OFFICE OF RESEARCH AND SPONSORED PROGRAMS (ORSP)
UNIVERSITY OF WISCONSIN-WHITEWATER (UWW), 262-472-5212
RELEASED 8 DECEMBER 2011
RON FLEISCHMANN, fleischr@uww.edu [W10FEB2012, 17FEB2012]

UWW ORSP DEADLINE: 10 FEBRUARY 2012

WISCONSIN SPACE GRANT CONSORTIUM
AEROSPACE OUTREACH PROGRAM

INTRAMURAL GRANT APPLICATION PACKAGE

X **University of Wisconsin-Whitewater Office of Research and Sponsored Programs Intramural Transmittal Form.** ONE original, complete ORSP Transmittal Form including all relevant funding competition information, proposal information, required clearances, and required signatures must accompany each proposal submitted to ORSP.

X **Proposal Development and Submission Instructions.** Each University of Wisconsin grant program has varying proposal development and submission requirements. Principal Investigators must review this application package carefully and adhere to specific program requirements to be competitive.

X **Grant Program Forms.** Each University of Wisconsin grant program requires the submission of different forms. All relevant forms are included in this application package. Electronic versions of all forms can be accessed on the ORSP Funding Page (http://www.uwworsp.org/media/funding.htm).

X **Additional Proposal Development and Submission Resources.** University of Wisconsin grant application packages may include additional resource information including evaluation/review criteria, description of proposal review processes and deadlines, and other pertinent appendices.

The Office of Research and Sponsored Programs can provide additional information, proposal development assistance, and copies of funded proposals. ALL proposals must be submitted to ORSP. Grants submitted to directly to System or Extension may not be reviewed.

DENISE EHLEN, Director, 262-472-5212, ehlend@uww.edu
RON FLEISCHMANN, Acting Assistant Director, 262-472-5212, fleischr@uww.edu

UNIVERSITY OF WISCONSIN WHITEWATER

RSP APPROVAL & CERTIFICATION

TRANSMITTAL

DO NOT COMPLETE SHADED SECTIONS WITH DOUBLED BORDER – FOR UWW RSP USE ONLY

FUNDING COMPETITION INFORMATION

Deadline:

1. Sponsor & Program:
2. Address:
3. Telephone: Fax: E-mail:
4. Web: Notes:

RSP USE ONLY ID:

Date Submitted:

Number of Copies to Sponsor (original +)

Binding of Original: ☐ Clip ☐ Staple ☐ Other ☐ N/A

GT Proposal Entry: GT Award:

PROPOSAL INFORMATION

5. Principal Investigator: 5a. Department/Division/Institution:

5b. Address: Phone: Fax: Email:

6. Co-Investigator: 6a. Department/Division/Institution:

6b. Address: Phone: Fax: Email:

7. Co-Investigator: 7a. Department/Division/Institution:

7b. Address: Phone: Fax: Email:

8. Co-Investigator: 8a. Department/Division/Institution:

8b. Address: Phone: Fax: Email:

9. Project Title:

10. Funding Type ☐ New ☐ Renewal/Continuation

11. Total Request $

12. Match Information $

13. Begin Date End Date

AWARD INFORMATION – RSP USE ONLY ☐ GRANT ☐ CONTRACT

New Account ☐ Non-Federal ☐ Federal (CFDA#)

Org Information ☐ New ☐ Add To

Total Award Begin Date End Date

REQUIRED CLEARANCES – *Does the project involve:*

	Approved? (choose one)
14. toxic, infectious or carcinogenic/mutagenic material? Use recombinant DNA technology?	☐ No ☐ Yes ☐ Pending
15. use of human subjects, human tissue or vertebrate animals?	☐ No ☐ Yes ☐ Pending
16. action involving space, remodeling, or construction?	☐ No ☐ Yes ☐ Pending
17. hiring non-UWW personnel?	☐ No ☐ Yes ☐ Pending
18. requires release time by PI (and/or Co-Is) in support of project activities?	☐ No ☐ Yes ☐ Pending
19. creation of new degree programs or services?	☐ No ☐ Yes ☐ Pending
20. potential environmental impacts, which require review under the Wisconsin Environmental Policy Act?	☐ No ☐ Yes ☐ Pending

