

Horizons

American Institute of Aeronautics and Astronautics

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Inputs for April's Horizons due no later than March 24th

Editor's Note

- by Cynthia Collins, Horizons Editor

Once again I take pen in hand, at least figuratively, to solicit ideas for the Horizons newsletters from all of you out there. I am grateful for the people who have tried so hard to make sure that I have a variety of articles to include. I know they worked hard to write them for me. And, as a gesture of thanks, all the articles will now have by lines by the respective authors. But I still need some ideas....

We have made it through the holidays and through the worst of the winter doldrums. Spring is almost upon us, and I see lots of activity for AIAA members in the near fu-

ture. We have the Engineering Science Fair, the Region IV Student Paper Conference, and the Spirit of Apollo Scholarships. We will also have seminars and workshops to attend. So, there is a lot to do and see. And, I just want to see the articles come in to the Horizons.

I'd like some ideas as to what you would like to see in the next few issues of Horizons. Would one-on-one interviews be of interest? Particularly if the interview was with someone well placed to discuss aeronautics and astronautics - someone like Ken Reightler of Lockheed Martin, a retired Navy

pilot and former astronaut?

I would like to hear what you, as members, have to say about a book you have read, a seminar you've attended, a film you've seen, a conference you plan on going to. Is there a paper or abstract that shed light on a particularly interesting subject that you would like to share with your fellow members here in the pages of Horizons?

So, if you would like to see your name in print, submit your articles and ideas to Cynthia Collins at (281) 483-7413 or by e-mail at collins_cynthia@semail.jsc.nasa.gov.



Left to right: Tom Mulder, Ken Reightler, and Bill Readdy

Horizons is the monthly newsletter of the Houston Section of the American Institute of Aeronautics and Astronautics. It is created by members of the Houston Section and reproduced at the Houston Offices of Lockheed Martin. Opinions expressed herein, other than by elected Section officers, are those of the authors and do not necessarily represent the position of AIAA or of the Houston Section. Please address all correspondence to the Chairman, Tom Mulder, McDonnell Douglas/MDC2-3156.

Chairman's Corner

- by Tom Mulder, Chairman

Congressional Visits Day

The AIAA is becoming increasingly concerned by a continuing decline seen in research and development budgets for many science and technology programs. Erosion of our nation's technology base can lead to serious gaps in key areas necessary for maintaining U.S. leadership into the next century. To establish a dialog between the AIAA and high-level decision makers, the Public Policy and Technical Activities Committees have implemented an AIAA Congressional Visits Day (CVD), scheduled to occur about the time you receive this newsletter.

The purpose of the CVD is to educate U.S. Congressional Represen-

tatives and staff on the broad, technical and public policy issues impacting the aerospace community. It is also an opportunity to develop a relationship with various Congressional leaders who may have little knowledge of the aerospace industry and its benefits. The AIAA strongly believes that because of our long history as the principal aerospace society and its unique membership structure, we are in a good position to communicate matters of aerospace policy and critical technical issues in an objective and effective manner.

To ensure that concerns peculiar to the JSC community are communicated to our local Representa-

tives, Russ Filler and I will represent the Houston Section on Capitol Hill on March 12th. Our mission is to increase awareness of the local area's space-related needs to staff members working for Tom DeLay, Nick Lampson, Sheila Jackson Lee, Phil Gramm, and Kay Bailey Hutchison. We will also participate in AIAA forums scheduled with Representatives James Sensenbrenner (R-WI) and George Brown (D-CA). If you have questions about this event or any of the AIAA Position Papers (www.aiaa.org/policy/index.html) please contact me or one of the other elected council members.

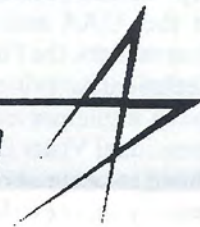


Left to right: Ken Reightler, Tom Mulder, Dan Selters, and Blaine Brown

Employment Opportunities

The AIAA Houston Section is now beginning to make aerospace-related employment opportunities available. If you are looking for employees, and you would like for the AIAA Houston Section to help your company make employment information available, please contact Charles Halliman (of Information Uncover) at (713) 991-1654.

