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AOPA Survey Summary of AGATE
Concepts Demonstration
October 17-19, 1996

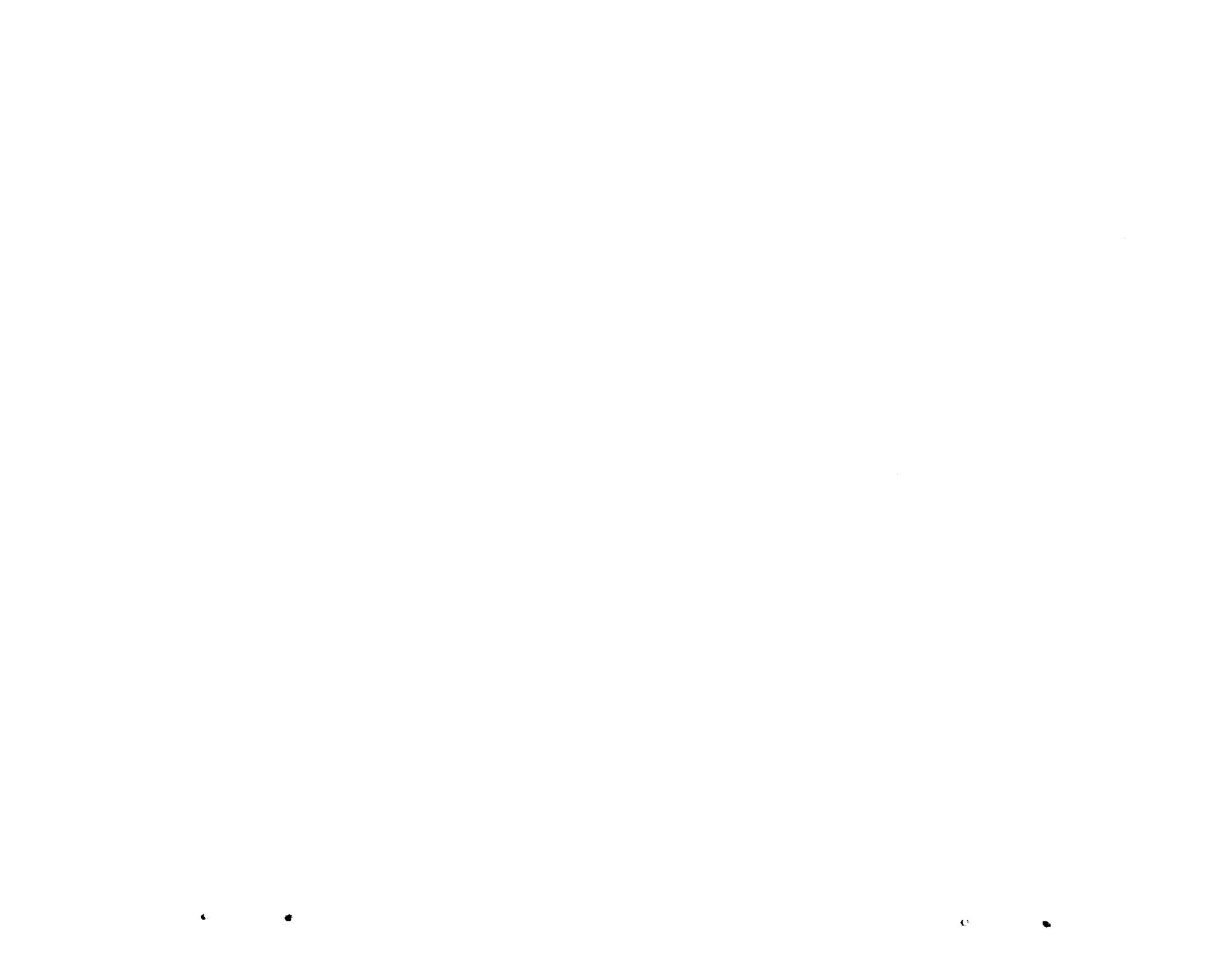
Volume II - Original Survey Data

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Hampton, Virginia 23681-0001



Abstract

An AGATE Concepts Demonstration was conducted at the Annual Aircraft Owners and Pilots Association (AOPA) Convention in 1996. The demonstration consisted of an interactive simulation of a single-pilot, single-engine aircraft in which the participant took off, flew a brief enroute segment and then flew a Global Positioning System (GPS) approach and landing. The participant was provided an advanced “pathway-in-the-sky” presentation on both a head-up display and a 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 352 people observed or participated in the demonstration, and 144 surveys were collected. The pilot ratings of the participants ranged from student to Air Transport Rating with an average of 1850 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 reduction in pilot workload were universally accepted and lauded as steps in the right direction.

1000

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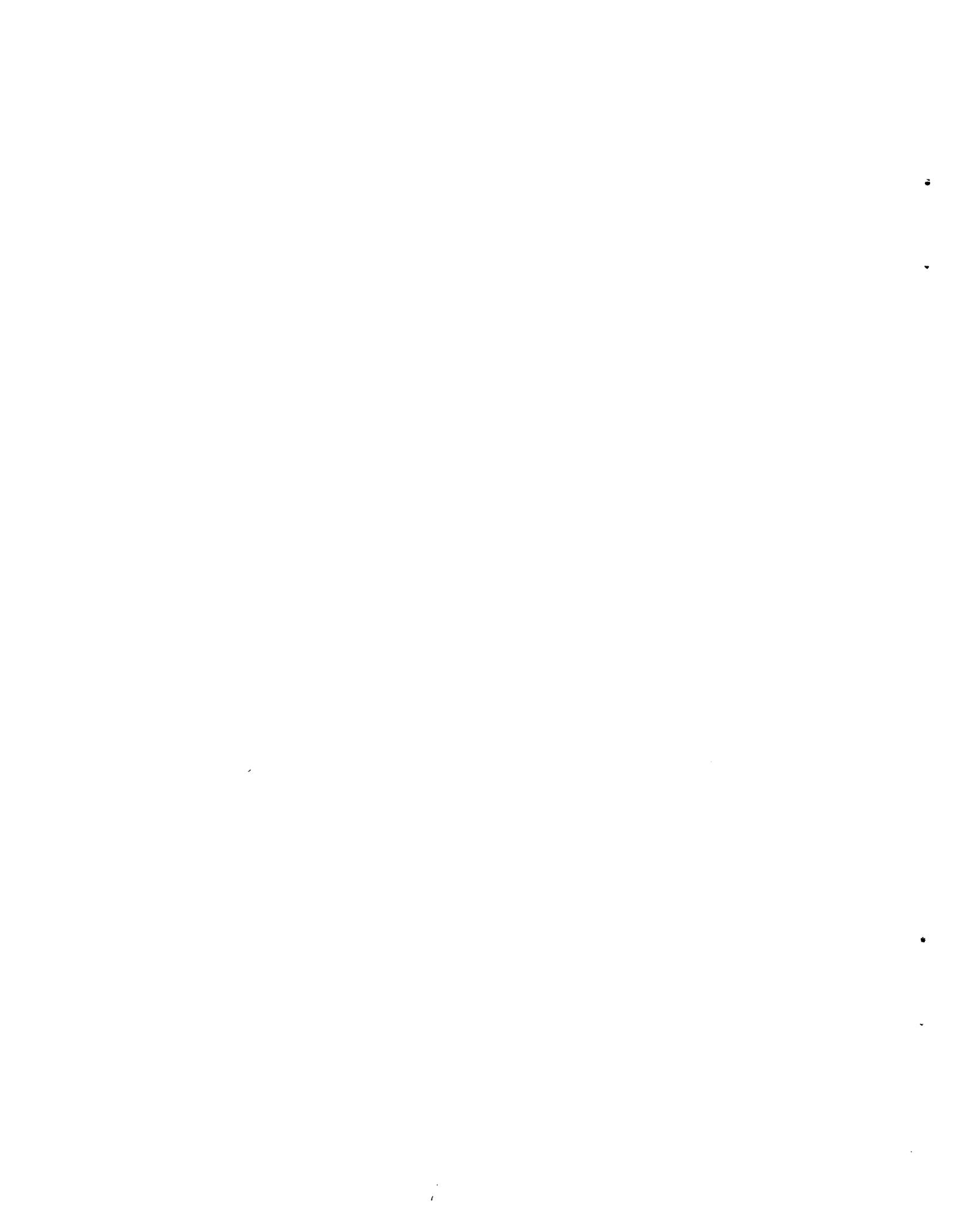
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APPENDIX D

AGATE Concepts Demonstration Original Data

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes - would need some added knowledge

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

In the future young pilots will be very in tune to this type of flying more likely to adapt. The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense. Also for more people flying.

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

Simple is Best

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *Don't think possible.*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *Simplify procedures*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Value to IFR + congested areas.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

1000 ±

How many hours flight time did you log in the last year?:

175

What type aircraft are you currently flying?:

Esper Homebuilt

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Farming

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

*you should be addressing flight procedures for the now ~~12~~ 10-15 yr old - the young adapt!
the older the pilot - the less he adapts, (or harder) but - mentally he needs simplicity.*

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes. As a student pilot I am easily disoriented by flight without reference to the ground.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

More accurate mixture settings for efficiency

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *OK, but not necessary if something like the "highway" is superimposed*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *Much more intuitive than traditional instruments*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *heads up display & GPS with map.*

Solves difficulties with flying in IMC, and getting lost

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why? *Combined attitude indicator/airspeed indicator. Useful still, but not as much as other items*

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?: 50

How many hours flight time did you log in the last year?:

50

What type aircraft are you currently flying?:

peper warrier

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?: programmer

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *reduces margin of error in reduced visibility*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *more intuitive to follow a 'highway' than to 'fly' dials, compass headings*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

*That this technology is available today.
increased learning curve*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

220

How many hours flight time did you log in the last year?:

60

What type aircraft are you currently flying?:

Beech 5-35
Bonanza

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

MD (Psychiatry)

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *EASE OF USE*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *EASE of USE*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *ALL*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why? *NONE*

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

4700

How many hours flight time did you log in the last year?:

55

What type aircraft are you currently flying?:

PA-32T-300

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

OWN A INSURANCE AGENCY

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

PUT AIRSPEED IN

NVD.

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator

or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

YES - I'm a visually oriented person

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this?

Risk reduction

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this?

Better engine life.

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *Less confusion when arriving at a new airport.*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *Reduced work load at a critical phase of flight.*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Single lever power control. It introduces new technology into the engine - which has had little innovation for many years.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Track display - I need to know more about what is in front of me not what's behind me (ie my historic track)

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

125

How many hours flight time did you log in the last year?:

30

What type aircraft are you currently flying?:

Trinidad

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Telephone Center Consultant

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

*No, w/ some exceptions.
Precise altitude awareness is decreased.
Lateral position is increased*

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this?

With some refinements, it could reduce workload.

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this?

Reduced workload due to no prop mixture. it would be better if it had tactile detents for the 5 power settings

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *Reduced possibility of situational awareness errors.*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *Provides lead for rollout onto heading or airway.*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *Hi definition HUD w/ visual depiction of runway environment for low visibility landings.*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why? *Might do above flight path is too coarse. Velocity vector presentation would be helpful. Bank data needs to be more precise.*

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

3000

How many hours flight time did you log in the last year?:

600

What type aircraft are you currently flying?:

C172/C182 (A28-161/181 AC14
C310

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

Flight instructor, author
on aviation human factors

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

Auto flap extension is a good idea, but auto trim adjustment should be included. The pilot does not have to trim away pitch moments created by flaps.

Also, could system automatically ~~reduce~~ adjust trim as airspeed changes are commanded to reduce workload?

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Simplifies information processing

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this? *unknown*

it appears very valuable but I question the pilot's ability to recognize problems with interrelated activities

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Reduce independent evaluation process & improve pilot confidence

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

It would make navigation less technical & therefore more comfortable & effective for less competent/newer pilots.

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot *Student*

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

4 hours

How many hours flight time did you log in the last year?:

NA

What type aircraft are you currently flying?:

Cessna 182

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

business woman

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

YES, GRAPHICS REDUCE MANUAL PROCESSING TIME.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

CLARITY OF FLIGHT POSITION INFORMATION

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

REDUCED PILOT WORKLOAD

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

CONSISTENCY OF COCIRIT STEPS + ORGANIZATION

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

PLEASEING DISPLAY OF POSITION.

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

CLARITY OF GRAPHICS POSITION AWARENESS

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

1000

How many hours flight time did you log in the last year?:

150

What type aircraft are you currently flying?:

C182

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

BUSINESS OWNER

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

1) A BRIEFING HANDOUT
WOULD BE HELPFUL

2) VERY GOOD STAFF TO
GIVE PROJECT ORIENTATION.

3) A VIDEO DEMO OF
WHAT YOU'LL SEE INSIDE
DEMONSTRATOR WOULD BE
HELPFUL.

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

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The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *It would keep things simple*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *It keeps you on course at all times, and eliminates questions about location*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *Ease of use. It makes the plane almost as simple to use as a car.*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why? *None. I liked all of the concepts*

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?: *N/A*

Private pilot

Instrument

Commercial

CFI

ATP

Still studying

How many total hours flight time have you logged?:

about 10

How many hours flight time did you log in the last year?:

about 9

What type aircraft are you currently flying?: *N/A*

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?: *Sales*

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator
or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Seeing is believing

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years *Don't know*
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

It's easy!

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

1000+

How many hours flight time did you log in the last year?:

180

What type aircraft are you currently flying?:

AG-5B/A

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Teacher

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

*Develop this ASAP & I'll
become instrument rated.*

AGATE Concept Demonstrator Survey

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The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

IFR Flying I believe would be easier

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

Simplicity Rules

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Standardization

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

its easier to understand where you're supposed to be

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

How many hours flight time did you log in the last year?:

What type aircraft are you currently flying?:

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

YES, ABSOLUTELY; THE ROAD IS A great concept. Maybe I would forget where the airport is but not the road!

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

I think the simpler aircraft are to fly, the greater utilization will be achieved. The easier it is the more likely I'll do it.

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

This is the most bizarre area of flying - so many weird procedures and folklore to managing power.

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *If this could be achieved without compromise in minimums OK, but otherwise, let them vary.*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *Most of us only have a dim view without GPS of where we are. The highway would completely resolve this, though my altitude info was weak.*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

- 1) highway*
- 2) Single power control*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

It's all valuable.

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

1700

How many hours flight time did you log in the last year?:

150

What type aircraft are you currently flying?:

Cessna 310

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

electrical engineer
Vice President engineering

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

This is really a great program. Thanks!

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Integrated, need for automatic alert of system failure

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

3600

How many hours flight time did you log in the last year?:

250

What type aircraft are you currently flying?:

TL5, mooney

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

TAX ATTORNEY

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?
It heads up yes. Flight path gives visual feedback

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this?

In non standard conditions I question the flexibility

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? standardize approach in crease safety

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Highway in sky unified GPS approach

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

single stick control

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

500

How many hours flight time did you log in the last year?:

100

What type aircraft are you currently flying?:

Maule -5-235
on floats

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

Sales Manager

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

OF COURSE. YOU ARE GIVEN A VISUAL PART W/ VISUAL QUES TO POWER ADJUSTMENTS, "FLY UP" & "FLY DOWN" ARE OBVIOUS.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this? *EASIER TO FLY "SITUATIONALLY" RATHER THAN INSTRUMENT INTERPRETATION*

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this? *NO OVER RICH, ENGINE ROUGH SITUATIONS*

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *UNIFORMITY. EASIER TO LEARN 1 UNIVERSAL "APPROACH" THAN ILS, NDB OR,*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *EASIER TO "FLY" THE HIGHWAY - OFF COURSE - ON COURSE CORRECTIONS HAVE VISUAL QUES.*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *HIGHWAY W/ ROAD SIGNS. EASIER TO FLY. SEE ABOVE ANSWER.*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

EVERYTHING LOOKED GOOD. I'D SACRIFICE THE SINGLE LEVER POWER CONTROL IF I HAD TO TO MAKE UNIT AFFORDABLE.

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

600

How many hours flight time did you log in the last year?:

75 (I WAS ill)

What type aircraft are you currently flying?:

C 172 / PA28-180

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

Attorney

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

GET THESE DEMONSTRATORS
OUT TO THE GEN. AV.
PUBLIC —

It's Unbelievable!

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

YES - HEADS-UP DISPLAY VERY NICE - VERY EASY TO FLY

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?: YES

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

LIMITS HEAD MOVEMENT IN COCKPIT - WORK LOAD REDUCED.

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you:

An increase in value over present general aviation aircraft systems?: YES

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

*ALL CONTROLS @ FINGERTIPS
LESS MOTION IN COCKPIT TO LOCATE
NEED NO EYE CONTACT.*

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *OBVIOUS - VERY EASY TO LEARN & STANDARDIZE PROCEDURES OPERATOR KNOWS WHAT TO EXPECT.*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

*EYE/HAND CO-ORDINATION
VERY GOOD*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

*SINGLE ~~PILOT~~ PILOT
CONTROLS - HEADS-UP DISPLAY*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

4000

How many hours flight time did you log in the last year?:

250

What type aircraft are you currently flying?:

A36

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Retiree

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

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Did you fly the concept demonstrator or observe?

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YES; NEED TO SEE REAL-WORLD THROUGH THE DISPLAY

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

INTEGRATED OUT-THE WINDOW VIEW WITH INSTRUMENTATION

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you:

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

MORE EFFICIENT ENGINE MANAGEMENT.

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?
EACH AREA HAS DIFFERENT TRAFFIC FLOW REQUIREMENTS, THEREFORE NEEDING DIFFERENT APPROACHES.

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

BETTER SITUATIONAL AWARENESS

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

*INTEGRATED INSTRUMENTATION
 BETTER SIMPLER PROCEDURES*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

RELUCTANCE BY MANUFACTURES TO OFFER THESE "AUTOMATED" PRODUCTS DUE TO THEIR ADDED LIABILITY EXPOSURE FROM CHANGE.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

~ 7,500

How many hours flight time did you log in the last year?:

250

What type aircraft are you currently flying?:

MOONNET 201
CESSNA 172

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

STUDENT - CAREER CHANGE
FORMER SIMULATION INSTRUCTOR.
SOFTWARE/NETWORK ENGINEER

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

I WOULD LIKE TO HAVE YOU/IT AT OUR NEXT "SUPER SAFETY SEMINAR" THAT WE ARE DOING IN SAN DIEGO. WE USUALLY HAVE ~ 800 TO 1200 PILOTS ATTEND. I BELIEVE THAT IT IS SCHEDULED FOR THE SEP/OCT 97

TIMEFRAME:

BILL SANDERS
815 AVENIDA MADERA
CHULA VISTA, CA.
91910-6235

VOICE MAIL: (619) 685-9921

72557.3212 @

COMPUSERVE.COM

PLEASE COME!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator
or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

~ 800

How many hours flight time did you log in the last year?:

~ 100

What type aircraft are you currently flying?:

C172, G200B SAMPLES

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?: COMPUTER SYSTEMS ARCHITECT

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator
or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

visual cues identify actual Flight path info and it clearly improved "situational awareness". Perhaps maybe too much!

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

*Don't have to split your attention between two different views
→ paradigm is the same regardless of weather*

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

simpler obviously

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
2 years 7 years *it won't*
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

standardization, but the original procedure turns were supposed to do this, and that got changed a lot -

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

Don't have to fuse disparate info from steam gauges -

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

*The "highway in the sky"
→ see previous comment*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

The throttles were going to change anyway.

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

1600

How many hours flight time did you log in the last year?:

0

What type aircraft are you currently flying?:

310

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?: Aerospace
ENGINEER

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not? **YES.**

GOOD VISUAL INDICATION OF POSITION + DESIRED FLIGHT PATH

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this? **EASIER TO FLY + FEWER CHANCES FOR ERROR**

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this? **REDUCED MAINTENANCE COSTS FROM LEAN BURN INDUCED ENGINE DAMAGE**

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? **STANDARDIZED APPROACHES**

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? **VISUAL REPRESENTATION IS EASIER TO INTERPRET**

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

How many hours flight time did you log in the last year?:

What type aircraft are you currently flying?:

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

MECHANIC

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not? *DEFINITELY*

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *DISPLAY CONCEPTS*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why? *?*

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?: 500+

How many hours flight time did you log in the last year?: 0

What type aircraft are you currently flying?: NOT CURRENT

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

yes because my attention would be focused on the outside world with instrument feedback.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Reduces eye fatigue and saves time for scanning instruments

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

It would alleviate the need to search for instruments. It's naturally placed where hands rest.

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *It would be easy to translate familiarity of airports to other airports.*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *People can relate to "lanes" from driving. So, adoption and time to proficiency would be reduced.*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Auto adjusting airspeed.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Couldn't think of any!

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Student Pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

N/A

How many hours flight time did you log in the last year?:

N/A

What type aircraft are you currently flying?:

Cessna 176

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

Computer Industry

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Conce: Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

yes - as long as a pilot doesn't get disoriented by flying a path through clouds - it increases awareness

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Watching terrain, traffic and attitude are primary to safe flight

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

less bother

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Variety improves awareness and skill

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

less pilot workload - more awareness of the situation

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Heads up display - more awareness

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

none

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

130

How many hours flight time did you log in the last year?:

65

What type aircraft are you currently flying?:

C-152

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

Sales

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?
Intuitive

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?
Reduces work load

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?
Consistency

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?
Reduces scan info but I'm not sure the concept has been optimized yet

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Being me up to date on latest technologies.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

18500

How many hours flight time did you log in the last year?:

80

What type aircraft are you currently flying?:

Bonanza G33

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Retired

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

yes, easy to visualize

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *safer*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot *Student*
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

28

How many hours flight time did you log in the last year?:

28

What type aircraft are you currently flying?:

152

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Computer Consultant

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

yes! provides an easy to visualize spatial orientation

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Keeps the pilot outside the airplane

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

Ease of use

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Standardization

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

All the information is concentrated in front of you and computed for you

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

200

How many hours flight time did you log in the last year?:

10

What type aircraft are you currently flying?:

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Information Systems consultant

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The graphical path was useful but should not dominate the screen.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

HEADS UP ALLOW FOR INCREASED SCANNING OF THE SURROUNDINGS YOU DON'T HAVE TO RE-FOCUS FROM THE INSIDE/OUTSIDE

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

While removing the pilot from some decision making it would simplify the task & reduce chance for error

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

EACH AIRPORT IS DIFFERENT & SHOULD'NT ALL BE THE SAME.

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

Switching back between maps to instruments to outside view while navigating can be taxing. The ability to follow a graphical path would reduce workload.

