

# HORIZONS

OCTOBER 1990

## Chairman's Letter

John M. Trebes

In lieu of the conventional message this month, I am reprinting the following (author unknown) from *AIAA Membership News*. Need I say more?

### FANTASY ISLAND

Many will be shocked to find  
When the day of judgment nears  
That there's a special place in heaven  
Set aside for volunteers.

Furnished with big recliners,  
Satin couches and footstools,  
Where there's no Committee Chairman,  
No group leaders or car pools.

No eager team that needs a coach,  
No bazaar and no bake sale,  
There will be nothing to staple,  
Not one thing to fold or mail.

Telephone lists will be outlawed,  
But a fingersnap will bring  
Cool drinks and gourmet dinners,  
And rare treats fit for a king.

You ask, who'll serve these privileged few  
And work for all they're worth?  
Why, all those who reaped the benefits  
And NOT ONCE volunteered on earth!

## Opportunities for involvement

### Partners in Space announces new location

Partners in Space announces a new office location at 16903 Buccaneer, Suite 104, Houston TX 77058, telephone 283-8225, fax 283-5472. The office will serve as an educational "clearing house" designed to build partnerships between industry and education.

They are currently recruiting volunteers for the Public Relations/Marketing Committee, the Fundraising Committee and the Project Committee. If you are interested in volunteering, or if you would like further information, call Susan Spencer, Executive Director, or Cheryl Irving, Administrative Coordinator.

*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 Engineering and Sciences Company. Please address all communications to Vice-Chairman of Operations, Charles Blacknall, MDSSC/T7E, telephone 283-1073.

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## Section activities

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### Credit where it's due

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To: Charles Blacknall  
Vice-Chairman, Operations

I was pleased to see the letter of thanks from the Science Engineering Fair of Houston for the continuing support that our section gives each year. However, as with many volunteer organizations, their mailing lists are out of date. The SEF activity this year was directed by Dave Dannemiller, Student Affairs Committee Chairman. His crew did another fine job dealing with an even larger number of exhibits than before.

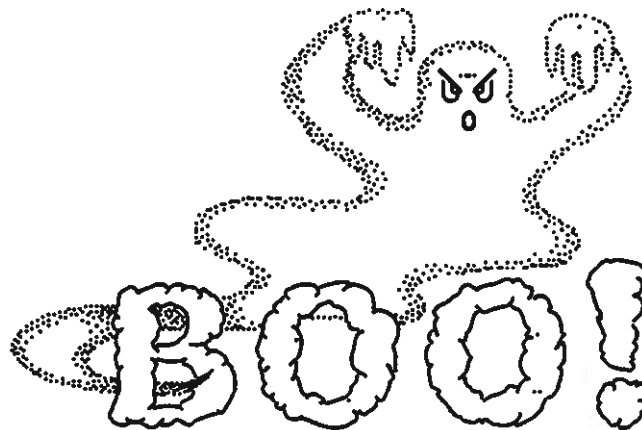
Dick Bennett  
McDonnell Douglas

### ISAC hosts Japanese students

Charles Blacknall  
Chairman, International Space Activities Committee

The International Space Activities Committee (ISAC) had the pleasure of entertaining a group of graduate students from Japan who attended the International Space University (ISU) this last summer. On September 5, 1990, ISAC hosted a visit by the students to the Johnson Space Center. The group consisted of Yoshihide Kita, Mamoru Takahashi, Ryuji Yamauchi, Takahashi Miyazaki, Hiroyuki Aoi, Mikiya Okumura, Hisahito Tadokoro and Kenji Nozaki. Accompanying the students was a representative of the Shimizu Corporation, Ms. Okazaki.

Carolyn Blacknall gave the students a guided tour of the Visitors Center, Building 9B and the Lunar Sample building. The tour was followed by a Lunch and Learn in the Building 3 cafeteria, which was also attended by Dr. Wendell Mendell, one of the guest professors at the ISU. Former astronaut Bob Overmyer gave a very interesting overview of his Spacelab 3 flight. He discussed materials processing, crystal growth processes and various experiments that were carried out on the flight, as well as what types of experiments will be done on Space Station Freedom. After the presentation, there was a question and answer period.





## Also included

### What's happening?

Lou Livingston  
Editor

Perhaps you've noticed that, like last month, this issue of *Horizons* is a bit skimpier than average. Let me assure you that this is not by choice. We'll print almost anything we get, but if we don't get it we can't print it.