REQUIRED SIGNATURES

PLEASE RETURN FORM TO RSP

PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR

I certify that the plan detailed in the proposal/contract complies with all campus, state, and federal regulations and policies and reflects University, College/Division, and Department/Unit goals. This project is achievable as described, including the limitations of time, resources, and personnel expertise. All required clearances have been satisfied. I have disclosed any possible conflicts of interest during the proposal development process. If awarded, I agree to conduct the proposed project in compliance with (1) the conditions of the grant and (2) with all policies of UWW, UWS, and the State of Wisconsin.

I authorize the use of my name and grant information for university publication. __NO __YES____(initial)

SIGNATURE DATE

TYPED NAME:

DEPARTMENT CHAIR/UNIT DIRECTOR

I certify that I have reviewed the proposal/contract and found it to be complete, including required clearances, budget, and commitments involving space, faculty/staff time, and matching funds. In addition, I certify that all resources and other provisions of any award will be fulfilled. A match (check one) ☐ has OR ☐ has NOT been pledged. Cash match will be satisfied by a transfer of funds from org code _____-_____-_____ in the amount of $_____ or via in-kind contributions as described in the budget (narrative).

SIGNATURE DATE

TYPED NAME:

COLLEGE DEAN/DIVISION DIRECTOR(S)

I certify that I have reviewed the proposal/contract and found it to be complete, including required clearances, budget, and commitments involving space, faculty/staff time, and matching funds. In addition, I certify that all resources and other provisions of any award will be fulfilled. A match (check one) ☐ has OR ☐ has NOT been pledged. Cash match will be satisfied by a transfer of funds from org code _____-_____-_____in the amount of $ or via in-kind contributions as described in the budget (narrative).

Applicants submitting proposals including an international component must secure the signature of the Director of the Center for Global Education in this cell.

SIGNATURE DATE

TYPED NAME:

TYPED NAME:

RESEARCH AND SPONSORED PROGRAMS CERTIFICATION

By signing this transmittal, I certify that this proposal/contract is consistent with campus, state, and federal regulations; is within the campus' research/service mission; and is approved for submission to the funding agency.

SIGNATURE DATE

INITIAL HERE TO APPROVE GRANT/CONTRACT ACCEPTANCE: DATE:

TYPED NAME: DENISE EHLEN

WISCONSIN SPACE GRANT CONSORTIUM
AEROSPACE OUTREACH PROGRAM

SPECIAL NOTES

Wisconsin Space Grant Consortium requires a minimum 1:1 match for the Aerospace Outreach Program.

Applicants to WSGC Programs are encouraged to coordinate proposal development with the UW-Whitewater WSGC Advisory Board Representative Rex Hanger (hangerr@uww.edu, x5258).

The Office of Research and Sponsored Programs will assist applicants with proposal submission using the sponsor's web-based proposal submission system.

Contact Denise Ehlen (ehlend@uww.edu, x5212) with additional questions.

Aerospace Outreach Program
Request for Proposals 2012-2013

Application Deadline: February 17, 2012
Award Announcements: April 13, 2012

Purpose:
To provide planning grants and supplemental grants for new or ongoing projects which have space-related content. Projects should:

1. Raise the level of exposure and interest of K-12 teachers, students, and the general public in space, aerospace, and space-related science, design, or technology and its potential benefits; and/or increase interest, recruitment, experience and training of pre-college students in the pursuit of space- or aerospace-related science, design, or technology
2. Demonstrate self-sustaining and/or replicable capabilities.
3. Demonstrate how the project meets this year's specific goal: 2012 – Teacher Training and Middle School Education.

Awards:
Most awards ~$3,000* per year, with up to $5,000* awards for exemplary, innovative new projects. WSGC will not fund overhead, however, it may be counted as institutional match. Proposals for two-year projects will be considered. Proposals for two-year projects should include budgets and objectives for each year.