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Workload reduction. Keeping balance in workload

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:
130

How many hours flight time did you log in the last year?:
60

What type aircraft are you currently flying?:
SEL

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:
ENGINEER

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

While following the path allowed the pilot to make a very precise approach it also seemed to have him fixate on that task. ATC and other traffic would require some sharing of cognitive resources.

The addition of VSI info and a path predictor display would also be helpful.

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes. In IMC conditions, this makes the conceptualization of my location and position much easier than in normal systems.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this?

Keeps your head up to stay aware of external reference points.

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this?

Simplification and optimization of settings

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?
Airport-specific knowledge no longer becomes mandatory for IMC landings.

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?
See answer #1.

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Heads-up display will make getting on IFR routes not only easier, but more desirable as well. Will reduce fear of flying IFR.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

90

How many hours flight time did you log in the last year?:

10

What type aircraft are you currently flying?:

Cessna 152-172

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Management consultant

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

If marketed correctly, this could really open up demand for pilots licenses in GA when people ~~see~~ (especially younger people) see the real relationship between this system and the video games they've been playing all their lives.

This will also spur movement toward standardized GPS approaches.

Thanks. Good luck.

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

YES - but what happens if I accidentally fly away from the green path? How do I find it again?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

MORE INTUITIVE.

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

less things to worry about and do wrong.

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *Simpler*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *But watch out about losing special orientation and just "following the green line" to nowhere.*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

"Visual" (although computer generated) reference to the ground and to the airport - a quick confirmation that I am heading in the right direction.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

How much programming will I need to make the green line do what it should. It feels like if I blink I will be way off course - too sensitive.

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

4000

How many hours flight time did you log in the last year?:

150

What type aircraft are you currently flying?:

BE90 KING AIR

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

FINANCE

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

Bank and pitch indications are deficient - No representation of Rate of desc. or climb. Also you need to show pitch attitude or speed vector for level flight so the pilot will always know where "center" is.

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator
or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes, increases the time available to look outside.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years *Don't know.*
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? Consistent and easy to use. Reduce confusion and errors

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Ease of use, and being able to learn much quicker will open GA to a much broader population

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

110

How many hours flight time did you log in the last year?:

110

What type aircraft are you currently flying?:

Piper Warrior Arrow

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?: Sales

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

I enjoyed seeing new thoughts on improving on what is essentially 30 year old technology presently in use. I doubt whether the required infrastructure changes (ATC, airports, aircraft) can be made in the near future but it provides a roadmap to put pieces in place in a consistent manner.

My initial impression is that it would take the "fun" out of flying because as a pilot I enjoy the complexity of the tasks of flying today. However, it will be necessary to make this kind of changes in order to open up GA and turn it into a real transportation alternative rather than a hobby.

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes - at a lower workload - but I didn't have the other "reference" info or numbers to check performance/trends.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this?

Safety in IFR

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this?

engine longevity/economy

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *Consistency would improve safety - but is this possible with respect to terrain?*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *But! - do we always want easier? - I do in IFR conditions - but not all the time.*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *HUD - for safety in IFR
Single lever power control - for engine longevity/economy*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why? *Isolation from traditional information workload/overload - as long as I'm not going to endanger life or limb - I like the challenges of integration.*

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
Instrument
Commercial
CFI
ATP

How many total hours flight time have you logged?:

800

How many hours flight time did you log in the last year?:

30

What type aircraft are you currently flying?:

Cessna 182

How much formal education have you completed?:

- High School:
Undergraduate College Degree:
Post Graduate Degree:
Trade School/professional training:

What is your current profession?:

Paramedic / Firefighter

What is your income level?:

- up to \$50,000 per year
\$50,000 to \$100,000 per year
\$100,000 to \$150,000 per year
over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

I think this is a great concept and a good direction for us to be heading - but - I can't afford to fly the antiquated technology I do now - how am I going to afford this new technology. I can just barely afford a share in an old 182 now, I could not afford a new production 182 with the old technology they are manufacturing now. How could I afford a new airplane with this advanced technology? **(IF)** This could be made available at a very low cost ~~if~~ it will bring more people (the "Nintendo" crowd) to aviation. But they think the \$3000+ that it costs now to get the license is too much.

VERY IMPRESSIVE demonstration - thank you very much for making this display available.

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Absolutely! Situational awareness primarily - engine systems secondary

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this? *Decrease in information*

overload

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this? *Decrease in cost Improved*

Quality of engine interaction

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *Like standard user interface*
Line standard user interface
computers and facilitate learning

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *More integrated flight management flight mtg.*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Approach/departure highway in sky

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Engine in instrument

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

400

How many hours flight time did you log in the last year?:

20

What type aircraft are you currently flying?:

C-122

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Policy Analyst

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

I found it very impressive + well-focused. Concepts would seem universally attractive.

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator
or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

*more efficient
better for engine life
less time + distraction for pilot*

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *less chance for errors*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

safety + proficiency

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

*if you only follow the roadway
you could ~~lose~~ lose situational awareness*

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

500

How many hours flight time did you log in the last year?:

100

What type aircraft are you currently flying?:

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

34

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

YES - Easy to read

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Easier to fly

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

Easier to fly and know to fly.

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

only for local flights - would be irritating for cross country.

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

SLPC

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

No response

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

— 0 —

How many hours flight time did you log in the last year?:

— 0 —

What type aircraft are you currently flying?:

— 0 —

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

Flight instructor

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:
 An increase in value over present general aviation aircraft display systems?:
 No increase in value over present general aviation aircraft display systems?:
 A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?
GREEN / RED as well as position UP DOWN / L/R

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you:
 An increase in value over present general aviation aircraft systems?:
 No increase in value over present general aviation aircraft systems?:
 A decrease in value over present general aviation aircraft systems?:

Why do you believe this?
no deviation of ~~and~~ concentration on in RICHING-UP MIXTURE ON DECENT

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?
OPTIMIZATION \neq STANDARDIZATION RATHER THAN DEPENDANCE ON OBSOLETE INFO
 Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?
SAME

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

ULTIMATE IN THEORETICAL ERGONOMICS

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

*① SAFETY \neq
 ② LOWER COST OF TRAINING
 ③ REDUCED PILOT ERROR*
 Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

How many hours flight time did you log in the last year?:

What type aircraft are you currently flying?:

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator
 or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Increase

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?
More awareness of Septines

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?
Safer and easier

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?
Much easier to follow

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Highway in the sky

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

200

How many hours flight time did you log in the last year?:

50

What type aircraft are you currently flying?:

Piper

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

YES HEADS UP, ROAD SIGNS, STANDARD VIEWING AREA

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

TERRIFIC FEEDBACK SYSTEM

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

MODERATE improvement

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? SMALLER PLANES still don't need long approach

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

GREAT feedback on EVERY AXIS, MUCH LIKE DRIVING

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

THE HIGHWAY

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

SINGLE LEVER

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

< 100

How many hours flight time did you log in the last year?:

20

What type aircraft are you currently flying?:

PIPER ARCHER

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Computer mgr.

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

I'm not sure. Part of my problem was a lack of knowing exactly what I was doing & what I needed to concentrate on.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this? *IT MOST LIKELY would but w/o spending more time on your system I CANT SAY.*

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this? *with my 231 I have several knobs & several gauges to adjust. one knob - 16 vage would be easy*

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

I CANT ANSWER THIS - I need to LOOK AT COST VS VALUE -

1 year	<input type="checkbox"/>	5 years	<input type="checkbox"/>	<i>not a payback period - safety is also an issue that may TAKE precedence over any added costs</i>
2 years	<input type="checkbox"/>	7 years	<input type="checkbox"/>	
3 years	<input type="checkbox"/>	10 years	<input type="checkbox"/>	
		longer	<input type="checkbox"/>	

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *safety is heightened greatly by having less to do / know. doing the same approach over & over = ↑ safety with ↑ repetition*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO ???

Why? *this was hard for me to fly because I don't do it. If that's what I learned then it would / should be very easy. BUT should flying airplanes become no thing more than videogames?*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *simplifying scan & info processing - w/ Today's GPS & A/P. etc. Flying in good wx or good IFR is simply managing systems - The crunch comes when there are emergencies & decisions must be made instantaneously*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

I'm not sure - The current instruments ALL relate to the "Feel" of an airplane in the actual environment - what you have does not enhance this - eg. Airspeed being nothing but a #. on my plane a high airspeed is a needle at top of relationship gauge - low is on bottom - A relationship is there

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

4300 +

How many hours flight time did you log in the last year?:

200-300 Hrs

What type aircraft are you currently flying?:

mooney 231

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree: 2-MAS
1-PhD
- Trade School/professional training:

What is your current profession?:

college professor
businessman - investor -
mag writer/editor/publisher -
real estate developer

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

I have some safety concerns with turning all info input into a single FIAT glass panel format. needles & gauges show relationships, ratios, etc. glass panels only show immediate situations - NOT trends - perhaps these relationships can be retained cognitively but in dire circumstances this trend/relationship info may become very important for decision making.

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

Reduces pilot load and shows positional awareness based on display

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Takes the risk out of the act of flying

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

All Excellent

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

900+

How many hours flight time did you log in the last year?:

250+

What type aircraft are you currently flying?:

MOONEY

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

PHYSICIAN

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

Excellent concept
and great
improvement in
CA.

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

YES. IN ACTUAL YOU WOULD BE ABLE TO SEE DIGITAL SURROUNDINGS

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

BETTER VISUAL ATTITUDE

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

PREVENTING ERRORS IN LEVER CONTROLS

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

FAMILIARITY.

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

DEPENDS. YOU DONT WANT TO RELY ON THE SIGNS - THERE MIGHT BE TIMES WHEN YOU HAVE TO DO IT DIFFERENTLY.
 What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

FUTURE TECHNOLOGY TO LOOK FORWARD TO OR TRAIN FOR

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

AFFORDABILITY

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

120 HRS

How many hours flight time did you log in the last year?:

10

What type aircraft are you currently flying?:

C182

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

FAA AIRPORT PLANNER

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

~~_____~~
MORE ADVANCED TRAINING
ON THE CONTROLS.

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

HUD keeps the pilots eyes out of the airplane where they belong.

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you:

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this? *K.I.S.S.*

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

To allow airports with terrain/obstacle limitations to still have useful (lower) minimums

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

Less ambiguity, especially if they can be integrated with ATC vectors/traffic avoidance in congested airspace.

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

*Moving map display - "The big picture"
 But I would also like to see vert. profile information within the same.*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

No rudder pedals!! I want to control the airplane in each axis - especially short final/rollout.

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

925

How many hours flight time did you log in the last year?:

60

What type aircraft are you currently flying?:

BE-60, PA-32R, C-177RG, C-17Z,
C-150

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Advertising Rep

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

I think that you are doing extremely important research that will improve aviation safety / accessibility.

I personally feel that the AGATE philosophy as I understand it goes to far in the following way:

Aviation will always demand a considerably greater amount of training and expertise than other means of transport.

Although the information systems aboard GA aircraft are seriously antiquated, the need for keeping the pilot in the flight control loop will always be vital. The greater the automation, the greater the propensity for apathy and complacency, and I think that the best contribution AGATE can make is in simplifying flight information systems (navigation and communication), while leaving stick, rudder, and throttle alone.

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this?

LOWERS WORKLOAD

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this? *BETTER ENGINE*

MANAGEMENT

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *LOWER COST. LESS WORK
UPDATING CHARTS.*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *LESS INFORMATION TO
SHORT THROUGH, etc.*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *HEAD UP DISPLAY.*

*ELIMINATES INST. SCAN, NEED
TO INTERPRET. INST. AND. FLY
AIRCRAFT.*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why? *LACK OF INST.*

*BACKUP. IN EVENT OF PWR.
FAILURE. WHAT ARE YOUR OPTION.*

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

2500

How many hours flight time did you log in the last year?:

250+

What type aircraft are you currently flying?:

T-210

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

CONTRACTOR

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

NEED FULL MOTION!

OPTION TO REVERSE
POWER - CONTROL STICK.

TOO SENSITIVE. NEED VOICE
PROMPTS SINCE PILOT WILL

FIXATE ON CRT DISPLAY

FLIGHT IS TO START TO
BECOME FAMILIAR WITH
AIRCRAFT CHARACTERISTICS.

PILOT'S WILL NEED INST.

BACK UP. ~~NO~~

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:
little
 An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?
NEED TO INCORPORATE ONLY SOME OF THE FEATURES

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you:
 An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?
I WOULD BELIEVE THE COSTS WOULD INCREASE FOR MAINT, REPAIR/REPLACE OF PARTS OVER A SIMPLE FOOLPROOF CABLE SYSTEM WHICH IS ABOUT AS MAINT FREE.

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *A PILOT WOULD LIKE A VARIATION TO MAKE IT MORE INTERESTING (A BUS DRIVER GETS TIRED OF GOING ON THE SAME ROUTE)*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

APPROACH - IT WOULD MAKE IT EASIER.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

*THE VIDEO FEATURE
 IT IS LIKE FLYING A VIDEO GAME*

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

~16000

How many hours flight time did you log in the last year?:

275

What type aircraft are you currently flying?:

PIPER PA-34

MAULE M-5-210

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

AERONAUTICAL ENGINEER

FAA DER/DAR

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this? *ALL NEEDED INFO IN ONE PLACE - PRESENTED IN FORM NATURAL FOR HUMAN EYE/ BRAIN.*

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this? *CONSIDER ~~POWER~~ SPEED CONTROL MARKER THAN POWER. LET THE COMPUTER SET THE POWER.*

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *SIMPLE ONE APPROACH PROCEDURE. ALLOW ALTERNATIVES FOR TRAINING*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *KEEP PLANES AHEAD W/OUT RADAR AND ATC*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *EASY "INSERTMENT" TRAINING*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

700

How many hours flight time did you log in the last year?:

100

What type aircraft are you currently flying?:

BE:4 B367C

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Investor

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

TRY IT W/ NON PILOTS:

KEEP IMPROVING TILL

ITS EASY FOR ANYONE!

ADJUST JOY STICK FOR
WEAKER SPINES.

CONSIDER PERIPHERAL
VISION CUES FOR
HORIZON.

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

yes - but the level of "help" needs to be adjustable.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this?

The Instrument Scan is distracting enough, and when in & out of the clouds the workload increases.

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this?

I am frequently referring to power charts & interpolating power settings

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *NO "I don't have the charts" problem. (NO \$\$\$ for annual Jepp updates).*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *Yes and NO. I would want more options in the granularity of the Highway. Maybe in x-country the "road" could be at one-mile intervals.*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Approach & Ldg. "highway"

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Auto flaps - or at least a manual override.

Need trim feedback.

Need more info in the HUD

Please provide the optional information on the back of this form. *(G.S., Airspeed, winds)*

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

1100

How many hours flight time did you log in the last year?:

100

What type aircraft are you currently flying?:

C-177 cardinal

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

PC-Guru

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

Joystick is too tall -

Spring tension too heavy -

Should be proportional

to reflect a feedback

similar to cabled controls.

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes. It forces you to remain close to flight path.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

Much easier to operate.

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *Less chance for an error in poor conditions.*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Makes navigation easier.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Distracts from ability to sight see.

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

How many hours flight time did you log in the last year?:

What type aircraft are you currently flying?:

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

less distracting - better awareness of flight path

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Ease of use - better situational awareness

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

How many hours flight time did you log in the last year?:

What type aircraft are you currently flying?:

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes - It is easier to compare the data.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this?

It better represents the situation the aircraft is in.

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you:

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this?

Allows the pilot to concentrate more on flying

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Simplicity = safety

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

Makes navigating easier. Problem is "what happens if you lose sight of the highway"

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Simplicity. Less things to look at.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

It all is good. I'm concerned about how expensive it might be

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

1300

How many hours flight time did you log in the last year?:

5

What type aircraft are you currently flying?:

PA 28-181

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Manager, Tech support

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

This system shows a lot of promise. Cost and reliability will determine its success.

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes. Minimizing pilot workload raises his/her ability to recognize subtle problems that could get big.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Safer, less stress, especially when flying with non-pilot guests.

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

Simple is nice but the extra system complexity would probably be dangerous.

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

One approach makes it easier. A couple of choices would be okay also.

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

No thinking. Just fly the road or boxes.

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Automatic communication with ground systems (towers, ATC, weather info, PIREPs)

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
Instrument
Commercial
CFI
ATP

How many total hours flight time have you logged?:

200

How many hours flight time did you log in the last year?:

10-15

What type aircraft are you currently flying?:

Archer

How much formal education have you completed?:

- High School:
Undergraduate College Degree:
Post Graduate Degree:
Trade School/professional training:

What is your current profession?:

Eng. Mngr at an electronics company.

What is your income level?:

- up to \$50,000 per year
\$50,000 to \$100,000 per year
\$100,000 to \$150,000 per year
over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

- Focus on easy to read, intuitive, numberless displays.
- Don't increase systems complexities. Instead focus on integrating more things together (fewer wires & hoses to break).

- Long overdue. Let's get this system in place.

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes. Same reason that windows work better on PC's -> Graphical Display = Better Info

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?
See above

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *Less variables = fewer accidents*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *IFR conditions*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Better situational awareness thru graphic displays.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Need additional safeguards against lightning strikes / electrical problems.

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

How many hours flight time did you log in the last year?:

What type aircraft are you currently flying?:

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes!

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

*Highways in the sky
w/ landmarks illuminated.*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

*All glass panel,
logitech = ESD = no ICS =
no computer (blank screens)*

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

None

How many total hours flight time have you logged?:

0

How many hours flight time did you log in the last year?:

0

What type aircraft are you currently flying?:

Ø

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- ~~Post~~ Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Director

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator
or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Increase

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

1400

How many hours flight time did you log in the last year?:

150

What type aircraft are you currently flying?:

Piston Singles and Twins

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

CFI / Business Owner

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *EASIER*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *ABLE TO SEE*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

How many hours flight time did you log in the last year?:

What type aircraft are you currently flying?:

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Keep head downtime to a minimum

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

much simpler

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Much easier to learn.

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

*FOLLOW THE ROAD TO THE BEST FLIGHT PATH.
NEED TO ADD SOMETHING TO STEER YOU BACK TO THE PATH IF YOU GET OFF IT.*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

ALL. I have only taken a few introductory flights and find this much easier to fly.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?: *NONE*

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

3

How many hours flight time did you log in the last year?:

3

What type aircraft are you currently flying?:

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

MARKETING/NEW BUSINESS DEVELOPMENT

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

What would a low time pilot do if the system failed?

Should add the backup instruments to the demonstrator at some points.

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

SLIGHTLY INCREASED TO CONCENTRATION ON DISPLAYS TOO MUCH.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this?

KEEPS HEAD OUT OF COCKPIT

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

I'M NOT SURE THAT THE DISPLAY USED IS OPTIMAL. A "FLIGHT DIRECTOR" MAP SCHEME WOULD HELP TO SHOW WHEN THE PROPER CORRECTION

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

*DISPLAYS
SITUATIONAL AWARENESS*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

6000+

How many hours flight time did you log in the last year?:

600

What type aircraft are you currently flying?:

734

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

ENGINEER

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

I HAD A WRONG
 IMPRESSION OF WHAT
 THE POWER LEVER
 WOULD DO DURING
 THE DEMO. YOU
 STILL WERE TO USE
 THE THROTTLE IN A
 CONVENTIONAL FASHION

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

YES - INCLUSION OF HIGHWAY & TERRAIN FEATURES GIVE EXACT IMAGE OF POSITION WRT DESIRED PATH.

NO METAL COMPUTATION NECESSARY

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

PRESSENT DIGITAL/ELECTRONIC SYS ARE REPRESENTATIONS OF PRIOR "STEAM GAUGES" & REQUIRE SOME MENTAL INTEGRATION.

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you:

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *STANDARDIZATION OF PROCEDURES*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *GIVE PRECISE LOCATION WRT DESIRED/PLANNED PATH - GIVES PRECISE LOCATION OF POINT OF DESCENT, etc.*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

- *SINGLE LEVER CONTROL*
- *HIGHWAY IN THE SKY COUPLED W/ DESIRED FLT. PATH & ACFT PERF. INFO.*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

ALL APPEAR TO ADD VALUE. COST WILL DETERMINE UTILIZATION.

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

5680

How many hours flight time did you log in the last year?:

15

What type aircraft are you currently flying?:

SENECA

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

PRESIDENT, SMALL AVIATION CO.

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

NASA IS TO BE CONGRATULATED FOR FUNDING THIS FAR-SIGHTED EFFORT TO MAKE FLYING SAFER, EASIER TO LEARN & LESS COSTLY.

THE SUCCESSFUL INTEGRATION OF THIS TECHNOLOGY IN FUTURE GA AIRCRAFT WILL INCREASE UTILIZATION OF SMALL GA AIRPLANES AS SHORT/MID-RANGE TRANSPORTATION VEHICLES.

THE INCREASED UTILIZATION WILL FURTHER REDUCE THE COST OF FLYING BY INCREASING AFT PRODUCTION WHICH WILL LOWER UNIT PRODUCTION COST & HENCE CUSTOMER PURCHASE PRICES

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

WHAT HAPPENS WHEN ELECTRONICS FAIL?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this? **HEAD UP DISPLAY APPEARS TO REDUCE FORWARD VISIBILITY AND REMOVE SOME OF THE FEELINGS OF FLYING I FOUND GREEN LINE IRRITATING. → WOULD PROBABLY BE SAFER ON APPROACH TO MINIMUMS AND FOR NON-REGULAR PILOTS INFREQUENT FLYERS**

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this? **DON'T HAVE TO FOOL WITH LEANING**

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? **STANDARDIZATION**

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? **2 → DON'T WANT TO SPEND 3 OR 4 HOURS IN CROSS COUNTRY FLYING LOOKING AT GREEN LINE**

→ GOOD FOR APPROACH BUT WHAT ABOUT SEVERAL AIRPLANES IN PATTERN

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

SIMPLIFIED CONTROLS AS LONG AS SUFFICIENT BACKUP WHEN STUFF STARTS TO FAIL AND IT WILL.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

MORE INFORMATION SIMPLY PROCESSED.

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

3400

How many hours flight time did you log in the last year?:

200

What type aircraft are you currently flying?:

MOONEY QUATION

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?: *MARKETING / ADVERTISING*

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

5000

How many hours flight time did you log in the last year?:

200

What type aircraft are you currently flying?:

B-32

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

Pilot

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator
or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

yes

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

300

How many hours flight time did you log in the last year?:

200

What type aircraft are you currently flying?:

B36

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

yes

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Eyes out of cockpit focused @ ∞ but w/observability to critical parameters leads to great S.A.