Even though summer is normally a period of reduced activity, it's hard to believe that so little is going on in a section with a thousand members. There are so many technical committees I've lost count, and almost as many operations committees. Even if some of them aren't hyperactive, a few are bound to be doing something. How about letting the rest of the section know what you're doing, or what you plan to do? A lot of our members would like to know; some of them might even get involved if they knew what was going on.

Repeating from last month, below are the input deadlines for the rest of the year. Inputs for *Horizons* should reach Charles Blacknall, VC-Ops, MDSSC/T7E, by the date given to be included in that month's issue. A floppy disk with an ASCII or equivalent file would be appreciated, but anything legible will be welcome.

Dinner Date (Thursday)	Reservations Deadline	<i>Horizons</i> Issue	Input Date (Friday)
11/15/90	11/9/90 (Friday)	November	10/12/90
12/13/90	12/10/90 (Monday)	December	11/9/90
1/24/91	1/18/91 (Friday)	January	12/21/91
2/28/91	2/25/91 (Monday)	February	1/25/91
3/21/91	3/18/91 (Monday)	March	2/15/91
4/25/91	4/22/91 (Monday)	April	3/22/91
—	—	May	4/19/91
6/13/91	6/10/91 (Monday)	June	5/10/91



# Technical activities schedule, October

Bill Best  
Clear Lake Council of Technical Societies

## 1—Monday

NASA Area Macintosh Users (Group) "NAMU"  
Symantec/Norton Utilities Gisela Salazar  
RSOC Cafeteria 600 Gemini 7:00PM  
Information: Sharyn Best 488-6522

## 3—Wednesday

IEEE, ISA, CLCTS Video Conference  
"Computer Graphics"  
JSC Gilruth Center 10:00 to 2:00 PM (\$60/\$50 Members)  
Information: Andy Lindberg 483-1474

## 3—Wednesday

JSC Astronomy Seminar Open Discussion  
JSC Bldg 31 Rm 129 Noon to 1:00 PM  
Information: Al Jackson 333-7679

## 3—Wednesday

LPI Seminar Series  
"Comets vs Asteroids: Cratering in the Solar System"  
Mark E. Bailey, University of Manchester, England  
LPI 3303 NASA RD1 Berkner Room 3:30PM  
Information: Pam Jones 486-2113

## 8—Monday

AIAA International Space Activities TC  
Monthly Meeting *11:30-12:30; Bldg. 32 Rm. 142*  
Information: Charles Blacknall 283-1073

## 9—Tuesday

Clear Lake Council of Tech. Societies Monthly Meeting  
Lockheed Plaza 3 1150 Gemini 11:45AM  
Information: Andy Lindberg 483-1474

## 10—Wednesday

JSC Astronomy Seminar  
"Solids In the Sky" Al Jackson, LESC; Report on Austin  
Symposium McDonald Observatory, UT  
JSC Bldg 31 Rm 129 Noon to 1:00 PM  
Information: Al Jackson 333-7679

## 11—Thursday

IEEE Monthly Meeting  
"Neural Network Applications" Dr Jack Aldridge, MDC  
JSC Gilruth Center 11:30/12:00 Noon  
Information: Dr. Zafer Taqvi 333-6544

## 12—Friday

LPI Seminar Series  
"The Application of Imaging Radar to Volcanology"  
Lisa Gaddis, Arizona State University  
LPI 3303 NASA RD1 Berkner Room 3:30PM  
Information: Pam Jones 486-2113

## 17—Wednesday

Houston Space Business Roundtable Monthly Luncheon  
"Canadian Space Activities" Mr. Brian Erb  
Nassau Bay Hilton 300 NASA Rd 1 11:30AM  
Information: Bill Nash 280-0460

## 17—Wednesday

JSC Astronomy Seminar Open Discussion  
JSC Bldg 31 Rm 129 Noon to 1:00 PM  
Information: Al Jackson 333-7679

## 17—Wednesday

AIAA Dinner Meeting  
"Role of Robotics for Space Station Applications"  
Charley Price, NASA  
JSC Gilruth Center 5:30/6:30/7:30PM  
Information: Dr. Zafer Taqvi 333-6544

## 18—Thursday

Clear Lake SigAda Business Meeting  
Holiday Inn 1300 E. NASA Rd 1 11:45AM  
Information: Tom Sullivan 333-5040

## 23—Tuesday

LPI Seminar Series-Brown Bag Seminar  
"Earth Resources & Environment: The Geologist's  
Schizophrenia", Petr Jakes, LPI  
LPI 3303 NASA RD1 Hess Room 12:00 Noon  
Information: Pam Jones 486-2113

