

1996

NASA/ASEE SUMMER FACULTY FELLOWSHIP PROGRAM

MARSHALL SPACE FLIGHT CENTER THE UNIVERSITY OF ALABAMA

DEVELOPMENT OF AN OUTREACH PROGRAM FOR NASA: "NASA AMBASSADORS"

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INTRODUCTION AND BACKGROUND

It is widely known that the average American citizen has either no idea or the wrong impression of what NASA is doing. The most common impression is that NASA's sole mission is to build and launch spacecraft and that the everyday experience of the common citizen would be impacted very little if NASA failed to exist altogether. Some feel that most of NASA's efforts are much too expensive and that the money would be better used on other efforts. Others feel that most of NASA's efforts either fail altogether or fail to meet their original objectives. Yet others feel that NASA is so mired in bureaucracy that it is no longer able to function.

The goal of the NASA Ambassadors Program (NAP) is to educate the general populace as to what NASA's mission and goals actually are, to re-excite the "man on the street" with NASA's discoveries and technologies, and to convince him that NASA really does impact his everyday experience and that the economy of the U.S. is very dependent on NASA-type research.

Each of the NASA centers currently run a speakers bureau through its Public Affairs Office (PAO). The speakers, NASA employees, are scheduled on an "as available" status and their travel is paid by NASA. However, there are only a limited number of them and their message may be regarded as being somewhat biased as they are paid by NASA. On the other hand, there are many members of NASA's summer programs which come from all areas of the country. Most of them not only believe that NASA's mission is important but are willing and able to articulate it to others. Furthermore, in the eyes of the public, they are probably more effective as ambassadors for NASA than are the NASA employees, as they do not derive their primary funding from it. Therefore it was decided to organize materials for them to use in presentations to general audiences in their home areas. Each person who accepted these materials was to be called a "NASA Ambassador".

PROGRAM DEVELOPMENT

An announcement was made at the first meeting of all of MSFC's summer program participants that a "NASA Ambassadors" program would be organized during the summer. It was suggested that certain NASA-related topics would make interesting presentations to general audinences. A call was made for volunteers who would be willing to collect and organize materials on these topics. At the first meeting of the

volunteers other topics were suggested. The following is a list of all of the suggested topics that came out of that first meeting.

| TOPICS | "GLITZY TITLES" |
|--|--|
| Propulsion, Single Stage to Orbit, Reuseable Launch Vehicle, Future Propulsion Systems | "Rocket Ships" |
| Space Station, Shuttle/Space Lab, Human Exploration and Development of Space (a NASA enterprise) | "Space Outposts" |
| Planetary Exploration, Viking, Pioneer, Voyager, Galileo, Mars Pathfinder, Planetary Science, Ulysses, Magellan, Cassini | "Destination Mars", "Space Robots" |
| Space Technology (a NASA Enterprise), Advanced Technologies, Spinoffs | "Space - For Free" |
| Aeronautics (a NASA Enterprise), Supersonic Transport | "To Fly" |
| Mission to Planet Earth (a NASA Enterprise), Global Warming, Ozone Depletion, Atmospheric Science | "The Water Planet" |
| Orbital Science, Protein Crystals, Fluid Physics, Microgravity | "Free Falling" |
| Space Observatories: Hubble, Compton, AXAF SIRTF, Son of Hubble | "Extending Our Senses Beyond Our Reach" |
| Discovery | "Ah-Ha" |
| Economics, NASA Messages | "To Lead or not to Lead" |
| Materials Developed and/or Originated by | "What is it made of?" |

Not all of the topics were chosen for development. Each volunteer chose one or two topics. In preparing the packages the volunteers identified a NASA expert who volunteered to be available to answer technical questions posed not only by the preparer but also by those who would be delivering the presentations. Meetings were held twice weekly in which members exchanged materials and suggestions. At the time of this

and for the Space Program

writing (August 6, 1996) visual and textual packages covering the following topics were near completion and ready for distribution.

| TOPIC | PREPARER |
|---|--|
| Rocket Ships of the Past, Present and Future | George Lebo University of Florida |
| Spacecraft Charging | Nancy Losure Mississippi State University |
| Mars in Fact and Fiction | Nancy Losure Mississippi State University |
| NASA - The Place Where Miracles Happen | Malcolm McDonald Berry College |
| To lead or not to lead, that is the question! | Malcolm McDonald Berry College |
| Extending Our Senses Beyond Our Reach | Frank Six MSFC |
| Protein Crystal Growth | Leonard Holmes UNC Pembroke |
| The Blue Planet | J. M. Wersinger Auburn University |

Summer programs members are issued as many of the above pre-packaged presentations as they request. However they are required to execute the following agreement which indicates that they will deliver each presentation to a non-academic audience at least twice during the next year.

AGREEMENT

Recognizing that: (1) NASA's missions excite people of all ages and educational backgrounds, and (2) relatively few have heard about NASA's missions, I agree to become a "NASA Ambassador." I understand that, to be named a NASA Ambassador, I must have been a participant in an MSFC summer program or I must be an employee of the MSFC. I understand that I will receive (a) package(s) of materials which I can use to give popular level talks to non-academic audiences.

The stipulations of the agreement are as follows:

NASA agrees to:

- 1. Provide me slides, video tapes and other appropriate audio-visual aids on selected topics.
- 2. Provide me written explanatory material to accompany the visual aid packages.
- 3. Notify me when a visual aid package on a given subject is available.
- 4. Keep the audio-visual and written materials up-to-date.
- 5. Provide me contacts within NASA who will answer questions regarding the material in the packages.
- 6. Recognize outstanding performance with some type of award.

I agree to:

- 1. Give at least two presentations per year to audiences outside my institution for each visual aid package which I receive.
- 2. Submit a reply card to MSFC each time I give a presentation documenting the size and nature of my audience and other pertinent statistics.
- 3. Distribute to the audience a one-page evaluation form. I will ask a member of the audience (probably the program chairperson) to collect this feedback and to mail it to MSFC in the envelope provided.

| NASA AMBASSADOR | NASA |
|----------------------|-----------|
| NAME | IVNOA |
| DEPARTMENT | |
| INSTITUTION | |
| CITY/STATE/ZIP CODE | |
| SIGNATURE | SIGNATURE |
| DATE | SIGNATURE |
| PACKAGE(S) REQUESTED | DIIIL |
| | |

NASA/MSFC's PAO has agreed to take responsibility for keeping the NASA Ambassadors' packages up-to-date and to maintain communication with them. The PAO will also send letters to officials at the NASA Ambassadors home institutions informing them of the program and that one of their faculty is a NASA Ambassador.

Evaluation materials were also developed. Each NASA Ambassador will be expected to fill out a reply card which will indicate the topic, audience, date and other pertinent information and return it to the PAO. He/she will also be asked to distribute evaluation forms which, after having been completed by the listeners, will be collected and sent directly to the MSFC PAO. The PAO will collate the responses and will feedback to the speaker comments, suggestions and criticisms as appropriate.

When a person becomes a NASA Ambassador he/she also receives instructions on how to go about getting invited to speak to different groups.

At the end of the 1996-1997 academic year the program will be reviewed by the PAO. It is hoped that the NAP will be come sufficiently successful that the other NASA centers will adopt it for use with their own summer participants.