;" type="text" value="1"/></p> <p>17. Heads-Up value <input style="width: 50px;" type="text" value="2"/></p> <p>18. Highway affect on tasks <input style="width: 150px;" type="text" value="1"/></p>	<p>19. PCATD types <input style="width: 50px;" type="text" value="4"/></p> <p>20. PCATD uses <input style="width: 50px;" type="text" value="4"/></p> <p>21. PCATD effectiveness <input style="width: 50px;" type="text" value="1"/></p> <p>22. PCATD for new ratings <input style="width: 50px;" type="text" value="1"/></p> <p>23. PCATD obstacles <input style="width: 50px;" type="text" value="4"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Abnormal OP</td><td><input style="width: 50px;" type="text" value="3"/></td></tr> <tr><td>Emergency Proc.</td><td><input style="width: 50px;" type="text" value="3"/></td></tr> <tr><td>Missed approach</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> <tr><td>Fit maneuvers</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Decision making</td><td><input style="width: 50px;" type="text" value="3"/></td></tr> <tr><td>Communications</td><td><input style="width: 50px;" type="text" value="1"/></td></tr> <tr><td>Navigation</td><td><input style="width: 50px;" type="text" value="3"/></td></tr> <tr><td>Other</td><td><input style="width: 150px;" type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Imbedded trainer</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Performance based certification</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Computer record keeping</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Fit/Control system design</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Unified curriculum</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> </table>	Normal OP	<input style="width: 50px;" type="text" value="5"/>	Abnormal OP	<input style="width: 50px;" type="text" value="3"/>	Emergency Proc.	<input style="width: 50px;" type="text" value="3"/>	Missed approach	<input style="width: 50px;" type="text" value="4"/>	Fit maneuvers	<input style="width: 50px;" type="text" value="5"/>	Decision making	<input style="width: 50px;" type="text" value="3"/>	Communications	<input style="width: 50px;" type="text" value="1"/>	Navigation	<input style="width: 50px;" type="text" value="3"/>	Other	<input style="width: 150px;" type="text"/>	PCATD	<input style="width: 50px;" type="text" value="5"/>	Imbedded trainer	<input style="width: 50px;" type="text" value="5"/>	Performance based certification	<input style="width: 50px;" type="text" value="5"/>	Computer record keeping	<input style="width: 50px;" type="text" value="5"/>	Fit/Control system design	<input style="width: 50px;" type="text" value="5"/>	Unified curriculum	<input style="width: 50px;" type="text" value="5"/>
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<p>1. Home state <input type="text" value="FL"/></p> <p>2. Rating <input type="text" value="Commercial Pilot"/></p> <p>3. Instrument rated <input type="text" value="Yes"/></p> <p>4. 12 Months fll time <input type="text" value="0"/></p> <p>5. Total flight time <input type="text" value="500"/></p> <p>6. Flight Instructor <input type="text" value="No"/></p> <p>7. Own/mng FBO <input type="text" value="No"/></p> <p>8. Type fll school <input type="text"/></p> <p>9. Type of Training <input type="text"/></p> <p>10. # of Airplanes <input type="text" value="90"/></p> <p>11. A/C Fll hours <input type="text" value="0"/></p> <p>12. Capabilities Effect <input type="text" value="25% increase"/></p> <p>13. Main AC type <input type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input type="text" value="Other: Human Factors Researcher &amp; Profess"/></p> <p>15. Participation <input type="text" value="Flew"/></p> <p>16. Situation Awareness <input type="text" value="2"/></p> <p>17. Heads-Up value <input type="text" value="3"/></p> <p>18. Highway affect on tasks <input type="text" value="2"/></p>	<p>19. PCATD types <input type="text" value="4"/></p> <p>20. PCATD uses <input type="text" value="2"/></p> <p>21. PCATD effectiveness <input type="text" value="1"/></p> <p>22. PCATD for new ratings <input type="text" value="1"/></p> <p>23. PCATD obstacles <input type="text" value="1"/></p> <p>24. AGATE Training value</p> <p style="padding-left: 20px;">Normal OP <input type="text" value="5"/></p> <p style="padding-left: 20px;">Abnormal OP <input type="text" value="5"/></p> <p style="padding-left: 20px;">Emergency Proc. <input type="text" value="5"/></p> <p style="padding-left: 20px;">Missed approach <input type="text" value="5"/></p> <p style="padding-left: 20px;">Fll maneuvers <input type="text" value="5"/></p> <p style="padding-left: 20px;">Decision making <input type="text" value="5"/></p> <p style="padding-left: 20px;">Communications <input type="text" value="5"/></p> <p style="padding-left: 20px;">Navigation <input type="text" value="5"/></p> <p style="padding-left: 20px;">Other <input type="text"/></p> <p>25. AGATE Program Importance</p> <p style="padding-left: 20px;">PCATD <input type="text" value="5"/></p> <p style="padding-left: 20px;">Imbedded trainer <input type="text" value="4"/></p> <p style="padding-left: 20px;">Performance based certification <input type="text" value="5"/></p> <p style="padding-left: 20px;">Computer record keeping <input type="text" value="5"/></p> <p style="padding-left: 20px;">Fll/Control system design <input type="text" value="5"/></p> <p style="padding-left: 20px;">Unified curriculum <input type="text" value="5"/></p>
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**26. Situational Awareness**

Improve them by they could be improved more if attention was paid H.F.E. research in the area. I.E. Velocity vector should ALWAYS be used -- No attitude!

**27. Most value**

Improved display of basic flight info significantly reduce pilot workload

**28. Least value**

GET RID OF ATTITUDE DISPLAY!

### AGATE Participant Responses

<p>1. Home state <input style="width: 50px;" type="text" value="FL"/></p> <p>2. Rating <input style="width: 150px;" type="text" value="Commercial Pilot"/></p> <p>3. Instrument rated <input style="width: 50px;" type="text" value="Yes"/></p> <p>4. 12 Months flt time <input style="width: 50px;" type="text" value="150"/></p> <p>5. Total flight time <input style="width: 50px;" type="text" value="4000"/></p> <p>6. Flight Instructor <input style="width: 50px;" type="text" value="No"/></p> <p>7. Own/mng FBO <input style="width: 50px;" type="text" value="No"/></p> <p>8. Type flt school <input style="width: 50px;" type="text"/></p> <p>9. Type of Training <input style="width: 200px;" type="text"/></p> <p>10. # of Airplanes <input style="width: 50px;" type="text" value="6"/></p> <p>11. A/C Flt hours <input style="width: 50px;" type="text" value="150"/></p> <p>12. Capabilities Effect <input style="width: 150px;" type="text"/></p> <p>13. Main AC type <input style="width: 150px;" type="text" value="Twin Piston Engine"/></p> <p>14. Prim Activity <input style="width: 200px;" type="text" value="Commuter, charter, Medevac or air taxi"/></p> <p>15. Participation <input style="width: 50px;" type="text" value="Flew"/></p> <p>16. Situation Awareness <input style="width: 50px;" type="text" value="1"/></p> <p>17. Heads-Up value <input style="width: 50px;" type="text" value="1"/></p> <p>18. Highway affect on tasks <input style="width: 150px;" type="text" value="1"/></p>	<p>19. PCATD types <input style="width: 50px;" type="text" value="1"/></p> <p>20. PCATD uses <input style="width: 50px;" type="text" value="1"/></p> <p>21. PCATD effectiveness <input style="width: 50px;" type="text" value="1"/></p> <p>22. PCATD for new ratings <input style="width: 50px;" type="text" value="1"/></p> <p>23. PCATD obstacles <input style="width: 50px;" type="text" value="4"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Abnormal OP</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Emergency Proc.</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Missed approach</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Flt maneuvers</td><td><input style="width: 50px;" type="text" value="2"/></td></tr> <tr><td>Decision making</td><td><input style="width: 50px;" type="text" value="2"/></td></tr> <tr><td>Communications</td><td><input style="width: 50px;" type="text" value="2"/></td></tr> <tr><td>Navigation</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Other</td><td><input style="width: 150px;" type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Imbedded trainer</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Performance based certification</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Computer record keeping</td><td><input style="width: 50px;" type="text" value="1"/></td></tr> <tr><td>Flt/Control system design</td><td><input style="width: 50px;" type="text" value="2"/></td></tr> <tr><td>Unified curriculum</td><td><input style="width: 50px;" type="text" value="2"/></td></tr> </table>	Normal OP	<input style="width: 50px;" type="text" value="5"/>	Abnormal OP	<input style="width: 50px;" type="text" value="5"/>	Emergency Proc.	<input style="width: 50px;" type="text" value="5"/>	Missed approach	<input style="width: 50px;" type="text" value="5"/>	Flt maneuvers	<input style="width: 50px;" type="text" value="2"/>	Decision making	<input style="width: 50px;" type="text" value="2"/>	Communications	<input style="width: 50px;" type="text" value="2"/>	Navigation	<input style="width: 50px;" type="text" value="5"/>	Other	<input style="width: 150px;" type="text"/>	PCATD	<input style="width: 50px;" type="text" value="5"/>	Imbedded trainer	<input style="width: 50px;" type="text" value="5"/>	Performance based certification	<input style="width: 50px;" type="text" value="5"/>	Computer record keeping	<input style="width: 50px;" type="text" value="1"/>	Flt/Control system design	<input style="width: 50px;" type="text" value="2"/>	Unified curriculum	<input style="width: 50px;" type="text" value="2"/>
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<p>26. Situational Awareness</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;">Decrease in actuality</div>																															
<p>27. Most value</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;">Simplicity you don't need to understand why only follow the path and directions</div>																															
<p>28. Least value</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;">Lack of real world reality - almost a game like atmosphere - what happens if equipment fails?</div>																															

### AGATE Participant Responses

<p>1. Home state <input type="text" value="FL"/></p> <p>2. Rating <input type="text" value="Private Pilot"/></p> <p>3. Instrument rated <input type="text" value="No"/></p> <p>4. 12 Months flt time <input type="text" value="0"/></p> <p>5. Total flight time <input type="text" value="71"/></p> <p>6. Flight Instructor <input type="text" value="No"/></p> <p>7. Own/mng FBO <input type="text" value="No"/></p> <p>8. Type flt school <input type="text"/></p> <p>9. Type of Training <input type="text"/></p> <p>10. # of Airplanes <input type="text" value="0"/></p> <p>11. A/C Flt hours <input type="text" value="0"/></p> <p>12. Capabilities Effect <input type="text" value="25% increase"/></p> <p>13. Main AC type <input type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input type="text" value="Other: AVN Psychology"/></p> <p>15. Participation <input type="text" value="Flew"/></p> <p>16. Situation Awareness <input type="text" value="2"/></p> <p>17. Heads-Up value <input type="text" value="1"/></p> <p>18. Highway affect on tasks <input type="text" value="2"/></p>	<p>19. PCATD types <input type="text" value="3"/></p> <p>20. PCATD uses <input type="text" value="2,4"/></p> <p>21. PCATD effectiveness <input type="text" value="2"/></p> <p>22. PCATD for new ratings <input type="text" value="2"/></p> <p>23. PCATD obstacles <input type="text" value="4,8 Skills tra"/></p> <p>24. AGATE Training value</p> <p style="padding-left: 20px;">Normal OP <input type="text" value="4"/></p> <p style="padding-left: 20px;">Abnormal OP <input type="text" value="5"/></p> <p style="padding-left: 20px;">Emergency Proc. <input type="text" value="5"/></p> <p style="padding-left: 20px;">Missed approach <input type="text" value="4"/></p> <p style="padding-left: 20px;">Flt maneuvers <input type="text" value="4"/></p> <p style="padding-left: 20px;">Decision making <input type="text" value="5"/></p> <p style="padding-left: 20px;">Communications <input type="text" value="5"/></p> <p style="padding-left: 20px;">Navigation <input type="text" value="5"/></p> <p style="padding-left: 20px;">Other <input type="text"/></p> <p>25. AGATE Program Importance</p> <p style="padding-left: 20px;">PCATD <input type="text" value="5"/></p> <p style="padding-left: 20px;">Imbedded trainer <input type="text" value="3"/></p> <p style="padding-left: 20px;">Performance based certification <input type="text" value="5"/></p> <p style="padding-left: 20px;">Computer record keeping <input type="text" value="5"/></p> <p style="padding-left: 20px;">Flt/Control system design <input type="text" value="5"/></p> <p style="padding-left: 20px;">Unified curriculum <input type="text" value="5"/></p>
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**26. Situational Awareness**

By providing flight guidance cues in the contact scene which match "plan view" map imagery, @ least the heightened awareness of position may be realized

**27. Most value**

The ability to turn night IMC into day VMC is intriguing. The natural cues we use to maintain orientation & establish position inflight w/respect to ground references become available All the time & no more hieroglyphics (sa!)!!

**28. Least value**

The engine & system monitoring seems on first blush to be more complex than it really is...

### AGATE Participant Responses

<p>1. Home state <input type="text" value="FL"/></p> <p>2. Rating <input type="text" value="Private Pilot"/></p> <p>3. Instrument rated <input type="text" value="No"/></p> <p>4. 12 Months flt time <input type="text" value="0"/></p> <p>5. Total flight time <input type="text" value="150"/></p> <p>6. Flight Instructor <input type="text" value="No"/></p> <p>7. Own/mng FBO <input type="text" value="Yes"/></p> <p>8. Type flt school <input type="text" value="Part 61, 141"/></p> <p>9. Type of Training <input type="text" value="ALL"/></p> <p>10. # of Airplanes <input type="text" value="16"/></p> <p>11. A/C Flt hours <input type="text" value="1800"/></p> <p>12. Capabilities Effect <input type="text" value="25% increase"/></p> <p>13. Main AC type <input type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input type="text" value="Aircraft services"/></p> <p>15. Participation <input type="text" value="Observed"/></p> <p>16. Situation Awareness <input type="text" value="1"/></p> <p>17. Heads-Up value <input type="text" value="2"/></p> <p>18. Highway affect on tasks <input type="text" value="1"/></p>	<p>19. PCATD types <input type="text" value="1"/></p> <p>20. PCATD uses <input type="text" value="1"/></p> <p>21. PCATD effectiveness <input type="text" value="2"/></p> <p>22. PCATD for new ratings <input type="text" value="2"/></p> <p>23. PCATD obstacles <input type="text" value="4"/></p> <p>24. AGATE Training value</p> <p style="padding-left: 20px;">Normal OP <input type="text" value="2"/></p> <p style="padding-left: 20px;">Abnormal OP <input type="text" value="3"/></p> <p style="padding-left: 20px;">Emergency Proc. <input type="text" value="2"/></p> <p style="padding-left: 20px;">Missed approach <input type="text" value="3"/></p> <p style="padding-left: 20px;">Flt maneuvers <input type="text" value="2"/></p> <p style="padding-left: 20px;">Decision making <input type="text" value="2"/></p> <p style="padding-left: 20px;">Communications <input type="text" value="3"/></p> <p style="padding-left: 20px;">Navigation <input type="text" value="2"/></p> <p style="padding-left: 20px;">Other <input type="text"/></p> <p>25. AGATE Program Importance</p> <p style="padding-left: 20px;">PCATD <input type="text" value="2"/></p> <p style="padding-left: 20px;">Imbedded trainer <input type="text" value="2"/></p> <p style="padding-left: 20px;">Performance based certification <input type="text" value="1"/></p> <p style="padding-left: 20px;">Computer record keeping <input type="text" value="3"/></p> <p style="padding-left: 20px;">Flt/Control system design <input type="text" value="2"/></p> <p style="padding-left: 20px;">Unified curriculum <input type="text" value="2"/></p>
<p>26. Situational Awareness <input type="text"/></p>	
<p>27. Most value <input type="text"/></p>	
<p>28. Least value <input type="text"/></p>	

### AGATE Participant Responses

<p>1. Home state <input type="text" value="FL"/></p> <p>2. Rating <input type="text" value="Private Pilot"/></p> <p>3. Instrument rated <input type="text" value="Yes"/></p> <p>4. 12 Months flt time <input type="text" value="200"/></p> <p>5. Total flight time <input type="text" value="7100"/></p> <p>6. Flight Instructor <input type="text" value="No"/></p> <p>7. Own/mng FBO <input type="text" value="No"/></p> <p>8. Type flt school <input type="text"/></p> <p>9. Type of Training <input type="text"/></p> <p>10. # of Airplanes <input type="text" value="45"/></p> <p>11. A/C Flt hours <input type="text" value="200"/></p> <p>12. Capabilities Effect <input type="text" value="50% increase"/></p> <p>13. Main AC type <input type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input type="text" value="Aircraft R&amp;D, Manufacturer"/></p> <p>15. Participation <input type="text" value="Flew"/></p> <p>16. Situation Awareness <input type="text" value="1"/></p> <p>17. Heads-Up value <input type="text" value="1"/></p> <p>18. Highway affect on tasks <input type="text" value="2"/></p>	<p>19. PCATD types <input type="text" value="1"/></p> <p>20. PCATD uses <input type="text" value="1"/></p> <p>21. PCATD effectiveness <input type="text" value="3"/></p> <p>22. PCATD for new ratings <input type="text" value="2"/></p> <p>23. PCATD obstacles <input type="text" value="4"/></p> <p>24. AGATE Training value</p> <p style="padding-left: 20px;">Normal OP <input type="text" value="4"/></p> <p style="padding-left: 20px;">Abnormal OP <input type="text" value="5"/></p> <p style="padding-left: 20px;">Emergency Proc. <input type="text" value="5"/></p> <p style="padding-left: 20px;">Missed approach <input type="text" value="4"/></p> <p style="padding-left: 20px;">Flt maneuvers <input type="text" value="2"/></p> <p style="padding-left: 20px;">Decision making <input type="text" value="4"/></p> <p style="padding-left: 20px;">Communications <input type="text" value="4"/></p> <p style="padding-left: 20px;">Navigation <input type="text" value="4"/></p> <p style="padding-left: 20px;">Other <input type="text"/></p> <p>25. AGATE Program Importance</p> <p style="padding-left: 20px;">PCATD <input type="text" value="3"/></p> <p style="padding-left: 20px;">Imbedded trainer <input type="text" value="4"/></p> <p style="padding-left: 20px;">Performance based certification <input type="text" value="5"/></p> <p style="padding-left: 20px;">Computer record keeping <input type="text" value="4"/></p> <p style="padding-left: 20px;">Flt/Control system design <input type="text" value="3"/></p> <p style="padding-left: 20px;">Unified curriculum <input type="text" value="3"/></p>
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**26. Situational Awareness**