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

simplicity... spare neurons available for other critical tasks

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *Again simplicity & predictability*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *Continuous feedback of course status.*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *Holo T.S.*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

400

How many hours flight time did you log in the last year?:

—

What type aircraft are you currently flying?:

—

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Aerospace Engineer

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

Pilot control feel system would obviously not be what was demonstrated which was not desirable. Decoupled control w/attitude command in the pitch axis (or similar) would greatly enhance the task simplicity. Additionally, the H.I.T.S. system increased the pilot's gain in up and away flight by tempting him to try to drive zero error with respect to the "highway"... ~~the~~ The apparent required precision of flight path control was too demanding... This should be explored further.

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator
or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

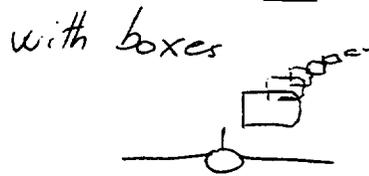
1 year 5 years
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?



What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

≈ 450

How many hours flight time did you log in the last year?:

≈ 100

What type aircraft are you currently flying?:

SEL C-150
C-172

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Sales manager

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator
 or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

*Definitely, you would have
 A graphic/Heads up display.*

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? Familiarity is great. When everything looks the same every time - it becomes easy

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

400

How many hours flight time did you log in the last year?:

85

What type aircraft are you currently flying?:

PA-24-250

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

Great, it will be quite interesting to actually fly this concept one of day.

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:
 An increase in value over present general aviation aircraft display systems?:
 No increase in value over present general aviation aircraft display systems?:
 A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-
 An increase in value over present general aviation aircraft systems?:
 No increase in value over present general aviation aircraft systems?:
 A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

CONSISTENCY

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

None

How many total hours flight time have you logged?:

How many hours flight time did you log in the last year?:

What type aircraft are you currently flying?:

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

Electrical Engineer

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

yes

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

efficiency

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *Commonality*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *REDUCE HEAD'S DOWN IN COCKPIT*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

GPS NAV

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Heads up Display

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

20,000 +

How many hours flight time did you log in the last year?:

500 +

What type aircraft are you currently flying?:

767 & J-3 CUB

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

Retired AIRLINE PILOT

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator

or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

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Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

UNREALISTIC EXPECTATION WHEN TERRAIN & CHANGING OBSTACLES TAKEN INTO CONSIDERATION

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

- *POWER PLANT MANAGEMENT*
- *EASE OF NAVIGATION*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
Instrument
Commercial
CFI
ATP

How many total hours flight time have you logged?:

750

How many hours flight time did you log in the last year?:

125

What type aircraft are you currently flying?:

PA 34-200T

How much formal education have you completed?:

- High School:
Undergraduate College Degree:
Post Graduate Degree:
Trade School/professional training:

What is your current profession?:

INSURANCE AECT. MGR +
FLIGHT INSTRUCTOR

What is your income level?:

- up to \$50,000 per year
\$50,000 to \$100,000 per year
\$100,000 to \$150,000 per year
over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

- DUAL POWER CONTROLS ON TWINS TO ALLOW FOR DIFFERENTIAL POWER
 - ON ~~W~~WIND TAKEOFF
 - IN THE EVENT OF ENG. OUT
- INCORPORATE AUTOMATIC YAW COMPENSATION
- INCORPORATE BANK INTO GOOD ENG.
- NEED MORE REALISTIC FEEDBACK IN STICK CONTROLLER
- NEED SOME INDICATION OF TRIM POSITION

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Easier for beginning pilots

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

Easier to maneuver

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Easier Training

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

How many hours flight time did you log in the last year?:

What type aircraft are you currently flying?:

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

yes easier to process the visual

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

How many hours flight time did you log in the last year?:

What type aircraft are you currently flying?:

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

consultant

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator

or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

How many hours flight time did you log in the last year?:

What type aircraft are you currently flying?:

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

3000

How many hours flight time did you log in the last year?:

50

What type aircraft are you currently flying?:

BONANZA F35

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

EST & TR PLANNER

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

70

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator

or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

Don't know. Concerned over lack of direct linkage to engine controls.

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

1000+

How many hours flight time did you log in the last year?:

100+

What type aircraft are you currently flying?:

BARON A55

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

YES - MFD Shows Location; Path in sky EASY TO SEE. BUT would worry about losing altitude info
 The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Need to be careful. Don't create the situation where the pilot fixates on one display.

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

Need indicators to get back on path.

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

MFD / ~~Path~~ + Path in sky.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

800

How many hours flight time did you log in the last year?:

50

What type aircraft are you currently flying?:

T210, 182

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

ENGR

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this?

COLLISION AVOIDANCE WOULD BE MUCH IMPROVED

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this?

REDUCED DISTRACTION FROM THE FLT & COLLISION AVOIDANCE TASKS -

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

STANDARDIZATION. SAFETY.

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

NAVIGATION BECOMES A "NO BRAINER"

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

All

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

NONE

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

2600 ±

How many hours flight time did you log in the last year?:

~~1500~~ 15 ±

What type aircraft are you currently flying?:

C172

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

CFI-I

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes - much more useful than traditional instrumentation

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Tendency to keep head in cockpit is much decreased

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

decreased input required

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *Again - simplicity is always preferable*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *Reduces the need for interpretation*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Intuitive operation

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

400

How many hours flight time did you log in the last year?:

20

What type aircraft are you currently flying?:

C-172

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Publishing

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

it ~~was~~ did not contain all info needed; the supporting info was outside my vision when I looked at the HUD

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

Permits pilot to put his attention on other aspects of flight

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

Probably, but my initial experience was disappointing

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Single Lever Power Control

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

*HUD as shown & Compass
 Put more of Alt/Horizontal info on HUD in Calibrated Sense.
 Also, put Standard Turn Rate Indicator on HUD*

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
Instrument
Commercial
CFI
ATP

How many total hours flight time have you logged?:

2200+

How many hours flight time did you log in the last year?:

60

What type aircraft are you currently flying?:

C 182, 172

How much formal education have you completed?:

- High School:
Undergraduate College Degree:
Post Graduate Degree:
Trade School/professional training:

What is your current profession?:

Aero Space Consulting

What is your income level?:

- up to \$50,000 per year
\$50,000 to \$100,000 per year
\$100,000 to \$150,000 per year
over \$150,000 per year

MYOB

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

I could not fly it properly even the second time around. I believe some of reasons for my failure are:

1. I did not use all info presented
2. lack of Kinesthetic feed back - g loads, noise, ~~stick~~ stick forces ~~etc~~ etc that I am used to in 49 years of flying
3. Displays are too far apart to see ~~the~~ without a large motion scan. I am used to the standard T arrangement when I can really see everything with out much if any eye motion.

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes, saves more time to fly the plane.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this? *Allows more time to concentrate on flying the aircraft*

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *Look into the future*

Future

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Look @ latent technology.

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

250

How many hours flight time did you log in the last year?:

100

What type aircraft are you currently flying?:

Cessna 172

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Attorney

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

yes - simpler tasks - make thought time for sit.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this? *Simplicity of tasks*

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this? *ditto*

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *Consistency*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *simplicity*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *EASE of USE, Allow pilot*

more time for overall SIT. Awareness

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

N/A

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot *STUDENT*
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

22

How many hours flight time did you log in the last year?:

4

What type aircraft are you currently flying?:

C-152

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Surgical Technology

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

Auto Engine & Fuel System mgmt

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

HUD, hwy in sky

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

200

How many hours flight time did you log in the last year?:

100

What type aircraft are you currently flying?:

182, 172 RG, Archer.

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Engineer.

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes reduces reference searches to panel

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Simplifies everything

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

Less system management risk

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

less risk of error

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

fewer references inside less risk

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Highway in the sky makes safe route obvious in emergency situations

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

ground picture data bank

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

70

How many hours flight time did you log in the last year?:

70

What type aircraft are you currently flying?:

C-172

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Company President

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes. Better Positional Awareness. But could cause pilot to pay less attention to other factors (traffic, engine gauges, etc.)

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?
Better eyes out flying

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?
More efficiency, less to manage.

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?
Consistency is easier

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?
Easier to follow path than to constantly check instruments & adjust.

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Single lever operation simplifies flying. Navigation path & approach helps with control.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Replacing standard instruments with computer screens takes away familiar environment and may fail.

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

160

How many hours flight time did you log in the last year?:

80

What type aircraft are you currently flying?:

Piper PA28-181

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Computer Scientist

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

yes. the map of your route is great

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *only one procedure to learn; know exactly what to expect.*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *once you got used to it. A cross bar that you should be lined up on might be easier to follow + more intuitive.*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

the visual display of the procedure/route you need to fly.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

the computer instrument displays weren't necessary. the heads-up route w/ the map display would be good alone

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

320

How many hours flight time did you log in the last year?:

150

What type aircraft are you currently flying?:

Piper Archer II

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

Computer Scientist

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

values based on:

Ease of use & safety, performance

Suggested display for highway:

○ ← you

+ the course

⊕ you on the desired course

if maybe "bumpers" to show you the limits.

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Good altitude and general situational awareness but possible danger of becoming fixated on highway. Also highway symbology possibly too over-bearing, intense.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Dramatic workload reduction, particularly on approach.

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

workload reduction

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

familiarity

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

- but only if displayed in a more "muted" fashion for cross-country, and more prominently in terminal areas.

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Wide angle HUD - much better, + therefore safer situational awareness. Single input flight controller and engine control to enable more "heads-up" flying and less time beat-down.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

~~HUD display~~
~~HUD display~~ *primary flight display - but can't really afford to lose that!*

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

*Aviation journalist
with many hours but
no rating. (Apart from
glider license)*

How many total hours flight time have you logged?:

How many hours flight time did you log in the last year?:

What type aircraft are you currently flying?:

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Graduate Post Graduate Degree: *Bachelor degree
(UK University)*

Trade School/professional training:

What is your current profession?:

Journalist

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator
or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes - lets you directly where shows you are supposed to be

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

850

How many hours flight time did you log in the last year?:

60

What type aircraft are you currently flying?:

Cessna, Stearman, Beechcraft

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

Flight Instructor

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

yes, it's like driving in a car.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this?

It is easy and natural

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this?

It is natural and saves engine & fuel

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

No surprise

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

It is natural

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Requires less practice

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Will it happen? how far through thing like this before

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

15,000

How many hours flight time did you log in the last year?:

300

What type aircraft are you currently flying?:

Cuba to 5 pit plane,
& most gen. avia aircraft.

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Pres From Instl
San Mfg

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

I like the way things are developing.

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Probably when more familiar with actual use.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this?

One looks ~~give info~~ information instead of a constant scan.

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this?

Apparently the computer figure engine parameters so there is no adjusting on the climb or descent.

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? This would simplify positional awareness and perhaps some apprehension at unfamiliar airports.

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? Again - finding the needed information in one place - head up.

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Exposure to new technology in general. Apparent ease of flight and navigation.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Not sure there is a least. It is all quite fascinating. I don't have enough confidence in fail safe capability to accept it all at this time.

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

6200

How many hours flight time did you log in the last year?:

68

What type aircraft are you currently flying?:

Cessna 182

Cherokee 235

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?: Aviation
Safety Analyst - NASA

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

It is a novel, futuristic approach to flying. One needs a bit more time to handle the controls and become familiar with the techniques & procedures to really get a good feel for the flight.

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?
Yes! The display lets you just "point and fly." The pilot doesn't have to think about each individual task. The system does all the "ciphering" and frees the pilot to just follow a preplanned route.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?: **TEN-FOLD!**

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this? *Same as above -- so many parameters are combined in the display it simplifies (short-cuts" if you will) the efforts necessary to maintain the desired flight path*

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this? *Quite simply, & fully believe that an automatic system (computer) properly designed (very important, naturally) can measure several parameters and make adjustments more quickly than I can.*

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense? *Please Note: I am not an aircraft owner and a very low-time renter, so my answers to this question is really a guess. Don't give it much weight!*

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *less to relearn for the (current) different approaches; easier to become/stay proficient -- every approach is practice for the next one.*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *Obvious! so easy to follow. I can't avoid the obvious comparison any longer -- it's just like driving a car!*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *Simplicity, bestows/reinforces confidence. I am a 65-hour private pilot and one of the reasons I don't fly more frequently is because I feel there is so much that I don't know. It can be intimidating. The AGATE system integrates so much info for me, though, I would feel as though I could fly proficiently and*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

The whole concept seems very beneficial for increased safety and proficiency & can't really pick out anything as not valuable and don't really perceive the experience as a set of individual component values. (Please see notes on reverse regarding "value.")

Please provide the optional information on the back of this form.

ALL IN ALL

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

less than 70 hrs total. (flying for about 16 months...)

How many hours flight time did you log in the last year?:

20 hrs.

What type aircraft are you currently flying?:

Cessna 172

How much formal education have you completed?:

- High School: Bachelor of Science, Business & Management
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Sales rep, wholesale produce distributor.

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

The term "value" is certainly open to several definitions or interpretations. I'm not an aircraft owner, so I don't think in terms of long-term, prorated costs. Neither am I wealthy (see last question, left column this page!) so flying is a luxurious treat that I can only occasionally afford...

I know that if there was a demand for 10 times as many aircraft that, overall, prices might come down. And how long it will take for demand to reach this level after (and assuming all airplanes work the "AGATE concept" way (a multi-year and lots-of-dollars task in itself) is for you folks to speculate on.

But anything that could help make general aviation more accessible to those of ~~us~~ us below (way below) millionaire-level income would be, in my opinion, a very valuable pursuit.

Thanks for the opportunity to try the AGATE concept Demonstrator and to share my thoughts...

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

CERTAINLY - VISUAL, ADDED A REAL SENSE; THE NOT REAL

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this? *FEEL LIKE LESS HEAD MOVEMENT, LESS SCANNING & LIGHTENS WORK LOAD.*

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you:

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this? *ACTUALLY IT HAS SOME VERY GOOD ASPECTS BUT MAY LEAVE OUT SOME PILOT CONTROL.*

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

NOT SURE IT WOULD OR NOT

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *WHERE TERRAIN ALLOWS.*

SIMILAR TO VFR APPROACH PROCEDURES THE SAME MOST OF THE TIME.

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *ADDS THE VISUAL & IS MUCH BETTER THAN IMAGINING OR GUESSING.*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *HOPEFULLY THE TECHNOLOGY COULD BE INEXPENSIVE SO IT WOULD APPLY ACROSS THE BOARD FOR G.A. - BIGGEST VALUE IS PROBABLY SAFETY & CERTAINLY WOULD LESSEN WORK LOAD*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why? *NO RUDDERS PROBABLY SINGLE CONTROL COULD BE A BIT OF A PROBLEM*

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

2,000

How many hours flight time did you log in the last year?:

170

What type aircraft are you currently flying? C-182

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?: Business
engineer

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

IF IT CAN TRULY APPLY TO
G.A. IN TERMS OF COST
IT WILL BE GREAT (FOR GUYS
LIKE ME) OTHERWISE, LIKE
RADAR & SOME OF THE PRESENT
HI TECH NAV AIDS, IT WILL
ONLY BE GOOD FOR COMMERCIALS
LOOKS GREAT - KEEP UP THE GOOD
WORK.

P.S. PART OF THE THRILL OF
FLYING IS THE ROMANCE
& ABILITY TO DO IT. LET'S
NOT LOSE IT.

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes - graphical

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

graphical

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

Simplified op.

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Simple

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

*S.A.
Fun
Simple.*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Graphical Displays

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

*OTW scene
skews test reality
from the panel display.*
 Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

5000+

How many hours flight time did you log in the last year?:

60

What type aircraft are you currently flying?:

Piper 180

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

Aero Engr.

What is your current profession?:

Avionics

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

Thank you
for coming
about GA
enough to have this
Demonstrator.

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes - The plan view on MFD, along with the 3-D PFD eliminate any SA problem.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Keeps the pilots head out of the cockpit

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? Lower training costs - better conformity in approach -

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? would be easier to manage flight path.

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *MFD with weather and engine gauges.*

Gauges.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

HVD - cost effectiveness not readily apparent.

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

1000

How many hours flight time did you log in the last year?:

50

What type aircraft are you currently flying?:

Cessna 140, 180

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?: *President manufacturing company.*

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

YES

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

*Computer handles details
All the reasons quoted by
the narrator*

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

Reduced work load

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Reduced pilot work load

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

That should be obvious

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

It is difficult to select any single item. This is an integrated package.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

The large display is misleading. That's not what I would see out from my cockpit.

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

~~250~~ 500

How many hours flight time did you log in the last year?:

75

What type aircraft are you currently flying?:

LANCAIR 360

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

SELF EMPLOYED
COMPUTER CONSULTANT

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?
Eyes outside - watching

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?
No fussing with knobs

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *Standardization - less likely to make mistakes, forget some little nuance*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *Good ref. for where I should be vs. where I am - as long as it is "in view" (if not, I need some help flying back to it: Where'd I get to?)*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Intelligent aids to doing what needs to be done. Some assurance I won't mess up. Buys time to think.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Stick. Yoke would do fine. More like car anyway.

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

student (expired)

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

~ 45

How many hours flight time did you log in the last year?:

1

What type aircraft are you currently flying?:

C-152

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

Assoc. Prof

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

*Stick had high gain / too much spring loading.
Power indications too small & poor color contrast.*

Suggestion: enlarge / brighten current power setting (smallest impact on screen clutter)

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

yes, I could get a broader picture

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Better awareness

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

allow the engine to last longer

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

easier

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

easier

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

heads up display

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

350

How many hours flight time did you log in the last year?:

100

What type aircraft are you currently flying?:

McCray 201

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

Student Aerospace
engineering

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

YES. THE PICTORIAL VIEW MAKES IT EASIER, DOES THE WORK FOR YOU - BUT NEED MORE PRACTICE TO ACHIEVE IT.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this? AS STATED ABOVE THE PICTURE DOES THE WORK FOR YOU.

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this? OBVIOUSLY, TO ACHIEVE MAXIMUM EFFICIENCY WITH MINIMUM PILOT INPUT MUST BE AN ADVANTAGE. ALSO THE PILOT CANNOT CAUSE WEAR PROBLEMS FOR THE ENGINE.

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? AGAIN APPROACH PROCEDURES REQUIRE CONSIDERABLE MENTAL INPUT, ANY IMPROVEMENT SUCH AS THIS SUGGESTED WOULD BE ADVANTAGEOUS.

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? IF IT REPRESENTS A HIGHWAY IN THE SKY, IT WOULD BE MUCH EASIER TO 'STAY ON THE ROAD'. AGAIN IT REDUCES PILOT WORKLOAD.

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

SINGLE LEVER POWER CONTROL FOR THE REASONS STATED BELOW

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

GPS APPROACH, ALTHOUGH I STILL LIKE IT! I DON'T WANT TO CHOOSE 'A WORD'!

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

850 +

How many hours flight time did you log in the last year?:

70 +

What type aircraft are you currently flying?:

PA 28 ARROW

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?: RETIRED, WAS
CITIZENED ACCOUNTANT = CPA

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator

or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Awareness

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *why not? if I go to a different airport, I know it.*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *but not so intrusive*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Data link for safety

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

200+

How many hours flight time did you log in the last year?:

50 → 70

What type aircraft are you currently flying?:

172

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Computer graphics

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?
YES, DOES NOT LET ANY INFORMATION BE MISSED

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

KEEPS YOUR EYES ON THE OUTSIDE SITUATION

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

LESS TO DO

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *SIMPLE*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *LESS CHANCE OF ERROR*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *ALL*

BASE IN ALL SITUATION

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

47

How many hours flight time did you log in the last year?:

0

What type aircraft are you currently flying?:

Cessna 152/10

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

SELF EMPLOYED

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *Head up display*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why? *Power Settings*

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

8M/10M

How many hours flight time did you log in the last year?:

250

What type aircraft are you currently flying?:

Cessna 340 Twin

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?: *Chem. Engr.*
C. E. O.

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Easier to use - You get the information you need in an integrated fashion

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

Simpler - lower work load

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *Standardization always simplifies the task.*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *Like driving on a road in the sky*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

All

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

1500

How many hours flight time did you log in the last year?:

50

What type aircraft are you currently flying?:

C172 & Beech A-36

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

NASA-Ames (Retired)

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

280

How many hours flight time did you log in the last year?:

100

What type aircraft are you currently flying?:

KATAN/A
WML EZ
C-152

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

BAILE AL-ENT

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?: IF IT COULD BE USED ON DEMAND

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

POTENTIALLY

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

395

How many hours flight time did you log in the last year?:

110

What type aircraft are you currently flying?:

CESSNA 172

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

ATTORNEY

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

99

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?
We would spend less time with normal procedures

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this?

TECNOLOGI

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this?

CHEAPER TO DO THE NORMAL MAINTENANCE

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *STANDARDIZING MAKES IT EASIER TO LEARN*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *NO VOR NO AIR WAYS NO RADIALS NO NDBS NO looking at charts.*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

TECNOLOGI - WE NEED IT

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

IS GOING TO TAKE THE EXCITEMENT AWAY

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

1,000

How many hours flight time did you log in the last year?:

500

What type aircraft are you currently flying?:

Seneca, C130, ~~130~~
Be 76 - Malibu

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Pilot

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

100

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

you bet increase but I still prefer ILS, VOR, GPS is 10 times more exciting

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

I like just the Head-Up display and the moving map nothing more than that still using "old" kind of instrument

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you:

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

I like to fly airplanes with prop mixture and throttle

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

I like GPS but I still like a ILS approach

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

make 10 times easier but I prefer to fly VOR, GPS, ILS, moving maps the highway is a kinda of video game window

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

I like the EFIS and ~~map~~ but still using the "old" instrument panel

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

The highway in the sky is to easy to fly

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

600

How many hours flight time did you log in the last year?:

400

What type aircraft are you currently flying?:

4WIN ENGINE

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

now I'm building time in USA.
but next month I'm going to BRAZIL because

What is your income level?: I got I job to fly in

- up to \$50,000 per year a airline there!
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

EFIS IS PRETTY GOOD
BUT LEAVE THE
"OLD" INSTRUMENT PANEL

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes, I am a deaf pilot & cannot fly IFR but with Agate System could help deaf pilots to fly without Radio Communication IFR

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this?

Same as above - There is more so deaf certified pilots in USA. We only fly VFR without radio but with this system - deaf pilot will appreciate them.

