THE K-8 AERONAUTICS INTERNET TEXTBOOK

PROJECT PLAN - YEAR 3

Covering the Time Period June 19, 1997 - June 18, 1998

Cislunar Aerospace, Inc.
2030 Airport Road
Napa, CA 94558

NASA Cooperative Agreement Number: NCC2-9010
The Project Plan - Year 3 includes: the major tasks and milestones, the assignment of tasks, and the key personnel assigned to each task, a description of the milestone and major task, and the deliverables for the project.

Milestones have project numbers ending in "0.0", such as "25.0.0 Phase III Development". Major tasks under that milestone begin with the same first number such as, "25.0.1 Develop Future Of Aeronautics".

The assignment of tasks included in the Year 3 project plan contains the names of the key personnel responsible for the task and others participating on the task. Although the PI has the overall and ultimately responsible for all the tasks and milestones, the name of the first individual on a task or milestone is the person responsible for that task. Other names listed under that task will be participating on the task. Since there are two individuals at Cislunar Aerospace, Inc. with the name "J. Pallis", the principal investigator, Jani Macari Pallis is designated as PI in the Project Plan and James Pallis is designated as J. Pallis.

Task "14.0.0 Multimedia Phase I Modifications" which was uncompleted from the Year 2 project plan was merged with Year 3 Task "26.0.0" which is now called "Multimedia Phase I & II Modifications".
<table>
<thead>
<tr>
<th>No.</th>
<th>Task</th>
<th>YEAR 3</th>
<th>Start</th>
<th>End</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.0.1</td>
<td>Develop Careers in Aeronautics</td>
<td></td>
<td>06/19/96</td>
<td>12/31/97</td>
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<tr>
<td></td>
<td>Responsible: PI, Dougherty, Olsen, Meizel, Hogan, Mendoza</td>
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<td></td>
<td>Research and write the textbook portion of <em>The Careers in Aeronautics</em> section of the electronic textbook for teacher, beginner, intermediate, and advanced audiences. Include enhancements as needed for deaf and Spanish speaking students. Define all graphics required. Suggest, when possible, lesson plan and student activities, video suggestions and individuals which might be interviewed to supplement the text. Rewrite and edit per recommendations or PI's request. <strong>Deliverables:</strong> Approximately 200 pages of <em>The Careers in Aeronautics</em> portion of the textbook, monthly lists of graphic needs.</td>
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<tr>
<td>13.1.3</td>
<td>Lesson Plans - Second Phase</td>
<td></td>
<td>12/12/96</td>
<td>03/31/98</td>
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<td></td>
<td>Responsible: PI, Licata</td>
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<td>Research and write the second phase of the Teacher's Supplement. The second phase includes the second half of the Lesson Plans. Each section is to be released as completed to facilitate the work of the Multimedia and Video Teams as well as peer review. <strong>Deliverables:</strong> Completion of the second half of the lesson plans.</td>
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<tr>
<td>15.0.9</td>
<td>Production Video Taping - Year 2</td>
<td></td>
<td>08/17/96</td>
<td>07/26/97</td>
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<td></td>
<td>Responsible: PI, Chattot, Gregory, Gordon Productions</td>
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<td>Prepare for all video taping to be performed during this year. Make all arrangements for personnel, locations, props, and sets. Finalize video taping dates for Multimedia Phase II. Video tape all sessions. Return sets to original condition. <strong>Deliverable:</strong> Letters, dates and copies of scripts to each video taping participant. All video sessions taped and ready for editing.</td>
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<td>15.1.0</td>
<td>Edit Video Tapes - Year 2</td>
<td></td>
<td>11/03/96</td>
<td>08/07/97</td>
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<td>Responsible: PI, Chattot, Gordon Productions, Gregory</td>
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<td>Perform video tape editing for all experiments. Video tapes of each experiment and interview will be ready for digitizing. <strong>Deliverables:</strong> Edited video tapes delivered to Cislunar.</td>
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<td>15.1.1</td>
<td>QuickTime Video Clips - Year 2</td>
<td></td>
<td>11/05/96</td>
<td>08/15/97</td>
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<td>Responsible: Chattot, Banks, Gregory, PI</td>
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<td>Digitize each edited video tape and perform final editing to accommodate the requirements for delivering the video over the internet. <strong>Deliverables:</strong> QuickTime video clips ready for use in the internet textbook.</td>
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<td>15.1.2</td>
<td>Compress Video Files - Year 2</td>
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<td>01/15/97</td>
<td>08/15/97</td>
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<td></td>
<td>Responsible: Chattot, Banks</td>
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<td>All videos are to be compressed and made available for integration into the internet textbook. <strong>Deliverables:</strong> A written statement that all video tapes for the year have been compressed.</td>
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### Administration

**Responsible:** PI, Hogan, Meizel, Volpe, Clarno, Coffin, Swan, Coates, Nelson, James, Banks, IT/DCAS

Project coordination and required NASA status reports.

**Deliverables:** Weekly status reports and required NASA reports.

### Modify Project Plan

**Responsible:** PI

Modify and republish the project plan as needed to reflect the current schedule. The revised plan will list: all milestones and dates, all project tasks which are part of those milestones, each team member that will participate on that task and the deliverable on that task. A detailed description of each task will be included.