**27. Most value**

**28. Least value**

**AGATE Participant Responses**

<p>1. Home state <input type="text" value="FL"/></p> <p>2. Rating <input type="text" value="Student"/></p> <p>3. Instrument rated <input type="text" value="No"/></p> <p>4. 12 Months flt time <input type="text" value="0"/></p> <p>5. Total flight time <input type="text" value="0"/></p> <p>6. Flight Instructor <input type="text" value="No"/></p> <p>7. Own/mng FBO <input type="text" value="No"/></p> <p>8. Type flt school <input type="text"/></p> <p>9. Type of Training <input type="text"/></p> <p>10. # of Airplanes <input type="text" value="0"/></p> <p>11. A/C Flt hours <input type="text" value="100"/></p> <p>12. Capabilities Effect <input type="text"/></p> <p>13. Main AC type <input type="text" value="Twin Turboprop"/></p> <p>14. Prim Activity <input type="text"/></p> <p>15. Participation <input type="text" value="Flew"/></p> <p>16. Situation Awareness <input type="text" value="1"/></p> <p>17. Heads-Up value <input type="text" value="1"/></p> <p>18. Highway affect on tasks <input type="text" value="1"/></p>	<p>19. PCATD types <input type="text"/></p> <p>20. PCATD uses <input type="text" value="1"/></p> <p>21. PCATD effectiveness <input type="text" value="1"/></p> <p>22. PCATD for new ratings <input type="text"/></p> <p>23. PCATD obstacles <input type="text"/></p> <p>24. AGATE Training value</p> <p>Normal OP <input type="text"/></p> <p>Abnormal OP <input type="text"/></p> <p>Emergency Proc. <input type="text"/></p> <p>Missed approach <input type="text"/></p> <p>Flt maneuvers <input type="text"/></p> <p>Decision making <input type="text"/></p> <p>Communications <input type="text"/></p> <p>Navigation <input type="text"/></p> <p>Other <input type="text"/></p> <p>25. AGATE Program Importance</p> <p>PCATD <input type="text"/></p> <p>Imbedded trainer <input type="text"/></p> <p>Performance based certification <input type="text"/></p> <p>Computer record keeping <input type="text"/></p> <p>Flt/Control system design <input type="text"/></p> <p>Unified curriculum <input type="text"/></p>
<p>26. Situational Awareness <input type="text"/></p>	
<p>27. Most value <input type="text"/></p>	
<p>28. Least value <input type="text"/></p>	

**AGATE Participant Responses**

<p>1. Home state <input type="text" value="FL"/></p> <p>2. Rating <input type="text" value="Student"/></p> <p>3. Instrument rated <input type="text" value="No"/></p> <p>4. 12 Months flt time <input type="text" value="3"/></p> <p>5. Total flight time <input type="text" value="0"/></p> <p>6. Flight Instructor <input type="text" value="No"/></p> <p>7. Own/mng FBO <input type="text" value="No"/></p> <p>8. Type flt school <input type="text"/></p> <p>9. Type of Training <input type="text"/></p> <p>10. # of Airplanes <input type="text" value="0"/></p> <p>11. A/C Flt hours <input type="text" value="0"/></p> <p>12. Capabilities Effect <input type="text" value="25% increase"/></p> <p>13. Main AC type <input type="text" value="Twin Piston Engine"/></p> <p>14. Prim Activity <input type="text"/></p> <p>15. Participation <input type="text" value="Flew"/></p> <p>16. Situation Awareness <input type="text" value="2"/></p> <p>17. Heads-Up value <input type="text" value="1"/></p> <p>18. Highway affect on tasks <input type="text" value="2"/></p>	<p>19. PCATD types <input type="text" value="1"/></p> <p>20. PCATD uses <input type="text" value="1"/></p> <p>21. PCATD effectiveness <input type="text" value="1"/></p> <p>22. PCATD for new ratings <input type="text" value="1"/></p> <p>23. PCATD obstacles <input type="text" value="3"/></p> <p>24. AGATE Training value</p> <p>Normal OP <input type="text" value="5"/></p> <p>Abnormal OP <input type="text" value="0"/></p> <p>Emergency Proc. <input type="text" value="0"/></p> <p>Missed approach <input type="text" value="0"/></p> <p>Flt maneuvers <input type="text" value="0"/></p> <p>Decision making <input type="text" value="0"/></p> <p>Communications <input type="text" value="0"/></p> <p>Navigation <input type="text" value="0"/></p> <p>Other <input type="text"/></p> <p>25. AGATE Program Importance</p> <p>PCATD <input type="text" value="0"/></p> <p>Imbedded trainer <input type="text" value="5"/></p> <p>Performance based certification <input type="text" value="0"/></p> <p>Computer record keeping <input type="text" value="0"/></p> <p>Flt/Control system design <input type="text" value="0"/></p> <p>Unified curriculum <input type="text" value="0"/></p>
<p>26. Situational Awareness <input type="text"/></p>	
<p>27. Most value <input type="text"/></p>	
<p>28. Least value <input type="text"/></p>	

**AGATE Participant Responses**

<p>1. Home state <input type="text" value="FL"/></p> <p>2. Rating <input type="text" value="Student"/></p> <p>3. Instrument rated <input type="text" value="No"/></p> <p>4. 12 Months flt time <input type="text" value="0"/></p> <p>5. Total flight time <input type="text" value="0"/></p> <p>6. Flight Instructor <input type="text" value="No"/></p> <p>7. Own/mng FBO <input type="text" value="No"/></p> <p>8. Type flt school <input type="text"/></p> <p>9. Type of Training <input type="text"/></p> <p>10. # of Airplanes <input type="text" value="0"/></p> <p>11. A/C Flt hours <input type="text" value="0"/></p> <p>12. Capabilities Effect <input type="text" value="50% increase"/></p> <p>13. Main AC type <input type="text"/></p> <p>14. Prim Activity <input type="text"/></p> <p>15. Participation <input type="text" value="Observed"/></p> <p>16. Situation Awareness <input type="text" value="1"/></p> <p>17. Heads-Up value <input type="text" value="1"/></p> <p>18. Highway affect on tasks <input type="text" value="1"/></p>	<p>19. PCATD types <input type="text"/></p> <p>20. PCATD uses <input type="text"/></p> <p>21. PCATD effectiveness <input type="text" value="0"/></p> <p>22. PCATD for new ratings <input type="text" value="0"/></p> <p>23. PCATD obstacles <input type="text"/></p> <p>24. AGATE Training value</p> <p>Normal OP <input type="text" value="0"/></p> <p>Abnormal OP <input type="text" value="0"/></p> <p>Emergency Proc. <input type="text" value="0"/></p> <p>Missed approach <input type="text" value="0"/></p> <p>Flt maneuvers <input type="text" value="0"/></p> <p>Decision making <input type="text" value="0"/></p> <p>Communications <input type="text" value="0"/></p> <p>Navigation <input type="text" value="0"/></p> <p>Other <input type="text"/></p> <p>25. AGATE Program Importance</p> <p>PCATD <input type="text" value="5"/></p> <p>Imbedded trainer <input type="text" value="5"/></p> <p>Performance based certification <input type="text" value="5"/></p> <p>Computer record keeping <input type="text" value="5"/></p> <p>Flt/Control system design <input type="text" value="5"/></p> <p>Unified curriculum <input type="text" value="5"/></p>
<p>26. Situational Awareness</p> <p><input type="text"/></p>	
<p>27. Most value</p> <p><input type="text"/></p>	
<p>28. Least value</p> <p><input type="text"/></p>	

### AGATE Participant Responses

<p>1. Home state <input type="text" value="GA"/></p> <p>2. Rating <input type="text" value="ATP"/></p> <p>3. Instrument rated <input type="text" value="Yes"/></p> <p>4. 12 Months flt time <input type="text" value="300"/></p> <p>5. Total flight time <input type="text" value="8000"/></p> <p>6. Flight Instructor <input type="text" value="No"/></p> <p>7. Own/mng FBO <input type="text" value="No"/></p> <p>8. Type flt school <input type="text"/></p> <p>9. Type of Training <input type="text"/></p> <p>10. # of Airplanes <input type="text" value="3"/></p> <p>11. A/C Flt hours <input type="text" value="300"/></p> <p>12. Capabilities Effect <input type="text" value="100% or more increase"/></p> <p>13. Main AC type <input type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input type="text" value="Other: AV fuel mktg rep"/></p> <p>15. Participation <input type="text" value="Observed"/></p> <p>16. Situation Awareness <input type="text" value="1"/></p> <p>17. Heads-Up value <input type="text" value="1"/></p> <p>18. Highway affect on tasks <input type="text" value="1"/></p>	<p>19. PCATD types <input type="text"/></p> <p>20. PCATD uses <input type="text"/></p> <p>21. PCATD effectiveness <input type="text" value="0"/></p> <p>22. PCATD for new ratings <input type="text" value="0"/></p> <p>23. PCATD obstacles <input type="text"/></p> <p>24. AGATE Training value</p> <p style="padding-left: 20px;">Normal OP <input type="text" value="5"/></p> <p style="padding-left: 20px;">Abnormal OP <input type="text" value="5"/></p> <p style="padding-left: 20px;">Emergency Proc. <input type="text" value="5"/></p> <p style="padding-left: 20px;">Missed approach <input type="text" value="5"/></p> <p style="padding-left: 20px;">Flt maneuvers <input type="text" value="5"/></p> <p style="padding-left: 20px;">Decision making <input type="text" value="5"/></p> <p style="padding-left: 20px;">Communications <input type="text" value="5"/></p> <p style="padding-left: 20px;">Navigation <input type="text" value="5"/></p> <p style="padding-left: 20px;">Other <input type="text"/></p> <p>25. AGATE Program Importance</p> <p style="padding-left: 20px;">PCATD <input type="text" value="5"/></p> <p style="padding-left: 20px;">Imbedded trainer <input type="text" value="5"/></p> <p style="padding-left: 20px;">Performance based certification <input type="text" value="5"/></p> <p style="padding-left: 20px;">Computer record keeping <input type="text" value="5"/></p> <p style="padding-left: 20px;">Flt/Control system design <input type="text" value="5"/></p> <p style="padding-left: 20px;">Unified curriculum <input type="text" value="5"/></p>
<p>26. Situational Awareness</p> <p style="padding-left: 40px;"><input type="text" value="Intuitive visual cues will positively improve"/></p>	
<p>27. Most value</p> <p style="padding-left: 40px;"><input type="text"/></p>	
<p>28. Least value</p> <p style="padding-left: 40px;"><input type="text"/></p>	

### AGATE Participant Responses

<p>1. Home state <input style="width: 50px;" type="text" value="GA"/></p> <p>2. Rating <input style="width: 150px;" type="text" value="Private Pilot"/></p> <p>3. Instrument rated <input style="width: 50px;" type="text" value="No"/></p> <p>4. 12 Months flt time <input style="width: 50px;" type="text" value="100"/></p> <p>5. Total flight time <input style="width: 50px;" type="text" value="1500"/></p> <p>6. Flight Instructor <input style="width: 50px;" type="text" value="No"/></p> <p>7. Own/mng FBO <input style="width: 50px;" type="text" value="Yes"/></p> <p>8. Type flt school <input style="width: 70px;" type="text"/></p> <p>9. Type of Training <input style="width: 250px;" type="text"/></p> <p>10. # of Airplanes <input style="width: 50px;" type="text" value="1"/></p> <p>11. A/C Flt hours <input style="width: 50px;" type="text" value="100"/></p> <p>12. Capabilities Effect <input style="width: 150px;" type="text" value="50% increase"/></p> <p>13. Main AC type <input style="width: 150px;" type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input style="width: 250px;" type="text" value="Aircraft services"/></p> <p>15. Participation <input style="width: 70px;" type="text" value="Flew"/></p> <p>16. Situation Awareness <input style="width: 100px;" type="text" value="1"/></p> <p>17. Heads-Up value <input style="width: 100px;" type="text" value="1"/></p> <p>18. Highway affect on tasks <input style="width: 150px;" type="text" value="1"/></p>	<p>19. PCATD types <input style="width: 50px;" type="text" value="1"/></p> <p>20. PCATD uses <input style="width: 50px;" type="text" value="1"/></p> <p>21. PCATD effectiveness <input style="width: 50px;" type="text" value="1"/></p> <p>22. PCATD for new ratings <input style="width: 50px;" type="text" value="2"/></p> <p>23. PCATD obstacles <input style="width: 50px;" type="text" value="6"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> <tr><td>Abnormal OP</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> <tr><td>Emergency Proc.</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Missed approach</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Flt maneuvers</td><td><input style="width: 50px;" type="text" value="3"/></td></tr> <tr><td>Decision making</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Communications</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> <tr><td>Navigation</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> <tr><td>Other</td><td><input style="width: 150px;" type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> <tr><td>Imbedded trainer</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Performance based certification</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Computer record keeping</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Flt/Control system design</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Unified curriculum</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> </table>	Normal OP	<input style="width: 50px;" type="text" value="4"/>	Abnormal OP	<input style="width: 50px;" type="text" value="4"/>	Emergency Proc.	<input style="width: 50px;" type="text" value="5"/>	Missed approach	<input style="width: 50px;" type="text" value="5"/>	Flt maneuvers	<input style="width: 50px;" type="text" value="3"/>	Decision making	<input style="width: 50px;" type="text" value="5"/>	Communications	<input style="width: 50px;" type="text" value="4"/>	Navigation	<input style="width: 50px;" type="text" value="4"/>	Other	<input style="width: 150px;" type="text"/>	PCATD	<input style="width: 50px;" type="text" value="4"/>	Imbedded trainer	<input style="width: 50px;" type="text" value="5"/>	Performance based certification	<input style="width: 50px;" type="text" value="5"/>	Computer record keeping	<input style="width: 50px;" type="text" value="5"/>	Flt/Control system design	<input style="width: 50px;" type="text" value="5"/>	Unified curriculum	<input style="width: 50px;" type="text" value="5"/>
Normal OP	<input style="width: 50px;" type="text" value="4"/>																														
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Communications	<input style="width: 50px;" type="text" value="4"/>																														
Navigation	<input style="width: 50px;" type="text" value="4"/>																														
Other	<input style="width: 150px;" type="text"/>																														
PCATD	<input style="width: 50px;" type="text" value="4"/>																														
Imbedded trainer	<input style="width: 50px;" type="text" value="5"/>																														
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Flt/Control system design	<input style="width: 50px;" type="text" value="5"/>																														
Unified curriculum	<input style="width: 50px;" type="text" value="5"/>																														
<p>26. Situational Awareness <input style="width: 500px;" type="text" value="Simple, lower cost to maintain"/></p> <p>27. Most value <input style="width: 500px;" type="text" value="Higher levels of safty. Less cockpit confusion"/></p> <p>28. Least value <input style="width: 500px;" type="text"/></p>																															

**AGATE Participant Responses**

1. Home state	<input type="text" value="IA"/>	19. PCATD types	<input type="text" value="2"/>
2. Rating	<input type="text" value="ATP"/>	20. PCATD uses	<input type="text" value="4"/>
3. Instrument rated	<input type="text" value="Yes"/>	21. PCATD effectiveness	<input type="text" value="2"/>
4. 12 Months flt time	<input type="text" value="600"/>	22. PCATD for new ratings	<input type="text" value="2"/>
5. Total flight time	<input type="text" value="30000"/>	23. PCATD obstacles	<input type="text" value="4"/>
6. Flight Instructor	<input type="text" value="Yes"/>	24. AGATE Training value	
7. Own/mng FBO	<input type="text" value="Yes"/>	Normal OP	<input type="text" value="5"/>
8. Type flt school	<input type="text" value="Part 61"/>	Abnormal OP	<input type="text" value="3"/>
9. Type of Training	<input type="text" value="ALL"/>	Emergency Proc.	<input type="text" value="5"/>
10. # of Airplanes	<input type="text" value="18"/>	Missed approach	<input type="text" value="5"/>
11. A/C Flt hours	<input type="text" value="400"/>	Flt maneuvers	<input type="text"/>
12. Capabilities Effect	<input type="text" value="25% increase"/>	Decision making	<input type="text"/>
13. Main AC type	<input type="text" value="Twin Piston Engine"/>	Communications	<input type="text"/>
14. Prim Activity	<input type="text" value="Other: Air Freight"/>	Navigation	<input type="text"/>
15. Participation	<input type="text" value="Flew"/>	Other	<input type="text"/>
16. Situation Awareness	<input type="text" value="2"/>	25. AGATE Program Importance	
17. Heads-Up value	<input type="text" value="1"/>	PCATD	<input type="text" value="5"/>
18. Highway affect on tasks	<input type="text" value="1"/>	Imbedded trainer	<input type="text" value="3"/>
26. Situational Awareness	<input type="text"/>		
27. Most value	<input type="text"/>		
28. Least value	<input type="text"/>		
		Performance based certification	<input type="text" value="5"/>
		Computer record keeping	<input type="text" value="2"/>
		Flt/Control system design	<input type="text" value="5"/>
		Unified curriculum	<input type="text"/>