LOCKHEED MARTIN



Lockheed Martin Space Mission Systems & Services,
a Division of Lockheed Martin Corporation,
located in the Clear Lake area,
has immediate openings for:

SOFTWARE ENGINEERS (minimum 2+ yrs. experience), **SYSTEMS ENGINEERS**
(minimum 3+ yrs. experience), **HARDWARE ENGINEERS**,
ENGINEERING SYSTEMS ANALYSTS and
PROGRAMMERS (minimum 1+ yr. experience).

**Positions require a degree in: Aeronautical Engineering, Aerospace Engineering,
Computer Science, Computer Engineering, Physics, Math,
or Electrical Engineering.**

Qualified applicants are asked to submit resumes and cover letter,
in strictest confidence, to:

**Lockheed Martin Space Mission Systems & Services
P.O. Box 58487
Houston, TX 77058**

Responses may be sent via fax to (713) 335-5030.

AIAA Calendar

The AIAA 1996-97 Calendar is intended to encompass all Houston Section events and significant dates. This includes Executive Council meetings, which are open to interested members, and Horizons deadlines. It will also include committee meetings, Lunch & Learns and similar events if Horizons hears about them in time for inclusion. Please send pertinent details to Tom Mulder/MDC2-3156.

March

3 - Monday
Executive Council meeting. 5:00 PM, Center for Advanced Space Studies.

4 - Tuesday
Reservations deadline by 12 Noon for Technology Transfer Seminar

5 - Wednesday
"Technology Transfer Seminar", Jim Cameron, Speaker, 2450 NASA Road One (Lockheed Building), Room 32C (2nd Floor), 6:45-8:00 PM.

24 - Monday
Horizons inputs for April due COB.

27 - Thursday
Monthly dinner meeting. "General Aviation: Past, Present, and Future." Distinguished Speaker Dr. Ramesh Agarwal. Ellington Field, Hangar 594, 5:00/5:15/6:30 PM.

28 - Friday
Innovations '97, Gilruth Center, starting at 11:30 AM

April

4,5 - Friday & Saturday
1997 Science Engineering Fair of Houston, Astroarena

7 - Monday
Executive Council meeting, 5:00 PM, Center for Advanced Space Studies.

10 - 12 Thursday - Saturday
45th AIAA Region IV Student Paper Conference, Ramada Inn/ NASA. Col. John Blaha, Keynote Speaker.

21 - Monday
Horizons inputs for May due COB.

23 - Wednesday
Monthly dinner meeting, NMA/ AIAA Joint Dinner, 5:00/6:00/6:30.

May

3 - Saturday
Deadline (postmarking) for Spirit of Apollo Scholarship applications

5 - Monday
Executive Council meeting, 5:00 PM, Center for Advanced Space Studies.

22 - Thursday
Monthly dinner meeting. Gilruth Center, 5:30/6:30/7:30.

27 - Tuesday
Horizons inputs for June due COB.

Truths?

Truer than you might believe...

Coca-Cola was originally green.

Every day more money is printed for Monopoly than for the United States Treasury.

Smartest dogs:

- 1) Border Collie;
- 2) Poodle;
- 3) Golden Retriever

Dumbest Dog:
Afghan

The Hawaiian alphabet has 12 letters.

Men can read smaller print than women; women can hear better.

The chances that an American lives within 50 miles of where he/she grew up: 1 in 2

The amount American Airlines saved in 1987 by eliminating one olive from each salad served in first class: \$40,000

The city with the most Rolls Royces per capita: Hong Kong

State with the highest percentage of people who walk to work: Alaska

The chances of a white Christmas in New York: 1 in 4



Spirit of Apollo Scholarship Program for 1997-98

by Ellen Ochoa
Scholarship Committee Chair

The AIAA Houston Section is again sponsoring the Spirit of Apollo scholarship program which provides a \$1000 scholarship during the academic year. Applicants must have defined a scholastic plan that provides entry into some field of engineering or science pertinent to AIAA technical activities and must meet other specified eligibility requirements.