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this?

less stress - and prevent pilot errors in IFR - for example approach speed - window warning us to slow down

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *Because it helps us to fly IFR or night better*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *Follow it "simple"*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *It will help all aviators to fly more enjoyable, less stress.*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

350

How many hours flight time did you log in the last year?:

50

What type aircraft are you currently flying?:

Beechcraft C35

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Plastering Const. & Investor

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

Please note! Deaf
Pilots really need this
system - to make them
to fly IFR. Also
with closed caption on
screen from tower.

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

YES - CLEAR, SIMPLY DISPLAYED VISUAL INFORMATION ALL IN ONE PLACE - REDUCES SCAN WORKLOAD.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?
 CAN DEVELOP CONSISTENT PILOT HABITS, ~~LESS~~ LESS THINKING/RECALLING PROCEDURES.

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?
 EASY TO FOLLOW, DON'T HAVE TO BE STUDYING CHARTS WHILE FLYING

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

HEADS UP, SINGLE DISPLAY

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

310

How many hours flight time did you log in the last year?:

50

What type aircraft are you currently flying?:

Cessna 172

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

CONSULTANT

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Less junk to sort through.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

Simpler visual queries

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

*Single lever engine control.
Highway visual for*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?: *None.*

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

10

How many hours flight time did you log in the last year?:

0

What type aircraft are you currently flying?:

-

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

Engineer

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

YES - IT ALLOWED FOR ANTICIPATION OF THE TURNS

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

IT KEEPS THE PILOTS EYES OUTSIDE. IT WAS INTUITIVE

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

ENGINE MANAGEMENT IS TOO COMPLEX CURRENTLY

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? Reduces Risk of BECOMING CONFUSED ON A STRANGE APPROACH

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? MORE INTUITIVE THAN NEEDLES

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? POWER CUES AND HIGHWAY DISPLAY

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

400

How many hours flight time did you log in the last year?:

75

What type aircraft are you currently flying?:

BONANZA + CHEROKEE

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

AVIONICS DESIGNER

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Conce Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

yes - all depends on details of display

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this?
If the picture is detailed enough, it should be like seeing out in VFR conditions.

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this?
assuming a "complex" setting having fewer controls should simplify any control.

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *I am not IFR yet. Seems much simpler than memorizing many different approaches*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *Both concepts would aid in IFR. However total dependence on computers would present problems. Would the pilot really be able to fly without this system if he did not have "traditional" training?*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

120

How many hours flight time did you log in the last year?:

40

What type aircraft are you currently flying?:

C-152

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

Music - Retail sales + performance

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

YES - BUT NEED AN ADDITIONAL ONE FOR THE UPPER BOUNDS OF ALTITUDE (IN ADDITION TO READ SIGN)

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this?

MUCH BETTER SITUATION AWARENESS ESPECIALLY IN TAKE-OFF LANDING PHASE

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you:

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this?

MUCH SIMPLER WAY OF CONTROLLING POWER - WORKS IN JETS!

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

WHEN THE PROCEDURES ARE CONSISTENT OR SIMILAR, YOU CAN GET SOME APPROACH

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

IT WOULD - FLRW A-G'S FOR 10 YEARS WITH A "HIGHWAY - IN-THE-SKY" - COMBINED WITH CPT, YOU CAN'T GET LOST

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

INTEGRATED DISPLAYS FOR IMPROVED SITUATION AWARENESS

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

WANT TO HAVE POWER LEVER. GIVE PILOT A SPEED ONE

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

3350

How many hours flight time did you log in the last year?:

60

What type aircraft are you currently flying?:

MOONEY 201

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

EXECUTIVE DIRECTOR
IN MONIES

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe? *yesterday*

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?
Yes - the one to the lower right would, might want to include a sideview also.

no - I might pay too much attention to the HUD graphics.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?
w/ more info I could look for other acct more. would prefer to have info in lower left on the HUD though.

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?
more time to see + avoid + lower operating cost AS LONG AS THERE IS MULTIPLE REDUNDANCY

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *Every airport is different, I would be concerned about not having info that would be important in an emergency*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?
At a glance I could tell if I'm "on" or "off" the flight plan - very helpful if looking at a map

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

*Power management - Increased reliability
 Navigation - Increased safety*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Simplification (ironically) I still would want to do all the stuff and have control over the little things. But there are two different markets and would probably

Please provide the optional information on the back of this form. *keep my 172 also.*

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument working on

Commercial

CFI

ATP

How many total hours flight time have you logged?:

280

How many hours flight time did you log in the last year?:

30

What type aircraft are you currently flying?:

C-172K

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree: working on

Trade School/professional training:

What is your current profession?:

Student, Business office of a
Software Developer

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

make the two controls scrapable.
Great Idea - Keep up the work.

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

yes - more intuitive

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *more standardized single*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *not sure*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

single lever power integrated display

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

600

How many hours flight time did you log in the last year?:

0

What type aircraft are you currently flying?:

None

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Manager

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

1 of 9

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Did you fly the concept demonstrator
or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

not every airport is the same.

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

but too easy?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

None

How many total hours flight time have you logged?:

How many hours flight time did you log in the last year?:

What type aircraft are you currently flying?:

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

marketing

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

yes - presented with situations (integrated) data not just data.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Head out of cockpit - direct cues - relate to other experience driving

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

extreme care & training & vigilance needed to achieve similar results with multiple controls.

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *Safety, Training cost reduced, Safety, Safety safety.*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *intuitive, similar to driving (how to address the tendency to overcontrol to follow)*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *simplified, controls, integrated & High level awareness cues / display & adv. advisories.*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why? *advisory cues - Rotate, Power settings - May not fit situation at all times.*

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

+1800

How many hours flight time did you log in the last year?:

10

What type aircraft are you currently flying?:

SEL - C172 - i

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?: *Systems Engineering*

manager Aerospace Eng -

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator
or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes ... reduced workload enhances the SA.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Ease of use.

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

Ease of use.

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Ability to safely navigate IFR w/o high workload apparent in conventional systems.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot (Student)
Instrument
Commercial
CFI
ATP

How many total hours flight time have you logged?:

25 hrs.

How many hours flight time did you log in the last year?:

25 hrs.

What type aircraft are you currently flying?:

Piper Archer

How much formal education have you completed?:

- High School:
Undergraduate College Degree:
Post Graduate Degree:
Trade School/professional training:

What is your current profession?:

Gen'l Mgmt.

What is your income level?:

- up to \$50,000 per year
\$50,000 to \$100,000 per year
\$100,000 to \$150,000 per year
over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

GOOD FOR DEAF PILOTS TO GET INTO IFR WITHOUT RADIO USE.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

I, DEAF PILOT USE ONLY VISUAL (NOT EAR)

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? EASIER TO MAINTAIN COURSES.

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? EASY GUIDE

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

I, DEAF PILOT CAN USE RADIO

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

ADDS BENEFITS TO USE IFR

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

98

How many hours flight time did you log in the last year?:

35

What type aircraft are you currently flying?:

C-172

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Carpenter

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

TO REMEMBER
THERE ARE DEAD
PILOTS OUT THERE
THAT ALSO NEED
HELP WITH IFR

(80 DEAD PILOTS
ARE IN USA.)

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Undecided

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

It would be easier to interpret

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

I would feel I had less control over the aircraft power

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *I don't think approaches are amenable to "one size fits all."*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

MAYBE

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Uncure; I don't know if I'm ready to stake my life on software.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

DON'T KNOW

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

approx 1600

How many hours flight time did you log in the last year?:

5 hours

What type aircraft are you currently flying?:

MOONEY

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

MANAGE COMPUTER SYSTEMS

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

YES

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this?

LESS HEAD NOT COM/SCANNING

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this?

LESS COMPLEXITY / ROOM FOR ERROR.

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years ?
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *S.O.P. ALLOW LESS ROOM FOR ERROR*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *LESS VISUALIZATION ERROR REQUIRED*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

DISPLAY POWER UNIT.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

550

How many hours flight time did you log in the last year?:

~ 90

What type aircraft are you currently flying?:

C172, 182, 152

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

Prog. Management

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

I'D LOVE TO
WORK ON THIS
PROJECT

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situational awareness? Why or why not?

Yes. Virtual Roadways and terrain projection are a tremendous help in situational awareness. Being able to fly the approach by HUD enables a smoother transition to visual w/o losing IFR control/scan. The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

See above

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

Power settings today do not seem overly complex.

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? Differing terrain and other scenarios require a differing approach path. I do believe the graphic highway, HUD, and a standardized user interface are a big improvement.

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? Following a "road" is a trivial mental exercise. However, the prototype did not provide me an opportunity to evaluate the "paving" process of selecting/building/changing the road in preflight or in flight.

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Reduced pilot workload, improved situational awareness, simplified simulator training. Improved safety and reduced costs.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Single lever power. Does not seem like a major improvement

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

380

How many hours flight time did you log in the last year?:

150

What type aircraft are you currently flying?:

PA28 - 161/181/236/RT201

PA32-300

M20J, M20K, G115, TB21

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

Manager, Network Systems

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

Looks promising!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes - No Threats and converting the to mind situation

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

less error and more Comfort Flying

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you:

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *Simple and safe.*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *easy to follow*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

all - I wish I was a test pilot and could learn to fly this edgy.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

none

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

3,500

How many hours flight time did you log in the last year?:

60

What type aircraft are you currently flying?:

Cessna 210
Cessna 441

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Realtor

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

This is a great step forward and you should continue to pursue. Good luck

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes - VISUAL WORKS

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

more accurate than conventional systems.

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

Less complex -

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *Consistency*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *Visual*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Heads Up display - I use a gps now which keeps my head inside the cockpit - BAD!

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

300

How many hours flight time did you log in the last year?:

100

What type aircraft are you currently flying?:

PA29-1A1

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

Manager Technical Marketing

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

It's about time

Good stuff -

Keep it up!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

GREATER SITUATIONAL AWARENESS

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

LOWER WORKLOAD

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? IN AN EMERGENCY, FAMILIARITY WITH PROCEDURES SHOULD INCREASE SAFETY MARGIN.

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

BUT IT SHOULD NOT BE SO ATTENTION COMPELLING AS TO INTERFERE WITH READY ATTENTION TO OTHER INFO.

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

CONVERSION OF INSTRUMENT INFO INTO VFR CUES

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

800

How many hours flight time did you log in the last year?:

60

What type aircraft are you currently flying?:

TB-20

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

UNIVERSITY PROFESSOR

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

absolutely - Less fatigue factor

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Much more time to pay attention to flying rather than instruments

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

Same as above

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum-time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Simple

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

Pilot Would Maintain Confidence

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Ease of flight

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:
800

How many hours flight time did you log in the last year?:
25

What type aircraft are you currently flying?:
Warrior

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:
OWNER SMALL BUSINESS

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

I think it's great
Key of the great
Work. Obviously
this will open up
GA to others
that may believe
it's too complicated.

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

160

How many hours flight time did you log in the last year?:

90

What type aircraft are you currently flying?:

PA28

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

ENG.

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

yes - it gives the big picture

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

more info in a better form

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

safer, more efficient, let the programmed chips do the work

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

it only makes sense in fact in disabled conditions plane could be controlled by ground!

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

HUD, power lever

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

*No wind in your face
 I like to fly tail dragger*

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

250

How many hours flight time did you log in the last year?:

10

What type aircraft are you currently flying?:

172 / Citabria.

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

doctor

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator

or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Obviously a picture is worth a thousand instruments.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

It helps keep your head out of the cockpit.

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

*Pilots frequently do not adjust mixture/prop controls at optimum times...
Would save fuel and maintenance.*

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

standardization = safety

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

just follow the "road"

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

simplified approaches and fuel/time management.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

1100

How many hours flight time did you log in the last year?:

175

What type aircraft are you currently flying?:

Small Cessnas

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

Postal Supervisor

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes, but useful only for IFR.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

Too dependent on system. GA usually not maintain at airline level.

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

240 hrs.

How many hours flight time did you log in the last year?:

160 hrs.

What type aircraft are you currently flying?:

C172RG.

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this? *EASE*

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

SOME

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *INST.*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why? *HWY*

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

How many hours flight time did you log in the last year?:

300

What type aircraft are you currently flying?:

727

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?: APT MGR.

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!



AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Easier work load

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

Simplicity

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

EASY!

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

1

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

400

How many hours flight time did you log in the last year?:

100

What type aircraft are you currently flying?:

SOCATA TRUNION

PIPER ALCHER II

PIPER TWIN SEMINOLE

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

Aircraft Inspector/mechanic
C-5

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes - The display shows you where you are and there's no imagining involved.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this?

Makes IFR flying a lot easier

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this?

This leaves a lot less to worry about and lets the pilot worry about flying

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Makes learning a new ~~area~~ IAP easier

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

Gives an easier to use way of flying approaches.

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

The auto-power settings leaves a lot up to the computer.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

220

How many hours flight time did you log in the last year?:

120

What type aircraft are you currently flying?:

C172

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Student

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Easier workload on IFR

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

*Over dependence on computers!
 If there's an electrical failure the pilot is in a bad predicament
 Detaches the pilot from the feel of the Basic and the Airplane*

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

300

How many hours flight time did you log in the last year?:

50

What type aircraft are you currently flying?:

Cessna Cardinals/172's

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

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AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator
 or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Maybe, it helps when doing an approach in the minimums

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? It's universal, money saving and easier to deal with

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? you can constantly fly IFR "if follow the road"

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *power settings*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

to cut fuel when the traffic is

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

140

How many hours flight time did you log in the last year?:

100

What type aircraft are you currently flying?:

C-172, C-150, PA30

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

~~Assistant mgr of~~
flight school

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator
or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years ?
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

~~25~~ 300

How many hours flight time did you log in the last year?:

50

What type aircraft are you currently flying?:

C-172

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

SALES

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

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AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not? *Absolutely.*

Especially integration in highly congested/regulated airspace. Also, for those times when currently you "lose" awareness, can get it back much more quickly

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this?

Integration & standardization

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this?

BUT: must provide ability for pilot to determine perf targets (i.e. speed, etc, fuel burn etc) Computer then adjusts engine to meet targets

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO MAYBE

Why?

Good, as long as we don't lose flexibility, and ability to land with alternative systems

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

Makes nav easier, but might result in more congestion on heavily traveled "highways"

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Improved situational awareness. Most critical issue, easiest to lose (esp in IMC), most difficult to regain

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

250

How many hours flight time did you log in the last year?:

40

What type aircraft are you currently flying?:

C-182

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Marketing

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Simplifies tasks + workload

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you:

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?
Airports are too individual

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?
Provides clear path and reduces workload. No dividing attention between charts and the windshield

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

*Highway in the sky } Clarifies information
 HUD }
 Reduces info overload*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

*integrated power control
 loss of touch and feel in controlling power and glide slope*

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

204

How many hours flight time did you log in the last year?:

165

What type aircraft are you currently flying?:

C172

Robin Archer

C182

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

Business Consultant

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this?

obvious question

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

long term look @ future

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

*we need too look @
 2-3 yrs not 5+ yrs
 w/ comp capabilities*

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

1600

How many hours flight time did you log in the last year?:

200

What type aircraft are you currently flying?:

GA

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

Grad Student

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Easier to visualize.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Will expand the GA base

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

Less Handles.

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *Ease of Use.*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *Ease of use. Better Situation awareness.*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Simplicity.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

It looks too much like a flight simulator. What happens when it all fails? No backup on

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

200

How many hours flight time did you log in the last year?:

10

What type aircraft are you currently flying?:

Arrow

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Consultant

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

I'm concerned about what happens when you have a technical failure. Ricky did not touch on experience and backups. It is great to have lesser skilled people fly, but aren't you asking for trouble without other forms of data acquisition/completion.

The less you use the "old" method, the more precarious your flight when things go south.

Minor point: If you continue to refer to us as "users", we are going to call you "pushers". What happened to "customers"?

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

*easier than scanning
- not cluttered*

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

it's simpler and less to worry about, but adjusting constant speed props for sound comfort is nice

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *obvious*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

Visually, its easier to follow than a hanging needle

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

275

How many hours flight time did you log in the last year?:

~90

What type aircraft are you currently flying?:

Cessnas & Cherokees

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

Software Architect

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator
or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *Intuitive*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *Highway in sky*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

SGI used to generate pretty picture doesn't represent what pilots will be able to buy. Even in 4 years. More realistic hardware should be used.

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

How many hours flight time did you log in the last year?:

What type aircraft are you currently flying?:

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes. Shows up display with map makes navigation easy.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?
Mixed feelings. It would aid & help myself, yet feel that one would become too reliant upon it & loose sight of what to do if not there
The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?
less controls, less workload.

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?
Simple & common

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?
good for ILS, easy to use, yet afraid would put too many people in the sky bc being so simple.

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

Single power lever - easier control one instrument and monitoring systems

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

heads up display - make flying more like an arcade game than really enjoying it.

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

300

How many hours flight time did you log in the last year?:

10

What type aircraft are you currently flying?:

C152, 172, Piper Arrow

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

work on flight instructor

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Less work load
 ① One visual reference

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

① less complicated to pilot
 ② consistent

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *less complicated*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *Visual reference*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *less pilot work load*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why? *Problem for old time pilot to learn new systems - break old habits*

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

14,000

How many hours flight time did you log in the last year?:

120

What type aircraft are you currently flying?:

Piper Ceronimo

PA-23-180

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

retired

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

Progress in aviation is largely in the hands of experienced aviators of USA.

Good to see industry joining in

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator
or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

BETTER VISUALIZATION & AWARENESS OF AIRCRAFT POSITION.

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? LESS ERRORS.

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? NO MENTAL WORK FOR WHERE THE AIR PLANE NEEDS TO GO.

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

THE TECHNOLOGY IS GREAT AS FAR AS WORKLOAD REDUCTION IS CONCERNED.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

THE ABSENCE OF A RUDDER CONTROL FROM THE PILOT. I AM CURIOUS ABOUT BACKUP IF THERE WAS AN ELECTRICAL FAILURE, PLEASE PROVIDE THE OPTIONAL INFORMATION ON THE BACK OF THIS OR OTHER MALFUNCTION OF THE SYSTEM.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

Approx. 630

How many hours flight time did you log in the last year?:

330

What type aircraft are you currently flying?:

CESSNA 152, 172, 172RG, 182
PIPER CHEROKEE, 40, PA28R-200,
PA32-300, KATANA DAZOAI

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

FLIGHT INSTRUCTOR

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

GPS reporting so you know where traffic is.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Need full autopilot mode

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot:
- Instrument:
- Commercial:
- CFI:
- ATP:

How many total hours flight time have you logged?:

200

How many hours flight time did you log in the last year?:

100

What type aircraft are you currently flying?:

210A

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Mgr.

What is your income level?:

- up to \$50,000 per year:
- \$50,000 to \$100,000 per year:
- \$100,000 to \$150,000 per year:
- over \$150,000 per year:

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

- 1) Harder to fly than I thought.
- 2) Need co-pilot or teaching mode
- 3) Traffic identity + sequencing has highest priority

AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

yes

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:

How many hours flight time did you log in the last year?:

What type aircraft are you currently flying?:

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?:

What is your income level?:

up to \$50,000 per year

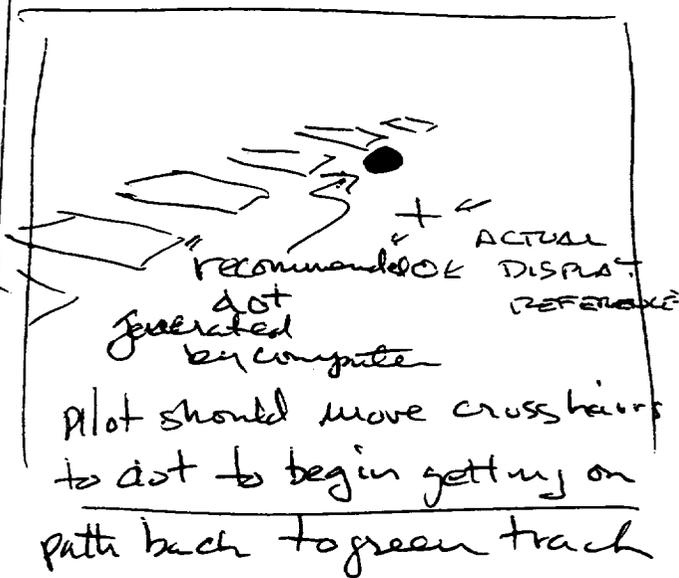
\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

For situations where pilot "goes off track," include in display a suggested point on which to place crosshairs to return to track.



AGATE Concept Demonstrator Survey

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Did you fly the concept demonstrator **Yes**
or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

Yes - compared to present instrumentation - NOT when compared to GPS DATA

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?

No increase in value over present general aviation aircraft display systems?

A decrease in value over present general aviation aircraft display systems?

Why do you believe this? *Present g/c displays are very poor in relation to present map displays and vertical NAV displays*

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?

No increase in value over present general aviation aircraft systems?

A decrease in value over present general aviation aircraft systems?

Why do you believe this? *Present GA Pwr Cntrls are inferior to present Automotive cntrls, which have some computer logic. ACFT may need more logic.*

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *VARIOUS APRTS HAVE CONSTRAINTS FROM NOISE, Runway spacing - The advantage of GPS is that it can be easily adapted to the local problem. Would a graphic "highway in the sky" display presentation make navigation easier? YES NO*

Why? *The approach & path to different final approach fixes is used by the controller (FAA) to space the Ldg acft and now at least, needs to be a variable path.*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *The map display is good for genl aviation - must add VNAV mode that would be useful for other flt regimes as well as final approach.*

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why? *power cntrl! Suitable single lever, should be attainable today, similar to automotive, the added necessary logic is easily managed by the pilot; I wouldn't pay anything for the added complexity.*

Please provide the optional information on the back of this form. *I.e. speeds for max endurance, max range, shortest flt time are no problem.*

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
Instrument
Commercial
CFI
ATP

How many total hours flight time have you logged?:

11,000 +

How many hours flight time did you log in the last year?:

~ 45

What type aircraft are you currently flying?:

C-180 + C-310 Q

How much formal education have you completed?:

- High School:
Undergraduate College Degree:
Post Graduate Degree:
Trade School/professional training:

What is your current profession?: Retired -

Test Pilot for major acft mfr.

was
What is your income level?:

- up to \$50,000 per year
\$50,000 to \$100,000 per year
\$100,000 to \$150,000 per year
over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

Am very interested in improving the flt deck technology for gen'l aviation i.e. making use of GPS and display technology - and am concerned that "agate" is biting off an impossibly big chunk of technology that will be defeated by its own "weight." The "Demonstrator" ~~only~~ does not cover the complete flt. deck workload, communications, systems management etc.