**Deliverables:** Revised Project Plan.

### Phase I & II Modifications

**Responsible:** PI, Licata, Banks, Olsen, Hunter

Based on the feedback received during the previous years “Pilot in Classroom” milestone define and modify changes which must be made to the Phase II materials including text development and graphics determination. Editing for continuity of language as necessary will be done.

**Deliverables:** Modifications to Phase I & II materials.

### Phase III Development

**Responsible:** PI

Phase III Development entails all aspects of the development of *The Future of Aeronautics* portion of the electronic textbook, the Student Workbook and any enhancements or modifications defined for students with special needs. The development of *The Future of Aeronautics* section includes text development and graphics determination. Editing for continuity of language as necessary will be done.

**Deliverables:** The *Future of Aeronautics* portion of the textbook, the Student Workbook, and enhancements for students with special needs.

### Develop Future Of Aeronautics

**Responsible:** PI, Banks, Licata, Dougherty, Mendoza

Research and write the textbook portion of *The Future of Aeronautics* section of the electronic textbook for teacher, beginner, intermediate, and advanced audiences. Include enhancements as needed for deaf and Spanish speaking students. Define all graphics required. Expand/modify the original chapter outline (Table of Contents) as needed. Make video suggestions and suggest individuals which might be interviewed to supplement the text. Rewrite and edit per recommendations or PI’s request.

**Deliverables:** Approximately 200 pages of *The Future of Aeronautics* portion of the textbook, monthly lists of graphic needs.

### Enhancements for Students with Special Needs

**Responsible:** PI, Licata, Hogan, Meizel, Clarno

Research and write enhancements for students with special needs.

**Deliverables:** Modified textbook and Teachers Supplement.
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25.0.3 NASA Projects and Tours to Highlight 06/19/96 04/30/98
Responsible: PI, Banks, Olsen, Dougherty, C. Okamoto, K. Okamoto

Determine and develop a schedule to spotlight any special NASA projects and interesting tours for the textbook. Suggest simulations.
Deliverables: Cutover of projects and tours.

25.1.1 Student Workbook 06/19/97 04/01/98
Responsible: PI, Hogan, Meizel, Mendoza, Licata, C. Okamoto, K. Okamoto

Research and write the Student Workbook which will accompany the text. This will include: beginner, intermediate, and advanced levels and any enhancements for students with special needs. All graphics and video suggestions will be defined. Rewrite as necessary. Enhance for deaf and Spanish speaking students as necessary.
Deliverables: The Student Workbook.

25.1.2 Scripts for Activities & Lesson Plans 06/19/97 02/01/98
Responsible: PI

Determine the number of activities and lesson plans to be video taped and content. Develop the detail for each activity. Determine the props required for each activity. Determine the setting required to video tape each activity.
Deliverables: Plan outline for each activity and scripts as needed, list of props needed, suggested location and scene.

25.1.3 Scripts for Interviews and Tours 06/19/97 02/01/98
Responsible: PI, Banks, Chattot

Develop a list of individuals to be interviewed and purpose of the interview. Develop the script for each interview. Determine the setting for each interview. Determine any electronic tours and associated scripts required.
Deliverables: List of individuals to be interviewed and basic purpose of interview. Interview script for each person. A list of the setting and location for each person to be interviewed. A list and script for each electronic tour.

26.0.0 Multimedia Phase I & II Modifications 06/19/97 12/31/97
Responsible: Banks, C. Okamoto, K. Okamoto, Olsen, Chattot, Gregory, Gordon Productions

Based on the feedback received during the previous years “Pilot in Classroom” milestone define and modify changes which must be made to the Multimedia Phase I & II materials.
Deliverables: Modifications to Multimedia Phase I & II materials.

27.0.0 Multimedia Phase III Development 06/19/97 06/01/98
Responsible: Banks

Multimedia Phase III Development entails all aspects of developing multimedia graphic materials, videos, stills, illustrations, converting all text into HTML format, integrating these with the graphic materials into a finished product, providing needed links between pages, and placing the combined product onto the projects’ server. In addition, during
the course of the third year of the project. Internet trends (Web page appearance, graphics, and performance) and browsers will be reviewed on an ongoing basis to ensure that the materials developed are utilizing effective technology.

27.0.1 Procure Additional Multimedia Equipment 06/19/97 10/01/97
Responsible: Banks, Chattot, PI

Additional multimedia development equipment will be procured during the third year. The new hardware and software will be necessary to take advantage of changing technologies, additional tasks planned for the third year, to meet the requirements of Special Needs students, and additional storage and equipment requirements during the third year. This equipment will be used throughout the life of the project.

**Deliverables:** Written statement from the Technical Support Manager validating the hardware and software lists.

27.0.2 Install Hardware / Software 08/15/97 10/01/97
Responsible: Banks

Install all hardware and configure system for the project development equipment.

**Deliverables:** Letter from Banks to PI stating that all development hardware and software has been configured, installed and is functioning.