### AGATE Participant Responses

<p>1. Home state <input style="width: 100px;" type="text" value="IL"/></p> <p>2. Rating <input style="width: 150px;" type="text" value="ATP"/></p> <p>3. Instrument rated <input style="width: 100px;" type="text" value="Yes"/></p> <p>4. 12 Months flt time <input style="width: 100px;" type="text" value="400"/></p> <p>5. Total flight time <input style="width: 100px;" type="text" value="6000"/></p> <p>6. Flight Instructor <input style="width: 100px;" type="text" value="Yes"/></p> <p>7. Own/mng FBO <input style="width: 100px;" type="text" value="Yes"/></p> <p>8. Type flt school <input style="width: 100px;" type="text" value="Part 141"/></p> <p>9. Type of Training <input style="width: 200px;" type="text" value="Private Pilot, Commercial, Instrument, C"/></p> <p>10. # of Airplanes <input style="width: 100px;" type="text" value="15"/></p> <p>11. A/C Flt hours <input style="width: 100px;" type="text" value="5000"/></p> <p>12. Capabilities Effect <input style="width: 150px;" type="text" value="25% increase"/></p> <p>13. Main AC type <input style="width: 150px;" type="text" value="Twin Turboprop"/></p> <p>14. Prim Activity <input style="width: 200px;" type="text" value="Pilot flight training"/></p> <p>15. Participation <input style="width: 100px;" type="text" value="Flew"/></p> <p>16. Situation Awareness <input style="width: 100px;" type="text" value="1"/></p> <p>17. Heads-Up value <input style="width: 100px;" type="text" value="1"/></p> <p>18. Highway affect on tasks <input style="width: 150px;" type="text" value="1"/></p>	<p>19. PCATD types <input style="width: 100px;" type="text" value="2"/></p> <p>20. PCATD uses <input style="width: 100px;" type="text" value="4"/></p> <p>21. PCATD effectiveness <input style="width: 100px;" type="text" value="1"/></p> <p>22. PCATD for new ratings <input style="width: 100px;" type="text" value="2"/></p> <p>23. PCATD obstacles <input style="width: 100px;" type="text" value="7"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input style="width: 100px;" type="text" value="5"/></td></tr> <tr><td>Abnormal OP</td><td><input style="width: 100px;" type="text" value="3"/></td></tr> <tr><td>Emergency Proc.</td><td><input style="width: 100px;" type="text" value="3"/></td></tr> <tr><td>Missed approach</td><td><input style="width: 100px;" type="text" value="5"/></td></tr> <tr><td>Flt maneuvers</td><td><input style="width: 100px;" type="text" value="5"/></td></tr> <tr><td>Decision making</td><td><input style="width: 100px;" type="text" value="3"/></td></tr> <tr><td>Communications</td><td><input style="width: 100px;" type="text" value="2"/></td></tr> <tr><td>Navigation</td><td><input style="width: 100px;" type="text" value="5"/></td></tr> <tr><td>Other</td><td><input style="width: 150px;" type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input style="width: 100px;" type="text" value="3"/></td></tr> <tr><td>Imbedded trainer</td><td><input style="width: 100px;" type="text" value="4"/></td></tr> <tr><td>Performance based certification</td><td><input style="width: 100px;" type="text" value="5"/></td></tr> <tr><td>Computer record keeping</td><td><input style="width: 100px;" type="text" value="4"/></td></tr> <tr><td>Flt/Control system design</td><td><input style="width: 100px;" type="text" value="3"/></td></tr> <tr><td>Unified curriculum</td><td><input style="width: 100px;" type="text" value="3"/></td></tr> </table>	Normal OP	<input style="width: 100px;" type="text" value="5"/>	Abnormal OP	<input style="width: 100px;" type="text" value="3"/>	Emergency Proc.	<input style="width: 100px;" type="text" value="3"/>	Missed approach	<input style="width: 100px;" type="text" value="5"/>	Flt maneuvers	<input style="width: 100px;" type="text" value="5"/>	Decision making	<input style="width: 100px;" type="text" value="3"/>	Communications	<input style="width: 100px;" type="text" value="2"/>	Navigation	<input style="width: 100px;" type="text" value="5"/>	Other	<input style="width: 150px;" type="text"/>	PCATD	<input style="width: 100px;" type="text" value="3"/>	Imbedded trainer	<input style="width: 100px;" type="text" value="4"/>	Performance based certification	<input style="width: 100px;" type="text" value="5"/>	Computer record keeping	<input style="width: 100px;" type="text" value="4"/>	Flt/Control system design	<input style="width: 100px;" type="text" value="3"/>	Unified curriculum	<input style="width: 100px;" type="text" value="3"/>
Normal OP	<input style="width: 100px;" type="text" value="5"/>																														
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Flt/Control system design	<input style="width: 100px;" type="text" value="3"/>																														
Unified curriculum	<input style="width: 100px;" type="text" value="3"/>																														
<p>26. Situational Awareness</p> <p style="margin-left: 40px;"><input style="width: 450px;" type="text" value="Visually (HUD) based system will improve situational awareness"/></p>																															
<p>27. Most value</p> <p style="margin-left: 40px;"><input style="width: 450px;" type="text" value="Integrating cockpit displays and training methods"/></p>																															
<p>28. Least value</p> <p style="margin-left: 40px;"><input style="width: 450px;" type="text"/></p>																															

### AGATE Participant Responses

<p>1. Home state <input style="width: 50px;" type="text" value="IL"/></p> <p>2. Rating <input style="width: 150px;" type="text" value="Private Pilot"/></p> <p>3. Instrument rated <input style="width: 50px;" type="text" value="Yes"/></p> <p>4. 12 Months flt time <input style="width: 50px;" type="text" value="35"/></p> <p>5. Total flight time <input style="width: 50px;" type="text" value="650"/></p> <p>6. Flight Instructor <input style="width: 50px;" type="text" value="No"/></p> <p>7. Own/mng FBO <input style="width: 50px;" type="text" value="No"/></p> <p>8. Type flt school <input style="width: 70px;" type="text"/></p> <p>9. Type of Training <input style="width: 250px;" type="text"/></p> <p>10. # of Airplanes <input style="width: 50px;" type="text" value="0"/></p> <p>11. A/C Flt hours <input style="width: 50px;" type="text" value="0"/></p> <p>12. Capabilities Effect <input style="width: 150px;" type="text" value="100% or more increase"/></p> <p>13. Main AC type <input style="width: 150px;" type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input style="width: 270px;" type="text"/></p> <p>15. Participation <input style="width: 80px;" type="text" value="Observed"/></p> <p>16. Situation Awareness <input style="width: 100px;" type="text" value="1"/></p> <p>17. Heads-Up value <input style="width: 100px;" type="text" value="1"/></p> <p>18. Highway affect on tasks <input style="width: 150px;" type="text" value="2"/></p>	<p>19. PCATD types <input style="width: 50px;" type="text" value="2"/></p> <p>20. PCATD uses <input style="width: 50px;" type="text" value="2"/></p> <p>21. PCATD effectiveness <input style="width: 50px;" type="text" value="4"/></p> <p>22. PCATD for new ratings <input style="width: 50px;" type="text" value="2"/></p> <p>23. PCATD obstacles <input style="width: 50px;" type="text" value="4"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input style="width: 30px;" type="text" value="3"/></td></tr> <tr><td>Abnormal OP</td><td><input style="width: 30px;" type="text" value="5"/></td></tr> <tr><td>Emergency Proc.</td><td><input style="width: 30px;" type="text" value="5"/></td></tr> <tr><td>Missed approach</td><td><input style="width: 30px;" type="text" value="3"/></td></tr> <tr><td>Flt maneuvers</td><td><input style="width: 30px;" type="text" value="2"/></td></tr> <tr><td>Decision making</td><td><input style="width: 30px;" type="text" value="3"/></td></tr> <tr><td>Communications</td><td><input style="width: 30px;" type="text" value="1"/></td></tr> <tr><td>Navigation</td><td><input style="width: 30px;" type="text" value="2"/></td></tr> <tr><td>Other</td><td><input style="width: 150px;" type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input style="width: 30px;" type="text"/></td></tr> <tr><td>Imbedded trainer</td><td><input style="width: 30px;" type="text" value="2"/></td></tr> <tr><td>Performance based certification</td><td><input style="width: 30px;" type="text" value="4"/></td></tr> <tr><td>Computer record keeping</td><td><input style="width: 30px;" type="text" value="1"/></td></tr> <tr><td>Flt/Control system design</td><td><input style="width: 30px;" type="text" value="5"/></td></tr> <tr><td>Unified curriculum</td><td><input style="width: 30px;" type="text" value="3"/></td></tr> </table>	Normal OP	<input style="width: 30px;" type="text" value="3"/>	Abnormal OP	<input style="width: 30px;" type="text" value="5"/>	Emergency Proc.	<input style="width: 30px;" type="text" value="5"/>	Missed approach	<input style="width: 30px;" type="text" value="3"/>	Flt maneuvers	<input style="width: 30px;" type="text" value="2"/>	Decision making	<input style="width: 30px;" type="text" value="3"/>	Communications	<input style="width: 30px;" type="text" value="1"/>	Navigation	<input style="width: 30px;" type="text" value="2"/>	Other	<input style="width: 150px;" type="text"/>	PCATD	<input style="width: 30px;" type="text"/>	Imbedded trainer	<input style="width: 30px;" type="text" value="2"/>	Performance based certification	<input style="width: 30px;" type="text" value="4"/>	Computer record keeping	<input style="width: 30px;" type="text" value="1"/>	Flt/Control system design	<input style="width: 30px;" type="text" value="5"/>	Unified curriculum	<input style="width: 30px;" type="text" value="3"/>
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Flt/Control system design	<input style="width: 30px;" type="text" value="5"/>																														
Unified curriculum	<input style="width: 30px;" type="text" value="3"/>																														

**26. Situational Awareness**

Clearer mental picture of what is happening in 3-D. Less mental gymnastics/arithmetic.

**27. Most value**

Demonstration of how simpler operation and greater reliability will result from continuation of AGATE program

**28. Least value**

Demonstrator is not particularly helpful for learning/practicing flight in existing aircraft. Let's get the new generation built. So we have something to practice for.

### AGATE Participant Responses

<p>1. Home state <input style="width: 50px;" type="text" value="IL"/></p> <p>2. Rating <input style="width: 150px;" type="text" value="Private Pilot"/></p> <p>3. Instrument rated <input style="width: 50px;" type="text" value="Yes"/></p> <p>4. 12 Months flt time <input style="width: 50px;" type="text" value="200"/></p> <p>5. Total flight time <input style="width: 50px;" type="text" value="4000"/></p> <p>6. Flight Instructor <input style="width: 50px;" type="text" value="No"/></p> <p>7. Own/mng FBO <input style="width: 50px;" type="text" value="No"/></p> <p>8. Type flt school <input style="width: 70px;" type="text"/></p> <p>9. Type of Training <input style="width: 200px;" type="text"/></p> <p>10. # of Airplanes <input style="width: 50px;" type="text" value="1"/></p> <p>11. A/C Flt hours <input style="width: 50px;" type="text" value="250"/></p> <p>12. Capabilities Effect <input style="width: 150px;" type="text" value="100% or more increase"/></p> <p>13. Main AC type <input style="width: 150px;" type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input style="width: 250px;" type="text"/></p> <p>15. Participation <input style="width: 70px;" type="text" value="Flew"/></p> <p>16. Situation Awareness <input style="width: 100px;" type="text" value="1"/></p> <p>17. Heads-Up value <input style="width: 100px;" type="text" value="1"/></p> <p>18. Highway affect on tasks <input style="width: 150px;" type="text" value="1"/></p>	<p>19. PCATD types <input style="width: 50px;" type="text" value="1"/></p> <p>20. PCATD uses <input style="width: 50px;" type="text" value="1"/></p> <p>21. PCATD effectiveness <input style="width: 50px;" type="text" value="1"/></p> <p>22. PCATD for new ratings <input style="width: 50px;" type="text" value="1"/></p> <p>23. PCATD obstacles <input style="width: 70px;" type="text"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Abnormal OP</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Emergency Proc.</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Missed approach</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Flt maneuvers</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Decision making</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Communications</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Navigation</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Other</td><td><input style="width: 150px;" type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Imbedded trainer</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Performance based certification</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Computer record keeping</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Flt/Control system design</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Unified curriculum</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> </table>	Normal OP	<input style="width: 50px;" type="text" value="5"/>	Abnormal OP	<input style="width: 50px;" type="text" value="5"/>	Emergency Proc.	<input style="width: 50px;" type="text" value="5"/>	Missed approach	<input style="width: 50px;" type="text" value="5"/>	Flt maneuvers	<input style="width: 50px;" type="text" value="5"/>	Decision making	<input style="width: 50px;" type="text" value="5"/>	Communications	<input style="width: 50px;" type="text" value="5"/>	Navigation	<input style="width: 50px;" type="text" value="5"/>	Other	<input style="width: 150px;" type="text"/>	PCATD	<input style="width: 50px;" type="text" value="5"/>	Imbedded trainer	<input style="width: 50px;" type="text" value="5"/>	Performance based certification	<input style="width: 50px;" type="text" value="5"/>	Computer record keeping	<input style="width: 50px;" type="text" value="5"/>	Flt/Control system design	<input style="width: 50px;" type="text" value="5"/>	Unified curriculum	<input style="width: 50px;" type="text" value="5"/>
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Unified curriculum	<input style="width: 50px;" type="text" value="5"/>																														
<p>26. Situational Awareness <input style="width: 400px;" type="text" value="Improve"/></p>																															
<p>27. Most value <input style="width: 400px;" type="text" value="Heads up always is better"/></p>																															
<p>28. Least value <input style="width: 400px;" type="text" value="None, everything seemed to work together with me, the pilot"/></p>																															

### AGATE Participant Responses

<p>1. Home state <input type="text" value="MD"/></p> <p>2. Rating <input type="text" value="Private Pilot"/></p> <p>3. Instrument rated <input type="text" value="Yes"/></p> <p>4. 12 Months flt time <input type="text" value="50"/></p> <p>5. Total flight time <input type="text" value="500"/></p> <p>6. Flight Instructor <input type="text" value="No"/></p> <p>7. Own/mng FBO <input type="text" value="No"/></p> <p>8. Type flt school <input type="text"/></p> <p>9. Type of Training <input type="text"/></p> <p>10. # of Airplanes <input type="text" value="2"/></p> <p>11. A/C Flt hours <input type="text" value="30"/></p> <p>12. Capabilities Effect <input type="text" value="No change"/></p> <p>13. Main AC type <input type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input type="text" value="Other: Aviation Publication"/></p> <p>15. Participation <input type="text" value="Observed"/></p> <p>16. Situation Awareness <input type="text" value="2"/></p> <p>17. Heads-Up value <input type="text" value="2"/></p> <p>18. Highway affect on tasks <input type="text" value="2"/></p> <p>26. Situational Awareness <input type="text"/></p> <p>27. Most value <input type="text"/></p> <p>28. Least value <input type="text"/></p>	<p>19. PCATD types <input type="text" value="3"/></p> <p>20. PCATD uses <input type="text" value="2,4"/></p> <p>21. PCATD effectiveness <input type="text" value="2"/></p> <p>22. PCATD for new ratings <input type="text" value="2"/></p> <p>23. PCATD obstacles <input type="text" value="4"/></p> <p>24. AGATE Training value</p> <p style="padding-left: 20px;">Normal OP <input type="text" value="3"/></p> <p style="padding-left: 20px;">Abnormal OP <input type="text" value="2"/></p> <p style="padding-left: 20px;">Emergency Proc. <input type="text" value="2"/></p> <p style="padding-left: 20px;">Missed approach <input type="text" value="5"/></p> <p style="padding-left: 20px;">Flt maneuvers <input type="text" value="2"/></p> <p style="padding-left: 20px;">Decision making <input type="text" value="5"/></p> <p style="padding-left: 20px;">Communications <input type="text" value="0"/></p> <p style="padding-left: 20px;">Navigation <input type="text" value="3"/></p> <p style="padding-left: 20px;">Other <input type="text"/></p> <p>25. AGATE Program Importance</p> <p style="padding-left: 20px;">PCATD <input type="text" value="4"/></p> <p style="padding-left: 20px;">Imbedded trainer <input type="text" value="4"/></p> <p style="padding-left: 20px;">Performance based certification <input type="text" value="0"/></p> <p style="padding-left: 20px;">Computer record keeping <input type="text" value="3"/></p> <p style="padding-left: 20px;">Flt/Control system design <input type="text" value="3"/></p> <p style="padding-left: 20px;">Unified curriculum <input type="text" value="4"/></p>
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### AGATE Participant Responses

<p>1. Home state <input style="width: 100px;" type="text" value="ME"/></p> <p>2. Rating <input style="width: 150px;" type="text" value="ATP"/></p> <p>3. Instrument rated <input style="width: 100px;" type="text" value="Yes"/></p> <p>4. 12 Months flt time <input style="width: 100px;" type="text" value="325"/></p> <p>5. Total flight time <input style="width: 100px;" type="text" value="4800"/></p> <p>6. Flight Instructor <input style="width: 100px;" type="text" value="No"/></p> <p>7. Own/mng FBO <input style="width: 100px;" type="text" value="Yes"/></p> <p>8. Type flt school <input style="width: 100px;" type="text" value="Part 61"/></p> <p>9. Type of Training <input style="width: 200px;" type="text" value="Private Pilot, Commercial, Instrument, C"/></p> <p>10. # of Airplanes <input style="width: 100px;" type="text" value="17"/></p> <p>11. A/C Flt hours <input style="width: 100px;" type="text" value="500"/></p> <p>12. Capabilities Effect <input style="width: 150px;" type="text"/></p> <p>13. Main AC type <input style="width: 150px;" type="text" value="Single Engine Turboprop"/></p> <p>14. Prim Activity <input style="width: 200px;" type="text" value="Commuter, charter, Medevac or air taxi"/></p> <p>15. Participation <input style="width: 100px;" type="text" value="Flew"/></p> <p>16. Situation Awareness <input style="width: 100px;" type="text" value="2"/></p> <p>17. Heads-Up value <input style="width: 100px;" type="text" value="2"/></p> <p>18. Highway affect on tasks <input style="width: 150px;" type="text" value="2"/></p>	<p>19. PCATD types <input style="width: 50px;" type="text" value="1"/></p> <p>20. PCATD uses <input style="width: 50px;" type="text" value="1"/></p> <p>21. PCATD effectiveness <input style="width: 50px;" type="text" value="2"/></p> <p>22. PCATD for new ratings <input style="width: 50px;" type="text" value="2"/></p> <p>23. PCATD obstacles <input style="width: 100px;" type="text" value="8 USE MOT"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> <tr><td>Abnormal OP</td><td><input style="width: 50px;" type="text"/></td></tr> <tr><td>Emergency Proc.</td><td><input style="width: 50px;" type="text"/></td></tr> <tr><td>Missed approach</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> <tr><td>Flt maneuvers</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> <tr><td>Decision making</td><td><input style="width: 50px;" type="text"/></td></tr> <tr><td>Communications</td><td><input style="width: 50px;" type="text"/></td></tr> <tr><td>Navigation</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> <tr><td>Other</td><td><input style="width: 150px;" type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input style="width: 50px;" type="text" value="3"/></td></tr> <tr><td>Imbedded trainer</td><td><input style="width: 50px;" type="text" value="3"/></td></tr> <tr><td>Performance based certification</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> <tr><td>Computer record keeping</td><td><input style="width: 50px;" type="text" value="3"/></td></tr> <tr><td>Flt/Control system design</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> <tr><td>Unified curriculum</td><td><input style="width: 50px;" type="text" value="3"/></td></tr> </table>	Normal OP	<input style="width: 50px;" type="text" value="4"/>	Abnormal OP	<input style="width: 50px;" type="text"/>	Emergency Proc.	<input style="width: 50px;" type="text"/>	Missed approach	<input style="width: 50px;" type="text" value="4"/>	Flt maneuvers	<input style="width: 50px;" type="text" value="4"/>	Decision making	<input style="width: 50px;" type="text"/>	Communications	<input style="width: 50px;" type="text"/>	Navigation	<input style="width: 50px;" type="text" value="4"/>	Other	<input style="width: 150px;" type="text"/>	PCATD	<input style="width: 50px;" type="text" value="3"/>	Imbedded trainer	<input style="width: 50px;" type="text" value="3"/>	Performance based certification	<input style="width: 50px;" type="text" value="4"/>	Computer record keeping	<input style="width: 50px;" type="text" value="3"/>	Flt/Control system design	<input style="width: 50px;" type="text" value="4"/>	Unified curriculum	<input style="width: 50px;" type="text" value="3"/>
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Unified curriculum	<input style="width: 50px;" type="text" value="3"/>																														
<p>26. Situational Awareness</p> <p style="border: 1px solid black; padding: 5px; margin-left: 20px;">I am not sure, it depends on what other information the pilot has to use.</p>																															
<p>27. Most value</p> <p style="border: 1px solid black; padding: 5px; margin-left: 20px;">Simplified cockpit, lower work load</p>																															
<p>28. Least value</p> <p style="border: 1px solid black; height: 20px; margin-left: 20px;"></p>																															