The selection process will begin in March when we mail out pack-

ages to colleges and universities within our region. The package includes a description of the application process, selection criteria, and application forms. This year's applications must be postmarked no later than May 3, 1997. The scholarship committee will evaluate the completed applications and select a recipient by June. The first half of the scholarship amount is mailed to the school's financial office at the start of the fall term; the second half is

provided at the start of the spring term.

A copy of this year's application package is included in this issue of Horizons. For additional copies, please contact me at ellen.ochoa1@jsc.nasa.gov or during the day at (281) 244-8809.



Spirit of Apollo Scholarship

AIAA Houston Section Scholarship Program, 1997-98

The Houston Section of the AIAA is pleased to announce the Spirit of Apollo Scholarship for the 1997-98 school year in the amount of \$1000. The first half (\$500) will be available for the Fall Semester. The second half (\$500) will be available for the Spring Semester. Eligibility requirements must be met for both the Fall and Spring semesters.

OBJECTIVE

The objective of the American Institute of Aeronautics and Astronautics (AIAA) is to advance the arts, sciences, and technology of aeronautics and astronautics.

The AIAA encourages original research, furthers dissemination of new knowledge, fosters the professional development of those engaged in scientific and engineering activities, improves public understanding of the profession and its contributions, fosters education in engineering and science, promotes communication among engineers and scientists and with other professional groups, and stimulates outstanding professional accomplishments.

ELIGIBILITY

The following eligibility requirements shall be met by the applicants for the AIAA/Houston Section Scholarship award:

1. Applicant must have completed at least one academic year of full-time college work at the time of receiving the scholarship.
2. Applicant must have a college grade point average of not less than 3.0 on a 4.0 scale.
3. Applicant shall be enrolled in an accredited college or school.
4. Applicant shall be pursuing a course of study in any field of engineering or science (i.e., physical science, mathematics, or computer science) which is pertinent to the technical activities of the AIAA.
5. Applicant shall not have, or subsequently receive, any other scholarship award which, combined with the AIAA award, would provide a stipend greater than the tuition plus direct educational expenses (such as books, lab fees, etc.) estimated by the educational institution he or she plans to attend.
6. Students who receive an award are eligible to reapply in succeeding years. It should be stressed that regardless of GPA, renewal is not automatic. To apply for renewal, an individual must follow the applica-

continued on page 8 . . .

continued from page 7 . . .

tion procedure indicated below.

7. Applicants must be either U.S. citizens or permanent residents of the U.S.

SELECTION CRITERIA

The recipients of the scholarship awards will be selected using the following criteria, which are listed in order of importance:

1. Scholarship

This criterion will be evaluated on the basis of the applicant's grade point average or equivalent. A grade point average of not less than 3.0 (B) is required.

2. Personal Assessment of Career Goals

This criterion will be evaluated through a 500-1000 word typewritten essay. The essay should specify the career objectives of the applicant and should outline the academic program required to achieve those career objectives.

3. Recommendations

Each applicant will be judged on personal and academic merit, based on letters of recommendation.

4. Extra-curricular Activities

Each applicant's high school, college, and community activities, offices, awards, and work experience will receive due consideration.

APPLICATION PROCESS

Each applicant will provide the following information:

1. A completed application form.
2. A current college transcript.
3. Each new applicant must include three typewritten letters of recommendation. Individuals seeking renewal need only supply two letters. Recommendations from relatives will not be accepted. The letters of recommendation may be attached to the application if sealed by the writer or sent under separate cover to the address indicated below. Recommendations must be postmarked no later than the due date of the application.
4. A 500-1000 word typewritten essay as described in selection criteria.

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The Applications (including transcripts, essays, etc.) for the next academic year must be post-marked no later than 2 May of the current academic year.