The certification process is a big concern esp for the improvements in the final approach technology. I would go "supplemental" (STC) first and gradually transition to the full approval as we gained experience with these new displays and functions.

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?

Make ~~it~~ it so you can fly the airplane ~~without~~ without being over worked.

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

It more efficiency than I could be.

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? Then the pilot is familiar with it.

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? It give a road to follow, so your on course.

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

The graphic highway.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

no rudder peddles, most pilot like being in control of the rudder

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot *student pilot*
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

40

How many hours flight time did you log in the last year?:

0

What type aircraft are you currently flying?:

Cessna 190

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

don't have one

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

AGATE Concept Demonstrator Survey

We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator

or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this? *The Ability to FLY VFR INSTRUMENTS IN IFR SOLID.*

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you-

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
 2 years 7 years
 3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why? *Reduces the chance of PILOT ERROR.*

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why? *Simplifies NAVIGATION, ATC CONTROL AND hopefully reduces travel time between destinations.*

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why? *Flying IFR AS VFR.*

SAFETY.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why? *Loss of Rudder pedals, single level power.*

Requires New aircraft design to MAKE practical.

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

- Private pilot
- Instrument
- Commercial
- CFI
- ATP

How many total hours flight time have you logged?:

1170

How many hours flight time did you log in the last year?:

150

What type aircraft are you currently flying?:

MOONEY M20C

How much formal education have you completed?:

- High School:
- Undergraduate College Degree:
- Post Graduate Degree:
- Trade School/professional training:

What is your current profession?:

Electronics Design Engineer

What is your income level?:

- up to \$50,000 per year
- \$50,000 to \$100,000 per year
- \$100,000 to \$150,000 per year
- over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

Lets get moving!

AGATE Concept Demonstrator Survey

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We would appreciate your feedback about the demonstration you have just seen. Where the questions ask about value, we realize that each individual may have a different basis for value. Time, Cost, Performance, Ease of Use, and Safety are some of the ways by which we measure value. Please state which value factors you consider most important in your answer. Use space on the back of the paper as necessary.

Did you fly the concept demonstrator or observe?

The AGATE Concept Demonstrator shows use of possible new display concepts intended to improve the pilot's awareness of his or her position and situation. Do you feel the display concepts shown would increase your situation awareness? Why or why not?

YES - MAINS - MAP DISPLAYS ARE A GOOD START, BUT THE "VIRTUAL REALITY" DISPLAY IS MUCH BETTER.

The AGATE Concept Demonstrator shows the concept of a "Head-Up" Display used with other instrument displays.

Would the head-up display represent for you:

An increase in value over present general aviation aircraft display systems?:

No increase in value over present general aviation aircraft display systems?:

A decrease in value over present general aviation aircraft display systems?:

Why do you believe this?
IT HELPS INSTRUMENT INTERPRETATION MUCH SIMPLER AND LESS TIME-CONSUMING.

The single lever power control would allow a pilot to operate the engine at maximum efficiency while reducing operating and maintenance expense.

Would the single lever power control represent for you:

An increase in value over present general aviation aircraft systems?:

No increase in value over present general aviation aircraft systems?:

A decrease in value over present general aviation aircraft systems?:

Why do you believe this?
IT ELIMINATES A WHOLE CLASS OF PILOT ERRORS, FROM OVER-LEANING TO FUEL TANK SWITCHING TO OVERBOOSTING.

If the single lever power control made the initial purchase of an aircraft more expensive, what would you accept as the maximum time for the savings in operation and maintenance to pay back the added initial purchase expense?

1 year 5 years
2 years 7 years
3 years 10 years longer

Do you like the concept of a single GPS approach procedure that looks essentially the same to the pilot at every airport? YES NO

Why?
REDUCES THE TRAFFIC WORKLOAD FOR PILOTS, AND LESSENS THE STRANGE LOCAL VARIATIONS.

Would a graphic "highway in the sky" display presentation make navigation easier? YES NO

Why?
PERSPECTIVE AS DISPLAYED IN THE DEMO IS A SERIOUS PROBLEM. HOW HIGH ABOVE THE HIGHWAY AM I? HOW MUCH CORRECTION SHOULD I APPLY AS GET BACK ONTO IT?

What concept(s) in the AGATE Demonstration here do you believe offers the most value to you as a general aviation pilot? Why?

THE CONCEPT OF APPLYING CURRENT TECHNOLOGY ACROSS THE BOARD, G.A. IS TOO FAR BEHIND THE CURVE IN EVERYTHING BUT AVIATICS. AND IT'S PRETTY FAR BEHIND THERE.

What concept(s) in the AGATE Demonstration here do you believe represents the least value to you as a general aviation pilot? Why?

AUTO-COORDINATED TURNS - THERE ARE STILL TIMES WHEN A SLIP IS NECESSARY - CANDING IN A CROSSWIND, FOR EXAMPLE.

Please provide the optional information on the back of this form.

Please tell us something about yourself so that we may better understand the needs of the general aviation pilot.

What Ratings do you currently hold?:

Private pilot

Instrument

Commercial

CFI

ATP

How many total hours flight time have you logged?:
~300

How many hours flight time did you log in the last year?:
~100

What type aircraft are you currently flying?:
Cessna 172, 172R, 182, 206

How much formal education have you completed?:

High School:

Undergraduate College Degree:

Post Graduate Degree:

Trade School/professional training:

What is your current profession?: *SOFTWARE ENGINEER,
REAL-TIME SYSTEMS*

What is your income level?:

up to \$50,000 per year

\$50,000 to \$100,000 per year

\$100,000 to \$150,000 per year

over \$150,000 per year

Please use this space to tell us anything else you think we should know about your impressions of the AGATE Concept Demonstrator. Thank you for your time!

APPENDIX E

AOPA AGATE Concepts Demonstration Survey Database

AOPA AGATE CONCEPTS DEMONSTRATION SURVEY DATABASE

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Would need some added knowledge
Head-Up Value	I
Head-Up Resp	In the future young pilots will be very in tune to this type of flying, more likely to adapt. Far more people flying
SLPC Value ...	I
SLPC Response	Simple is best
SLPC Cost PB	
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Don't think possible
Highway NAV Easier	Y
Highway Resp	Simplify procedures
Most value	Value to IFR & congested areas
Least value	?
Ratings	PP
Total Hours	1000
Hours last yr	175
Aircraft	EXP
Education	UGD
Profession	FARMING
Income	50-100
Comments 1	You should be addressing Flight Procedures for the non 8 to 15 yr old -- the young adapt! The older the pilot the less he adapts, (or harder) but - mentally he needs simplicity.
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	As a student pilot I am easily disoriented by flight without reference to the ground
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	More accurate mixture settings for efficiency
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	N
Sngl GPS Resp	OK, but not necessary if something like the "highway" is superimposed
Highway NAV Easier	Y
Highway Resp	Much more intuitive than traditional instruments
Most value	Heads-up display & GPS with map. Solves difficulty with flying in IMC, and getting lost
Least value	Combined attitude indicator/airspeed indicator. Useful still, but not as much as other items
Ratings	NONE
Total Hours	50
Hours last yr	50
Aircraft	PIPER WARRIOR
Education	PGD
Profession	PROGRAMMER
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	reduces margin of error in reduced visibility
Highway NAV Easier	Y
Highway Resp	more intuitive to follow a "highway" then to "fly" dials, compass headings
Most value	That this technology is available today. Increased learning curve
Least value	
Ratings	PP
Total Hours	220
Hours last yr	60
Aircraft	BEECH 2-35 BONNAZA
Education	PGD
Profession	MD-PSYCHIATRY
Income	100-150
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Ease of use
Highway NAV Easier	Y
Highway Resp	Ease of use
Most value	All
Least value	none
Ratings	COM, CFI
Total Hours	4700
Hours last yr	55
Aircraft	PA-32T-300
Education	UGD
Profession	INSURANCE AGENCY
Income	50-100
Comments 1	Put airspeed in HUD
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	I'm a visually oriented person
Head-Up Value	I
Head-Up Resp	Risk reduction
SLPC Value	I
SLPC Response	Better engine life
SLPC Cost PB	2
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Less confusion when arriving at a new airport
Highway NAV Easier	Y
Highway Resp	Reduced work load at a critical phase of flight
Most value	Single lever power control. It introduces new technology into the engine - which has had little inovation for many years
Least value	Track display - I need to know more about what is in front of me not what's behind me (ie. my historic track)
Ratings	PP
Total Hours	125
Hours last yr	30
Aircraft	TRINADAD
Education	PGD
Profession	TELE CENTER CONSUL
Income	100-150
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	N
Awareness Resp	No, with some exceptions. Precise attitude awareness is decreased. Lateral position is increased
Head-Up Value	I
Head-Up Resp	with some refinements, it could reduce workload
SLPC Value	I
SLPC Response	Reduced workload due to no prop. mixture; it would be better if it had tactile detents for the 5 power settings
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Reduced possibility of situational awareness errors
Highway NAV Easier	Y
Highway Resp	Provides lead for rollout onto heading or airway
Most value	Hi definition HUD with visual depiction of runway environment for low visibility landings
Least value	Hight data above flight path is to coarse. Velocity vector presentation would be helpful. Bank data needs to be more precise
Ratings	PP, INS, COM, CFI
Total Hours	3000
Hours last yr	600
Aircraft	C172, C182 PA28-161/181, AC14, C310
Education	UGD
Profession	FI, AUTHOR
Income	< 50
Comments 1	Auto flap extensions is a good idea, but auto trim adjustment should be included so pilot does nont have to trim away pitch moments created by flaps. Also, could system automatically adjust trim as airspeed changes are commanded to reduce workload?
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	Simplifies information processing
SLPC Value	
SLPC Response	Unknown, it appears very valuable but I question the pilot ability to recognize problem with interrelated activities
SLPC Cost PB	2
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Reduces independent evaluation process and improve pilot confidence
Highway NAV Easier	Y
Highway Resp	I would make navigation less technical & therefore more comfortable and effective for less competent/newer pilots
Most value	
Least value	
Ratings	STU
Total Hours	4
Hours last yr	0
Aircraft	C182
Education	UGD
Profession	BUSSINESS WOMAN
Income	> 150
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Graphics reduce mental processing time
Head-Up Value	I
Head-Up Resp	Clarity of flight position information
SLPC Value	I
SLPC Response	Reduced Pilot workload
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Consistency of of cockpit steps and organization
Highway NAV Easier	Y
Highway Resp	Pleasing display of position
Most value	Clarity of graphics position awareness
Least value	
Ratings	COM
Total Hours	1000
Hours last yr	150
Aircraft	C182
Education	PGD
Profession	BUSSINESS OWNER
Income	> 150
Comments 1	1) A briefing handout would be helpful 2) Very good staff to give project organization. 3) A video demo of what you'll see inside demonstrator would be helpful.
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	7
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	It would keep things simple
Highway NAV Easier	Y
Highway Resp	It keeps you on course at all times, and eliminates questions about location
Most value	Ease of use. It makes the plane almost simple to use as a car
Least value	None. I liked all of the concepts
Ratings	STU
Total Hours	10
Hours last yr	9
Aircraft	
Education	HS
Profession	SALES
Income	< 50
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	Seeing is believing
SLPC Value	I
SLPC Response	
SLPC Cost PB	
Cost response	Don't know
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	
Least value	It's easy
Ratings	PP
Total Hours	1000
Hours last yr	180
Aircraft	AG-5B/A
Education	PGD
Profession	TEACHER
Income	< 50
Comments 1	Develop this ASAP and I'll become instrument rated
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	IFR flying I believe would be easier
SLPC Value	I
SLPC Response	Simplicity rules
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Standardization
Highway NAV Easier	Y
Highway Resp	Its easier to understand where you're supposed to be
Most value	
Least value	
Ratings	
Total Hours	
Hours last yr	
Aircraft	
Education	
Profession	
Income	
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	Absolutely; The road is a great concept. Maybe I would forget where the airport is, but not the road!
Head-Up Value	I
Head-Up Resp	I think the simpler aircraft are to fly the greater utilization will be achieved. The easier it is the more likely I'll do it.
SLPC Value	I
SLPC Response	This is the most bizarre area of flying - so many weird procedures and folklore to managing power.
SLPC Cost PB	1
Cost response	
Sngl GPS Approach	N
Sngl GPS Resp	If this could be achieved without compormise in minimums OK, but otherwise, let them vary.
Highway NAV Easier	Y
Highway Resp	Most of us only have a dim view without GPS of where we are. The highway would completely resolve this. Though my altitude info was weak.
Most value	1) highway 2) SLPC
Least value	It's all valuable
Ratings	PP, INS
Total Hours	1700
Hours last yr	150
Aircraft	C310
Education	PGD
Profession	EE, VP ENG
Income	> 150
Comments 1	This is really a great program. Thanks!
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	2
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	Integrated, need for automatic alert of system failures
Least value	
Ratings	COM
Total Hours	3600
Hours last yr	250
Aircraft	TL5, MOONEY
Education	PGD
Profession	TAX ATTORNEY
Income	> 150
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	If heads up Yes. Flight path gives visual feed back
Head-Up Value	I
Head-Up Resp	
SLPC Value	N
SLPC Response	In nonstandard conditions I question the flexibility
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Standardize approach increase safety
Highway NAV Easier	Y
Highway Resp	
Most value	Hiway in sky unified GPS approach
Least value	Single stick control
Ratings	PP
Total Hours	500
Hours last yr	100
Aircraft	MAULE-5-235
Education	PGD
Profession	SALES MANAGER
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Of course. you are given a visual path w/ visual ques to power adjustments, "Fly up" & "Fly Down" are obvious
Head-Up Value	I
Head-Up Resp	Easier to fly "Situationally" rather than instrument interpretation
SLPC Value	I
SLPC Response	No over rich, engine rough situations
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Uniformity. Easier to learn. 1 universal "approach" than ILS, NDB VOR.
Highway NAV Easier	Y
Highway Resp	Easier to "fly" the highway - off course - on course corrections have visual ques
Most value	Highway w/ road signs easier to fly. See above answer.
Least value	Everything looked good. I'd sacrafice the SLPC if I had to make unit affordable
Ratings	PP, INS
Total Hours	500
Hours last yr	75
Aircraft	C172, PA28-180
Education	PGD, PT
Profession	ATTORNEY
Income	100-150
Comments 1	Get these demonstrators out to the Gen Av. Public -- It's unbelievable!
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	Heads-up display very nice - very easy to fly
Head-Up Value	I
Head-Up Resp	Limits head movement in cockpit - work load leasend
SLPC Value	I
SLPC Response	All controls @ fingertips less motion in cockpit to locate and needs no eye contact
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Obvious - very easy to learn & standardize approaches you know what to expect.
Highway NAV Easier	Y
Highway Resp	Eye/hand co-ordination very good
Most value	Single pilot controls -- Heads-up display
Least value	
Ratings	PP
Total Hours	4000
Hours last yr	250
Aircraft	A36
Education	UGD
Profession	TRANSPORTATION
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	Need to see real-world through the display.
Head-Up Value	I
Head-Up Resp	Interates out-the window view with instrumentation
SLPC Value	I
SLPC Response	More efficient engine management
SLPC Cost PB	1
Cost response	
Sngl GPS Approach	N
Sngl GPS Resp	Each area has different traffic flow requirements, therefore needing different approaches
Highway NAV Easier	Y
Highway Resp	Better situational awareness
Most value	Integrated instrumentation. Simpler procedures
Least value	Reluctance by manufactures to offer these "automated" products due to their added liability exposure from change
Ratings	INS, COM, CFI
Total Hours	7500
Hours last yr	250
Aircraft	MOONEY 201, C172
Education	PGD
Profession	STUDENT, SFTW ENG
Income	< 50
Comments 1	I would like to have you/it at our next "Super Safety Seminar" that we are doing in San Diego. We usually have ~ 800 to 1200 pilots attend. I believe that it is scheduled for the Sep/Oct 97 timeframe.
Comments 2	Bill Sanders; 815 Avenida Madera; Chula Vista, CA 91910-6235; VM (619)685-9921;E-mail 72557.3212@Compuserve.com Please come!
Comments 3	

Fly/Observe	O
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	
Least value	
Ratings	PP, INS
Total Hours	800
Hours last yr	100
Aircraft	C172
Education	UGD
Profession	COMPUTER SYS ARCH
Income	100-150
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Visual cues identify actual flight path info and it clearly improved "situational awareness". Perhaps maybe too much!
Head-Up Value	I
Head-Up Resp	Don't have to split your attention between two different views - Paradigm is the same regardless of weather
SLPC Value	I
SLPC Response	Simpler obviously
SLPC Cost PB	
Cost response	It won't
Sngl GPS Approach	Y
Sngl GPS Resp	Standardization. But the original procedure t... were supposed to do this, and that got changed a lot
Highway NAV Easier	Y
Highway Resp	Don't have to fuse disparate info from steam gauges
Most value	The "highway in the sky"
Least value	The throttles were going to change anyway
Ratings	COM
Total Hours	1600
Hours last yr	0
Aircraft	C310
Education	UGD
Profession	AEROSPACE ENG
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Good visual indication of position & desired flight path
Head-Up Value	I
Head-Up Resp	Easier to fly & fewer chnces for error
SLPC Value	I
SLPC Response	Reduced maintenance losts from lean burn induced engine damage
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Standardized approaches
Highway NAV Easier	Y
Highway Resp	Visual represenetation is easier to interpret
Most value	
Least value	
Ratings	
Total Hours	
Hours last yr	
Aircraft	
Education	UGD
Profession	MECHANIC
Income	
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Definitely
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	Display concepts
Least value	?
Ratings	PP
Total Hours	500
Hours last yr	0
Aircraft	
Education	HS, TS/PT
Profession	
Income	
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Because my attention would be focused on the outside world with instrument feedback
Head-Up Value	I
Head-Up Resp	Reduces eye fatigue and saves time for scanning instruments
SLPC Value	I
SLPC Response	It would alleviate the need to search for instruments. It's naturally placed where hands rest.
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	It would be easy to translate familiarity of airports to other airports
Highway NAV Easier	Y
Highway Resp	People can relate to "lanes" from driving. So, adoption and time to proficiency would be reduced.
Most value	...ato adjusting airspeed
Least value	Couldn't think of any!
Ratings	STU
Total Hours	0
Hours last yr	0
Aircraft	C170
Education	UGD
Profession	COMPUTER INDUSTRY
Income	< 50
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	As long as a pilot doesn't get disoriented by flying a path through clouds - it increases awareness
Head-Up Value	I
Head-Up Resp	Watching terrain, traffic and attitude are primary to safe flight
SLPC Value	I
SLPC Response	less bother
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	N
Sngl GPS Resp	Variety improves awareness and skill
Highway NAV Easier	Y
Highway Resp	Less pilot workload - more awareness of the situation
Most value	Heads up display - more awareness
Least value	none
Ratings	PP
Total Hours	130
Hours last yr	65
Aircraft	C152
Education	UGD
Profession	SALES
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	Intutive
SLPC Value	I
SLPC Response	Reduces work load
SLPC Cost PB	2
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Consistancy
Highway NAV Easier	Y
Highway Resp	Reduces scan ifo but I'm not sure the concept has been optimized yet
Most value	Bring me up to date on the latest technologies.
Least value	?
Ratings	ATP
Total Hours	18500
Hours last yr	80
Aircraft	BONAZA 633
Education	PGD
Profession	RETIRED
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Easy to visualize
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Safer
Highway NAV Easier	Y
Highway Resp	
Most value	
Least value	
Ratings	STU
Total Hours	28
Hours last yr	28
Aircraft	C152
Education	UGD
Profession	COMPUTER CONSULTANT
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Provides an easy to visualize spacial orientation
Head-Up Value	I
Head-Up Resp	Keep the pilot outside the airplane
SLPC Value	I
SLPC Response	Easy to use
SLPC Cost PB	7
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Standardization
Highway NAV Easier	Y
Highway Resp	All the information is concentrated in front of you and computed for you
Most value	
Least value	
Ratings	PP
Total Hours	200
Hours last yr	0
Aircraft	
Education	UGD
Profession	COMPUTER CONSULTANT
Income	100-150
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	The graphical path was useful but shouldn't dominate the screen
Head-Up Value	I
Head-Up Resp	Heads up allow for increased scanning of the surroundings. You don't have to re-focus from the inside/outside
SLPC Value	I
SLPC Response	While removing the pilot from some decision making it would simplify the task & reduce chance for error
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	N
Sngl GPS Resp	Each airport is different & shouldn't all be the same
Highway NAV Easier	Y
Highway Resp	Switching back between maps to instruments to outside view while navigating can be taxing. The ability to follow a graphical path would reduce workload
Most value	Workload reduction. Keeping balance in workload
Least value	
Ratings	PP
Total Hours	130
Hours last yr	60
Aircraft	SEL
Education	PGD
Profession	ENGINEER
Income	< 50
Comments 1	While following the path allowed the pilot to make a very precise approach it also seemed to have him fixated on that task. ATC and other traffic would require some sharing of cognitive resources.
Comments 2	The addition of VSI info and a path predictor display would also be helpful.
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	In IMC conditions, this makes the conceptualization of my location and position much easier than in normal systems
Head-Up Value	I
Head-Up Resp	Keeps your head up to stay aware of external reference points
SLPC Value	I
SLPC Response	Simplification and optimization of settings
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Airport-specific knowledge no longer becomes mandatory for IMC landings
Highway NAV Easier	Y
Highway Resp	see answer #1
Most value	Heads-up display will make getting an IFR rating not only easier, but more desirable as well. Will reduce fear of flying IFR
Least value	
Ratings	PP
Total Hours	90
Hours last yr	10
Aircraft	C152, C172
Education	PGD
Profession	MANAGEMENT CONSULT
Income	> 150
Comments 1	If marketed correctly, this could really open up demand for pilots licences in GA. When people (especially younger people) see the real relationship between this system and the video games they've been playing all their lives.
Comments 2	This will also spur movement toward standardized GPS approaches. Thanks. Good luck.
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	But what happens if I accidentally fly away from the green path? How do I find it again.
Head-Up Value	I
Head-Up Resp	More intuitive
SLPC Value	I
SLPC Response	Less things to worry about and do wrong
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Simplicity
Highway NAV Easier	Y
Highway Resp	But watch out about losing spacial orientation and just "following the green line" to nowhere
Most value	Visual (although computer generated) reference to the ground and to the airport - a quick confirmation that I am heading in the right direction
Least value	How much programming will I need to make the green line do what it should. It feels like if I blink I will be way off course -- too sensitive
Ratings	ATP
Total Hours	4000
Hours last yr	150
Aircraft	KING AIR
Education	PGD
Profession	FINANCE
Income	
Comments 1	Bank and pitch indications are deficient -- no representations of Rate of desc or climb. Also you need to show pitch attitude or speed vectors for level flight so the pilot will always know where "center" is
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Increases the time available to look outside
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Consistent and easy to use. Reduce confusion and errors
Highway NAV Easier	Y
Highway Resp	
Most value	Ease of use, and being able to learn much quicker will open GA to a much broader population
Least value	
Ratings	PP
Total Hours	110
Hours last yr	110
Aircraft	PIPER WARRIOR / ARROW
Education	UGD
Profession	SALES
Income	50-100
Comments 1	I enjoyed seeing new thoughts on improving on what is essentially 30 year old technology presently in use. I doubt whether the required infrastructure changes (ATC, airports, aircraft) can be make in the near future but it provides a raodmap to put
Comments 2	pieces in a consistent manner. My initial impression is that it would take the "fun" out of flying because as a pilot I enjoy the complexity of the tasks of flying today. However, it will be nexessary to make this kind of changes in order to open up GA
Comments 3	and turn it into a real transportation alternative rather than a hobby