### AGATE Participant Responses

<p>1. Home state <input type="text" value="MI"/></p> <p>2. Rating <input type="text" value="ATP"/></p> <p>3. Instrument rated <input type="text" value="Yes"/></p> <p>4. 12 Months flt time <input type="text" value="700"/></p> <p>5. Total flight time <input type="text" value="3500"/></p> <p>6. Flight Instructor <input type="text" value="Yes"/></p> <p>7. Own/mng FBO <input type="text" value="No"/></p> <p>8. Type flt school <input type="text"/></p> <p>9. Type of Training <input type="text" value="ATP"/></p> <p>10. # of Airplanes <input type="text" value="7"/></p> <p>11. A/C Flt hours <input type="text" value="12000"/></p> <p>12. Capabilities Effect <input type="text" value="10% increase"/></p> <p>13. Main AC type <input type="text" value="Twin Turboprop"/></p> <p>14. Prim Activity <input type="text" value="Commuter, charter, Medevac or air taxi"/></p> <p>15. Participation <input type="text" value="Flew"/></p> <p>16. Situation Awareness <input type="text" value="1"/></p> <p>17. Heads-Up value <input type="text" value="1"/></p> <p>18. Highway affect on tasks <input type="text" value="1"/></p>	<p>19. PCATD types <input type="text" value="1"/></p> <p>20. PCATD uses <input type="text" value="1"/></p> <p>21. PCATD effectiveness <input type="text" value="1"/></p> <p>22. PCATD for new ratings <input type="text" value="2"/></p> <p>23. PCATD obstacles <input type="text" value="4"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input type="text" value="4"/></td></tr> <tr><td>Abnormal OP</td><td><input type="text" value="3"/></td></tr> <tr><td>Emergency Proc.</td><td><input type="text" value="3"/></td></tr> <tr><td>Missed approach</td><td><input type="text" value="3"/></td></tr> <tr><td>Flt maneuvers</td><td><input type="text" value="3"/></td></tr> <tr><td>Decision making</td><td><input type="text" value="2"/></td></tr> <tr><td>Communications</td><td><input type="text" value="2"/></td></tr> <tr><td>Navigation</td><td><input type="text" value="5"/></td></tr> <tr><td>Other</td><td><input type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input type="text" value="4"/></td></tr> <tr><td>Imbedded trainer</td><td><input type="text" value="5"/></td></tr> <tr><td>Performance based certification</td><td><input type="text" value="5"/></td></tr> <tr><td>Computer record keeping</td><td><input type="text" value="5"/></td></tr> <tr><td>Flt/Control system design</td><td><input type="text" value="4"/></td></tr> <tr><td>Unified curriculum</td><td><input type="text"/></td></tr> </table>	Normal OP	<input type="text" value="4"/>	Abnormal OP	<input type="text" value="3"/>	Emergency Proc.	<input type="text" value="3"/>	Missed approach	<input type="text" value="3"/>	Flt maneuvers	<input type="text" value="3"/>	Decision making	<input type="text" value="2"/>	Communications	<input type="text" value="2"/>	Navigation	<input type="text" value="5"/>	Other	<input type="text"/>	PCATD	<input type="text" value="4"/>	Imbedded trainer	<input type="text" value="5"/>	Performance based certification	<input type="text" value="5"/>	Computer record keeping	<input type="text" value="5"/>	Flt/Control system design	<input type="text" value="4"/>	Unified curriculum	<input type="text"/>
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<p>26. Situational Awareness</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>																															
<p>27. Most value</p> <div style="border: 1px solid black; padding: 2px;">HUD, able to see through weather. Vol. indication on HUD</div>																															
<p>28. Least value</p> <div style="border: 1px solid black; padding: 2px;">Auto flaps, loss of "numbers" based training</div>																															

### AGATE Participant Responses

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<p>26. Situational Awareness</p> <div style="border: 1px solid black; padding: 2px; width: 100%;">Heads-up display &amp; your position displayed</div>																															
<p>27. Most value</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>																															
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**26. Situational Awareness**

Essential information presented in an easier format. Average pilot worklod is greatly reduced.

**27. Most value**

Simplicity of operation. Less systems managing

**28. Least value**

Any system that makes for a safer pilot has great value for a GA pilot.

### AGATE Participant Responses

<p>1. Home state <input style="width: 50px;" type="text" value="MI"/></p> <p>2. Rating <input style="width: 150px;" type="text" value="Student"/></p> <p>3. Instrument rated <input style="width: 50px;" type="text" value="No"/></p> <p>4. 12 Months flt time <input style="width: 50px;" type="text" value="2"/></p> <p>5. Total flight time <input style="width: 50px;" type="text" value="15"/></p> <p>6. Flight Instructor <input style="width: 50px;" type="text" value="No"/></p> <p>7. Own/mng FBO <input style="width: 50px;" type="text" value="No"/></p> <p>8. Type flt school <input style="width: 70px;" type="text"/></p> <p>9. Type of Training <input style="width: 200px;" type="text"/></p> <p>10. # of Airplanes <input style="width: 50px;" type="text" value="3"/></p> <p>11. A/C Flt hours <input style="width: 50px;" type="text" value="30"/></p> <p>12. Capabilities Effect <input style="width: 150px;" type="text" value="100% or more increase"/></p> <p>13. Main AC type <input style="width: 150px;" type="text" value="Jet"/></p> <p>14. Prim Activity <input style="width: 250px;" type="text"/></p> <p>15. Participation <input style="width: 70px;" type="text" value="Flew"/></p> <p>16. Situation Awareness <input style="width: 100px;" type="text" value="1"/></p> <p>17. Heads-Up value <input style="width: 100px;" type="text" value="1"/></p> <p>18. Highway affect on tasks <input style="width: 150px;" type="text" value="1"/></p>	<p>19. PCATD types <input style="width: 50px;" type="text" value="3"/></p> <p>20. PCATD uses <input style="width: 50px;" type="text" value="2"/></p> <p>21. PCATD effectiveness <input style="width: 50px;" type="text" value="4"/></p> <p>22. PCATD for new ratings <input style="width: 50px;" type="text" value="0"/></p> <p>23. PCATD obstacles <input style="width: 70px;" type="text" value="8 Slow &amp; co"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Abnormal OP</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> <tr><td>Emergency Proc.</td><td><input style="width: 50px;" type="text" value="3"/></td></tr> <tr><td>Missed approach</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Flt maneuvers</td><td><input style="width: 50px;" type="text" value="1"/></td></tr> <tr><td>Decision making</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Communications</td><td><input style="width: 50px;" type="text" value="1"/></td></tr> <tr><td>Navigation</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Other</td><td><input style="width: 150px;" type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Imbedded trainer</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Performance based certification</td><td><input style="width: 50px;" type="text" value="1"/></td></tr> <tr><td>Computer record keeping</td><td><input style="width: 50px;" type="text" value="1"/></td></tr> <tr><td>Flt/Control system design</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Unified curriculum</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> </table>	Normal OP	<input style="width: 50px;" type="text" value="5"/>	Abnormal OP	<input style="width: 50px;" type="text" value="4"/>	Emergency Proc.	<input style="width: 50px;" type="text" value="3"/>	Missed approach	<input style="width: 50px;" type="text" value="5"/>	Flt maneuvers	<input style="width: 50px;" type="text" value="1"/>	Decision making	<input style="width: 50px;" type="text" value="5"/>	Communications	<input style="width: 50px;" type="text" value="1"/>	Navigation	<input style="width: 50px;" type="text" value="5"/>	Other	<input style="width: 150px;" type="text"/>	PCATD	<input style="width: 50px;" type="text" value="5"/>	Imbedded trainer	<input style="width: 50px;" type="text" value="5"/>	Performance based certification	<input style="width: 50px;" type="text" value="1"/>	Computer record keeping	<input style="width: 50px;" type="text" value="1"/>	Flt/Control system design	<input style="width: 50px;" type="text" value="5"/>	Unified curriculum	<input style="width: 50px;" type="text" value="4"/>
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Unified curriculum	<input style="width: 50px;" type="text" value="4"/>																														
<p>26. Situational Awareness</p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 10px;">Improve because of the easyness to make correcting and situation awareness.</div> <p>27. Most value</p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 10px;">Pathway in the sky and unified joystick and single speed lever. Easier to fly.</div> <p>28. Least value</p> <div style="border: 1px solid black; padding: 2px;">The price may be big.</div>																															

**AGATE Participant Responses**

<p>1. Home state <input type="text" value="MN"/></p> <p>2. Rating <input type="text" value="ATP"/></p> <p>3. Instrument rated <input type="text" value="Yes"/></p> <p>4. 12 Months flt time <input type="text" value="475"/></p> <p>5. Total flight time <input type="text" value="38000"/></p> <p>6. Flight Instructor <input type="text" value="Yes"/></p> <p>7. Own/mng FBO <input type="text" value="Yes"/></p> <p>8. Type flt school <input type="text" value="Part 61"/></p> <p>9. Type of Training <input type="text" value="ALL"/></p> <p>10. # of Airplanes <input type="text" value="18"/></p> <p>11. A/C Flt hours <input type="text" value="9000"/></p> <p>12. Capabilities Effect <input type="text" value="50% increase"/></p> <p>13. Main AC type <input type="text" value="Twin Piston Engine"/></p> <p>14. Prim Activity <input type="text" value="Pilot flight training"/></p> <p>15. Participation <input type="text" value="Flew"/></p> <p>16. Situation Awareness <input type="text" value="2"/></p> <p>17. Heads-Up value <input type="text" value="1"/></p> <p>18. Highway affect on tasks <input type="text" value="1"/></p>	<p>19. PCATD types <input type="text" value="4"/></p> <p>20. PCATD uses <input type="text" value="1"/></p> <p>21. PCATD effectiveness <input type="text" value="1"/></p> <p>22. PCATD for new ratings <input type="text" value="2"/></p> <p>23. PCATD obstacles <input type="text" value="4,8 Technol"/></p> <p>24. AGATE Training value</p> <p>Normal OP <input type="text" value="5"/></p> <p>Abnormal OP <input type="text" value="3"/></p> <p>Emergency Proc. <input type="text" value="3"/></p> <p>Missed approach <input type="text" value="3"/></p> <p>Flt maneuvers <input type="text" value="4"/></p> <p>Decision making <input type="text" value="2"/></p> <p>Communications <input type="text" value="1"/></p> <p>Navigation <input type="text" value="1"/></p> <p>Other <input type="text"/></p> <p>25. AGATE Program Importance</p> <p>PCATD <input type="text" value="5"/></p> <p>Imbedded trainer <input type="text" value="5"/></p> <p>Performance based certification <input type="text" value="5"/></p> <p>Computer record keeping <input type="text" value="4"/></p> <p>Flt/Control system design <input type="text" value="5"/></p> <p>Unified curriculum <input type="text" value="3"/></p>
<p>26. Situational Awareness <input type="text" value="Not sure"/></p>	
<p>27. Most value <input type="text" value="Computer assisted decision making"/></p>	
<p>28. Least value <input type="text" value="Not sure"/></p>	

### AGATE Participant Responses

<p>1. Home state <input style="width: 100px;" type="text" value="MO"/></p> <p>2. Rating <input style="width: 200px;" type="text" value="Commercial Pilot"/></p> <p>3. Instrument rated <input style="width: 100px;" type="text" value="Yes"/></p> <p>4. 12 Months flt time <input style="width: 100px;" type="text" value="250"/></p> <p>5. Total flight time <input style="width: 100px;" type="text" value="4000"/></p> <p>6. Flight Instructor <input style="width: 100px;" type="text" value="Yes"/></p> <p>7. Own/mng FBO <input style="width: 100px;" type="text" value="Yes"/></p> <p>8. Type flt school <input style="width: 100px;" type="text" value="Part 61"/></p> <p>9. Type of Training <input style="width: 250px;" type="text" value="ALL"/></p> <p>10. # of Airplanes <input style="width: 100px;" type="text" value="4"/></p> <p>11. A/C Flt hours <input style="width: 100px;" type="text" value="2000"/></p> <p>12. Capabilities Effect <input style="width: 200px;" type="text" value="10% increase"/></p> <p>13. Main AC type <input style="width: 200px;" type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input style="width: 300px;" type="text" value="Aircraft renting or leasing"/></p> <p>15. Participation <input style="width: 100px;" type="text" value="Flew"/></p> <p>16. Situation Awareness <input style="width: 100px;" type="text" value="1"/></p> <p>17. Heads-Up value <input style="width: 100px;" type="text" value="1"/></p> <p>18. Highway affect on tasks <input style="width: 150px;" type="text" value="2"/></p>	<p>19. PCATD types <input style="width: 50px;" type="text" value="1"/></p> <p>20. PCATD uses <input style="width: 50px;" type="text" value="1"/></p> <p>21. PCATD effectiveness <input style="width: 50px;" type="text" value="2"/></p> <p>22. PCATD for new ratings <input style="width: 50px;" type="text" value="1"/></p> <p>23. PCATD obstacles <input style="width: 50px;" type="text" value="2"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input style="width: 50px;" type="text" value="2"/></td></tr> <tr><td>Abnormal OP</td><td><input style="width: 50px;" type="text" value="2"/></td></tr> <tr><td>Emergency Proc.</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> <tr><td>Missed approach</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> <tr><td>Flt maneuvers</td><td><input style="width: 50px;" type="text" value="3"/></td></tr> <tr><td>Decision making</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> <tr><td>Communications</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> <tr><td>Navigation</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Other</td><td><input style="width: 150px;" type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Imbedded trainer</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Performance based certification</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Computer record keeping</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> <tr><td>Flt/Control system design</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> <tr><td>Unified curriculum</td><td><input style="width: 50px;" type="text" value="3"/></td></tr> </table>	Normal OP	<input style="width: 50px;" type="text" value="2"/>	Abnormal OP	<input style="width: 50px;" type="text" value="2"/>	Emergency Proc.	<input style="width: 50px;" type="text" value="4"/>	Missed approach	<input style="width: 50px;" type="text" value="4"/>	Flt maneuvers	<input style="width: 50px;" type="text" value="3"/>	Decision making	<input style="width: 50px;" type="text" value="4"/>	Communications	<input style="width: 50px;" type="text" value="4"/>	Navigation	<input style="width: 50px;" type="text" value="5"/>	Other	<input style="width: 150px;" type="text"/>	PCATD	<input style="width: 50px;" type="text" value="5"/>	Imbedded trainer	<input style="width: 50px;" type="text" value="5"/>	Performance based certification	<input style="width: 50px;" type="text" value="5"/>	Computer record keeping	<input style="width: 50px;" type="text" value="4"/>	Flt/Control system design	<input style="width: 50px;" type="text" value="4"/>	Unified curriculum	<input style="width: 50px;" type="text" value="3"/>
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Unified curriculum	<input style="width: 50px;" type="text" value="3"/>																														
<p>26. Situational Awareness</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;">Narrows the focus of concentration.</div>																															
<p>27. Most value</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;">Visualization in low visibility situations</div>																															
<p>28. Least value</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;">It does not fly like a plane</div>																															