Applications and related materials should be addressed to:

Scholarship Committee Chair
AIAA-Houston Section
American Institute of Aeronautics and Astronautics
P.O. Box 57524
Webster, TX 77598

ADMINISTRATION OF THE SCHOLARSHIP PROGRAM

The AIAA-Houston section's scholarship committee will be responsible for selecting the recipients of the awards.

SELECTION OF THE SCHOLARSHIP RECIPIENTS

The decisions of the AIAA Scholarship committee are considered to be final and the winner for the next academic year will be advised of the outcome by 6 June of the current academic year.

DISBURSEMENT OF THE SCHOLARSHIP FUNDS

Disbursement of the scholarship awards shall be made in the form of a check in the name of the recipient and sent to the educational institution of the selected candidate. Educational institutions attended by the recipients will be notified of the scholarship awards, so that the institutions can coordinate the financial resources of the recipients.



Application for the Spirit of Apollo Scholarship 1997-98

American Institute of Aeronautics and Astronautics
- Houston Section -

[Please print or type. If additional space is necessary, continue on a separate sheet.]

Personal Information

Name: _____ Soc. Sec. number: _____

Local Address: _____
no. & street

_____ Telephone: (____) _____
city state zip

Date of Birth: _____ School Telephone: (____) _____

Citizenship: ☐ U.S. Citizen ☐ Permanent Resident of the U. S.

Current Class Rank: _____ out of _____

List your educational experience to date:

| Name of High School or College | Dates Attended | Graduation Date | Degree | GPA |
|--------------------------------|----------------|-----------------|--------------------|-------|
| _____ | _____ | _____ | _____ out of _____ | _____ |
| _____ | _____ | _____ | _____ out of _____ | _____ |
| _____ | _____ | _____ | _____ out of _____ | _____ |
| _____ | _____ | _____ | _____ out of _____ | _____ |

Indicate the school year for which the scholarship is requested:

☐ Sophomore ☐ Junior ☐ Senior ☐ Graduate

Degree sought (major): _____

Horizons

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Activity and Employment Information

List High School, College, and Community activities, including offices held and/or awards:

| Organization | Offices/Awards | Dates of Involvement |
|--------------|----------------|----------------------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

List work experience during the last four years:

| Type of work | Employer/Company | Dates of employment |
|--------------|------------------|---------------------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |

Signature of applicant _____ Date _____

AIAA JUDGES NEEDED FOR HOUSTON SCIENCE ENGINEERING FAIR

The 1997 Science Engineering Fair of Houston will be held at the Astroarena on Friday, April 4 and Saturday, April 5. As in previous years AIAA will present special awards at this year's Fair.

Volunteers are needed to judge the entries for the AIAA awards. Awards will be given in three individual-entry categories and one team-entry division.

Individual entry divisions:
Junior/Middle School (Grades 7 and 8)
Ninth Grade
Senior (Grades 10 through 12)
Team project division:
Junior/Middle School (Grades 7 and 8)

Judging must take place on Friday, April 4. Judging will begin at 1:00 PM and run as follows:

Registration: 1:00 PM
All divisions: 1:30 - 5:00 PM
Junior/Middle School: 6:30 - 8:00 PM
Ninth Grade and Senior: 6:30 - 9:30 PM

The time required to complete the AIAA scoring will depend on the number of topic-relevant projects and the number of volunteers.

Fair organizers have provided the following additional information:

- * Only judges, exhibitors, and Fair officials will be allowed in the exhibit area.
- * No child care services will be provided.
- * Comfortable shoes are suggested.
- * Food service will be available.

If you are interested in representing AIAA as a judge, please contact Mike Barrett at mbarrett@bayou.uh.edu (preferred) or at (713) 743-4542.

Blaha to Speak at 1997 Student Paper Competition

by Kirsty Reidy and Eric Duncan

The 1997 AIAA Student Paper Competition Co-Chairs are pleased to announce that USAF Retired Colonel John E. Blaha has agreed to be the Keynote Speaker for the Student Paper Competition. Colonel Blaha earned his Bachelor of Science in Engineering Science from the United States Air Force Academy and his Master of Science in Astronautical Engineering from Purdue University. He was selected as an astronaut in May 1980, and has since logged 161 days in space, including 4 shuttle missions and, most recently, a 4 month stay aboard the Mir Space Station.