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	At a lower workload - but I didn't have the other "reference" info or numbers to check performance/trends
Head-Up Value	I
Head-Up Resp	Safety in IFR
SLPC Value	I
SLPC Response	engine longevity/ economy
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Consistency would improve safety - but is this possible with respect to terrain?
Highway NAV Easier	Y
Highway Resp	But! do we always want easier? I do in IFR conditions - but not all the time.
Most value	HUD - for safety in IFR SLPC - for engine longevity/ economy
Least value	Isolation from traditional information workload/ overload - as long as I'm not going to endanger life or limb - I like the challenges of integration
Ratings	PP
Total Hours	800
Hours last yr	30
Aircraft	C182
Education	HS, TS/PT
Profession	PARAMEDIC, FIREFIGHTER
Income	< 50
Comments 1	I think this is a great concept and a good dircetion for us to be heading - but - I can't afford to fly the antiquated technology I do now - how am I going to afford this new technology. I can just barely afford a share in an old 182 now, I could not
Comments 2	afford a new production 182 with the old technology they are manufacturing now. How could I afford a new airplane with this advanced technology? IF this could be make available at a very low cost it will bring more people (the "Nintendo" crowd) to
Comments 3	avation. But they think the \$3000+ that it costs now to get the license is too much. Very Impressive demonstration - thank you very much for making this display available

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Absolutely! Situational awareness primarily - engine systems secondary
Head-Up Value	I
Head-Up Resp	Decrease information overload
SLPC Value	I
SLPC Response	Improved quality of engine maintained
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Like standard user interfaces on computers and facilitate learning
Highway NAV Easier	Y
Highway Resp	More integrated flight management
Most value	Approach/ departure highway in sky
Least value	Engine management
Ratings	PP
Total Hours	400
Hours last yr	20
Aircraft	C172
Education	PGD
Profession	POLICY ANALYST
Income	< 50
Comments 1	I found it very impressive + well-focused. Concepts would seem unusally attractive.
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	More efficient, better for engine life, less time and distractions for pilot
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Less chance for errors
Highway NAV Easier	Y
Highway Resp	
Most value	Safety and proficiency
Least value	If you only follow the roadway you could lose situational awareness
Ratings	INS
Total Hours	500
Hours last yr	100
Aircraft	
Education	HS
Profession	
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	Easy to read
Head-Up Value	I
Head-Up Resp	Easier to fly
SLPC Value	I
SLPC Response	Easier to fly and learn to fly
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	Onlyu for local flights. Would be irritating for cross country
Most value	SLPC
Least value	no response
Ratings	
Total Hours	
Hours last yr	
Aircraft	
Education	PGD
Profession	FLIGHT OPERATIONS
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Increase
Head-Up Value	I
Head-Up Resp	More awareness of systems
SLPC Value	N
SLPC Response	
SLPC Cost PB	2
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Safer and easier
Highway NAV Easier	Y
Highway Resp	much easier to follow
Most value	Highway in the sky
Least value	
Ratings	PP
Total Hours	200
Hours last yr	50
Aircraft	PIPER
Education	UGD
Profession	
Income	> 150
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Head's up, road signs, standard view area
Head-Up Value	I
Head-Up Resp	terrific feedback system
SLPC Value	I
SLPC Response	moderate improvement
SLPC Cost PB	2
Cost response	
Sngl GPS Approach	N
Sngl GPS Resp	Smaller planes still don't need long approach
Highway NAV Easier	Y
Highway Resp	Great feedback on every axis, much like driving
Most value	The highway
Least value	Single lever
Ratings	PP
Total Hours	100
Hours last yr	20
Aircraft	PIPER ARCHER
Education	PGD
Profession	COMPUTER MGR
Income	100-150
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	M
Awareness Resp	I'm not sure. Part of my problem was a lack of knowing exactly what I was doing & what I needed to concentrate on.
Head-Up Value	N
Head-Up Resp	It most likely would but w/o spending more time on your system I can't say
SLPC Value	I
SLPC Response	With my 231 I have several knobs & several guages to adjust. One knob - 1 gauge would be easy
SLPC Cost PB	
Cost response	I can't answer this - I need to look at cost vs value - not a payback period - safety is also an issue that may take precedence over any added costs
Sngl GPS Approach	Y
Sngl GPS Resp	Safety is heightened greatly by having less to do/know. Doing the same approach over & over = increased safety with increased repetition
Highway NAV Easier	N
Highway Resp	This was hard for me to fly because I don't do it. If thats what I learned then it would/should be very easy "But should flying airplanes become nothing more than video games?"
Most value	Simplifying scan & info processing - w/ today's GPS & !/pilots flying in good wx or good IFR is simply managing systems - the crunch comes when there are emergencies & decisions must be make instantaneously
Least value	I'm not sure - the current instruments all relate to the "feel" of an airplane in the aerial environment - what you hae does not enhance this - eg. airspeed being nothin but a # or my plane a high airspeed is a needle at top of guage - low is on bottom
Ratings	PP, INST
Total Hours	4300
Hours last yr	300
Aircraft	MOONEY 231
Education	PGD (3)
Profession	PROFESSOR, AUTHOR
Income	> 150
Comments 1	I have some safety concerns with turning all info input into a single flat glass panel format. Needles & guages show relationships, ration\s, etc. glass panels only show

	immediate situations not trends - perhaps these relationships can be retained
Comments 2	cognitively but in dire circumstances this trend/relationship info may become very important for decision making
Comments 3	
Fly/Observe	F
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	1
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	Div.... pilot ... and shows positional awareness based on display
Most value	Takes the risk out of the act of flying
Least value	All excellent
Ratings	CFI
Total Hours	900
Hours last yr	250
Aircraft	MOONEY
Education	TS/PT
Profession	PHYSICIAN
Income	> 150
Comments 1	Excellent concepts and great improvement for GA
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	In actual you would be able to see digital surrounding
Head-Up Value	I
Head-Up Resp	Better visual attitude
SLPC Value	I
SLPC Response	Presenting errors in lever controls
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Familiarity
Highway NAV Easier	N
Highway Resp	Depends. You don't want to rely on the signs - there might be times when you have to do it differently
Most value	Future technology to look forward to or train for
Least value	Affordability
Ratings	PP
Total Hours	120
Hours last yr	10
Aircraft	C182
Education	UGD
Profession	FAA AIRPORT PLANNER
Income	< 50
Comments 1	More advanced training on the controls
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	HUD keeps the pilots eyes out of the airplane where they belong
SLPC Value	I
SLPC Response	K.I.S.S.
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	N
Sngl GPS Resp	To allow airports with terrain/obstacle limitations to still have usefull (lower) minimums
Highway NAV Easier	Y
Highway Resp	Less ambiguity, especially if they can be integrated with ATC vectors/ traffic avoidance in congested airspace
Most value	Moving map display - "the big picture". But, I would also like to see vert. profile information within the same.
Least value	No rudder pedals!! I want to control the airplane in each axis - especially shor final/ rollout
Ratings	COM
Total Hours	925
Hours last yr	60
Aircraft	BE-60, PA-32R, C177R6, C172, C150
Education	UGD, TS/PT
Profession	ADVERTISING REP
Income	< 50
Comments 1	I think that you are doing extremely important research that will improve aviation safety/ accessibility. I personally feel that the AGATE philosolhy as I understand it goes to far in the following way:
Comments 2	Aviation will always demand a considerably greater amount of training and expertise that other means of transport. Although the information systems aboard GA aircraft are seriously antiquated, the need for keeping the pilot in the flight control loop
Comments 3	will always be vital. The greater the automation, the greater the propensity for apathy and complacency. I think that the best cont. AGATE can make is in simplifying flight information systems (nav & comm), while leaving stick, rudder, & throttle alone

Fly/Observe	F
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	Lowers workload
SLPC Value	I
SLPC Response	Better engine management
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Lower cost. Less work updating charts
Highway NAV Easier	Y
Highway Resp	Less information to sort through.
Most value	Head up display eliminates inst. scan., need to interpret inst. and fly aircraft
Least value	Lack of inst. backup. In event of power failure what are your options
Ratings	PP, INS
Total Hours	2500
Hours last yr	250
Aircraft	T-210
Education	UGD
Profession	CONTRACTOR
Income	100-150
Comments 1	Need full motion! Option to reverse power - control stick too sensitive. Need voice prompts since pilot will fixate on CRT display. Flight is to short to become famillure with aircraft characteristics. Pilot's will need inst. back up.
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	Need to incorporate only some of the features
SLPC Value	N
SLPC Response	I would believe the costs would increase for maint. replacement of parts over a simple foolproof cable system with about as maint free.
SLPC Cost PB	99
Cost response	
Sngl GPS Approach	N
Sngl GPS Resp	A pilot would like a variation to make it more interesting (just like a bus driver gets tired of going on the same route)
Highway NAV Easier	Y
Highway Resp	
Most value	Approach - it would make it easier
Least value	The video feature - it is like flying a video game
Ratings	ATP
Total Hours	16000
Hours last yr	275
Aircraft	PA-34, M-5-210
Education	UGD, TS/PT
Profession	AERONAUTICAL ENG
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	All needed info. In one place - presented in form natural for human eye/ brain
SLPC Value	I
SLPC Response	Consider speed control bater than power let the computer set the power
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Simpler PME approach brief. Allow alternatives for terrain
Highway NAV Easier	Y
Highway Resp	Keep planes apart w/out radar and ATC
Most value	Easy "instrument" training
Least value	
Ratings	PP, INS
Total Hours	700
Hours last yr	100
Aircraft	B36TL
Education	UGD
Profession	INVESTOR
Income	> 150
Comments 1	Try it w/non pilots: keep improving till its easy for anyone! Adjust joystick for weaker springs. Consider peripheral vision cues for horizon.
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	But, the level of "help" needs to be adjustable
Head-Up Value	I
Head-Up Resp	The instrument scan is distracting enough, and when in & out of the clouds the workload increases
SLPC Value	I
SLPC Response	I am frequently referring to power charts & interpolating power settings
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	No "I don't have the charts" problem (no \$\$\$ for annual Jepp updates).
Highway NAV Easier	Y/N
Highway Resp	Yes and no. I would want more, options in the granularity of the highway. Maybe in x-country the "road" could be at one-mile intervals.
Most value	Approach & landing "highway"
Least value	Auto flaps - or at least a manual override. Need trim feedback. Need more info in the NUD (G.S., Airspeed, Winds)
Ratings	COM, CFI
Total Hours	1100
Hours last yr	100
Aircraft	C177
Education	UGD
Profession	PC-GURU
Income	50-100
Comments 1	Joystict is too tall - Spring tension to heavy - should be proportional to reflect a feedback similar to cabled controls
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	It forces you to remain close to flight path
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	Much easier to operate.
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Less chance for an error in poor conditions
Highway NAV Easier	Y
Highway Resp	
Most value	Makes navigation easier.
Least value	Distracts from ability to sight see.
Ratings	
Total Hours	
Hours last yr	
Aircraft	
Education	
Profession	
Income	
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	Less distracting - better awareness of flight path
Head-Up Value	I
Head-Up Resp	Ease of use - better situational awareneww
SLPC Value	I
SLPC Response	
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	
Least value	
Ratings	
Total Hours	
Hours last yr	
Aircraft	
Education	
Profession	
Income	
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	It is easier to compare the data
Head-Up Value	I
Head-Up Resp	It better represents the situation the aircraft is in.
SLPC Value	I
SLPC Response	Allows the pilot to concentrate more on flying
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Simplicity = safety
Highway NAV Easier	Y
Highway Resp	Makes navigating easier. Problem is "what happens if you lose sight of the highway"
Most value	Simplicity - less things to look at
Least value	It all is good. I'm concerned about how expensive it might be.
Ratings	INS, COM, CFI
Total Hours	1300
Hours last yr	5
Aircraft	PA28-181
Education	UGD
Profession	MANAGER, TECH SUPPORT
Income	50-100
Comments 1	This system shows a lot of promise. Cost and reliability will determine its success
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Minimizing pilot workload raises his/her ability to recognize subtle problems that could get big.
Head-Up Value	I
Head-Up Resp	Safer, less stress, especially when flying with non-pilot guests.
SLPC Value	D
SLPC Response	Simple is nice but the extra system complexity would probably be dangerous.
SLPC Cost PB	1
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	One approach makes it easier. A couple of choices would be okay also.
Highway NAV Easier	Y
Highway Resp	No thinging. Just fly the road or boxes.
Most value	Automatic communication with ground systems (towers, ATC, weather info, PIREPS)
Least value	
Ratings	PP
Total Hours	200
Hours last yr	15
Aircraft	ARCHER
Education	UGD
Profession	ENG MGR
Income	100-150
Comments 1	-- Focus on easy to read, intuitive, numberless displays. -- Don't increase systems complexities. Instead focus on integrating more things together (fewer wires & hoses to break). -- Long overdue. Let's get this system in place.
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Same reason that windows work better on PC's -> Graphical displays = better info
Head-Up Value	I
Head-Up Resp	see above
SLPC Value	I
SLPC Response	
SLPC Cost PB	1
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Less variables = fewer accidents
Highway NAV Easier	Y
Highway Resp	IFR conditions
Most value	Better situational awareness thru graphic displays
Least value	Need additional safeguards against lightening strikes/ electrical problems
Ratings	
Total Hours	
Hours last yr	
Aircraft	
Education	
Profession	
Income	
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	Highway in the sky w/ landmarks illuminated.
Least value	All glass panel, lightening = ESD = no IC's = no computer (blank screens)
Ratings	
Total Hours	
Hours last yr	
Aircraft	
Education	PGD
Profession	DIRECTOR
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	
Least value	
Ratings	INS, COM, CFI
Total Hours	1400
Hours last yr	150
Aircraft	PISTON SINGLES & TWINS
Education	UGD
Profession	CFI / BUSINESS OWNER
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Easier
Highway NAV Easier	Y
Highway Resp	Able to see
Most value	
Least value	
Ratings	
Total Hours	
Hours last yr	
Aircraft	
Education	
Profession	
Income	
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	Keeps head downtime to a minimum
SLPC Value	I
SLPC Response	Much simpler
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Much easiter to learn
Highway NAV Easier	Y
Highway Resp	Follow the road to the best flight path. Need to add something to steer you back to the path if you get off it
Most value	All. I have only taken a few introductory flights and find this much easier to fly
Least value	
Ratings	STU
Total Hours	3
Hours last yr	3
Aircraft	
Education	PGD
Profession	MARKETING / NEW BUS DEV
Income	50-100
Comments 1	What would a low time pilot do if the system failed? Shoud del the backup instruments to the demonstrator at some point.
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	Slightly. Tended to concentrate/fixate on displays too much.
Head-Up Value	I
Head-Up Resp	Keeps head out of cockpit
SLPC Value	I
SLPC Response	
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	I'm not sure that the display used is optimal. A "flight director" sidebar would help to show when the proper correction had been made
Most value	Displays. Situational awareness
Least value	
Ratings	ATP
Total Hours	6000
Hours last yr	100
Aircraft	T34
Education	PGD
Profession	ENGINEER
Income	> 150
Comments 1	I had a wrong impression of what the power lever would do during the demo. You still need to use the throttle in a conventional fashion
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	Inclusion of Highway & terrain features give exact image of position wrt desired path. No mental computation necessary
Head-Up Value	I
Head-Up Resp	Present digital/ electronic sys are representations of prior "steam gauges" & require same mental integration
SLPC Value	I
SLPC Response	
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Standardization of procedures
Highway NAV Easier	Y
Highway Resp	Give precise location wrt desired/ planned path. Gives precise location of point of descent, ils -
Most value	. Single lever control . highway in the sky coupled w/ desired flt. path & acft perf. info
Least value	All appear to add value. Cost will determine utilization
Ratings	INS, COM
Total Hours	5680
Hours last yr	15
Aircraft	SENECA
Education	PGD
Profession	PRES. SMALL AVIATION CO
Income	50-100
Comments 1	NASA is to be congratulated for funding this far-sighted effort to make flying safer, easier to learn & les costly. The successful integration of this technology in future GA aircraft will increase utilization of small FA airplanes as short/mid-range
Comments 2	transportation vehicles. The increased utilization will further reduce the cost of flying by increasing acft production which will lower unit production cost & hence customer purchase price
Comments 3	

Fly/Observe	O
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	HUD appears to reduce forward visibility and remove some of the feeling of flying. I found green line irritating. Would probably be safer on approach to minimums and for infrequent flyers - what happens when elec. fail??
SLPC Value	I
SLPC Response	Don't have to fool with leaning
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Standardization
Highway NAV Easier	Y/N
Highway Resp	Don't want to spend 3 or 4 hours in cross country flying looking at green line -- good for approach, but what about several airplanes in pattern
Most value	Simplified controls as long as sufficient backup when stuff starts to fail and it will
Least value	More information - Simply processed.
Ratings	PP, INS
Total Hours	3000
Hours last yr	200
Aircraft	MOONEY OVATION
Education	UGD
Profession	MARKETING/ADVERTISING
Income	100-150
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	10
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	
Least value	
Ratings	CFI
Total Hours	5000
Hours last yr	200
Aircraft	B-36
Education	UGD
Profession	PILOT
Income	< 50
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	2
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	
Least value	
Ratings	PP
Total Hours	300
Hours last yr	200
Aircraft	B-36
Education	HS
Profession	
Income	
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	
Head-Up Value	I
Head-Up Resp	Eyes out of cockpit focused @ infinity but w/ observability to critical parameters leads to great S.A.
SLPC Value	I
SLPC Response	Simplicity ... spare neurons available for other critical tasks
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Again simplicity & predictability
Highway NAV Easier	Y
Highway Resp	Continous feedback at course status
Most value	H. I. T. S.
Least value	
Ratings	INS, COM
Total Hours	400
Hours last yr	0
Aircraft	
Education	PGD
Profession	AEROSPACE ENG
Income	50-100
Comments 1	Pilot control feel system would obviously not be what was demonstrated which was not desirable. Decoupled control w/ attitude command in the pitch axis (or similar) would graetly enhance the task simplicity. Additionally the HITS system
Comments 2	increased the pilot's gain in up and away flight by tempting him to try to drive zero error with respect to the "highway". The apparent required precision of flight path control was too demanding... This should be explored further
Comments 3	

Fly/Observe	O
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	2
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	with boxes (graphics included)
Most value	
Least value	
Ratings	PP, INS
Total Hours	450
Hours last yr	100
Aircraft	C150, C172
Education	
Profession	SALES MANAGER
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Definetely, you would have a graphic / heads up display
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Familiarity is great. When everthing looks the same every time - it becomes easy
Highway NAV Easier	Y
Highway Resp	
Most value	
Least value	
Ratings	COM
Total Hours	900
Hours last yr	85
Aircraft	PA-24-250
Education	UGD
Profession	
Income	< 50
Comments 1	Great, it will be quite interesting to actually fly this concept one day.
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	10
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	Consistency
Least value	
Ratings	
Total Hours	
Hours last yr	
Aircraft	
Education	UGD
Profession	ELECTRONIC ENG
Income	100-150
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	Efficiency
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Commonality
Highway NAV Easier	Y
Highway Resp	Reduce Head's down in cockpit
Most value	GPS Nav
Least value	Heads up display
Ratings	ATP
Total Hours	20000
Hours last yr	500
Aircraft	767, J-3 CUB
Education	UGD
Profession	RETIRED AIRLINE PILOT
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	N
Sngl GPS Resp	Unrealistic expectation when terrain & changing obstacles taken into consideration
Highway NAV Easier	Y
Highway Resp	
Most value	. Power plant management . Ease of navigation
Least value	
Ratings	CFI
Total Hours	750
Hours last yr	125
Aircraft	PA-34-200T
Education	UGD
Profession	FI, INSURANCE ACCT MGR
Income	< 50
Comments 1	.Dual power controls on twins to all for differential power. On Xwind takeoff. In the event of eng. out. . Incorporate automatic yaw compensation . Incorporate bank into good eng.
Comments 2	. Need more realistic feedback in stick controller . Need some indication of trim position
Comments 3	