27.0.3 Signing and Captioning 06/19/97 02/01/98
Responsible: PI, Hogan, Clarno

Determine which words will need to be signed or captioned. Develop the signing or captioning script, if different from spoken script. Determine the setting for signing, if different than that for the experiment.

**Deliverables:** A list of which words are to be signed or captioned.

27.0.4 Experiments and Interviews for Video Sessions 07/28/97 10/01/97
Responsible: PI, Gordon Productions, Chattot, Banks, Olsen, Dougherty, K. Okamoto

Convert the purpose and plan for each experiment or interview into a script which will allow for video taping during the assigned session.

**Deliverable:** A script for each experiment, complete with a personnel list, prop list, location requirements, laid out for each video taping session.

27.0.5 Production Video Taping 10/01/97 11/29/97
Responsible: PI, Gordon Productions, Chattot, Sampson

Prepare for all video taping to be performed during this year. Make all arrangements for personnel, locations, props, and sets. Finalize video taping dates for Multimedia Phase III. Gordon Productions to make arrangements for video equipment and supplies. Video tape all sessions. Return sets to original condition.

**Deliverable:** Letters, dates and copies of scripts to each video taping participant. All video sessions taped and ready for editing.

27.0.6 Edit Video Tapes 11/29/97 12/31/97
Responsible: PI, Gordon Productions, Chattot
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Perform video tape editing for all experiments. Video tapes of each experiment and interview will be ready for digitizing.
Deliverables: Edited video tapes delivered to Cislunar.

27.0.7 Edit Video Tapes into QuickTime Video Clips
01/01/98 02/14/98
Responsible: Banks, Chattot

Digitize each edited video tape and perform final editing to accommodate the requirements for delivering the video over the internet.

27.0.8 Compress Video Files
01/15/98 02/15/98
Responsible: Banks, Chattot

All videos are to be compressed and made available for integration into the internet textbook.
Deliverables: A written statement that all video tapes for the year have been compressed and are ready posted on the Web.

27.0.9 Generate all Graphics Required for the Textbook
06/19/97 06/18/98
Responsible: PI, C. Okamoto

Generate all graphics required for inclusion into the internet textbook. This includes preexisting graphics files from other sources, digitizing photographs and video stills, and generating all illustrations as required.
Deliverables: A written statement of graphics created on a weekly basis.

28.0.0 System Support Year 3
06/19/97 06/18/98
Responsible: Banks, Weiss

Support the World Wide Web server for the K-8 Aeronautics Internet Textbook. Assist in the loading of text, graphic and video medium. Consult and assist in a “reflector mail service” for team members. Interface with the Davis Community Network. Based on priorities set with the PI support other essential systems work. With the PI determine how support for the WWW server should be handled after project completion.
Deliverables: Status reports as required by the PI.

29.0.0 Pilot School Evaluation of Phase III Curriculum
10/01/97 05/15/98
Responsible: PI, Hogan, Meizel, Volpe, Coffin, Nelson, Clarno, Apodaca, Pilot Schools Staffs

Critique the textbook materials for ease of use, content, applicability to state requirements and classroom utilization. In particular feedback regarding the texts applicability for multicultural, deaf and visually impaired students Specify modifications and enhancements needed. Make suggestions.
Deliverables: Written critiques and evaluations by pilot school staffs.

30.0.0 Field Test Phase III
01/01/98 06/01/98
Responsible: Banks, Weiss, Chattot

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Utilizing typical classroom computer equipment, benchmark the performance of the developed project materials. Check out all developed procedures on proposed textbook utilization.

Deliverables: Written summary of benchmark results, modified procedures and a list of system modifications needed.

31.0.0 Install Pilot School Equipment - Year 3
Responsible: Banks, Chattot, Pallis, Sampson

 WAS Assistance in the installation of pilot school equipment. Oversee any facility changes.
Deliverables: Transfer of equipment letter to NASA.

31.1.0 Procure Pilot School Equipment
Responsible: PI, Banks, Sampson

Validate equipment list, finalize configuration, develop configuration diagrams for equipment to be procured. Configure, specify, order, and procure all equipment required by the Year 3 pilot schools. All equipment is to be inspected, configured, and tested prior to installation in the pilot schools. The equipment is then to be shipped to the sites in preparation for installation.
Deliverables: A written statement to the PI indicating the expected delivery dates. A written statement indicating that this equipment has been procured and shipped.

31.2.0 Install Equipment at Pilot Schools
Responsible: Banks, PI, Pallis, Chattot

Develop a detailed installation plan and checklist for the equipment being installed into the pilot schools.
Deliverables: A written report indicating that all installation is complete. Provide written notification to NASA of transfer of equipment to pilot schools. Warranty forms are to be completed and mailed.

31.0.0 Final Project Report Deliverable - Year 3
Responsible: PI

Finals report covering the entire project.
Deliverables: The Final Year 3 report to NASA.

32.0.0 Project Continuation
Responsible: PI, Warrick, Peters

Finalize prospects for project continuation and or marketing.
Deliverables: Written statement regarding the above will be included in the Final Year 3 report to NASA.