The Student Paper Competition will be held at the Ramada Inn/

NASA, 1301 NASA Road One, on April 10-12, 1997. Eight colleges and universities from Region IV will be participating, with students presenting papers throughout the day on Friday, April 11 beginning at approximately 8:00 AM. Awards will be presented on Saturday morning during an Awards Brunch. A luncheon Friday will be held between the morning and afternoon paper presentation sessions during which Colonel Blaha will deliver his keynote address. The agenda for Colonel Blaha's presentation has yet to be set. For more information please contact either Eric N. Duncan at 281/483-7537 (W) or Kirsty E. Reidy at 281/244-7897 (W).



Random Knowledge

If you toss a penny 10,000 times, it will not be heads 5,000 times, but more like 4,950. The heads picture weighs more, and it ends up on the bottom.

The glue on Israeli postage stamps is certified kosher.

The longest word in the English language, according to the Oxford English Dictionary, is pneumonoultramicroscopicsilicovolcanoconiosis. The only other word with the same amount of letters is pneumonoultramicroscopicsilicovolcanoconioses, its plural.

Hydroxydesoxycorticosterone and hydroxydeoxycorticosterones are the largest anagrams.

Los Angeles's full name is "El Pueblo de Nuestra Senora la Reina de los Angeles de Porciuncula."

Only one person in two billion will live to be 116 or older.

An ostrich's eye is bigger than it's brain.

Ben and Jerry's sends the waste from making ice cream to local pig farmers to use as feed. Pigs love the stuff, except for one flavor: Mint Oreo.

Al Capone's business card said he was a used furniture dealer.

Committee Report: CLCTS Bay Area Technical Societies Officers Workshop

By Edward Jablonski

Several AIAA Houston Section officers attended an evening officers workshop, which was hosted by the Vice Chairman of The Clear Lake Council of Technical Societies, Dr. Zafar Taqvi, this past February 6th.

Members from several other non-aerospace, as well as aerospace, technical societies were present, making for an even better exchange of ideas. The workshop was very useful in that it covered both administrative and operations topics. Dr. Taqvi offered several suggestions for increasing and retaining membership, and there were group exercises on financial planning for events, and for program idea generation. The conclusion was that the most popular events were either on topics that were of outside interest, or tours, or, preferably, both.

He also emphasized that the goals of our professional societies should be "specific, positive, realistic, yet flexible." Many other

tips, tricks, and tools, primarily based on Dr. Taqvi's experience, were shared among the participants.

This seminar, open to all, was attended by a classroom full of AIAA members, INCOSE members, IEEE members, and other guests.

For more information, contact:

Dr. Zafar Taqvi at
(281) 212-9275,
Andy Lindberg at
(281) 532-4450,
or

Edward Jablonski at
(281) 283-4294

Flying High - March 27th Meeting

By Russell Filler

Our AIAA Houston Section meeting on March 27th will feature our second and final AIAA Distinguished Lecture for this year. The speaker is Dr. Ramesh Agarwal from the Department of Aerospace Engineering at Wichita State University, Wichita, Kansas. **Dr. Agarwal will be speaking on General Aviation: Past, Present and Future.**

To complement the general aviation topic we will be meeting at Ellington Field in Hanger 594 courtesy of the Ellington Field Air Club, surrounded by planes used for general aviation in the area. Hopefully, with weather permitting we plan to have BBQ outside so we can get closer to the planes and activity of the airport.

If you have yet to hear a AIAA Distinguished lecture this is your last opportunity this year. AIAA is careful in selecting Distinguished Lectures and these talks have a proven message, technical merit and have a proven record for audience enjoyment. This is one worth attending.

Dr. Agarwal will provide a brief history of general aviation, then discuss its present status and continue on to provide us insights into the future projects to further improve general aviation. He will discuss the recently created government/industry/university part-



continued on page 15...