Fly/Observe	F
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	Easier for beginning pilots
SLPC Value	I
SLPC Response	Easier for maneuvering
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Easier training
Highway NAV Easier	Y
Highway Resp	
Most value	
Least value	
Ratings	
Total Hours	
Hours last yr	
Aircraft	
Education	
Profession	
Income	
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Easier to process the visual
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	N
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	
Least value	
Ratings	
Total Hours	
Hours last yr	
Aircraft	
Education	PGD
Profession	CONSULTANT
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	
Least value	
Ratings	PP
Total Hours	
Hours last yr	
Aircraft	
Education	PGD
Profession	
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	
Least value	
Ratings	COM
Total Hours	3000
Hours last yr	50
Aircraft	BONANZA E35
Education	HS, TS/PT
Profession	ESTATE PLANNER
Income	100-150
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	N
SLPC Response	Don't know. Concerned over lack of direct linkage to engine controls.
SLPC Cost PB	
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	
Least value	
Ratings	INS, COM
Total Hours	1000
Hours last yr	100
Aircraft	BARON A55
Education	PGD
Profession	
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	MFD shows location. Path in sky easy to see. But, would worry about loosing attitude info while focusing on path in sky.
Head-Up Value	I
Head-Up Resp	Need to be carefull. Don't create the situation where the pilot fixates on one display.
SLPC Value	I
SLPC Response	
SLPC Cost PB	
Cost response	
Sngl GPS Approach	
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	Need indicators to get back on path
Most value	MFD and path in sky.
Least value	
Ratings	PP,INS, COM
Total Hours	800
Hours last yr	50
Aircraft	T210, 182
Education	UGD
Profession	ENGINEER
Income	
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	Collision avoidance would be much improved
SLPC Value	I
SLPC Response	Reduced distraction from the fit & collision avoidance tasks
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Standardization safety
Highway NAV Easier	Y
Highway Resp	Navigation becomes a "no brainer"
Most value	All
Least value	None
Ratings	INS, COM, CFI
Total Hours	2600
Hours last yr	15
Aircraft	C172
Education	HS
Profession	CFI - I
Income	< 50
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Much more visual than traditional instrumentation
Head-Up Value	I
Head-Up Resp	Tendency to keep head in cockpit is much decreased.
SLPC Value	I
SLPC Response	Decreased inputs required
SLPC Cost PB	2
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Again - simplicity is always preferable
Highway NAV Easier	Y
Highway Resp	Reduce the need for interpretation
Most value	Intuitive operation
Least value	
Ratings	PP, INS
Total Hours	400
Hours last yr	20
Aircraft	C172
Education	PGD
Profession	PUBLISHING
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	
Awareness Resp	
Head-Up Value	D
Head-Up Resp	It did not contain all info needed; the supporting info was outside my vision when I looked at the HUD
SLPC Value	I
SLPC Response	Permits pilot to put his attention on other aspects of flight
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	Probable, but my initial experience was disappointing
Most value	Single level power control
Least value	HUD as shown & compass put more of a horizon info on HUD in calibrated sense. Also, put standard turn rate indicator on HUD
Ratings	PP, INS
Total Hours	2200
Hours last yr	60
Aircraft	C182, 172
Education	PGD
Profession	AEROSPACE CONSULTING
Income	
Comments 1	I could not fly it properly, even the second time around. I believe some of reasons for my failure are: 1) I did not use all info presented. 2) Lack of kinesthetic feed back - g loads, noise, stick forces, etc., that I am used to in 89 years of flying
Comments 2	3) Displays are too far apart to see without a large motion scan. I am used to the standard T arrangement where I can really see everything with out much if any eye motion.
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Leaves more time to fly the plane
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	Allows more time to concentrate on flying the av....
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	A look into the future
Least value	Look at latest technology
Ratings	PP
Total Hours	250
Hours last yr	100
Aircraft	C172
Education	TS/PT
Profession	ATTORNEY
Income	> 150
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Simpler tasks - more thought time for situation
Head-Up Value	I
Head-Up Resp	Simplicity of tasks
SLPC Value	I
SLPC Response	ditto
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	consistency
Highway NAV Easier	Y
Highway Resp	simplicity
Most value	Ease of use, allow pilot more time for overall situation awareness
Least value	n/a
Ratings	STU
Total Hours	22
Hours last yr	0
Aircraft	C152
Education	UGD
Profession	SURGICAL TECHNOLOGIST
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	Auto engine & fuel system management
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	HUD, Hwy in sky
Least value	
Ratings	PP
Total Hours	200
Hours last yr	100
Aircraft	182, 172RG, ARCHER
Education	HS
Profession	ENGINEER
Income	> 150
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Reduces reference searches to panel
Head-Up Value	I
Head-Up Resp	Simplifies everything
SLPC Value	I
SLPC Response	Less system management risk
SLPC Cost PB	99
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	less risk of error
Highway NAV Easier	Y
Highway Resp	fewer references inside less risk
Most value	Highway in the sky. makes safe routes obvious in emergency situation
Least value	Ground picture data bank
Ratings	PP
Total Hours	70
Hours last yr	70
Aircraft	C172
Education	PGD
Profession	COMPANY PRESIDENT
Income	> 150
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Better positional awareness. But, could cause pilot to pay less attention to other factors (traffic, engine, gauges, etc.)
Head-Up Value	I
Head-Up Resp	Better eyes out flying
SLPC Value	I
SLPC Response	More efficiency, less to manage
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Consistency is easier
Highway NAV Easier	Y
Highway Resp	Easier to floowo path than to constantly check instruments and adjust.
Most value	Single lever operation simplifies flying. Navigation path & approach helps with controls
Least value	Replacing standard instruments with compuer screens takes away familiar environment and may fail.
Ratings	PP
Total Hours	160
Hours last yr	80
Aircraft	PA28-181
Education	PGD
Profession	COMPUTER SCIENTIST
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	The map of your route is great.
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Only one procedure to learn; know exactly what to expect.
Highway NAV Easier	Y
Highway Resp	Once you got used to it a cross bar that you should be lined up on might be easier to follow & more intuitive.
Most value	The visual display of the procedure/route you need to fly
Least value	The computer instrument displays weren't necessary. The heads-up route w/ the map display would be good alone.
Ratings	PP, INS
Total Hours	320
Hours last yr	150
Aircraft	PIPER ARCHER II
Education	PGD
Profession	COMPUTER SCIENTIST
Income	50-100
Comments 1	values based on: ease of use -> safety, performance. Suggested display for highway: hollow circle - you + - the course circle w/+ - you on the desired course
Comments 2	with maybe "bumpers" to show you the limits
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Good altitude and general situational awareness but possible danger of becoming fixated on highway. Also, highway symbology possibly too over-bearing, intense
Head-Up Value	I
Head-Up Resp	Dramatic workload reduction. Particularly on approach
SLPC Value	I
SLPC Response	Workload reduction
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Familiarity
Highway NAV Easier	Y
Highway Resp	but only if displayed in a more "marked" fashion for cross-country, and more prominent in terminal areas.
Most value	Wide angle HUD - much better & therefore safer situational awareness. Single input flight controller and engine control to enable more "heads-up" flying and less time head down.
Least value	Primary flight display - but can't really afford to lose that!
Ratings	
Total Hours	
Hours last yr	
Aircraft	
Education	UGD
Profession	JOURNALIST
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Shows you directly where you are supposed to be
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	
Least value	
Ratings	CFI
Total Hours	850
Hours last yr	60
Aircraft	CITABRA, STEAM..., DEBONAIR
Education	UGD
Profession	FLIGHT INSTRUCTOR
Income	< 50
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	It's like driving in a car
Head-Up Value	I
Head-Up Resp	It is easy and natural
SLPC Value	I
SLPC Response	It is natural and saves engine and fuel.
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	No surprises
Highway NAV Easier	Y
Highway Resp	It is natural
Most value	Requires less practice
Least value	Will it happen? We've been through thins like this before
Ratings	INS, COM, CFI
Total Hours	15000
Hours last yr	300
Aircraft	MOST GA AIRCRAFT
Education	UGD
Profession	PRES.MANUFACTURING
Income	> 150
Comments 1	I like the way things are developing
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	Probably so, when more familiar with actual use.
Head-Up Value	I
Head-Up Resp	One look gives information instead of a constant scan
SLPC Value	I
SLPC Response	Apparently the computer figures engine parameters so there is no adjusting on the climb or descent
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	This would simplify positional awareness and perhaps some apprehension at unfamiliar arpts.
Highway NAV Easier	Y
Highway Resp	Again - finding the needed information in one place - head up.
Most value	Exposure to new techonolgy in general. Apparent ease of flight and navigation.
Least value	Not sure there is a least. It is all quite fascinating; I don't have enough confidence in fail safe capability to accept it all at this time.
Ratings	INS, COM, CFI
Total Hours	6200
Hours last yr	68
Aircraft	C182, CHEROKEE 235
Education	PGD
Profession	NASA-AVIATION SAFETY ANA
Income	< 50
Comments 1	It is a novel, futuristic approach to flying. One needs a bit more time to handle the controls and become familiar with the techniqe & procedures to really get a good feel for the flight
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	The display lets you just "point and fly". The pilot doesn't have to think about each individual task. The system does all the "ciphering" and frees the pilot to just follow a preplanned route.
Head-Up Value	I
Head-Up Resp	TEN_FOLD! Same as above so many parameters are combined in the display it simplifies ("short-cuts" if you will) the efforts necessary to maintain the desired flight path
SLPC Value	I
SLPC Response	Quite simply, I fully believe that an automatic system (computer) properly designed (very important, naturally) can measure several parameters and make adjustments more quickly than I can.
SLPC Cost PB	5
Cost response	Please note: I am not an aircraft owner and a very low-time renter, so my answer to this question is really a guess ...Don't give it much weight!
Sngl GPS Approach	Y
Sngl GPS Resp	Less to relearn for the (current) different approaches; easier to become/stay proficient -- every approach is practice for the next one.
Highway NAV Easier	Y
Highway Resp	Obvious! So easy to follow. I can't avoid the obvious comparison any longer -- it's just like driving a car!
Most value	Simplicity, bestows/reinforces confidence. I am a 65-hour private pilot and one of the reasons I don't fly more frequently is because I feel there is so much that I don't know. It can be intimidating. The AGATE system integrates so much info for me, th
Least value	The whole concept seems very beneficial for increased safety and proficiency. I can't really pick out anything as not valuable and don't really percieve the experience as a set of individual component values.
Ratings	PP
Total Hours	70
Hours last yr	20
Aircraft	C172
Education	UGD
Profession	SALES REP.
Income	< 50

Comments 1

The term "value" is certainly open to several definitions or interpretations. I'm not an a/c owner, so I don't think in terms of long-term prorated costs. Neither am I wealthy, so flying is a luxurious treat that I can only occasionally afford...

Comments 2

I know that if there was a demand for 10 times as many aircraft that, overall, prices might come down. And how long it will take for demand to reach this level after all airplanes work the "AGATE Concept" way is for you folks to speculate on.

Comments 3

But anything that could help make GA more accessible to those of us below millionair-level income would be a very valuable pursuit. Thanks for the opportunity to try the AGATE Concept Demonstrator and th share my thoughts