### AGATE Participant Responses

<p>1. Home state <input style="width: 100px;" type="text" value="MO"/></p> <p>2. Rating <input style="width: 150px;" type="text" value="Student"/></p> <p>3. Instrument rated <input style="width: 100px;" type="text" value="No"/></p> <p>4. 12 Months flt time <input style="width: 100px;" type="text" value="0"/></p> <p>5. Total flight time <input style="width: 100px;" type="text" value="0"/></p> <p>6. Flight Instructor <input style="width: 100px;" type="text" value="No"/></p> <p>7. Own/mng FBO <input style="width: 100px;" type="text" value="No"/></p> <p>8. Type flt school <input style="width: 100px;" type="text"/></p> <p>9. Type of Training <input style="width: 200px;" type="text"/></p> <p>10. # of Airplanes <input style="width: 100px;" type="text" value="0"/></p> <p>11. A/C Flt hours <input style="width: 100px;" type="text" value="0"/></p> <p>12. Capabilities Effect <input style="width: 150px;" type="text"/></p> <p>13. Main AC type <input style="width: 150px;" type="text"/></p> <p>14. Prim Activity <input style="width: 250px;" type="text"/></p> <p>15. Participation <input style="width: 100px;" type="text"/></p> <p>16. Situation Awareness <input style="width: 150px;" type="text" value="1"/></p> <p>17. Heads-Up value <input style="width: 150px;" type="text" value="1"/></p> <p>18. Highway affect on tasks <input style="width: 150px;" type="text" value="1"/></p>	<p>19. PCATD types <input style="width: 100px;" type="text"/></p> <p>20. PCATD uses <input style="width: 100px;" type="text" value="1"/></p> <p>21. PCATD effectiveness <input style="width: 100px;" type="text" value="1"/></p> <p>22. PCATD for new ratings <input style="width: 100px;" type="text" value="1"/></p> <p>23. PCATD obstacles <input style="width: 100px;" type="text"/></p> <p>24. AGATE Training value</p> <p style="padding-left: 20px;">Normal OP <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Abnormal OP <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Emergency Proc. <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Missed approach <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Flt maneuvers <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Decision making <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Communications <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Navigation <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Other <input style="width: 150px;" type="text"/></p> <p>25. AGATE Program Importance</p> <p style="padding-left: 20px;">PCATD <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Imbedded trainer <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Performance based certification <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Computer record keeping <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Flt/Control system design <input style="width: 100px;" type="text" value="0"/></p> <p style="padding-left: 20px;">Unified curriculum <input style="width: 100px;" type="text" value="0"/></p>
<p>26. Situational Awareness <input style="width: 500px;" type="text"/></p>	
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Decision making	<input style="width: 100px;" type="text" value="1"/>																														
Communications	<input style="width: 100px;" type="text" value="3"/>																														
Navigation	<input style="width: 100px;" type="text" value="2"/>																														
Other	<input style="width: 150px;" type="text"/>																														
PCATD	<input style="width: 100px;" type="text" value="5"/>																														
Imbedded trainer	<input style="width: 100px;" type="text" value="5"/>																														
Performance based certification	<input style="width: 100px;" type="text" value="5"/>																														
Computer record keeping	<input style="width: 100px;" type="text" value="4"/>																														
Flt/Control system design	<input style="width: 100px;" type="text" value="4"/>																														
Unified curriculum	<input style="width: 100px;" type="text" value="3"/>																														
<p>26. Situational Awareness</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;">Remain the same. What do you do if you have a computer failure in flight?</div>																															
<p>27. Most value</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;">A cheaper overall cost. Get more people involved.</div>																															
<p>28. Least value</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;">Emergency procedures</div>																															

### AGATE Participant Responses

<p>1. Home state <input type="text" value="NC"/></p> <p>2. Rating <input type="text" value="Commercial Pilot"/></p> <p>3. Instrument rated <input type="text" value="Yes"/></p> <p>4. 12 Months fht time <input type="text" value="500"/></p> <p>5. Total flight time <input type="text" value="1000"/></p> <p>6. Flight Instructor <input type="text" value="No"/></p> <p>7. Own/mng FBO <input type="text" value="Yes"/></p> <p>8. Type fht school <input type="text"/></p> <p>9. Type of Training <input type="text" value="ALL"/></p> <p>10. # of Airplanes <input type="text" value="4"/></p> <p>11. A/C Fht hours <input type="text" value="400"/></p> <p>12. Capabilities Effect <input type="text" value="No change"/></p> <p>13. Main AC type <input type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input type="text" value="Commuter, charter, Medevac or air taxi"/></p> <p>15. Participation <input type="text" value="Flew"/></p> <p>16. Situation Awareness <input type="text" value="1"/></p> <p>17. Heads-Up value <input type="text" value="1"/></p> <p>18. Highway affect on tasks <input type="text" value="1"/></p>	<p>19. PCATD types <input type="text" value="1"/></p> <p>20. PCATD uses <input type="text" value="1"/></p> <p>21. PCATD effectiveness <input type="text" value="2"/></p> <p>22. PCATD for new ratings <input type="text" value="2"/></p> <p>23. PCATD obstacles <input type="text" value="4"/></p> <p>24. AGATE Training value</p> <p style="padding-left: 20px;">Normal OP <input type="text" value="4"/></p> <p style="padding-left: 20px;">Abnormal OP <input type="text" value="2"/></p> <p style="padding-left: 20px;">Emergency Proc. <input type="text" value="2"/></p> <p style="padding-left: 20px;">Missed approach <input type="text" value="4"/></p> <p style="padding-left: 20px;">Fht maneuvers <input type="text" value="4"/></p> <p style="padding-left: 20px;">Decision making <input type="text" value="3"/></p> <p style="padding-left: 20px;">Communications <input type="text" value="2"/></p> <p style="padding-left: 20px;">Navigation <input type="text" value="4"/></p> <p style="padding-left: 20px;">Other <input type="text"/></p> <p>25. AGATE Program Importance</p> <p style="padding-left: 20px;">PCATD <input type="text" value="4"/></p> <p style="padding-left: 20px;">Imbedded trainer <input type="text" value="4"/></p> <p style="padding-left: 20px;">Performance based certification <input type="text" value="3"/></p> <p style="padding-left: 20px;">Computer record keeping <input type="text" value="4"/></p> <p style="padding-left: 20px;">FIT/Control system design <input type="text" value="4"/></p> <p style="padding-left: 20px;">Unified curriculum <input type="text" value="3"/></p>
<p>26. Situational Awareness</p> <p style="border: 1px solid black; padding: 2px; margin-left: 20px;">Allow more time to train that is cost effective Practise = greater S.A.</p>	
<p>27. Most value</p> <p style="border: 1px solid black; height: 20px; margin-left: 20px;"></p>	
<p>28. Least value</p> <p style="border: 1px solid black; height: 20px; margin-left: 20px;"></p>	

### AGATE Participant Responses

<p>1. Home state <input style="width: 100px;" type="text" value="NJ"/></p> <p>2. Rating <input style="width: 150px;" type="text" value="ATP"/></p> <p>3. Instrument rated <input style="width: 50px;" type="text" value="Yes"/></p> <p>4. 12 Months flt time <input style="width: 50px;" type="text" value="600"/></p> <p>5. Total flight time <input style="width: 50px;" type="text" value="10000"/></p> <p>6. Flight Instructor <input style="width: 50px;" type="text" value="Yes"/></p> <p>7. Own/mng FBO <input style="width: 50px;" type="text" value="Yes"/></p> <p>8. Type flt school <input style="width: 100px;" type="text" value="Part 141"/></p> <p>9. Type of Training <input style="width: 200px;" type="text" value="ALL"/></p> <p>10. # of Airplanes <input style="width: 50px;" type="text" value="5"/></p> <p>11. A/C Flt hours <input style="width: 50px;" type="text" value="600"/></p> <p>12. Capabilities Effect <input style="width: 150px;" type="text" value="25% increase"/></p> <p>13. Main AC type <input style="width: 150px;" type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input style="width: 200px;" type="text" value="Pilot flight training"/></p> <p>15. Participation <input style="width: 80px;" type="text" value="Flew"/></p> <p>16. Situation Awareness <input style="width: 100px;" type="text" value="1"/></p> <p>17. Heads-Up value <input style="width: 100px;" type="text" value="2"/></p> <p>18. Highway affect on tasks <input style="width: 150px;" type="text" value="2"/></p>	<p>19. PCATD types <input style="width: 50px;" type="text" value="1"/></p> <p>20. PCATD uses <input style="width: 50px;" type="text" value="2"/></p> <p>21. PCATD effectiveness <input style="width: 50px;" type="text" value="1"/></p> <p>22. PCATD for new ratings <input style="width: 50px;" type="text" value="2"/></p> <p>23. PCATD obstacles <input style="width: 50px;" type="text" value="4"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Abnormal OP</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Emergency Proc.</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Missed approach</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Flt maneuvers</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Decision making</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Communications</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Navigation</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Other</td><td><input style="width: 150px;" type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Imbedded trainer</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Performance based certification</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Computer record keeping</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Flt/Control system design</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Unified curriculum</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> </table>	Normal OP	<input style="width: 50px;" type="text" value="5"/>	Abnormal OP	<input style="width: 50px;" type="text" value="5"/>	Emergency Proc.	<input style="width: 50px;" type="text" value="5"/>	Missed approach	<input style="width: 50px;" type="text" value="5"/>	Flt maneuvers	<input style="width: 50px;" type="text" value="5"/>	Decision making	<input style="width: 50px;" type="text" value="5"/>	Communications	<input style="width: 50px;" type="text" value="5"/>	Navigation	<input style="width: 50px;" type="text" value="5"/>	Other	<input style="width: 150px;" type="text"/>	PCATD	<input style="width: 50px;" type="text" value="5"/>	Imbedded trainer	<input style="width: 50px;" type="text" value="5"/>	Performance based certification	<input style="width: 50px;" type="text" value="5"/>	Computer record keeping	<input style="width: 50px;" type="text" value="5"/>	Flt/Control system design	<input style="width: 50px;" type="text" value="5"/>	Unified curriculum	<input style="width: 50px;" type="text" value="5"/>
Normal OP	<input style="width: 50px;" type="text" value="5"/>																														
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<p>26. Situational Awareness</p> <p><input style="width: 400px;" type="text" value="Increase"/></p>																															
<p>27. Most value</p> <p><input style="width: 400px;" type="text" value="Ease of flying - improved safety"/></p>																															
<p>28. Least value</p> <p><input style="width: 400px;" type="text" value="?"/></p>																															

### AGATE Participant Responses

<p>1. Home state <input style="width: 100px;" type="text" value="NJ"/></p> <p>2. Rating <input style="width: 150px;" type="text" value="ATP"/></p> <p>3. Instrument rated <input style="width: 100px;" type="text" value="Yes"/></p> <p>4. 12 Months flt time <input style="width: 100px;" type="text" value="200"/></p> <p>5. Total flight time <input style="width: 100px;" type="text" value="9000"/></p> <p>6. Flight Instructor <input style="width: 100px;" type="text" value="Yes"/></p> <p>7. Own/mng FBO <input style="width: 100px;" type="text" value="No"/></p> <p>8. Type flt school <input style="width: 100px;" type="text"/></p> <p>9. Type of Training <input style="width: 250px;" type="text"/></p> <p>10. # of Airplanes <input style="width: 100px;" type="text" value="70"/></p> <p>11. A/C Flt hours <input style="width: 100px;" type="text" value="400"/></p> <p>12. Capabilities Effect <input style="width: 150px;" type="text" value="100% or more increase"/></p> <p>13. Main AC type <input style="width: 150px;" type="text" value="Jet"/></p> <p>14. Prim Activity <input style="width: 250px;" type="text" value="Commuter, charter, Medevac or air taxi"/></p> <p>15. Participation <input style="width: 100px;" type="text" value="Flew"/></p> <p>16. Situation Awareness <input style="width: 100px;" type="text" value="1"/></p> <p>17. Heads-Up value <input style="width: 100px;" type="text" value="1"/></p> <p>18. Highway affect on tasks <input style="width: 150px;" type="text" value="1"/></p>	<p>19. PCATD types <input style="width: 100px;" type="text" value="1"/></p> <p>20. PCATD uses <input style="width: 100px;" type="text" value="1"/></p> <p>21. PCATD effectiveness <input style="width: 100px;" type="text" value="1"/></p> <p>22. PCATD for new ratings <input style="width: 100px;" type="text" value="2"/></p> <p>23. PCATD obstacles <input style="width: 100px;" type="text" value="4"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Abnormal OP</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Emergency Proc.</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Missed approach</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Flt maneuvers</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> <tr><td>Decision making</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Communications</td><td><input style="width: 50px;" type="text" value="3"/></td></tr> <tr><td>Navigation</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Other</td><td><input style="width: 150px;" type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> <tr><td>Imbedded trainer</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Performance based certification</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Computer record keeping</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Flt/Control system design</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Unified curriculum</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> </table>	Normal OP	<input style="width: 50px;" type="text" value="5"/>	Abnormal OP	<input style="width: 50px;" type="text" value="5"/>	Emergency Proc.	<input style="width: 50px;" type="text" value="5"/>	Missed approach	<input style="width: 50px;" type="text" value="5"/>	Flt maneuvers	<input style="width: 50px;" type="text" value="4"/>	Decision making	<input style="width: 50px;" type="text" value="5"/>	Communications	<input style="width: 50px;" type="text" value="3"/>	Navigation	<input style="width: 50px;" type="text" value="5"/>	Other	<input style="width: 150px;" type="text"/>	PCATD	<input style="width: 50px;" type="text" value="4"/>	Imbedded trainer	<input style="width: 50px;" type="text" value="5"/>	Performance based certification	<input style="width: 50px;" type="text" value="5"/>	Computer record keeping	<input style="width: 50px;" type="text" value="5"/>	Flt/Control system design	<input style="width: 50px;" type="text" value="5"/>	Unified curriculum	<input style="width: 50px;" type="text" value="4"/>
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Unified curriculum	<input style="width: 50px;" type="text" value="4"/>																														
<p>26. Situational Awareness</p> <p style="margin-left: 40px;"><input style="width: 450px;" type="text" value="Increase"/></p>																															
<p>27. Most value</p> <p style="margin-left: 40px;"><input style="width: 450px;" type="text"/></p>																															
<p>28. Least value</p> <p style="margin-left: 40px;"><input style="width: 450px;" type="text" value="Need capability to fly without system"/></p>																															

### AGATE Participant Responses

<p>1. Home state <input style="width: 50px;" type="text" value="NJ"/></p> <p>2. Rating <input style="width: 150px;" type="text" value="Commercial Pilot"/></p> <p>3. Instrument rated <input style="width: 50px;" type="text" value="Yes"/></p> <p>4. 12 Months flt time <input style="width: 50px;" type="text" value="30"/></p> <p>5. Total flight time <input style="width: 50px;" type="text" value="6000"/></p> <p>6. Flight Instructor <input style="width: 50px;" type="text" value="No"/></p> <p>7. Own/mng FBO <input style="width: 50px;" type="text" value="No"/></p> <p>8. Type flt school <input style="width: 70px;" type="text"/></p> <p>9. Type of Training <input style="width: 200px;" type="text"/></p> <p>10. # of Airplanes <input style="width: 50px;" type="text" value="2"/></p> <p>11. A/C Flt hours <input style="width: 50px;" type="text" value="0"/></p> <p>12. Capabilities Effect <input style="width: 150px;" type="text" value="50% increase"/></p> <p>13. Main AC type <input style="width: 150px;" type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input style="width: 200px;" type="text" value="Insurance"/></p> <p>15. Participation <input style="width: 70px;" type="text" value="Flew"/></p> <p>16. Situation Awareness <input style="width: 100px;" type="text" value="1"/></p> <p>17. Heads-Up value <input style="width: 100px;" type="text" value="1"/></p> <p>18. Highway affect on tasks <input style="width: 150px;" type="text" value="1"/></p> <p>26. Situational Awareness <input style="width: 450px; height: 15px;" type="text"/></p> <p>27. Most value <input style="width: 450px; height: 15px;" type="text"/></p> <p>28. Least value <input style="width: 450px; height: 15px;" type="text"/></p>	<p>19. PCATD types <input style="width: 50px;" type="text" value="1"/></p> <p>20. PCATD uses <input style="width: 50px;" type="text" value="1"/></p> <p>21. PCATD effectiveness <input style="width: 50px;" type="text" value="2"/></p> <p>22. PCATD for new ratings <input style="width: 50px;" type="text" value="2"/></p> <p>23. PCATD obstacles <input style="width: 100px;" type="text" value="8 Not active"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Abnormal OP</td><td><input style="width: 50px;" type="text" value="2"/></td></tr> <tr><td>Emergency Proc.</td><td><input style="width: 50px;" type="text" value="2"/></td></tr> <tr><td>Missed approach</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Flt maneuvers</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Decision making</td><td><input style="width: 50px;" type="text" value="3"/></td></tr> <tr><td>Communications</td><td><input style="width: 50px;" type="text" value="2"/></td></tr> <tr><td>Navigation</td><td><input style="width: 50px;" type="text" value="3"/></td></tr> <tr><td>Other</td><td><input style="width: 150px;" type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> <tr><td>Imbedded trainer</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Performance based certification</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Computer record keeping</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Flt/Control system design</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> <tr><td>Unified curriculum</td><td><input style="width: 50px;" type="text" value="4"/></td></tr> </table>	Normal OP	<input style="width: 50px;" type="text" value="5"/>	Abnormal OP	<input style="width: 50px;" type="text" value="2"/>	Emergency Proc.	<input style="width: 50px;" type="text" value="2"/>	Missed approach	<input style="width: 50px;" type="text" value="5"/>	Flt maneuvers	<input style="width: 50px;" type="text" value="5"/>	Decision making	<input style="width: 50px;" type="text" value="3"/>	Communications	<input style="width: 50px;" type="text" value="2"/>	Navigation	<input style="width: 50px;" type="text" value="3"/>	Other	<input style="width: 150px;" type="text"/>	PCATD	<input style="width: 50px;" type="text" value="4"/>	Imbedded trainer	<input style="width: 50px;" type="text" value="5"/>	Performance based certification	<input style="width: 50px;" type="text" value="5"/>	Computer record keeping	<input style="width: 50px;" type="text" value="5"/>	Flt/Control system design	<input style="width: 50px;" type="text" value="4"/>	Unified curriculum	<input style="width: 50px;" type="text" value="4"/>
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Unified curriculum	<input style="width: 50px;" type="text" value="4"/>																														

**AGATE Participant Responses**

1. Home state	<input type="text" value="NJ"/>	19. PCATD types	<input type="text" value="2,3"/>
2. Rating	<input type="text" value="Private Pilot"/>	20. PCATD uses	<input type="text" value="2"/>
3. Instrument rated	<input type="text" value="Yes"/>	21. PCATD effectiveness	<input type="text" value="2"/>
4. 12 Months flt time	<input type="text" value="30"/>	22. PCATD for new ratings	<input type="text" value="2"/>
5. Total flight time	<input type="text" value="1007"/>	23. PCATD obstacles	<input type="text" value="3,7"/>
6. Flight Instructor	<input type="text" value="No"/>	24. AGATE Training value	
7. Own/mng FBO	<input type="text" value="No"/>	Normal OP	<input type="text" value="3"/>
8. Type flt school	<input type="text"/>	Abnormal OP	<input type="text" value="3"/>
9. Type of Training	<input type="text"/>	Emergency Proc.	<input type="text" value="3"/>
10. # of Airplanes	<input type="text" value="0"/>	Missed approach	<input type="text" value="3"/>
11. A/C Flt hours	<input type="text" value="40"/>	Flt maneuvers	<input type="text" value="3"/>
12. Capabilities Effect	<input type="text"/>	Decision making	<input type="text" value="2"/>
13. Main AC type	<input type="text" value="Single Piston Engine"/>	Communications	<input type="text" value="1"/>
14. Prim Activity	<input type="text" value="Other: Journalism"/>	Navigation	<input type="text" value="3"/>
15. Participation	<input type="text" value="Flew"/>	Other	<input type="text"/>
16. Situation Awareness	<input type="text" value="1"/>	25. AGATE Program Importance	
17. Heads-Up value	<input type="text" value="1"/>	PCATD	<input type="text" value="5"/>
18. Highway affect on tasks	<input type="text" value="1"/>	Imbedded trainer	<input type="text" value="2"/>
		Performance based certification	<input type="text" value="5"/>
		Computer record keeping	<input type="text" value="4"/>
		Flt/Control system design	<input type="text" value="5"/>
		Unified curriculum	<input type="text" value="5"/>