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nership known as Advanced General Aviation Transport Experiments (AGATE). The AGATE group has established market-driven goals and objectives including research on flight systems, propulsion sensors and controls, training, ice protection, integrated design and manufacturing and air and ground control infrastructures. The consortium is designed to accelerate the processes for bringing new technologies from the experimental research stage to fully certified production status. Successes have already been demon-

strated in the use of advanced satellite GPS-based "highway in the sky navigation" for air traffic control at the 1996 International Olympic Games.

Dr. Agarwal has an excellent background for this topic. He is the Bloomfield Distinguished Professor in the Department of Aerospace Engineering and Executive Director of the National Institute for Aviation Research at Wichita State University. He is also the director of the Aircraft Design and Manufacturing Research Center

and a Senior Fellow at the National Institute for Aviation Research at Wichita State University. He has a Ph.D. from Stanford University and is a Fellow of the AIAA.

In addition, the member that signs up the most new AIAA-Houston Section members from March 1 until March 27 will receive a free airplane ride. Weather permitting the plan is for an evening ride following the meeting.

We expect to bring in several unique aircraft for this event. The BBQ should be great and is priced to please. Instructors will be available to discuss learning to fly, but more likely to share their stories.

Hanger 594 is located next to Southwest Services on Ellington Field. Enter through the main gate (Hwy 3 and 1959) which puts you on *Challenger 7 Parkway*. Take the first right onto *Aerospace*. Take the first left onto *Fairchild*. Proceed straight ahead to Hanger 594. To help you find your way after you pass through the gate look for the AIAA emblems and follow the arrows.

Registration starts at 5:00 PM, with dinner starting at 5:15 PM. The program commences at 6:30 PM. Any questions call Russ Filler at 483-6904 or Dan Selters at 333-7312.

Hope to see you there.



View of the MIR Station in the Dome Simulator



Houston Section
P.O. Box 57524
Webster, TX 77598

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Bellaire TX 77401

Horizons

March, 1997



INNOVATIONS '97

Technical Seminar Organized by CLCTS for JAIPCC Executive Board

FRIDAY, MARCH 28 11:30 - 6:00PM

Gilruth Center, NASA Johnson Space Center

11:30 - 12:00 REGISTRATION

Cost \$12.00(Includes Lunch & Reception)

12:00 - 12:45 LUNCHEON

12:45

PLENARY SESSION DR. R. BRYAN ERB

Assistant Director Canadian Space Station Program

"THE SPACE FUTURE WE NEED-HOW WILL WE CREATE IT?"

1:30 - 3:00

Technical Sessions 'A'

AIAA "Aerospace Showcase for The Future"

Chair: Steve King, Lockheed-Martin

ASQC "Quality Innovations for '97 Part I

Chair: Bill Weatherspoon

ISSA "Information Security Solutions"

Chair: Carolyn Hopkins, USA

3:15 - 4:45

Technical Sessions 'B'

AIAA "Space Station Communications and Tracking"

Chair: Chuck DuSold, MDA

ASQC "Quality Innovations for '97 Part II

Chair: Bill Weatherspoon

INCOSE "System Engineering in Dilbert Space"

Chair: Mark A. Powell

4:45 - 5:15

SPECIAL PRESENTATION: MANZURUL AMIN

Past Director of TV, Government of India

"SATELLITES FOR DEVELOPMENTAL COMMUNICATIONS IN INDIA"