**Based on availability of funds.*

Requirements:

- U.S. Citizen
- Any established organization including, but not limited to: schools (K-12 and higher education), aerospace industries, government agencies and non-profit aerospace associations.
- A 1:1 match is required for funding.

Questions about Aerospace Outreach, contact:
Shelley Lee, WSGC Associate Director for Aerospace Outreach
Wisconsin Department of Public Instruction
125 S. Webster Street
P.O. Box 7841
Madison, WI 53707-7841
Phone: (608)266-3319; Fax: (608)264-9553
E-mail: shelley.lee@dpi.state.wi.us

Aerospace Outreach Program
Proposal Requirements

Please breakdown your proposal into a single file and label them clearly in the requested category below. You will be asked to upload (browse) the file at the bottom of the application form.

1. Sponsoring Organization Information:
Include demographics.

2. Goals and Value of Project:
In one or two pages, describe the goals of your new project or the enhancement of an existing project, how it fits into your organization's scope, and the value of the project to the participants/recipients. State how your goals align with the goals of the Aerospace Outreach Program. Specifically state how the project will:

- Raise the level of exposure and interest of K-12 teachers, students, and the general public in space, aerospace, and space-related science, design, or technology and its potential benefits; increase interest, recruitment, experience and training of pre-college students in the pursuit of space- or aerospace-related science, design, or technology.
- Demonstrate self-sustaining and/or replicable capabilities. (If this is or will be an on-going project, describe whether and how it might become self-sustaining. How can this project be shared with others interested in starting a like project?)
- Demonstrate how the project meets this year's specific goal: 2012 – Teacher Training and Middle School Education.

Detail how this project aligns with the goals of one or more NASA Directorates or Centers. Because the WSGC is required to demonstrate the alignment of each of our projects with NASA Directorate or Center goals, proposals that do not demonstrate such alignment will not be funded. If this proposal focuses on precollege education, state how the proposal ties with national or state education standards for science, technology, engineering and/or mathematics.

3. Description of Anticipated Participants:
Describe in less than 500 words including the number of anticipated participants, how they will be selected, demographic and numeric information on underrepresented minorities, women, and people with disabilities. Include in this 500 word description the location of the project and of its participants.

4. Discussion of the Project:
Discuss in less than three (3) pages of enumerated paragraphs the proposed project in sufficient detail that the reviewers may ascertain its chance of success. The following should be called out specifically:

1. Work plan;
2. Schedule, activities and events;
3. Self-evaluation criteria (required). Must include data on any resulting student interest in STEM careers.

The proposal should also list special facilities needed, and special supporting personnel or organizations. Include any history or prior results on the project and the planning status to date (see General Information below).

5. Budget/Use of Funds:
Describe in detail the use of the funds for the proposed project, then estimate the total project costs (direct costs only), and other contributor(s) and their contributed match amount(s) in the following format:

Budget Item	WSGC	Match*	Total

Be specific under this column. Category headings such as Supplies & Expenses, Equipment, and Transportation preferred but not necessary.	$XXX.xx $XXX.xx $ XX.xx ----------	$XXX.xx ---------- $XX.xx $XX.xx	$XXX.xx $XXX.xx $XXX.xx $XX.xx
Total	$XXX.xx	$XXX.xx	$XXX.xx

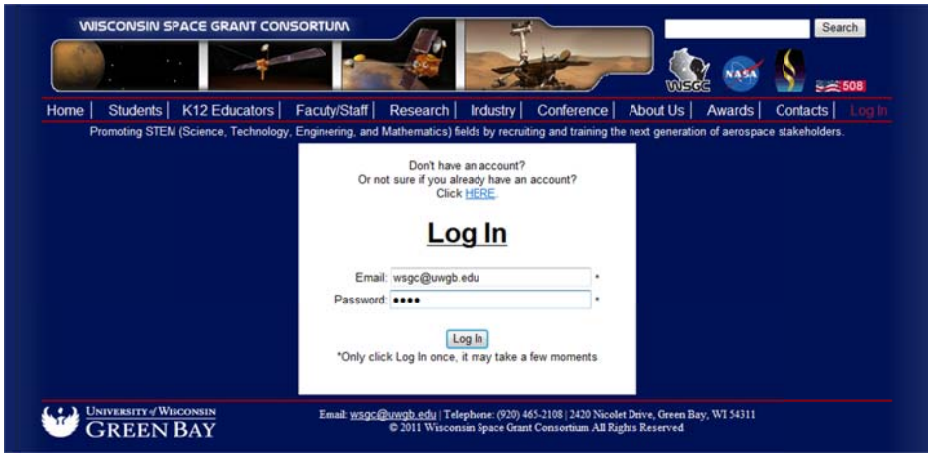
*A minimum 1:1 match is required. Add more match columns if there is more than one source of matching funds. Indicate the source of each match.