**26. Situational Awareness**

**27. Most value**

**28. Least value**

### AGATE Participant Responses

<p>1. Home state <input style="width: 50px;" type="text" value="NJ"/></p> <p>2. Rating <input style="width: 150px;" type="text" value="Student"/></p> <p>3. Instrument rated <input style="width: 50px;" type="text" value="No"/></p> <p>4. 12 Months flt time <input style="width: 50px;" type="text" value="12"/></p> <p>5. Total flight time <input style="width: 50px;" type="text" value="120"/></p> <p>6. Flight Instructor <input style="width: 50px;" type="text" value="No"/></p> <p>7. Own/mng FBO <input style="width: 50px;" type="text" value="No"/></p> <p>8. Type flt school <input style="width: 70px;" type="text"/></p> <p>9. Type of Training <input style="width: 250px;" type="text"/></p> <p>10. # of Airplanes <input style="width: 50px;" type="text" value="2"/></p> <p>11. A/C Flt hours <input style="width: 50px;" type="text" value="10"/></p> <p>12. Capabilities Effect <input style="width: 180px;" type="text" value="50% increase"/></p> <p>13. Main AC type <input style="width: 170px;" type="text"/></p> <p>14. Prim Activity <input style="width: 270px;" type="text" value="Aircraft services"/></p> <p>15. Participation <input style="width: 80px;" type="text" value="Flew"/></p> <p>16. Situational Awareness <input style="width: 130px;" type="text" value="1"/></p> <p>17. Heads-Up value <input style="width: 130px;" type="text" value="1"/></p> <p>18. Highway affect on tasks <input style="width: 170px;" type="text" value="1"/></p>	<p>19. PCATD types <input style="width: 50px;" type="text" value="1"/></p> <p>20. PCATD uses <input style="width: 50px;" type="text" value="1"/></p> <p>21. PCATD effectiveness <input style="width: 50px;" type="text" value="1"/></p> <p>22. PCATD for new ratings <input style="width: 50px;" type="text" value="1"/></p> <p>23. PCATD obstacles <input style="width: 70px;" type="text" value="2"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input style="width: 30px;" type="text" value="0"/></td></tr> <tr><td>Abnormal OP</td><td><input style="width: 30px;" type="text" value="0"/></td></tr> <tr><td>Emergency Proc.</td><td><input style="width: 30px;" type="text" value="5"/></td></tr> <tr><td>Missed approach</td><td><input style="width: 30px;" type="text" value="0"/></td></tr> <tr><td>Flt maneuvers</td><td><input style="width: 30px;" type="text" value="0"/></td></tr> <tr><td>Decision making</td><td><input style="width: 30px;" type="text" value="0"/></td></tr> <tr><td>Communications</td><td><input style="width: 30px;" type="text" value="0"/></td></tr> <tr><td>Navigation</td><td><input style="width: 30px;" type="text" value="0"/></td></tr> <tr><td>Other</td><td><input style="width: 180px;" type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input style="width: 30px;" type="text" value="0"/></td></tr> <tr><td>Imbedded trainer</td><td><input style="width: 30px;" type="text" value="5"/></td></tr> <tr><td>Performance based certification</td><td><input style="width: 30px;" type="text" value="0"/></td></tr> <tr><td>Computer record keeping</td><td><input style="width: 30px;" type="text" value="0"/></td></tr> <tr><td>Flt/Control system design</td><td><input style="width: 30px;" type="text" value="0"/></td></tr> <tr><td>Unified curriculum</td><td><input style="width: 30px;" type="text" value="0"/></td></tr> </table>	Normal OP	<input style="width: 30px;" type="text" value="0"/>	Abnormal OP	<input style="width: 30px;" type="text" value="0"/>	Emergency Proc.	<input style="width: 30px;" type="text" value="5"/>	Missed approach	<input style="width: 30px;" type="text" value="0"/>	Flt maneuvers	<input style="width: 30px;" type="text" value="0"/>	Decision making	<input style="width: 30px;" type="text" value="0"/>	Communications	<input style="width: 30px;" type="text" value="0"/>	Navigation	<input style="width: 30px;" type="text" value="0"/>	Other	<input style="width: 180px;" type="text"/>	PCATD	<input style="width: 30px;" type="text" value="0"/>	Imbedded trainer	<input style="width: 30px;" type="text" value="5"/>	Performance based certification	<input style="width: 30px;" type="text" value="0"/>	Computer record keeping	<input style="width: 30px;" type="text" value="0"/>	Flt/Control system design	<input style="width: 30px;" type="text" value="0"/>	Unified curriculum	<input style="width: 30px;" type="text" value="0"/>
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Unified curriculum	<input style="width: 30px;" type="text" value="0"/>																														
<p>26. Situational Awareness</p> <p><input style="width: 530px;" type="text" value="Workload"/></p>																															
<p>27. Most value</p> <p><input style="width: 530px;" type="text"/></p>																															
<p>28. Least value</p> <p><input style="width: 530px;" type="text"/></p>																															

**AGATE Participant Responses**

<p>1. Home state <input type="text" value="NY"/></p> <p>2. Rating <input type="text" value="ATP"/></p> <p>3. Instrument rated <input type="text" value="Yes"/></p> <p>4. 12 Months flt time <input type="text" value="900"/></p> <p>5. Total flight time <input type="text" value="23300"/></p> <p>6. Flight Instructor <input type="text" value="Yes"/></p> <p>7. Own/mng FBO <input type="text" value="Yes"/></p> <p>8. Type flt school <input type="text" value="Part 61"/></p> <p>9. Type of Training <input type="text" value="Private Pilot, Commercial, Instrument, C"/></p> <p>10. # of Airplanes <input type="text" value="6"/></p> <p>11. A/C Flt hours <input type="text" value="2000"/></p> <p>12. Capabilities Effect <input type="text" value="50% increase"/></p> <p>13. Main AC type <input type="text" value="Twin Piston Engine"/></p> <p>14. Prim Activity <input type="text" value="Commuter, charter, Medevac or air taxi"/></p> <p>15. Participation <input type="text" value="Flew"/></p> <p>16. Situation Awareness <input type="text" value="1"/></p> <p>17. Heads-Up value <input type="text" value="1"/></p> <p>18. Highway affect on tasks <input type="text" value="1"/></p>	<p>19. PCATD types <input type="text" value="1"/></p> <p>20. PCATD uses <input type="text"/></p> <p>21. PCATD effectiveness <input type="text" value="0"/></p> <p>22. PCATD for new ratings <input type="text" value="0"/></p> <p>23. PCATD obstacles <input type="text"/></p> <p>24. AGATE Training value</p> <p>Normal OP <input type="text" value="0"/></p> <p>Abnormal OP <input type="text" value="0"/></p> <p>Emergency Proc. <input type="text" value="0"/></p> <p>Missed approach <input type="text" value="0"/></p> <p>Flt maneuvers <input type="text" value="0"/></p> <p>Decision making <input type="text" value="0"/></p> <p>Communications <input type="text" value="0"/></p> <p>Navigation <input type="text" value="0"/></p> <p>Other <input type="text"/></p> <p>25. AGATE Program Importance</p> <p>PCATD <input type="text" value="0"/></p> <p>Imbedded trainer <input type="text" value="0"/></p> <p>Performance based certification <input type="text" value="0"/></p> <p>Computer record keeping <input type="text" value="0"/></p> <p>FI/Control system design <input type="text" value="5"/></p> <p>Unified curriculum <input type="text" value="0"/></p>
<p>26. Situational Awareness <input type="text"/></p>	
<p>27. Most value <input type="text"/></p>	
<p>28. Least value <input type="text"/></p>	

### AGATE Participant Responses

<p>1. Home state <input type="text" value="NY"/></p> <p>2. Rating <input type="text" value="ATP"/></p> <p>3. Instrument rated <input type="text" value="Yes"/></p> <p>4. 12 Months flt time <input type="text" value="200"/></p> <p>5. Total flight time <input type="text" value="10200"/></p> <p>6. Flight Instructor <input type="text" value="Yes"/></p> <p>7. Own/mng FBO <input type="text" value="Yes"/></p> <p>8. Type flt school <input type="text" value="Part 61"/></p> <p>9. Type of Training <input type="text" value="ALL"/></p> <p>10. # of Airplanes <input type="text" value="32"/></p> <p>11. A/C Flt hours <input type="text" value="350"/></p> <p>12. Capabilities Effect <input type="text"/></p> <p>13. Main AC type <input type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input type="text" value="Pilot flight training"/></p> <p>15. Participation <input type="text" value="Observed"/></p> <p>16. Situation Awareness <input type="text" value="1"/></p> <p>17. Heads-Up value <input type="text" value="1"/></p> <p>18. Highway affect on tasks <input type="text" value="1"/></p>	<p>19. PCATD types <input type="text" value="3"/></p> <p>20. PCATD uses <input type="text" value="4"/></p> <p>21. PCATD effectiveness <input type="text" value="2"/></p> <p>22. PCATD for new ratings <input type="text" value="3"/></p> <p>23. PCATD obstacles <input type="text" value="6,7"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input type="text" value="5"/></td></tr> <tr><td>Abnormal OP</td><td><input type="text" value="5"/></td></tr> <tr><td>Emergency Proc.</td><td><input type="text" value="4"/></td></tr> <tr><td>Missed approach</td><td><input type="text" value="5"/></td></tr> <tr><td>Flt maneuvers</td><td><input type="text"/></td></tr> <tr><td>Decision making</td><td><input type="text" value="3"/></td></tr> <tr><td>Communications</td><td><input type="text" value="3"/></td></tr> <tr><td>Navigation</td><td><input type="text" value="5"/></td></tr> <tr><td>Other</td><td><input type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input type="text" value="3"/></td></tr> <tr><td>Imbedded trainer</td><td><input type="text" value="5"/></td></tr> <tr><td>Performance based certification</td><td><input type="text" value="3"/></td></tr> <tr><td>Computer record keeping</td><td><input type="text" value="5"/></td></tr> <tr><td>FI/Control system design</td><td><input type="text" value="4"/></td></tr> <tr><td>Unified curriculum</td><td><input type="text" value="3"/></td></tr> </table>	Normal OP	<input type="text" value="5"/>	Abnormal OP	<input type="text" value="5"/>	Emergency Proc.	<input type="text" value="4"/>	Missed approach	<input type="text" value="5"/>	Flt maneuvers	<input type="text"/>	Decision making	<input type="text" value="3"/>	Communications	<input type="text" value="3"/>	Navigation	<input type="text" value="5"/>	Other	<input type="text"/>	PCATD	<input type="text" value="3"/>	Imbedded trainer	<input type="text" value="5"/>	Performance based certification	<input type="text" value="3"/>	Computer record keeping	<input type="text" value="5"/>	FI/Control system design	<input type="text" value="4"/>	Unified curriculum	<input type="text" value="3"/>
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Unified curriculum	<input type="text" value="3"/>																														

**26. Situational Awareness**

By displaying flight path as a geographic concept instead of a nav signal geometric concept, the average pilot could grasp it far better

**27. Most value**

Highway in sky. situational awareness. Major concern: Reliability - an agate trained pilot in a loss of data/display would have no situational awareness.

**28. Least value**

Single lever power control. I would rank this as nice to have but not too big a deal.

### AGATE Participant Responses

<p>1. Home state <input type="text" value="NY"/></p> <p>2. Rating <input type="text" value="Commercial Pilot"/></p> <p>3. Instrument rated <input type="text" value="Yes"/></p> <p>4. 12 Months flt time <input type="text" value="40"/></p> <p>5. Total flight time <input type="text" value="5000"/></p> <p>6. Flight Instructor <input type="text" value="Yes"/></p> <p>7. Own/mng FBO <input type="text" value="Yes"/></p> <p>8. Type flt school <input type="text" value="Part 141"/></p> <p>9. Type of Training <input type="text" value="ALL"/></p> <p>10. # of Airplanes <input type="text" value="25"/></p> <p>11. A/C Flt hours <input type="text" value="500"/></p> <p>12. Capabilities Effect <input type="text" value="25% increase"/></p> <p>13. Main AC type <input type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input type="text" value="Pilot flight training"/></p> <p>15. Participation <input type="text" value="Flew"/></p> <p>16. Situation Awareness <input type="text" value="2"/></p> <p>17. Heads-Up value <input type="text" value="2"/></p> <p>18. Highway affect on tasks <input type="text" value="4"/></p>	<p>19. PCATD types <input type="text" value="3"/></p> <p>20. PCATD uses <input type="text" value="1"/></p> <p>21. PCATD effectiveness <input type="text" value="2"/></p> <p>22. PCATD for new ratings <input type="text" value="2"/></p> <p>23. PCATD obstacles <input type="text" value="5"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input type="text" value="5"/></td></tr> <tr><td>Abnormal OP</td><td><input type="text" value="5"/></td></tr> <tr><td>Emergency Proc.</td><td><input type="text" value="4"/></td></tr> <tr><td>Missed approach</td><td><input type="text" value="4"/></td></tr> <tr><td>Flt maneuvers</td><td><input type="text" value="1"/></td></tr> <tr><td>Decision making</td><td><input type="text" value="4"/></td></tr> <tr><td>Communications</td><td><input type="text" value="4"/></td></tr> <tr><td>Navigation</td><td><input type="text" value="4"/></td></tr> <tr><td>Other</td><td><input type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input type="text" value="1"/></td></tr> <tr><td>Imbedded trainer</td><td><input type="text" value="2"/></td></tr> <tr><td>Performance based certification</td><td><input type="text" value="1"/></td></tr> <tr><td>Computer record keeping</td><td><input type="text" value="2"/></td></tr> <tr><td>Flt/Control system design</td><td><input type="text" value="2"/></td></tr> <tr><td>Unified curriculum</td><td><input type="text" value="2"/></td></tr> </table>	Normal OP	<input type="text" value="5"/>	Abnormal OP	<input type="text" value="5"/>	Emergency Proc.	<input type="text" value="4"/>	Missed approach	<input type="text" value="4"/>	Flt maneuvers	<input type="text" value="1"/>	Decision making	<input type="text" value="4"/>	Communications	<input type="text" value="4"/>	Navigation	<input type="text" value="4"/>	Other	<input type="text"/>	PCATD	<input type="text" value="1"/>	Imbedded trainer	<input type="text" value="2"/>	Performance based certification	<input type="text" value="1"/>	Computer record keeping	<input type="text" value="2"/>	Flt/Control system design	<input type="text" value="2"/>	Unified curriculum	<input type="text" value="2"/>
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<p>26. Situational Awareness</p> <p><input type="text" value="Distraction in cruise Great for approach"/></p>																															
<p>27. Most value</p> <p><input type="text" value="IFR approach"/></p>																															
<p>28. Least value</p> <p><input type="text" value="Cruise fuidance seems unnecessary"/></p>																															

### AGATE Participant Responses

<p>1. Home state <input style="width: 100px;" type="text" value="NY"/></p> <p>2. Rating <input style="width: 150px;" type="text" value="Private Pilot"/></p> <p>3. Instrument rated <input style="width: 50px;" type="text" value="Yes"/></p> <p>4. 12 Months flt time <input style="width: 50px;" type="text" value="0"/></p> <p>5. Total flight time <input style="width: 50px;" type="text" value="950"/></p> <p>6. Flight Instructor <input style="width: 50px;" type="text" value="No"/></p> <p>7. Own/mng FBO <input style="width: 50px;" type="text" value="No"/></p> <p>8. Type flt school <input style="width: 70px;" type="text"/></p> <p>9. Type of Training <input style="width: 200px;" type="text"/></p> <p>10. # of Airplanes <input style="width: 50px;" type="text" value="0"/></p> <p>11. A/C Flt hours <input style="width: 50px;" type="text" value="0"/></p> <p>12. Capabilities Effect <input style="width: 150px;" type="text" value="100% or more increase"/></p> <p>13. Main AC type <input style="width: 150px;" type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input style="width: 250px;" type="text"/></p> <p>15. Participation <input style="width: 70px;" type="text" value="Flew"/></p> <p>16. Situation Awareness <input style="width: 100px;" type="text" value="1"/></p> <p>17. Heads-Up value <input style="width: 100px;" type="text" value="1"/></p> <p>18. Highway affect on tasks <input style="width: 150px;" type="text" value="1"/></p>	<p>19. PCATD types <input style="width: 50px;" type="text" value="1"/></p> <p>20. PCATD uses <input style="width: 50px;" type="text" value="1"/></p> <p>21. PCATD effectiveness <input style="width: 50px;" type="text" value="1"/></p> <p>22. PCATD for new ratings <input style="width: 50px;" type="text" value="1"/></p> <p>23. PCATD obstacles <input style="width: 50px;" type="text" value="2"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Abnormal OP</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Emergency Proc.</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Missed approach</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Flt maneuvers</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Decision making</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Communications</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Navigation</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Other</td><td><input style="width: 150px;" type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Imbedded trainer</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Performance based certification</td><td><input style="width: 50px;" type="text" value="1"/></td></tr> <tr><td>Computer record keeping</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Flt/Control system design</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Unified curriculum</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> </table>	Normal OP	<input style="width: 50px;" type="text" value="5"/>	Abnormal OP	<input style="width: 50px;" type="text" value="0"/>	Emergency Proc.	<input style="width: 50px;" type="text" value="0"/>	Missed approach	<input style="width: 50px;" type="text" value="0"/>	Flt maneuvers	<input style="width: 50px;" type="text" value="0"/>	Decision making	<input style="width: 50px;" type="text" value="5"/>	Communications	<input style="width: 50px;" type="text" value="0"/>	Navigation	<input style="width: 50px;" type="text" value="0"/>	Other	<input style="width: 150px;" type="text"/>	PCATD	<input style="width: 50px;" type="text" value="5"/>	Imbedded trainer	<input style="width: 50px;" type="text" value="5"/>	Performance based certification	<input style="width: 50px;" type="text" value="1"/>	Computer record keeping	<input style="width: 50px;" type="text" value="5"/>	Flt/Control system design	<input style="width: 50px;" type="text" value="5"/>	Unified curriculum	<input style="width: 50px;" type="text" value="5"/>
Normal OP	<input style="width: 50px;" type="text" value="5"/>																														
Abnormal OP	<input style="width: 50px;" type="text" value="0"/>																														
Emergency Proc.	<input style="width: 50px;" type="text" value="0"/>																														
Missed approach	<input style="width: 50px;" type="text" value="0"/>																														
Flt maneuvers	<input style="width: 50px;" type="text" value="0"/>																														
Decision making	<input style="width: 50px;" type="text" value="5"/>																														
Communications	<input style="width: 50px;" type="text" value="0"/>																														
Navigation	<input style="width: 50px;" type="text" value="0"/>																														
Other	<input style="width: 150px;" type="text"/>																														
PCATD	<input style="width: 50px;" type="text" value="5"/>																														
Imbedded trainer	<input style="width: 50px;" type="text" value="5"/>																														
Performance based certification	<input style="width: 50px;" type="text" value="1"/>																														
Computer record keeping	<input style="width: 50px;" type="text" value="5"/>																														
Flt/Control system design	<input style="width: 50px;" type="text" value="5"/>																														
Unified curriculum	<input style="width: 50px;" type="text" value="5"/>																														
<p>26. Situational Awareness <input style="width: 400px;" type="text" value="Improve"/></p>																															
<p>27. Most value <input style="width: 400px;" type="text"/></p>																															
<p>28. Least value <input style="width: 400px;" type="text"/></p>																															