5:20

RECEPTION - Sponsors: AIAA

Dynacs

Lockheed-Martin

USA

REGISTRATION FORM and SESSION DETAILS on REVERSE

Session Paper/Author

- A1 An Autonomous Doppler Shifted Ultrasound Bubble Detector for EVA"
Dr. Michael R. Powell, NASA JSC
"Plume Impingement Heating to ISS"
William Rochelle, Lockheed-Martin
Spacecab: A Multipurpose Spacecraft
Andrew Petro, NASA JSC
- A2 "Design of Experiments: Study on the Factors Affecting Variability in the Melt Index
Measurements" Sudhir Bafina, Solvay Polymers Technical Center
"Raising the Bar-Doing ISO 9000 for Yourself"
Wali Alam
- A3 "Certification of High Integrity Software: An Automated Approach"
Philip Bandy, Lockheed-Martin
"Auditing Network Servers"
Mike McMullan, American General Life
- B1 "Space Station Video Subsystem"
Eric Obleman, MDA
"Space Station S-Band Subsystem"
Dr. Zafar Taqvi, Dynacs Engineering
"Space Station C&T Verification Planning"
Tom Morrow, MDA
- B2 "The Power of The System: How ISO14001 Provides Greater Assurance of Environmental
Protection" Jack McVaugh PE, Environmental Technology and Management
"Re-Engineering Systems Approach"
David Stoner
- B3 "The ISS Timeliner Software Development Engineering Process"
William K. Dwyer
"The Life of A Requirement"
Jonette Stecklein
"Integrated Product Teams-Lessons Learned From The ISS"
William V. Rates

REGISTRATION for INNOVATIONS '97

NAME/SOCIETY.....

ADDRESS

CITYZIP.....PHONE.....

COMPANY.....

FAXEMAIL.....

Please register me for Innovations '97 (registration includes
conference, abstract proceedings, lunch, and post seminar
reception @ \$12.00/person. DUE MARCH 21, 1997

Signature.....

Please send this form with your check to either:
Andy Lindberg, 218 Wynwood, Seabrook, TX 77586 (281-532-4450)
or:
Bill Best, USA USH-436B (281-282-6970)



TOM MULDER
CHAIRMAN 1996-97

American Institute of Aeronautics and Astronautics

HOUSTON SECTION P.O. BOX 57524 WEBSTER, TEXAS 77598

PROGRAM / PRESENTER

Thursday, March 27, 1997

GENERAL AVIATION PAST, PRESENT, & FUTURE

Dr. RAMESH K. AGARWAL
Wichita State University
AIAA Distinguished Lecturer



A brief history of General Aviation in the U.S. will be presented. Its status and future prospects will be reviewed. The particular focus of this presentation will be on the recently created government/ industry/ university partnership to revitalize general aviation known as AGATE (Advanced General Aviation Transport Experiments). NASA and the FAA are principal government participants, along with 70 corporate and university members. The consortium is designed to accelerate the processes for bringing new technologies from the experimental research stage to fully certified production status.

Dr. Agarwal is the Bloomfield Distinguished Professor in the Department of Aerospace Engineering and Executive Director of the National Institute for Aviation Research at Wichita State University, USA. He is also the Director of the Aircraft Design and Manufacturing Research Center and a Senior Fellow at the National Institute for Aviation Research. From 1978-1994, he was the Program Director and McDonnell Douglas Fellow at McDonnell Douglas Aerospace in St. Louis, Mo. He is also a Fellow of AIAA.

DINNER MEETING

5:00 Registration
5:15 Dinner
6:00 Social
6:30 Program

Entree: BAR-B-QUE

| | |
|------------|---------|
| MEMBERS | \$ 3.00 |
| NONMEMBERS | \$ 6.00 |

ELLINGTON FIELD, HANGER 594, BRANTLY & FAIRCHILD AVES. (Next to Southwest Services)
Follow AIAA Emblems and Arrows to Hanger 594 from Main Entrance

DANITA THOMAS
483-2348
NASA

PAM SISK
483-8341
NASA

MISTY ARMSTRONG
333-4419
DYNACS

CALL ONE OF THE ABOVE FOR RESERVATIONS.
NOTE: RESERVATION DEADLINE IS MONDAY, MARCH 24 AT NOON.

ALL ARE WELCOME

SEE AIAA, HOUSTON SECTION WEB SITE FOR MORE DETAILS AND HOW TO WIN A FREE AIRPLANE RIDE
<http://www.jsc.nasa.gov/aiaa>