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Visual added a real sense, tho' not real
Head-Up Value	I
Head-Up Resp	Requires less head movement, less scanning & lightens work load.
SLPC Value	N
SLPC Response	Acutally it has some ver good aspects but may leave out some pilot control
SLPC Cost PB	
Cost response	Not sure it would or not
Sngl GPS Approach	Y
Sngl GPS Resp	Where terrain allows. Simliar to VFR approach procedures the same most of the times
Highway NAV Easier	Y
Highway Resp	Adds the visual & is much better than imagining or guessing.
Most value	Hopefully the technology could be inexpensive so it would apply across the board for GA. Biggest value is probably safety & certainly would lessen work load
Least value	No rudders. Possibly single control could be a bit of a problem
Ratings	INS
Total Hours	2000
Hours last yr	170
Aircraft	C182
Education	UGD
Profession	EXPLOSIVES ENG
Income	50-100
Comments 1	If it can truly apply to GA in terms of cost it will be great (for guys like me) otherwise, like radar & some of the present hi tech nav aids, it will only be good for commercials. Looks great - keep up the good work.
Comments 2	PS. Part of the thrill of flying is the romance & ability to do it. Let's not loose it.
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Graphical
Head-Up Value	I
Head-Up Resp	Graphical
SLPC Value	I
SLPC Response	simplified op.
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Simple
Highway NAV Easier	Y
Highway Resp	SA, fun, simple
Most value	Graphical displays
Least value	OTW scene skews test reality from the panel displays
Ratings	CFI
Total Hours	5000
Hours last yr	60
Aircraft	P180
Education	PGD
Profession	AVIONICS
Income	50-100
Comments 1	Thank you for caring about GA enough to have this demonstrator
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	The plan view on MFD, along with the 3-D PFD eliminate any SA problem
Head-Up Value	I
Head-Up Resp	Keeps the pilots head out of the cockpit
SLPC Value	N
SLPC Response	
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Lower training costs - better conformity in approach
Highway NAV Easier	Y
Highway Resp	Would be easier to manage flight path
Most value	MGD with weather and engine gauges
Least value	HUD - cost effectiveness not readily apparent
Ratings	PP
Total Hours	1000
Hours last yr	50
Aircraft	CHEROKEE 140, 180
Education	UGD
Profession	PRES. MANUFACT CO
Income	100-150
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	
Head-Up Value	I
Head-Up Resp	Computer handles details all the reasons quoted by the narrator
SLPC Value	I
SLPC Response	Reduced work load
SLPC Cost PB	1
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Reduced pilot work load
Highway NAV Easier	Y
Highway Resp	That should be obvious
Most value	It is difficult to select any single item. This is an integrated package.
Least value	The large display is misleading. That's not what I would see from my cockpit.
Ratings	PP
Total Hours	500
Hours last yr	75
Aircraft	LANCAIR 360
Education	PGD
Profession	COMPUTER CONSULTANT
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	Eyes outside watching
SLPC Value	I
SLPC Response	No fussing with knobs
SLPC Cost PB	2
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Standardization - less likely to make mistakes, forget some little nuance
Highway NAV Easier	Y
Highway Resp	Good ref. for where I should be vs. where I am - as long as it is "in view" (if not, I need some help flying back to it: Where'd it go?)
Most value	Intelligent aids to doing what needs to be done. Some assurance I won't mess up. Buys time to think.
Least value	Stick. Yoke would do fine. More like car anyway.
Ratings	STU
Total Hours	45
Hours last yr	1
Aircraft	C152
Education	PGD
Profession	ASST. PROF
Income	50-100
Comments 1	Stick had high gain/too much spring loading. Power indications too small & poor color contrast. Suggestion: enlarge/brighten current power setting (smallest impact on screen clutter)
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	I could get a broader picture
Head-Up Value	I
Head-Up Resp	Better awareness
SLPC Value	I
SLPC Response	Allow the engine to last longer
SLPC Cost PB	99
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Easier
Highway NAV Easier	Y
Highway Resp	Easier
Most value	Heads up display
Least value	
Ratings	INS, COM
Total Hours	350
Hours last yr	10
Aircraft	MOONEY 201
Education	UGD
Profession	AEROSPACE ENG
Income	< 50
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	The pictorial view makes it easier, does the work for you - but need more practice to achieve it.
Head-Up Value	I
Head-Up Resp	As stated above the picture does the looking for you
SLPC Value	I
SLPC Response	Obviously, to achieve maximum efficiency with minimum pilot input must be an advantage. Also, the pilot cannot cause wear problems for the engine.
SLPC Cost PB	7
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Again approach procedures require considerable mental input. Any improvement such as this wuggested would be advantageous.
Highway NAV Easier	Y
Highway Resp	Ig it represents a highway in the sky, it would be much easier to stay on the road! Again it reduces pilot workload.
Most value	Single lever power control for the reasons stated below.
Least value	GPS approach, although I still like it! I don't want to choose 'A worst'!
Ratings	INS, COM
Total Hours	850
Hours last yr	70
Aircraft	P28 ARROW
Education	UGD
Profession	RETIRED CPA
Income	> 150
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	Awareness
SLPC Value	I
SLPC Response	
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Why not? If I go to a different airpoort, I know it.
Highway NAV Easier	Y
Highway Resp	But not so intrusive.
Most value	Data link for safety
Least value	
Ratings	PP
Total Hours	200
Hours last yr	60
Aircraft	C172
Education	PGD
Profession	COMPUTER GRAPHICS
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Does not let any information be missed.
Head-Up Value	I
Head-Up Resp	Keeps your eyes on the outside situation
SLPC Value	I
SLPC Response	Less to do.
SLPC Cost PB	2
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Simple
Highway NAV Easier	Y
Highway Resp	Less chance of error
Most value	All ease in all situation
Least value	
Ratings	PP
Total Hours	47
Hours last yr	0
Aircraft	C152
Education	PGD
Profession	SELF EMPLOYED
Income	100-150
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	Landing - no problem
Least value	Power setting
Ratings	PP, INS
Total Hours	9000
Hours last yr	250
Aircraft	C340 TWIN
Education	PGD
Profession	CHEM ENG, CEO
Income	> 150
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	
Head-Up Value	I
Head-Up Resp	Easier to use - You get the information you need in an integrated fashion.
SLPC Value	I
SLPC Response	Simpler - lower workload.
SLPC Cost PB	7
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Standardization always simplifier the task.
Highway NAV Easier	Y
Highway Resp	Like driving on a road in the sky
Most value	All
Least value	
Ratings	INS, COM
Total Hours	1500
Hours last yr	50
Aircraft	C172, BEECH A-36
Education	PGD
Profession	RETIRED, NASA AMES
Income	
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	7
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	
Least value	
Ratings	PP
Total Hours	280
Hours last yr	100
Aircraft	C152, KATANA, LONG E2
Education	UGD
Profession	BAIC AGENT
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	If it could be used on demand
SLPC Value	I
SLPC Response	
SLPC Cost PB	
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	
Highway Resp	Potentially
Most value	
Least value	
Ratings	PP
Total Hours	395
Hours last yr	110
Aircraft	C172
Education	PGD
Profession	ATTORNEY
Income	
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	We would spend less time with normal procedures
Head-Up Value	I
Head-Up Resp	Technology
SLPC Value	I
SLPC Response	Cheaper to do the normal maintenance
SLPC Cost PB	2
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Standarizing makes it easier to learn
Highway NAV Easier	Y
Highway Resp	No VOR, no airways, no radials, no NDBS, no looking at charts.
Most value	Technology - we need it
Least value	Is going to take the excitement away
Ratings	COM, CFI
Total Hours	1000
Hours last yr	500
Aircraft	SENECA, C130, BE76
Education	HS
Profession	PILOT
Income	
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	You bet increase but I still prefer ILS, VOR, GPS is 10 times more exiting
Head-Up Value	I
Head-Up Resp	I like just the Head-UP display and the moving map nothing more than that still using an "old" kind of instruments.
SLPC Value	D
SLPC Response	I like to fly airplanes with props, mixture, and throttle
SLPC Cost PB	
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	I like GPS but I still like an ILS approach
Highway NAV Easier	Y
Highway Resp	Make 10 times easier, but I prefer to fly VOR, GPS, ILS, moving maps, the highway is a kinda of video game (Nintendo)
Most value	I like the EFIS but still using the "old" instrument panel
Least value	The highway in the sky is to easy to fly
Ratings	COM
Total Hours	600
Hours last yr	400
Aircraft	TWIN ENGINE
Education	HS
Profession	
Income	< 50
Comments 1	EFIS is pretty good but leave the "old" instrument panel!
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	I am a deaf pilot & cannot fly IFR, but with AGATE system could help deafs pilots to fly without radio communication IFR
Head-Up Value	I
Head-Up Resp	Same as above - there is more than 80 deaf certified pilots in USA. We only fly VFR without radio but with this system - deaf pilot will appreciate them
SLPC Value	I
SLPC Response	Less stress - and prevent pilot errors in IFR - for example approach speed in window warning us to slow down.
SLPC Cost PB	
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Because it helps us to fly IFR or night better
Highway NAV Easier	Y
Highway Resp	Follow it "simple"
Most value	It will help all aviators to fly more enjoyable, less stress.
Least value	
Ratings	PP
Total Hours	350
Hours last yr	50
Aircraft	BONANZA C35
Education	HS
Profession	PLASTERING CONST. & INVESTOR
Income	50-100
Comments 1	Pleas note! Deaf pilots really need this system to make them to fly IFR. Also with closed caption on screen from tower.
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	Clear, simply displayed visual information all in one place - reduced scan workload.
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Can develop consistent pilot habits, less thinking/recalling procedures
Highway NAV Easier	Y
Highway Resp	Easy to follow, don't have to be studying chars while flying
Most value	Heads up, single display
Least value	
Ratings	INS
Total Hours	310
Hours last yr	50
Aircraft	C172
Education	PGD
Profession	CONSULTANT
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Less junk to sort through
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	Simpler visual queues
Most value	Single lever engine control. Highway visual.
Least value	
Ratings	
Total Hours	10
Hours last yr	0
Aircraft	
Education	PGD
Profession	ENGINEER
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	It allowed for anticipation of the turns
Head-Up Value	I
Head-Up Resp	It keeps the pilots eyes outside. It was intuitive
SLPC Value	I
SLPC Response	Engine management is too complex currently
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Reduces risk of becomming confused on a strange approach
Highway NAV Easier	Y
Highway Resp	More intuitive than needles
Most value	Power cues and highway display
Least value	
Ratings	PP, INS
Total Hours	400
Hours last yr	75
Aircraft	BONANZA, CHEROKEE
Education	UGD
Profession	AVIONICS DESIGNER
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	All depends on detail of display
Head-Up Value	I
Head-Up Resp	If the picture is detailed enough, it should be like seeing out in VFR conditions
SLPC Value	I
SLPC Response	Assuming a "complex" setup, having fewer controls should simplify eng. control.
SLPC Cost PB	1
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	I am not IFR yet. Seems much simpler than memorizing many different approaches
Highway NAV Easier	Y
Highway Resp	If the picture is detailed enough, it should be like seeing out in VFR conditions
Most value	Both concepts would aid in IMC. However total dependence on computers would present problems. Would the pilot really be able to fly without this system if he did not have "traditional" training?
Least value	
Ratings	PP
Total Hours	120
Hours last yr	40
Aircraft	C152
Education	UGD
Profession	MUSIC, RETAIL SALES & PERF
Income	< 50
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	But needs an additional cue for the upper bound of altitude (in addition to road signs)
Head-Up Value	I
Head-Up Resp	Much better situation awareness especially in take-off & landing phase
SLPC Value	I
SLPC Response	Much simpler way of controlling power - used in jets!
SLPC Cost PB	2
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	When the procedures are constant or similar, you can fly safer approaches
Highway NAV Easier	Y
Highway Resp	It works - flew A6's for 10 years with a "highway in the sky" -> combined with GPS, you can't get lost
Most value	Integrated displays for improved situation awareness
Least value	Where to place power lever. Give pilot a speed cue.
Ratings	INS, COM
Total Hours	3350
Hours last yr	60
Aircraft	MOONEY 201
Education	PGD, PT
Profession	EXECUTIVE DIR
Income	100-150
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y/N
Awareness Resp	YES - The one to the lower right would, might want to include a sideview also. NO - I might pay too much attention to the HUD graphics.
Head-Up Value	I
Head-Up Resp	With more info I could look for other acft more. Would prefer to have info in lower left on the HUD though
SLPC Value	I
SLPC Response	More time to see & avoid & lower operating cost as long as there is multable redundancy.
SLPC Cost PB	7
Cost response	
Sngl GPS Approach	N
Sngl GPS Resp	Every airport is different, I would be concerned about not having info that would be important in an emergency.
Highway NAV Easier	Y
Highway Resp	At a glance I could tell if I'm "on" or "off" the flight plan - very helpful if looking at a map.
Most value	Power management - increased reliability. Navigation - increased safety.
Least value	Simplification (ironicly) I still would want to do all the stuff and have control over the little things. But those are two differnt markets and would probaly keep my 172 also
Ratings	PP
Total Hours	280
Hours last yr	30
Aircraft	C-R172K
Education	UGD
Profession	STU., BUS AFFAIRS OF SFTW DEV
Income	
Comments 1	Make the two controls swapable. Great idea - keep up the work.
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	More intuitive
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Standardized, simplier
Highway NAV Easier	
Highway Resp	Not sure
Most value	Single lever power, integeated display
Least value	
Ratings	COM
Total Hours	600
Hours last yr	0
Aircraft	
Education	UGD
Profession	MANAGER
Income	100-150
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	N
Sngl GPS Resp	Not every airport is the same
Highway NAV Easier	Y
Highway Resp	but too easy?
Most value	
Least value	
Ratings	
Total Hours	
Hours last yr	
Aircraft	
Education	PGD
Profession	MARKETING
Income	< 50
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	Presented with situational (integrated) data not just data.
Head-Up Value	I
Head-Up Resp	- Head out of cockpit. - direct cues - relate to other experience "driving"
SLPC Value	I
SLPC Response	extreme care & training & vigilance needed to achieve similar results with multiple controls
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Safety, training cost reduced, safety, safety, safety.
Highway NAV Easier	Y
Highway Resp	Intuitive similar to driving (have to address the tendency to overcontrol to follow).
Most value	Simplified, controls, integrated & high level awareness ques/displays & advisories.
Least value	Advisory signs - Rotate, Power settings - may not fit situation all times.
Ratings	COM
Total Hours	1800
Hours last yr	10
Aircraft	SEL, C172
Education	UGD
Profession	SYS ENG MGR, AEROS ENG
Income	100-150
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Reduced workload enhances the SA
Head-Up Value	I
Head-Up Resp	Ease of use.
SLPC Value	I
SLPC Response	Ease of use.
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	Ability to safely navigate IFR w/o high workload apperent in conventional systems.
Least value	
Ratings	STU
Total Hours	25
Hours last yr	25
Aircraft	PIPER ARCHER
Education	UGD
Profession	GENERAL MANAGEMENT
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Good for deaf pilots to get into IFR without radio use.
Head-Up Value	I
Head-Up Resp	I, deaf pilot use only visual (not ear)
SLPC Value	I
SLPC Response	
SLPC Cost PB	10
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Easier to maintain courses
Highway NAV Easier	Y
Highway Resp	Easy guide
Most value	I, deaf pilot can use radio
Least value	Adds benefit to use IFR
Ratings	PP
Total Hours	98
Hours last yr	35
Aircraft	C172
Education	HS
Profession	CARPENTER
Income	50-100
Comments 1	To remember there are deaf pilots out there that also need help with IFR (80 deaf pilots are in USA)
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	
Awareness Resp	Undecided
Head-Up Value	I
Head-Up Resp	It would be easier to interpret
SLPC Value	D
SLPC Response	I would feel I had less control over the aircraft power
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	N
Sngl GPS Resp	I don't think appraoces are amenable to "one size fits all."
Highway NAV Easier	
Highway Resp	Maybe
Most value	Unsure; I don't know if I'm ready to stake my life on software.
Least value	Don't know
Ratings	PP, INS
Total Hours	1600
Hours last yr	5
Aircraft	MOONEY
Education	PGD
Profession	MGMR, COMPUTER SYSTEMS
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	
Head-Up Value	I
Head-Up Resp	Less head not con/scanning
SLPC Value	I
SLPC Response	Less complexity /room for error.
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	SOP allow less room for error
Highway NAV Easier	Y
Highway Resp	Less visualization effort required
Most value	Display, Power mgmt.
Least value	
Ratings	INS
Total Hours	550
Hours last yr	90
Aircraft	C172, C182, C152
Education	PGD
Profession	PROGRAM MANAGEMENT
Income	
Comments 1	I'd love to work on this project!
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	Virtual roadways and terrain projection are a tremendous help in situational awareness. Being able to fly the approach by HUD enables a smoother transition to visual w/o loosing IFR control /scan
Head-Up Value	I
Head-Up Resp	see above
SLPC Value	N
SLPC Response	power settings today do not seem overly complex
SLPC Cost PB	1
Cost response	
Sngl GPS Approach	N
Sngl GPS Resp	Differing terrain and other scenarios require a differing approach path. I do believe the graphic highway, HUD, and standardized user interface are a big improvement.
Highway NAV Easier	Y
Highway Resp	Following a "road" is a trivial mental exercise. However, the prototype did not provide me an opportunity to evaluate the "paving" process of selecting/building/ changing the road in preflight or in flight.
Most value	Reduced pilot workload, improved situational awareness, simplified simulator training. Improved safety and reduced costs.
Least value	Single lever power. Does not seem like a major improvement.
Ratings	PP, INS
Total Hours	380
Hours last yr	150
Aircraft	PA28-161/181/236/RT201, PA32-300
Education	HS, TS/PT
Profession	MANAGER, NETWORK SYSTEMS
Income	50-100
Comments 1	Looks promising!
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	No thinking and converting info to mind situation
Head-Up Value	I
Head-Up Resp	Less error and more comfort flying
SLPC Value	I
SLPC Response	
SLPC Cost PB	2
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Simple and safe.
Highway NAV Easier	Y
Highway Resp	Easy to follow
Most value	All - I wish I was a kid again and could learn to fly this easy.
Least value	none
Ratings	INS, COM
Total Hours	3500
Hours last yr	60
Aircraft	C210
Education	UGD
Profession	REALTOR
Income	50-100
Comments 1	This is a great step forward and you should continue to persue. Good luck.
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	Visual works
Head-Up Value	I
Head-Up Resp	More accurate then conventional systems
SLPC Value	I
SLPC Response	Less complex -
SLPC Cost PB	99
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Consistency
Highway NAV Easier	Y
Highway Resp	Visual
Most value	Heads Up display - I use a GPS now which keeps my head inside the cockpit - BAD!
Least value	
Ratings	PP
Total Hours	300
Hours last yr	100
Aircraft	PA28-181
Education	HS
Profession	MANAGER TECH. MARKETING
Income	> 150
Comments 1	It's about time. Good stuff -- Keep it up!
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	
Head-Up Value	I
Head-Up Resp	Greater situational awareness
SLPC Value	I
SLPC Response	Lower workload
SLPC Cost PB	2
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	In an emergency, familiarity with procedures should increase safety margin.
Highway NAV Easier	Y
Highway Resp	But it should not be so attention compelling as to interfere with ready attention to other info.
Most value	Conversion of instruments info into VFR cues.
Least value	
Ratings	PP, INS
Total Hours	800
Hours last yr	60
Aircraft	TB-20
Education	PGD
Profession	UNIVERSITY PROFESSOR
Income	100-150
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Absolutely - less fatigue factor
Head-Up Value	I
Head-Up Resp	Mouch more time to pay attention to flying rather than instruments
SLPC Value	I
SLPC Response	same as above
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Simple and safe.
Highway NAV Easier	Y
Highway Resp	Pilot would maintain confidence
Most value	ease of flight
Least value	
Ratings	PP
Total Hours	800
Hours last yr	25
Aircraft	WARRIOR
Education	HS
Profession	OWNER SMALL BUSINESS
Income	> 150
Comments 1	I think it's great. Keep up the great work. Obviously this will open up GA to others that may believe it's too complicated.
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	2
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	
Least value	
Ratings	PP
Total Hours	160
Hours last yr	90
Aircraft	PA28
Education	UGD
Profession	ENGINEER
Income	100-150
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	It gives the big picture
Head-Up Value	I
Head-Up Resp	More info in a better form
SLPC Value	I
SLPC Response	Safer, more efficient, let the programmed chips do the work
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	It only makes sense, in fact in disabled conditions, plane could be controlled by ground.
Highway NAV Easier	Y
Highway Resp	
Most value	HUD, power lever
Least value	No wind in your face. I like to fly tail draggers
Ratings	PP
Total Hours	250
Hours last yr	10
Aircraft	C172, CITABRIA
Education	PGD
Profession	DOCTOR
Income	> 150
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Obviously a picture is worth a thousand instruments.
Head-Up Value	I
Head-Up Resp	It helps keep your head out of the cockpit.
SLPC Value	I
SLPC Response	Pilots frequently do not adjust mixture/prop controls at optimum times ... would save fuel and maintenance.
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Standardization = safety
Highway NAV Easier	Y
Highway Resp	Just follow the "road"
Most value	Simplified approaches and fuel/time management.
Least value	
Ratings	PP, INS, COM, CFI
Total Hours	1100
Hours last yr	175
Aircraft	SMALL CESSNAS
Education	UGD
Profession	POSTAL SUPERVISOR
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	but useful only for IFR
Head-Up Value	N
Head-Up Resp	
SLPC Value	D
SLPC Response	Too dependent on system. GA usually not maintain at airline level
SLPC Cost PB	10
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	
Least value	
Ratings	PP, COM
Total Hours	240
Hours last yr	160
Aircraft	C172RG
Education	UGD
Profession	
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	Ease
SLPC Value	N
SLPC Response	
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	some
Most value	inst.
Least value	Highway
Ratings	ATP
Total Hours	
Hours last yr	300
Aircraft	BOEING 727
Education	UGD
Profession	APARTMENT MANAGER
Income	< 50
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	Easier workload
SLPC Value	I
SLPC Response	simplicity
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Easy!
Highway NAV Easier	Y
Highway Resp	Easy!
Most value	
Least value	
Ratings	INS, COM
Total Hours	400
Hours last yr	100
Aircraft	TRINIDAD, ARCHER II, SEMINOLE
Education	UGD
Profession	AIRCRAFT INSP., MECH C-5
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	The display shows you where you are and there's no imagining involved.
Head-Up Value	I
Head-Up Resp	Makes IFR flying a lot easier
SLPC Value	I
SLPC Response	This leaves a lot less to worry about and lets the pilot worry about flying.
SLPC Cost PB	10
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Makes learning a new IAP easier
Highway NAV Easier	Y
Highway Resp	Gives an easier to use way of flying approaches.
Most value	The auto-power settings leaves a lot upto the computer
Least value	
Ratings	PP
Total Hours	220
Hours last yr	120
Aircraft	C172
Education	HS
Profession	STUDENT
Income	< 50
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	7
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	Easier workload on IFR
Least value	Over dependance on computers! If there's an electrical failure the pilot is in a bad predicament. Detaches the pilot from the feel of the basic and the airplane
Ratings	PP
Total Hours	300
Hours last yr	50
Aircraft	C172, CARDINALS
Education	UGD
Profession	
Income	< 50
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Maybe, It helps when doing an approach in the minimums
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	99
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Its universal, money safing and easier to deal with
Highway NAV Easier	Y
Highway Resp	You can freely fly IFR "I follow the road"
Most value	Power settings
Least value	Can't tell where the traffic is
Ratings	PP
Total Hours	140
Hours last yr	100
Aircraft	C172, C150, PA30
Education	HS, TS/PT
Profession	ASST. MGR OF FLIGHT SHOW
Income	< 50
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	
Cost response	?
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	
Least value	
Ratings	PP, INS
Total Hours	300
Hours last yr	50
Aircraft	C172
Education	UGD
Profession	SALES
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	Especially integration in highly congested/ regulated airspace. Also, for those times when currently you "lose" awareness, can get it back much more quickly.
Head-Up Value	I
Head-Up Resp	Integration & standardization
SLPC Value	I
SLPC Response	But: must provide ability for lpilot to determine perf targets (ie. speed eta, fuel burn, etc.). computer then adjusts engine to meet targets.
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y/N
Sngl GPS Resp	Maybe - Good, as long as we don't lose flexibility, and ability to land with alternative systems.
Highway NAV Easier	Y
Highway Resp	Mfakes new easier, but might result in more congestion on heavily traveled "highways"
Most value	Improved situational awareness. Most critical issue, easiest to lose (esp in IMC), most difficult to regain
Least value	
Ratings	PP
Total Hours	250
Hours last yr	40
Aircraft	C182
Education	PGD
Profession	MARKETING
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	Simplifies tasks & workload
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	N
Sngl GPS Resp	Airports are too individual
Highway NAV Easier	Y
Highway Resp	Provides clear path and reduces workload. No dividing attention between charts and the windscreen
Most value	Highway in the sky, HUD -- clarifies information, reduces info overload
Least value	Integrated power control, loss of touch and feel in controlling power and glideslope.
Ratings	PP
Total Hours	204
Hours last yr	165
Aircraft	C172, ARCHER, C182
Education	PGD
Profession	BUSINESS CONSULTANT
Income	100-150
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	Obvious question
SLPC Value	I
SLPC Response	
SLPC Cost PB	7
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	Long term look at the future.
Least value	We need too look at 2-3 years not 5+ years with comp capabilities
Ratings	ATP
Total Hours	1600
Hours last yr	200
Aircraft	GA
Education	UGD
Profession	GRAD STUDENT
Income	< 50
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Easier to visualize
Head-Up Value	I
Head-Up Resp	Will expand to GA base
SLPC Value	I
SLPC Response	Less headaches
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Ease of use
Highway NAV Easier	Y
Highway Resp	Ease of use. Better situational awareness
Most value	Simplicity.
Least value	It looks too much like a flight simulator. What happens when it all fails? No on backup.
Ratings	COM
Total Hours	700
Hours last yr	10
Aircraft	ARROW
Education	PGD
Profession	CONSULTANT
Income	> 150
Comments 1	I'm concerned about what happens when you have electrical failure. Briefing did not touch on experience and backups. It's great to have lesser skilled people fly, but aren't you asking for trouble without 0 xfer hours of data acquisition/ comm/ etc.
Comments 2	The less you use the "old" method, the more precarious your plight when trying to so.... Minor point: If you continue to refer to us as "users". we are going to call you "pushers". What happened to "customers"?
Comments 3	

Fly/Observe	O
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	Easier than scanning -- not cluttered should be able to clear screen
SLPC Value	I
SLPC Response	It's simpler and less to worry about, but adjusting constant speed props for sound/comfort is nice
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Obvious
Highway NAV Easier	Y
Highway Resp	Visually, it's easier to follow than a hanging needle
Most value	
Least value	
Ratings	PP
Total Hours	275
Hours last yr	90
Aircraft	CESSNA, CHEROKEE
Education	UGD
Profession	SOFTWARE ARCHITECT
Income	50-100
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	2
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	Intuitive
Most value	Highway in sky
Least value	Sgi used to generate pretty picture doesn't represent what pilots will be able to buy. Even in 4 years. More realistic hardware should be used.
Ratings	
Total Hours	
Hours last yr	
Aircraft	
Education	
Profession	
Income	
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Heads up display with map makes navigation easy.
Head-Up Value	I
Head-Up Resp	Mixed feelings. It would aid & help myself. Yet feel that one would become too reliant upon it & loose sight of what to do if not there
SLPC Value	I
SLPC Response	less controls, less workload
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Simple & common
Highway NAV Easier	Y
Highway Resp	Good for ILS, easy to use, yet afraid would put too many people in the sky it being so simple.
Most value	Single power lever - easier control one instruments and monitoring systems.
Least value	Heads up display - makes flying more like an arcade game than really enjoying it.
Ratings	PP, INS, COM
Total Hours	300
Hours last yr	10
Aircraft	C152. C172, ARROW
Education	UGD
Profession	FLIGHT INSTRUCTOR
Income	< 50
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	1) Less work load 2) One visual reference
SLPC Value	I
SLPC Response	1) Less complicated to pilot 2) Consistant
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Less complicated
Highway NAV Easier	Y
Highway Resp	Visual reference
Most value	Lessen pilot work load
Least value	Problem for old time pilots to learn new systems - break old habits
Ratings	INS, COM
Total Hours	14000
Hours last yr	120
Aircraft	PIPER GERONIMO, PA-23-180
Education	PGD
Profession	RETIRED
Income	50-100
Comments 1	Progress in avaiton is largely in the hands of experimental aircraft and NASA. Good to see industry joining in
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	Better visualization & awareness of aircraft position
SLPC Value	I
SLPC Response	
SLPC Cost PB	
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Less errors.
Highway NAV Easier	Y
Highway Resp	No mental work for where the airplane needs to go.
Most value	The technology is great as far as workload reduction is concerned.
Least value	The absense of a rudder control from the pilot. I am curious about backup if there was an electrical failure or other malfunction of the system.
Ratings	INS, COM, CFI
Total Hours	630
Hours last yr	330
Aircraft	C152, 172, 172RG, 182, PIPER CHEROKEE 140, PA28R-
Education	HS
Profession	FLIGHT INSTRUCTOR
Income	< 50
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	GPS reporting so you know where traffic is.
Least value	Need full autopilot mode.
Ratings	PP
Total Hours	200
Hours last yr	100
Aircraft	210A
Education	PGD
Profession	MANAGER
Income	> 150
Comments 1	1) Harder to fly than I thought 2) Need autopilot or teaching mode. 3) Traffic identify and sequen..... has highest priority.
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	
Head-Up Value	I
Head-Up Resp	
SLPC Value	I
SLPC Response	
SLPC Cost PB	
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	
Highway NAV Easier	Y
Highway Resp	
Most value	
Least value	
Ratings	
Total Hours	
Hours last yr	
Aircraft	
Education	PGD
Profession	
Income	50-100
Comments 1	For situations where pilot "goes off track", include in display a suggested point on which to place crosshairs to return to track. NOTE: (graphic included in discussion)
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	Y
Awareness Resp	Compared to present instrumentation - Not when compared to GPS data.
Head-Up Value	I
Head-Up Resp	Present a/c displays are very poor in relation to present map displays and vertical nav displays
SLPC Value	I
SLPC Response	Present GA pwr controls are inferior to present automotive controls, which have some computer logic - ACFT may need more logic
SLPC Cost PB	1
Cost response	
Sngl GPS Approach	N
Sngl GPS Resp	Various aprts have constraints from noise, runway spacing - The advantage of GPS is that it can be easily adapted to the local problems.
Highway NAV Easier	N
Highway Resp	The approach flt path to different final approach fixes us used by the controllers (FAA) to space the ldg acft and now at least, needs to be a variable path.
Most value	The map display is good for gen'l aviation - must add VNAV mode that would be useful for other flt regimes as well as final approach.
Least value	Suitable SLPC should be attainable today, similar to automotive. The added necessary logic is easily managed by the pilot; I wouldn't pay anything for the added complexity. ie. speeds for max endurance, max range, shortest flt time are no plbm.
Ratings	ATP
Total Hours	11000
Hours last yr	45
Aircraft	C180, C310Q
Education	PGD
Profession	RETIRED, TEST PILOT
Income	50-100
Comments 1	Am very interested in improving the flt deck technology for GA ie. making use of GPS and display technology - and am concerned that AGATE is biting off an impossibly big chunk of technology that will be defeated by it's own "weight".
Comments 2	The "demonstrator" does not cover the complete flt deck

	workload, comm, sys mgmt, etc. The certification process is a big concern espl for the improvements in the final approach technology. I would go "supplemental" (STC) first and
Comments 3	gradually transition to the full approval as we gained experience with these new displays and functions.
Fly/Observe	F
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	Make it so you can fly the airplane without overworked.
SLPC Value	I
SLPC Response	It more efficiency than I could be.
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Then the pilot is furmillur with it
Highway NAV Easier	Y
Highway Resp	It give a road to follow, so your on coures.
Most value	The graphic highway.
Least value	No rudder peddles. Most pilot like being in control of the rudder
Ratings	STU
Total Hours	40
Hours last yr	0
Aircraft	C150, C172
Education	HS
Profession	
Income	
Comments 1	
Comments 2	
Comments 3	

Fly/Observe	F
Increase Awareness	
Awareness Resp	
Head-Up Value	I
Head-Up Resp	The ability to fly VFR instruments in IFR solid.
SLPC Value	I
SLPC Response	
SLPC Cost PB	3
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Reduces the chance of pilot error.
Highway NAV Easier	Y
Highway Resp	Simplifys navagation, ATC controll and hopefully reduces travel time between destinations
Most value	Flying IFR as VFR. Safety
Least value	Loss of rudder pedals, single level power. Requires new aircraft design to make practical.
Ratings	PP
Total Hours	1100
Hours last yr	150
Aircraft	MOONEY M20C
Education	PGD
Profession	ELECTRONICS DESIGN ENG.
Income	50-100
Comments 1	Let's get moving!
Comments 2	
Comments 3	

Fly/Observe	O
Increase Awareness	Y
Awareness Resp	Moving mamp displays are a good start, but the "virtual /reality" display is much better.
Head-Up Value	I
Head-Up Resp	It makes instrument interpretation much simpler and less time -consuming.
SLPC Value	I
SLPC Response	It eliminates a whole class of pilot errors, from over-leaning to fuel tank switching to overboosting.
SLPC Cost PB	5
Cost response	
Sngl GPS Approach	Y
Sngl GPS Resp	Reduces the traing workload for pilots, and lessens the strange local variations.
Highway NAV Easier	N
Highway Resp	Perspective as displayed in the demo is a serious problem. How high above the highway am I? How much correction should I apply to get back onto it?
Most value	The concept of applying current technology accross the board, GA is too far behind the curve in everything but avionics and it's pretty far behind there.
Least value	Auto-coordinated turns - there are still times when a slip is necessary - landing in a crosswind, for example
Ratings	PP, INS
Total Hours	300
Hours last yr	100
Aircraft	C172, 172RG, 182, 206
Education	HS
Profession	SOFTWARE ENG.
Income	50-100
Comments 1	
Comments 2	
Comments 3	

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13. ABSTRACT (Maximum 200 words) An AGATE Concepts Demonstration was conducted at the Annual Aircraft Owners and Pilots Association (AOPA) Convention in 1996. The demonstration consisted of an interactive simulation of a single-pilot, single-engine aircraft in which the participant took off, flew a brief enroute segment and then flew a Global Positioning System (GPS) approach and landing. The participant was provided an advanced "pathway-in-the-sky" presentation on both a head-up display and a 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 352 people observed or participated in the demonstration, and 144 surveys were collected. The pilot ratings of the participants ranged from student to Air Transport Rating with an average of 1850 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 reduction in pilot workload were universally accepted and lauded as steps in the right direction.				
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