### AGATE Participant Responses

<p>1. Home state <input type="text" value="NY"/></p> <p>2. Rating <input type="text" value="Student"/></p> <p>3. Instrument rated <input type="text" value="No"/></p> <p>4. 12 Months flt time <input type="text" value="0"/></p> <p>5. Total flight time <input type="text" value="2"/></p> <p>6. Flight Instructor <input type="text" value="No"/></p> <p>7. Own/mng FBO <input type="text" value="No"/></p> <p>8. Type flt school <input type="text"/></p> <p>9. Type of Training <input type="text"/></p> <p>10. # of Airplanes <input type="text" value="0"/></p> <p>11. A/C Flt hours <input type="text" value="0"/></p> <p>12. Capabilities Effect <input type="text"/></p> <p>13. Main AC type <input type="text"/></p> <p>14. Prim Activity <input type="text" value="Aircraft services"/></p> <p>15. Participation <input type="text" value="Observed"/></p> <p>16. Situation Awareness <input type="text" value="0"/></p> <p>17. Heads-Up value <input type="text" value="0"/></p> <p>18. Highway affect on tasks <input type="text" value="1"/></p>	<p>19. PCATD types <input type="text"/></p> <p>20. PCATD uses <input type="text"/></p> <p>21. PCATD effectiveness <input type="text" value="0"/></p> <p>22. PCATD for new ratings <input type="text" value="0"/></p> <p>23. PCATD obstacles <input type="text"/></p> <p>24. AGATE Training value</p> <p style="padding-left: 20px;">Normal OP <input type="text" value="0"/></p> <p style="padding-left: 20px;">Abnormal OP <input type="text" value="0"/></p> <p style="padding-left: 20px;">Emergency Proc. <input type="text" value="0"/></p> <p style="padding-left: 20px;">Missed approach <input type="text" value="0"/></p> <p style="padding-left: 20px;">Flt maneuvers <input type="text" value="0"/></p> <p style="padding-left: 20px;">Decision making <input type="text" value="0"/></p> <p style="padding-left: 20px;">Communications <input type="text" value="0"/></p> <p style="padding-left: 20px;">Navigation <input type="text" value="0"/></p> <p style="padding-left: 20px;">Other <input type="text"/></p> <p>25. AGATE Program Importance</p> <p style="padding-left: 20px;">PCATD <input type="text" value="5"/></p> <p style="padding-left: 20px;">Imbedded trainer <input type="text" value="5"/></p> <p style="padding-left: 20px;">Performance based certification <input type="text" value="0"/></p> <p style="padding-left: 20px;">Computer record keeping <input type="text" value="0"/></p> <p style="padding-left: 20px;">Flt/Control system design <input type="text" value="0"/></p> <p style="padding-left: 20px;">Unified curriculum <input type="text" value="0"/></p>
<p>26. Situational Awareness <input type="text"/></p>	
<p>27. Most value <input type="text"/></p>	
<p>28. Least value <input type="text"/></p>	

### AGATE Participant Responses

<p>1. Home state <input type="text" value="OH"/></p> <p>2. Rating <input type="text" value="ATP"/></p> <p>3. Instrument rated <input type="text" value="Yes"/></p> <p>4. 12 Months flt time <input type="text" value="300"/></p> <p>5. Total flight time <input type="text" value="10000"/></p> <p>6. Flight Instructor <input type="text" value="Yes"/></p> <p>7. Own/mng FBO <input type="text" value="Yes"/></p> <p>8. Type flt school <input type="text" value="Part 61"/></p> <p>9. Type of Training <input type="text"/></p> <p>10. # of Airplanes <input type="text" value="6"/></p> <p>11. A/C Flt hours <input type="text" value="300"/></p> <p>12. Capabilities Effect <input type="text"/></p> <p>13. Main AC type <input type="text" value="Twin Piston Engine"/></p> <p>14. Prim Activity <input type="text" value="Commuter, charter, Medevac or air taxi"/></p> <p>15. Participation <input type="text" value="Observed"/></p> <p>16. Situation Awareness <input type="text" value="2"/></p> <p>17. Heads-Up value <input type="text" value="2"/></p> <p>18. Highway affect on tasks <input type="text" value="2"/></p>	<p>19. PCATD types <input type="text" value="1"/></p> <p>20. PCATD uses <input type="text" value="1"/></p> <p>21. PCATD effectiveness <input type="text" value="2"/></p> <p>22. PCATD for new ratings <input type="text" value="2"/></p> <p>23. PCATD obstacles <input type="text" value="3"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input type="text" value="5"/></td></tr> <tr><td>Abnormal OP</td><td><input type="text" value="5"/></td></tr> <tr><td>Emergency Proc.</td><td><input type="text" value="5"/></td></tr> <tr><td>Missed approach</td><td><input type="text" value="5"/></td></tr> <tr><td>Flt maneuvers</td><td><input type="text" value="3"/></td></tr> <tr><td>Decision making</td><td><input type="text" value="1"/></td></tr> <tr><td>Communications</td><td><input type="text" value="3"/></td></tr> <tr><td>Navigation</td><td><input type="text" value="5"/></td></tr> <tr><td>Other</td><td><input type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input type="text" value="5"/></td></tr> <tr><td>Imbedded trainer</td><td><input type="text" value="5"/></td></tr> <tr><td>Performance based certification</td><td><input type="text" value="5"/></td></tr> <tr><td>Computer record keeping</td><td><input type="text" value="5"/></td></tr> <tr><td>Flt/Control system design</td><td><input type="text" value="3"/></td></tr> <tr><td>Unified curriculum</td><td><input type="text" value="3"/></td></tr> </table>	Normal OP	<input type="text" value="5"/>	Abnormal OP	<input type="text" value="5"/>	Emergency Proc.	<input type="text" value="5"/>	Missed approach	<input type="text" value="5"/>	Flt maneuvers	<input type="text" value="3"/>	Decision making	<input type="text" value="1"/>	Communications	<input type="text" value="3"/>	Navigation	<input type="text" value="5"/>	Other	<input type="text"/>	PCATD	<input type="text" value="5"/>	Imbedded trainer	<input type="text" value="5"/>	Performance based certification	<input type="text" value="5"/>	Computer record keeping	<input type="text" value="5"/>	Flt/Control system design	<input type="text" value="3"/>	Unified curriculum	<input type="text" value="3"/>
Normal OP	<input type="text" value="5"/>																														
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Decision making	<input type="text" value="1"/>																														
Communications	<input type="text" value="3"/>																														
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Flt/Control system design	<input type="text" value="3"/>																														
Unified curriculum	<input type="text" value="3"/>																														
<p>26. Situational Awareness</p> <p><input type="text" value="Decrease"/></p>																															
<p>27. Most value</p> <p><input type="text" value="Simplifications"/></p>																															
<p>28. Least value</p> <p><input type="text" value="This will make pilots less aware of the airway system like GPS and LORAN has done to XC Pilots."/></p>																															

### AGATE Participant Responses

<p>1. Home state <input type="text" value="OH"/></p> <p>2. Rating <input type="text" value="Commercial Pilot"/></p> <p>3. Instrument rated <input type="text" value="Yes"/></p> <p>4. 12 Months flt time <input type="text" value="250"/></p> <p>5. Total flight time <input type="text" value="3200"/></p> <p>6. Flight Instructor <input type="text" value="No"/></p> <p>7. Own/mng FBO <input type="text" value="Yes"/></p> <p>8. Type flt school <input type="text"/></p> <p>9. Type of Training <input type="text"/></p> <p>10. # of Airplanes <input type="text" value="2"/></p> <p>11. A/C Flt hours <input type="text" value="500"/></p> <p>12. Capabilities Effect <input type="text"/></p> <p>13. Main AC type <input type="text" value="Twin Piston Engine"/></p> <p>14. Prim Activity <input type="text" value="Aircraft services"/></p> <p>15. Participation <input type="text" value="Flew"/></p> <p>16. Situation Awareness <input type="text" value="1"/></p> <p>17. Heads-Up value <input type="text" value="1"/></p> <p>18. Highway affect on tasks <input type="text" value="1"/></p>	<p>19. PCATD types <input type="text" value="1"/></p> <p>20. PCATD uses <input type="text"/></p> <p>21. PCATD effectiveness <input type="text" value="0"/></p> <p>22. PCATD for new ratings <input type="text" value="0"/></p> <p>23. PCATD obstacles <input type="text"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input type="text" value="0"/></td></tr> <tr><td>Abnormal OP</td><td><input type="text" value="0"/></td></tr> <tr><td>Emergency Proc.</td><td><input type="text" value="0"/></td></tr> <tr><td>Missed approach</td><td><input type="text" value="0"/></td></tr> <tr><td>Flt maneuvers</td><td><input type="text" value="0"/></td></tr> <tr><td>Decision making</td><td><input type="text" value="0"/></td></tr> <tr><td>Communications</td><td><input type="text" value="0"/></td></tr> <tr><td>Navigation</td><td><input type="text" value="0"/></td></tr> <tr><td>Other</td><td><input type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input type="text" value="5"/></td></tr> <tr><td>Imbedded trainer</td><td><input type="text" value="3"/></td></tr> <tr><td>Performance based certification</td><td><input type="text" value="4"/></td></tr> <tr><td>Computer record keeping</td><td><input type="text" value="4"/></td></tr> <tr><td>Flt/Control system design</td><td><input type="text" value="4"/></td></tr> <tr><td>Unified curriculum</td><td><input type="text" value="5"/></td></tr> </table>	Normal OP	<input type="text" value="0"/>	Abnormal OP	<input type="text" value="0"/>	Emergency Proc.	<input type="text" value="0"/>	Missed approach	<input type="text" value="0"/>	Flt maneuvers	<input type="text" value="0"/>	Decision making	<input type="text" value="0"/>	Communications	<input type="text" value="0"/>	Navigation	<input type="text" value="0"/>	Other	<input type="text"/>	PCATD	<input type="text" value="5"/>	Imbedded trainer	<input type="text" value="3"/>	Performance based certification	<input type="text" value="4"/>	Computer record keeping	<input type="text" value="4"/>	Flt/Control system design	<input type="text" value="4"/>	Unified curriculum	<input type="text" value="5"/>
Normal OP	<input type="text" value="0"/>																														
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Flt/Control system design	<input type="text" value="4"/>																														
Unified curriculum	<input type="text" value="5"/>																														
<p>26. Situational Awareness</p> <p><input type="text" value="Heads up, realistic display"/></p>																															
<p>27. Most value</p> <p><input type="text" value="Single unified display"/></p>																															
<p>28. Least value</p> <p><input type="text"/></p>																															

### AGATE Participant Responses

<p>1. Home state <input style="width: 50px;" type="text" value="PA"/></p> <p>2. Rating <input style="width: 150px;" type="text" value="ATP"/></p> <p>3. Instrument rated <input style="width: 50px;" type="text" value="Yes"/></p> <p>4. 12 Months flt time <input style="width: 50px;" type="text" value="50"/></p> <p>5. Total flight time <input style="width: 50px;" type="text" value="22000"/></p> <p>6. Flight Instructor <input style="width: 50px;" type="text" value="Yes"/></p> <p>7. Own/mng FBO <input style="width: 50px;" type="text" value="Yes"/></p> <p>8. Type flt school <input style="width: 50px;" type="text" value="Part 141"/></p> <p>9. Type of Training <input style="width: 200px;" type="text" value="ALL"/></p> <p>10. # of Airplanes <input style="width: 50px;" type="text" value="22"/></p> <p>11. A/C Flt hours <input style="width: 50px;" type="text" value="1200"/></p> <p>12. Capabilities Effect <input style="width: 150px;" type="text" value="50% increase"/></p> <p>13. Main AC type <input style="width: 150px;" type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input style="width: 250px;" type="text" value="Pilot flight training"/></p> <p>15. Participation <input style="width: 50px;" type="text" value="Flew"/></p> <p>16. Situation Awareness <input style="width: 100px;" type="text" value="5"/></p> <p>17. Heads-Up value <input style="width: 50px;" type="text" value="1"/></p> <p>18. Highway affect on tasks <input style="width: 100px;" type="text" value="1"/></p>	<p>19. PCATD types <input style="width: 50px;" type="text" value="3"/></p> <p>20. PCATD uses <input style="width: 50px;" type="text" value="3,4"/></p> <p>21. PCATD effectiveness <input style="width: 50px;" type="text" value="2"/></p> <p>22. PCATD for new ratings <input style="width: 50px;" type="text" value="2"/></p> <p>23. PCATD obstacles <input style="width: 50px;" type="text" value="7"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Abnormal OP</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Emergency Proc.</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Missed approach</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Flt maneuvers</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Decision making</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Communications</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Navigation</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Other</td><td><input style="width: 150px;" type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Imbedded trainer</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Performance based certification</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Computer record keeping</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Flt/Control system design</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> <tr><td>Unified curriculum</td><td><input style="width: 50px;" type="text" value="0"/></td></tr> </table>	Normal OP	<input style="width: 50px;" type="text" value="5"/>	Abnormal OP	<input style="width: 50px;" type="text" value="0"/>	Emergency Proc.	<input style="width: 50px;" type="text" value="0"/>	Missed approach	<input style="width: 50px;" type="text" value="0"/>	Flt maneuvers	<input style="width: 50px;" type="text" value="0"/>	Decision making	<input style="width: 50px;" type="text" value="0"/>	Communications	<input style="width: 50px;" type="text" value="0"/>	Navigation	<input style="width: 50px;" type="text" value="0"/>	Other	<input style="width: 150px;" type="text"/>	PCATD	<input style="width: 50px;" type="text" value="0"/>	Imbedded trainer	<input style="width: 50px;" type="text" value="5"/>	Performance based certification	<input style="width: 50px;" type="text" value="0"/>	Computer record keeping	<input style="width: 50px;" type="text" value="0"/>	Flt/Control system design	<input style="width: 50px;" type="text" value="0"/>	Unified curriculum	<input style="width: 50px;" type="text" value="0"/>
Normal OP	<input style="width: 50px;" type="text" value="5"/>																														
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Unified curriculum	<input style="width: 50px;" type="text" value="0"/>																														
<p>26. Situational Awareness</p> <input style="width: 500px; height: 20px;" type="text"/>																															
<p>27. Most value</p> <input style="width: 500px; height: 20px;" type="text" value="Simplicity"/>																															
<p>28. Least value</p> <input style="width: 500px; height: 20px;" type="text"/>																															