Check for clarity. Sorry, NASA (we are a NASA-funded organization) does not accept the purchase of capital items as reasonable use of funds unless they are specifically needed by the project . Astronaut visits cannot be funded. Field trips will only be considered as a minor component of a project, and only if they are necessary to the project goals.

General Information:
For additional information contact Shelley Lee, WSGC Associate Director for Aeorspace Outreach, (608)266-3319 or shelley.lee@dpi.state.wi.us.

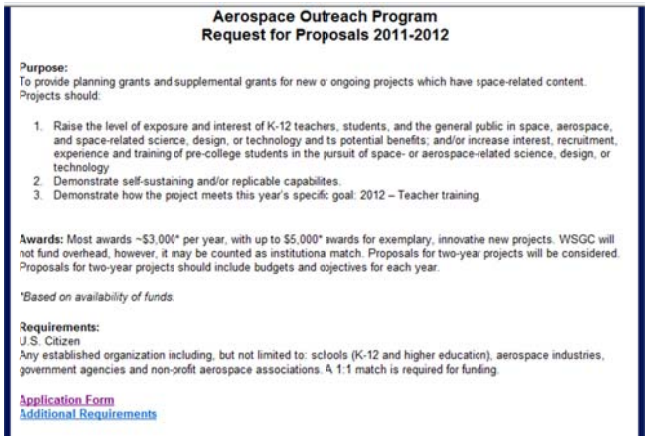
Applying to: Aerospace Outreach

1. Login with your username and password

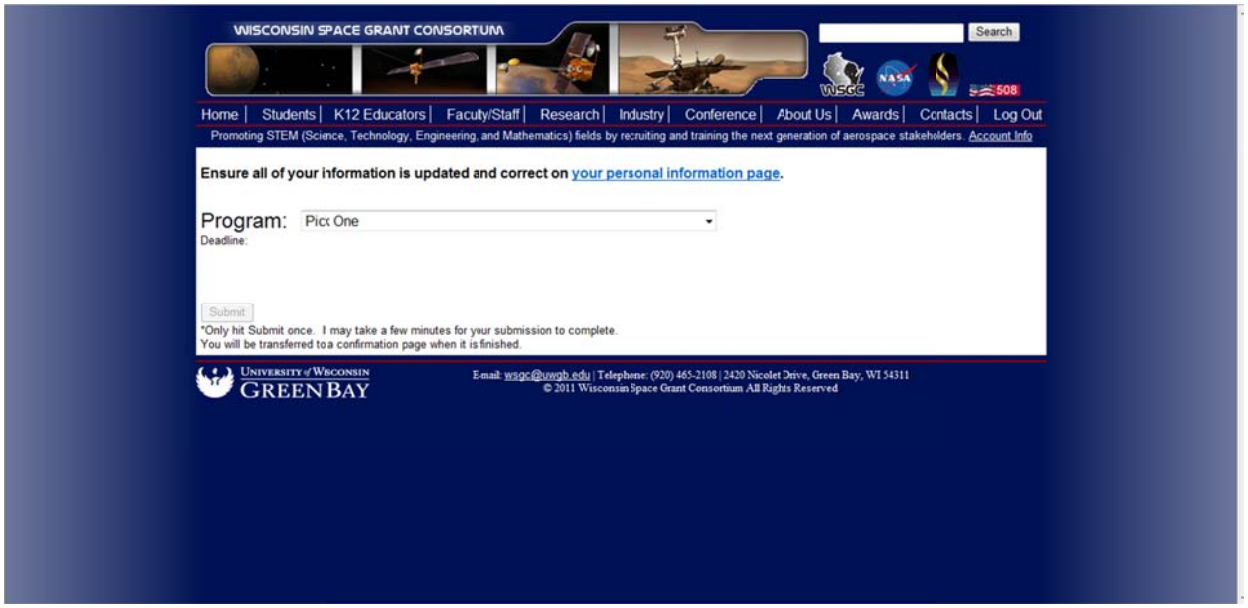


2. Click on the "K12 Educators" tab
    a. Click on Aerospace Outreach

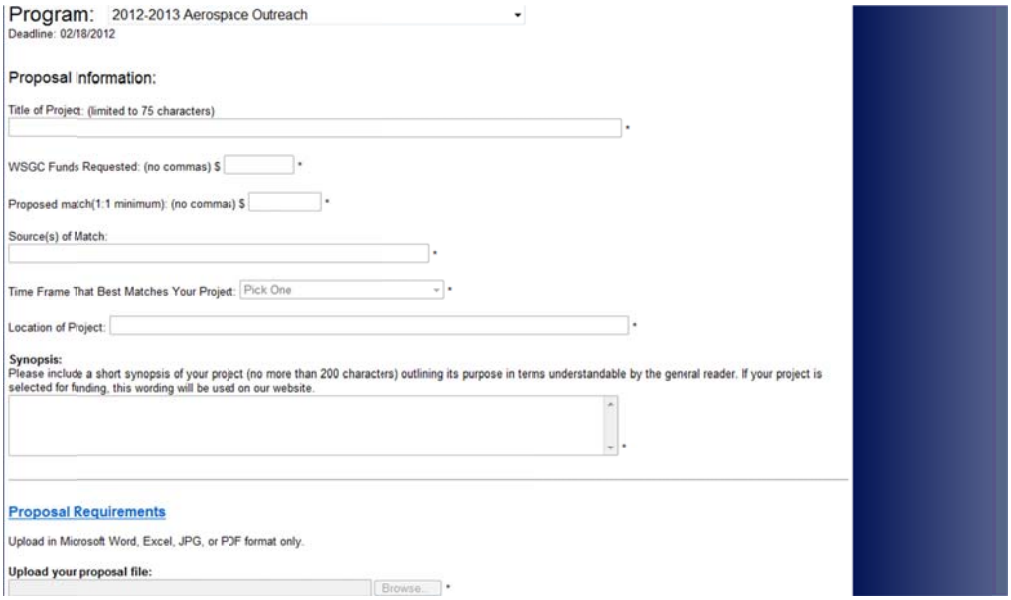
3. Click on the link that says "Application Form"



4. It will bring you to a page that looks like this:



   a. Select "Aerospace Outreach" from the drop down menu to see this:



   b. Read the Proposal Requirements document and upload all required documents.

5. Hit submit and you will be applied.

**NOTE: You must be classified as a PROFESSIONAL, PROFESSOR, or K12_EDUCATOR to apply to this program. This is determined on your Personal Information page Under the Account info link at the top right of the screen.

NASA Centers - Research Emphases

Ames Research Center
As a leader in information technology research with a focus on supercomputing, networking and intelligent systems, Ames conducts the critical R&D and develops the enabling technologies that make NASA missions possible. Ames also is a leader in nanotechnology, fundamental space biology, biotechnology, aerospace and thermal protection systems, and human factors research. Ames research in astrobiology focuses on the effects of gravity on living things, and the nature and distribution of stars, planets and life in the universe.

In addition, Ames works collaboratively with the FAA, conducting research in air traffic management to make safer, cheaper and more efficient air travel a reality. Ames engages in information and education outreach, forms collaborative partnerships, and fosters commercial application of NASA technologies.

Dryden Flight Research Center
The Dryden Flight Research Center, located at Edwards, California, is NASA's primary installation for flight research.