### AGATE Participant Responses

<p>1. Home state <input style="width: 100px;" type="text" value="TX"/></p> <p>2. Rating <input style="width: 150px;" type="text" value="Commercial Pilot"/></p> <p>3. Instrument rated <input style="width: 100px;" type="text" value="Yes"/></p> <p>4. 12 Months flt time <input style="width: 100px;" type="text" value="200"/></p> <p>5. Total flight time <input style="width: 100px;" type="text" value="500"/></p> <p>6. Flight Instructor <input style="width: 100px;" type="text" value="Yes"/></p> <p>7. Own/mng FBO <input style="width: 100px;" type="text" value="No"/></p> <p>8. Type flt school <input style="width: 100px;" type="text"/></p> <p>9. Type of Training <input style="width: 200px;" type="text"/></p> <p>10. # of Airplanes <input style="width: 100px;" type="text" value="0"/></p> <p>11. A/C Flt hours <input style="width: 100px;" type="text" value="100"/></p> <p>12. Capabilities Effect <input style="width: 150px;" type="text" value="25% increase"/></p> <p>13. Main AC type <input style="width: 150px;" type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input style="width: 200px;" type="text" value="Tooling"/></p> <p>15. Participation <input style="width: 100px;" type="text" value="Flew"/></p> <p>16. Situation Awareness <input style="width: 100px;" type="text" value="2"/></p> <p>17. Heads-Up value <input style="width: 100px;" type="text" value="2"/></p> <p>18. Highway affect on tasks <input style="width: 100px;" type="text" value="2"/></p>	<p>19. PCATD types <input style="width: 100px;" type="text" value="1"/></p> <p>20. PCATD uses <input style="width: 100px;" type="text" value="1"/></p> <p>21. PCATD effectiveness <input style="width: 100px;" type="text" value="2"/></p> <p>22. PCATD for new ratings <input style="width: 100px;" type="text" value="2"/></p> <p>23. PCATD obstacles <input style="width: 100px;" type="text" value="4,7"/></p> <p>24. AGATE Training value</p> <p style="padding-left: 20px;">Normal OP <input style="width: 100px;" type="text" value="4"/></p> <p style="padding-left: 20px;">Abnormal OP <input style="width: 100px;" type="text" value="2"/></p> <p style="padding-left: 20px;">Emergency Proc. <input style="width: 100px;" type="text" value="2"/></p> <p style="padding-left: 20px;">Missed approach <input style="width: 100px;" type="text" value="4"/></p> <p style="padding-left: 20px;">Flt maneuvers <input style="width: 100px;" type="text" value="1"/></p> <p style="padding-left: 20px;">Decision making <input style="width: 100px;" type="text" value="3"/></p> <p style="padding-left: 20px;">Communications <input style="width: 100px;" type="text" value="4"/></p> <p style="padding-left: 20px;">Navigation <input style="width: 100px;" type="text" value="4"/></p> <p style="padding-left: 20px;">Other <input style="width: 150px;" type="text"/></p> <p>25. AGATE Program Importance</p> <p style="padding-left: 20px;">PCATD <input style="width: 100px;" type="text" value="2"/></p> <p style="padding-left: 20px;">Imbedded trainer <input style="width: 100px;" type="text" value="3"/></p> <p style="padding-left: 20px;">Performance based certification <input style="width: 100px;" type="text" value="4"/></p> <p style="padding-left: 20px;">Computer record keeping <input style="width: 100px;" type="text" value="4"/></p> <p style="padding-left: 20px;">Flt/Control system design <input style="width: 100px;" type="text" value="2"/></p> <p style="padding-left: 20px;">Unified curriculum <input style="width: 100px;" type="text" value="3"/></p>
<p>26. Situational Awareness <input style="width: 450px;" type="text" value="Decrease thru complacency"/></p>	
<p>27. Most value <input style="width: 450px;" type="text" value="Introduction to flight, reduction in training cost"/></p>	
<p>28. Least value <input style="width: 450px;" type="text" value="Automatic turn coordination"/></p>	

**AGATE Participant Responses**

<p>1. Home state <input type="text" value="UT"/></p> <p>2. Rating <input type="text" value="Private Pilot"/></p> <p>3. Instrument rated <input type="text" value="Yes"/></p> <p>4. 12 Months flt time <input type="text" value="85"/></p> <p>5. Total flight time <input type="text" value="250"/></p> <p>6. Flight Instructor <input type="text" value="No"/></p> <p>7. Own/mng FBO <input type="text" value="No"/></p> <p>8. Type flt school <input type="text"/></p> <p>9. Type of Training <input type="text" value="ALL"/></p> <p>10. # of Airplanes <input type="text" value="70"/></p> <p>11. A/C Flt hours <input type="text" value="100"/></p> <p>12. Capabilities Effect <input type="text" value="50% increase"/></p> <p>13. Main AC type <input type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input type="text" value="Other: Marketing"/></p> <p>15. Participation <input type="text" value="Flew"/></p> <p>16. Situation Awareness <input type="text" value="1"/></p> <p>17. Heads-Up value <input type="text" value="1"/></p> <p>18. Highway affect on tasks <input type="text" value="1"/></p>	<p>19. PCATD types <input type="text" value="1"/></p> <p>20. PCATD uses <input type="text" value="4"/></p> <p>21. PCATD effectiveness <input type="text" value="1"/></p> <p>22. PCATD for new ratings <input type="text" value="2"/></p> <p>23. PCATD obstacles <input type="text" value="3,4"/></p> <p>24. AGATE Training value</p> <table border="0"> <tr><td>Normal OP</td><td><input type="text" value="5"/></td></tr> <tr><td>Abnormal OP</td><td><input type="text" value="4"/></td></tr> <tr><td>Emergency Proc.</td><td><input type="text" value="3"/></td></tr> <tr><td>Missed approach</td><td><input type="text" value="3"/></td></tr> <tr><td>Flt maneuvers</td><td><input type="text" value="3"/></td></tr> <tr><td>Decision making</td><td><input type="text" value="3"/></td></tr> <tr><td>Communications</td><td><input type="text" value="3"/></td></tr> <tr><td>Navigation</td><td><input type="text" value="4"/></td></tr> <tr><td>Other</td><td><input type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0"> <tr><td>PCATD</td><td><input type="text" value="5"/></td></tr> <tr><td>Imbedded trainer</td><td><input type="text" value="5"/></td></tr> <tr><td>Performance based certification</td><td><input type="text" value="5"/></td></tr> <tr><td>Computer record keeping</td><td><input type="text" value="5"/></td></tr> <tr><td>Flt/Control system design</td><td><input type="text" value="5"/></td></tr> <tr><td>Unified curriculum</td><td><input type="text" value="5"/></td></tr> </table>	Normal OP	<input type="text" value="5"/>	Abnormal OP	<input type="text" value="4"/>	Emergency Proc.	<input type="text" value="3"/>	Missed approach	<input type="text" value="3"/>	Flt maneuvers	<input type="text" value="3"/>	Decision making	<input type="text" value="3"/>	Communications	<input type="text" value="3"/>	Navigation	<input type="text" value="4"/>	Other	<input type="text"/>	PCATD	<input type="text" value="5"/>	Imbedded trainer	<input type="text" value="5"/>	Performance based certification	<input type="text" value="5"/>	Computer record keeping	<input type="text" value="5"/>	Flt/Control system design	<input type="text" value="5"/>	Unified curriculum	<input type="text" value="5"/>
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Unified curriculum	<input type="text" value="5"/>																														

26. Situational Awareness

27. Most value

28. Least value

### AGATE Participant Responses

<p>1. Home state <input style="width: 100px;" type="text" value="UT"/></p> <p>2. Rating <input style="width: 150px;" type="text" value="Private Pilot"/></p> <p>3. Instrument rated <input style="width: 50px;" type="text" value="Yes"/></p> <p>4. 12 Months fIt time <input style="width: 50px;" type="text" value="150"/></p> <p>5. Total flight time <input style="width: 50px;" type="text" value="800"/></p> <p>6. Flight Instructor <input style="width: 50px;" type="text" value="No"/></p> <p>7. Own/mng FBO <input style="width: 50px;" type="text" value="Yes"/></p> <p>8. Type fit school <input style="width: 50px;" type="text" value="Part 141"/></p> <p>9. Type of Training <input style="width: 200px;" type="text" value="ALL"/></p> <p>10. # of Airplanes <input style="width: 50px;" type="text" value="50"/></p> <p>11. A/C Flt hours <input style="width: 50px;" type="text" value="150"/></p> <p>12. Capabilities Effect <input style="width: 150px;" type="text" value="50% increase"/></p> <p>13. Main AC type <input style="width: 150px;" type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input style="width: 200px;" type="text" value="Airplane sales"/></p> <p>15. Participation <input style="width: 50px;" type="text" value="Observed"/></p> <p>16. Situation Awareness <input style="width: 100px;" type="text" value="2"/></p> <p>17. Heads-Up value <input style="width: 50px;" type="text" value="1"/></p> <p>18. Highway affect on tasks <input style="width: 150px;" type="text" value="2"/></p>	<p>19. PCATD types <input style="width: 50px;" type="text" value="1"/></p> <p>20. PCATD uses <input style="width: 50px;" type="text" value="1"/></p> <p>21. PCATD effectiveness <input style="width: 50px;" type="text" value="2"/></p> <p>22. PCATD for new ratings <input style="width: 50px;" type="text" value="2"/></p> <p>23. PCATD obstacles <input style="width: 100px;" type="text" value="2,3,8 Cost"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input style="width: 50px;" type="text" value="3"/></td></tr> <tr><td>Abnormal OP</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Emergency Proc.</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Missed approach</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Fit maneuvers</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Decision making</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Communications</td><td><input style="width: 50px;" type="text" value="3"/></td></tr> <tr><td>Navigation</td><td><input style="width: 50px;" type="text" value="3"/></td></tr> <tr><td>Other</td><td><input style="width: 150px;" type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input style="width: 50px;" type="text" value="3"/></td></tr> <tr><td>Imbedded trainer</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Performance based certification</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Computer record keeping</td><td><input style="width: 50px;" type="text" value="3"/></td></tr> <tr><td>Fit/Control system design</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> <tr><td>Unified curriculum</td><td><input style="width: 50px;" type="text" value="5"/></td></tr> </table>	Normal OP	<input style="width: 50px;" type="text" value="3"/>	Abnormal OP	<input style="width: 50px;" type="text" value="5"/>	Emergency Proc.	<input style="width: 50px;" type="text" value="5"/>	Missed approach	<input style="width: 50px;" type="text" value="5"/>	Fit maneuvers	<input style="width: 50px;" type="text" value="5"/>	Decision making	<input style="width: 50px;" type="text" value="5"/>	Communications	<input style="width: 50px;" type="text" value="3"/>	Navigation	<input style="width: 50px;" type="text" value="3"/>	Other	<input style="width: 150px;" type="text"/>	PCATD	<input style="width: 50px;" type="text" value="3"/>	Imbedded trainer	<input style="width: 50px;" type="text" value="5"/>	Performance based certification	<input style="width: 50px;" type="text" value="5"/>	Computer record keeping	<input style="width: 50px;" type="text" value="3"/>	Fit/Control system design	<input style="width: 50px;" type="text" value="5"/>	Unified curriculum	<input style="width: 50px;" type="text" value="5"/>
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<p>27. Most value <input style="width: 400px;" type="text" value="Highway signs"/></p>																															
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### AGATE Participant Responses

<p>1. Home state <input type="text" value="VA"/></p> <p>2. Rating <input type="text" value="Private Pilot"/></p> <p>3. Instrument rated <input type="text" value="No"/></p> <p>4. 12 Months flt time <input type="text" value="0"/></p> <p>5. Total flight time <input type="text" value="200"/></p> <p>6. Flight Instructor <input type="text" value="No"/></p> <p>7. Own/mng FBO <input type="text" value="No"/></p> <p>8. Type flt school <input type="text"/></p> <p>9. Type of Training <input type="text"/></p> <p>10. # of Airplanes <input type="text" value="3"/></p> <p>11. A/C Flt hours <input type="text" value="70"/></p> <p>12. Capabilities Effect <input type="text" value="No change"/></p> <p>13. Main AC type <input type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input type="text" value="Other: Aviation Journalism"/></p> <p>15. Participation <input type="text" value="Flew"/></p> <p>16. Situation Awareness <input type="text" value="4"/></p> <p>17. Heads-Up value <input type="text" value="2"/></p> <p>18. Highway affect on tasks <input type="text" value="2"/></p>	<p>19. PCATD types <input type="text" value="1"/></p> <p>20. PCATD uses <input type="text" value="1"/></p> <p>21. PCATD effectiveness <input type="text" value="2"/></p> <p>22. PCATD for new ratings <input type="text" value="2"/></p> <p>23. PCATD obstacles <input type="text" value="3,4,7"/></p> <p>24. AGATE Training value</p> <table border="0" style="width: 100%;"> <tr><td>Normal OP</td><td><input type="text" value="4"/></td></tr> <tr><td>Abnormal OP</td><td><input type="text" value="3"/></td></tr> <tr><td>Emergency Proc.</td><td><input type="text" value="3"/></td></tr> <tr><td>Missed approach</td><td><input type="text" value="5"/></td></tr> <tr><td>Flt maneuvers</td><td><input type="text" value="2"/></td></tr> <tr><td>Decision making</td><td><input type="text" value="5"/></td></tr> <tr><td>Communications</td><td><input type="text" value="1"/></td></tr> <tr><td>Navigation</td><td><input type="text" value="5"/></td></tr> <tr><td>Other</td><td><input type="text"/></td></tr> </table> <p>25. AGATE Program Importance</p> <table border="0" style="width: 100%;"> <tr><td>PCATD</td><td><input type="text" value="2"/></td></tr> <tr><td>Imbedded trainer</td><td><input type="text" value="4"/></td></tr> <tr><td>Performance based certification</td><td><input type="text" value="4"/></td></tr> <tr><td>Computer record keeping</td><td><input type="text" value="5"/></td></tr> <tr><td>Flt/Control system design</td><td><input type="text" value="5"/></td></tr> <tr><td>Unified curriculum</td><td><input type="text" value="4"/></td></tr> </table>	Normal OP	<input type="text" value="4"/>	Abnormal OP	<input type="text" value="3"/>	Emergency Proc.	<input type="text" value="3"/>	Missed approach	<input type="text" value="5"/>	Flt maneuvers	<input type="text" value="2"/>	Decision making	<input type="text" value="5"/>	Communications	<input type="text" value="1"/>	Navigation	<input type="text" value="5"/>	Other	<input type="text"/>	PCATD	<input type="text" value="2"/>	Imbedded trainer	<input type="text" value="4"/>	Performance based certification	<input type="text" value="4"/>	Computer record keeping	<input type="text" value="5"/>	Flt/Control system design	<input type="text" value="5"/>	Unified curriculum	<input type="text" value="4"/>
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**26. Situational Awareness**

Because the display is continuous, without numbers, you are forced to watch it move, prolonging the division of your attention between panel and outside the airplane

**27. Most value**

It allows much more precise approaches and it is good for navigation. You don't have to constantly check your waypoints and directional indicator.

**28. Least value**

Communications - because it really isn't designed to improve communications. Also, it isn't too good for flight maneuvers and stalls, because it still doesn't fly enough like a real aircraft.

### AGATE Participant Responses

<p>1. Home state <input type="text" value="WI"/></p> <p>2. Rating <input type="text" value="Private Pilot"/></p> <p>3. Instrument rated <input type="text" value="Yes"/></p> <p>4. 12 Months flt time <input type="text" value="150"/></p> <p>5. Total flight time <input type="text" value="1200"/></p> <p>6. Flight Instructor <input type="text" value="No"/></p> <p>7. Own/mng FBO <input type="text" value="No"/></p> <p>8. Type flt school <input type="text"/></p> <p>9. Type of Training <input type="text"/></p> <p>10. # of Airplanes <input type="text" value="1"/></p> <p>11. A/C Flt hours <input type="text" value="200"/></p> <p>12. Capabilities Effect <input type="text" value="25% increase"/></p> <p>13. Main AC type <input type="text" value="Single Piston Engine"/></p> <p>14. Prim Activity <input type="text" value="Other: Hangers"/></p> <p>15. Participation <input type="text" value="Flew"/></p> <p>16. Situation Awareness <input type="text" value="1"/></p> <p>17. Heads-Up value <input type="text" value="1"/></p> <p>18. Highway affect on tasks <input type="text" value="1"/></p>	<p>19. PCATD types <input type="text"/></p> <p>20. PCATD uses <input type="text" value="1"/></p> <p>21. PCATD effectiveness <input type="text" value="2"/></p> <p>22. PCATD for new ratings <input type="text" value="0"/></p> <p>23. PCATD obstacles <input type="text"/></p> <p>24. AGATE Training value</p> <p style="padding-left: 20px;">Normal OP <input type="text" value="5"/></p> <p style="padding-left: 20px;">Abnormal OP <input type="text" value="5"/></p> <p style="padding-left: 20px;">Emergency Proc. <input type="text" value="5"/></p> <p style="padding-left: 20px;">Missed approach <input type="text" value="5"/></p> <p style="padding-left: 20px;">Flt maneuvers <input type="text" value="5"/></p> <p style="padding-left: 20px;">Decision making <input type="text" value="5"/></p> <p style="padding-left: 20px;">Communications <input type="text"/></p> <p style="padding-left: 20px;">Navigation <input type="text" value="5"/></p> <p style="padding-left: 20px;">Other <input type="text"/></p> <p>25. AGATE Program Importance</p> <p style="padding-left: 20px;">PCATD <input type="text" value="5"/></p> <p style="padding-left: 20px;">Imbedded trainer <input type="text" value="5"/></p> <p style="padding-left: 20px;">Performance based certification <input type="text" value="5"/></p> <p style="padding-left: 20px;">Computer record keeping <input type="text" value="5"/></p> <p style="padding-left: 20px;">Flt/Control system design <input type="text" value="5"/></p> <p style="padding-left: 20px;">Unified curriculum <input type="text" value="5"/></p>
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<p>27. Most value <input type="text"/></p>	
<p>28. Least value <input type="text"/></p>	



# REPORT DOCUMENTATION PAGE

*Form Approved*  
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

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<b>4. TITLE AND SUBTITLE</b> Survey Summary of AGATE Concepts Demonstration at Annual NATA Convention Mar. 24-26, 1997, Vol. II - Original Survey Data			<b>5. FUNDING NUMBERS</b> NAS1-19214  Task Assignment 21  WU 538-07-19-01	
<b>6. AUTHOR(S)</b>			<b>8. PERFORMING ORGANIZATION REPORT NUMBER</b>	
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<b>13. ABSTRACT (Maximum 200 words)</b> An AGATE Concepts Demonstration was conducted at the annual National Air Transportation Association (NATA) Convention in 1997. Following a 5-minute introductory briefing, an interactive simulation of a single-pilot, single-engine aircraft was conducted. The participant was able to take off, fly a brief enroute segment, fly a Global Positioning System (GPS) approach and landing, and repeat the approach and landing segment. The participant was provided an advanced "highway-in-the-sky" presentation on both a simulated head-up display and on a large LCD head-down display to follow throughout the flight. A single-lever power control and display concept was also provided for control of the engine throughout the flight. A second head-down, multifunction display in the instrument panel provided a moving map display for navigation purposes and monitoring of the status of the aircraft's systems. An estimated 100 people observed or participated in the demonstration, and 68 surveys were collected. The pilot ratings of the participants ranged from student to Air Transport Rating with an average of 6089 hours total flight time. The overwhelming response was that technologies that simplify piloting tasks are enthusiastically welcomed by pilots of all experience levels. The increase in situation awareness and use of the head-up display were universally accepted and lauded as steps in the right direction.				
<b>14. SUBJECT TERMS</b> Interactive simulation of single-pilot, single-engine aircraft, single lever power control and display concept, moving-map display			<b>15. NUMBER OF PAGES</b> 216	
			<b>16. PRICE CODE</b> A10	
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