Glenn Research Center
Glenn leads NASA's research in the microgravity science disciplines of fluid physics, combustion science and the field of microgravity acceleration measurement. Glenn is applying this expertise to Bioscience and engineering. The Center also designs power and propulsion systems for space flight systems in support of NASA programs and leads NASA's Space Communications Program.

Glenn leads NASA research and development in the area of Aeropropulsion, powering flight through the atmosphere and beyond. The Agency's major efforts are in subsonic, supersonic, hypersonic, general aviation, and high-performance aircraft propulsion systems as well as in materials, structures, internal fluid mechanics, instrumentation and controls, interdisciplinary technologies, and aircraft icing research. NASA Glenn also specializes in turbomachinery.

Goddard Space Flight Center
Center activities:

- Conduct a preeminent program of research in the space and Earth science disciplines using measurements from space complemented by suborbital, ground-based and laboratory measurements and by theoretical investigations;
- Develop and operate a broad spectrum of flight missions that are responsive to the needs of the science community;
- Provide and operate spaceflight tracking and data acquisition networks;
- Develop innovative technology and instruments critical to the success of our mission;
- Develop and maintain advanced information systems for the display, analysis, archiving and distribution of space and Earth science data; and
- Develop National Oceanic and Atmospheric Administration (NOAA) satellite systems that provide environmental data for forecasting and research.

Jet Propulsion Laboratory (JPL)
Research emphases not currently available. JPL is counted as a NASA Center in some cases but not others.

Johnson Space Center
Johnson leads NASA efforts in human space exploration. JSC is the home of mission control.

Kennedy Space Center
Kennedy serves as America's spaceport, the locus of nearly every NASA space launch.

Langley Research Center
More than half of NASA Langley's research is in aeronautics. Not only does Langley develop Airframe Systems, scientists also examine the layers of air planes and spacecraft fly through in Atmospheric Sciences.

Researchers have expanded their studies into other atmospheres, the kind spacecraft will find on distant planets, in NASA's Center of Excellence for Structures and Materials and in wind tunnels and test facilities.

Langley leads NASA initiatives in aviation safety, quiet aircraft technology, small aircraft transportation and aerospace vehicles system technology. It supports NASA space programs with atmospheric research and technology testing and development. Langley is home to the NASA Engineering and Safety Center.

Marshall Space Flight Center
Marshall manages the key propulsion hardware and technologies of the Space Shuttle, develops the next generation of space transportation and propulsion systems, oversees science and hardware development for the International Space Station, and handles a variety of associated scientific endeavors to benefit space exploration and improve life here on Earth.

Stennis Space Center
Stennis serves as NASA's rocket propulsion testing ground. The Applied Sciences Program bridges the gap between Earth science research results and the use of data to help its partner agencies make better informed decisions.

Goals and Objectives - NASA Directorates

The Aeronautics Research Mission Directorate (ARMD) conducts vital research to make air travel more efficient, safe, green, and to uncover leading-edge solutions for the Next Generation Air Transportation System (NextGen) in the United States. ARMD's fundamental research in traditional aeronautical disciplines and emerging disciplines helps address substantial noise, emissions, efficiency, performance and safety challenges that must be met in order to design vehicles that can operate in the NextGen.(http://www.aeronautics.nasa.gov)

The Science Mission Directorate (SMD) leads the Agency in four areas of research: Earth Science, Heliophysics, Planetary Science, and Astrophysics. SMD works closely with the broader scientific community, considers national initiatives, and uses the results of National Research Council studies to define a set of "Big Questions" in each of these four research areas. These questions, in turn, fuel mission priorities and the SMD research agenda. The SMD also sponsors research that both enables, and is enabled by, NASA's exploration activities. SMD has a portfolio of Education and Public Outreach projects that are connected to its research efforts. (http://nasascience.nasa.gov)

The Human Exploration and Operations (HEO) Mission Directorate provides the Agency with leadership and management of NASA space operations related to human exploration in and beyond low-Earth orbit. HEO also oversees low-level requirements development, policy, and programmatic oversight. Exploration activities beyond low-Earth orbit include the management of Commercial Space Transportation, Exploration Systems Development, Human Space Flight Capabilities, Advanced Exploration Systems, and Space Life Sciences Research & Applications. (http://www.nasa.gov/directorates/heo/home/index.html)

The Office of the Chief Technologist (OCT) serves as the NASA Administrator's principal advisor and advocate on matters concerning agency-wide technology policy and programs. The Office of the Chief Technologist (OCT) is responsible for direct management of NASA's Space Technology programs and for coordination and tracking of all technology investments across the agency. The office also serves as the NASA technology point of entry and contact with other government agencies, academia and the commercial aerospace community. The office is responsible for developing and executing innovative technology partnerships, technology transfer and commercial activities and the development of collaboration models for NASA. (http://www.nasa.gov/offices/oct/about_us/index.html)

Please visit each NASA organization website to find detailed information about current projects and current areas of interest.

National Space Grant College and Fellowship Program
Strategic Plan 2002-2006
Executive Summary

The National Space Grant College and Fellowship Program Implementation Plan will guide the Space Grant program through the year 2006. This Executive Summary includes our National Vision, six National Mission Statements, and twelve National Goals. The strategic planning process involved all 52 Space Grant programs directly. Participation in the creation of the strategic plan included Space Grant Directors; Associate Directors; state, industry, and academic affiliates and NASA. In order to assure all states participate in the completion of this Plan, a participative process was used. One state, one vote. This methodology provided the opportunity for all participants and stakeholders to shape and focus the future of the National Space Grant College and Fellowship Program. This Implementation Plan is our roadmap. At its core is our support for NASA's Strategic Framework and our science and engineering education, research, and outreach programs.

VISION
The National Space Grant College and Fellowship program is a national network of colleges and universities working to expand opportunities for Americans to understand and participate in NASA's aeronautics and space programs by supporting and enhancing science, and engineering education, research, and outreach programs.

MISSION GOALS - 2001-2006
Mission Statement #1: Using our national network of scientists, engineers, and educators, enable the development of a diverse workforce of future scientists, engineers, technology professionals, and educators.

- Goal #1: Create a National Space Grant Fellowship Program and work to significantly increase the program size each year.
- Goal #2: Involve Space Grant students in research and discovery.
- Goal #3: Model diversity in Space Grant leadership, programs, and activities.

Mission Statement #2: Stimulate and nurture innovative programs to assure the development and transfer of practical applications in aerospace research and education.

- Goal #4: Identify innovative concepts and resources within and outside the Space Grant network, share information across the network, and identify sources of financial and other support.

Mission Statement #3: Cultivate a nationwide network of partners from universities, industry, museums, science centers, state and local agencies, to pursue state and national aerospace research, education, and economic development goals.

- Goal #5: Establish Space Grant as a viable state/national resource and catalyst for aerospace research, education, and economic development.
- Goal #6: Each consortium has on its Advisory Board members of science centers, industry, museums, and state and local agencies to create an environment where collaboration is encouraged and supported in areas of common interest. Representatives from the state Advisory Boards will comprise a national working group on networking which will meet at regional and national meetings and report.

Mission Statement #4: Provide access to the excitement, knowledge, and technology from America's Earth, Air and Space programs.

- Goal #7: Develop, enable, and highlight local participation in Earth, Air, and Space programs on a national level.

Mission Statement #5: Educate students at all levels by encouraging and supporting interdisciplinary and multi-disciplinary research experiences and education programs.

- Goal #8: Develop and promote national Space Grant opportunities for student research activities/space missions (e.g. Cube Sat, Cit. Explorers)
- Goal #9: The International Space Station (ISS): A Science Classroom for America. Engage the nation to be an active learner in this new science classroom by developing and flying student experiments on the ISS.
- Goal #10: Develop networks of students, faculty, and industry scientists to address workforce issues.

Mission Statement #6: Serve the general public by contributing to scientific literacy.

- Goal #11: Develop Earth, Air, and Space programs to enhance public scientific literacy and to complement community needs.
- Goal #12: Engage in all facets of the community in the excitement of scientific discovery using Science, Math, Engineering and Technology; (Edutainment, Process of Discovery).