## 23—Tuesday

Bay Area PC Organization (BAPCO) Monthly Meeting  
Hard Disk Horror—Failure, Repair, and Recovery  
(DiskTec)  
League City Bank & Trust 303 E. Main 7:30PM  
Information: Don Wechsler 335-8517

## 24—Wednesday

Armed Forces Communications and Electronics Assoc.  
Monthly Luncheon (Public is Welcome)  
Lt. Gen Thomas W. Kelly, Dir of Operations, Jt Chiefs,  
Wash. D.C.  
(?)Holiday Inn 1300 E. NASA Rd 1 11:45AM  
Information: Mike Denard 280-1532

## 24—Wednesday

JSC Astronomy Seminar  
"Nedilin Space Catastrophe-Snooping Out the Facts"  
Jim Oberg  
JSC Bldg 31 Rm 129 Noon to 1:00 PM  
Information: Al Jackson 333-7679

## 25—Thursday

Society for Computer Simulation 11:45AM  
Speaker: Ed Smith LESC  
Lockheed Plaza 3, PIC Rm 1150 Gemini Ave  
Information: Robin Kirkham 333-7345

## 30-1 Nov—Tuesday-Thursday

"Space Exploration 90"  
Sponsored by the NASA Alumni League  
South Shore Harbour Resort and Conf. Center 8:00AM  
Information: Gwen Griffen 623-6591

## 31—Wednesday

JSC Astronomy Seminar  
"Science vs Pseudo-Science" Steve Williams, LPI  
JSC Bldg 31 Rm 129 Noon to 1:00 PM  
Information: Al Jackson 333-7679

Please send additions, corrections and comments to:  
Bill Best /R12A-130, Rockwell Shuttle Operations Co., 600  
Gemini Ave., Houston, TX 77058, telephone 283-0261.



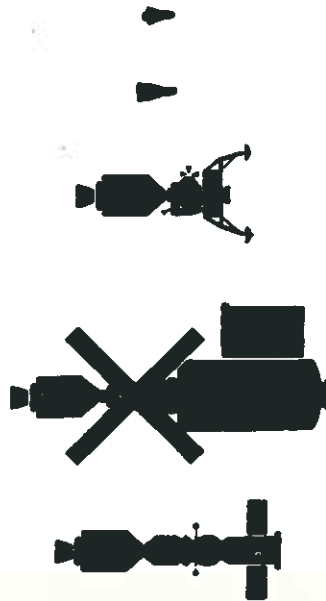


# AIAA HOUSTON HORIZONS

## OUTSTANDING SECTION AWARD



1975-1976  
1976-1977  
1979-1980  
1980-1981  
1981-1982  
1983-1984  
1986-1987  
1988-1989

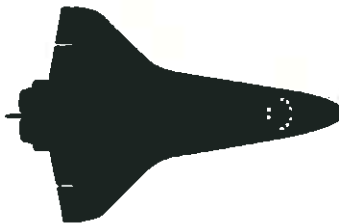


## SECTION SPECIAL EVENT AWARD



1971-1972  
1972-1973  
1979-1980  
1981-1982  
1983-1984  
1985-1986  
1988-1989

AIAA HOUSTON  
SECTION  
P.O. BOX 57524  
WEBSTER, TX 77598



Non-Profit Organization  
U.S. POSTAGE PAID  
Webster, Texas  
Permit Number 1

300591872 B HO  
Dr. Larry J. Friesen  
League City TX 77573



# AMERICAN INSTITUTE OF AERONAUTICS AND ASTRONAUTICS

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

**Wednesday, October 17, 1990**

## **SPACE STATION FREEDOM ROBOTS AND THEIR ROLE IN EXTERNAL MAINTENANCE**

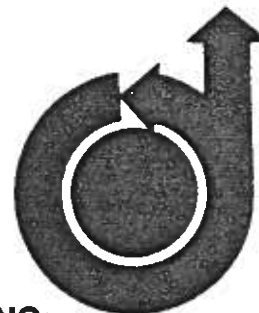
**CHARLES R. PRICE  
CHIEF  
ROBOTIC SYSTEMS  
DEVELOPMENT BRANCH  
JOHNSON SPACE CENTER**



**AIAA HOUSTON SECTION MEETINGS  
ARE HELD AT THE JOHNSON SPACE CENTER  
ROBERT R. GILRUTH RECREATION CENTER**

### **PROGRAM:**

The External Maintenance Task Team recently completed a six month study that found the external maintenance required for the Space Station Freedom (SSF) to be substantial. Known colloquially as the Fischer-Price committee, the team also evaluated the use of extravehicle activity (EVA) astronauts and robots to meet these maintenance needs. Results of this study were given to the NASA Administrator and Congressional oversight committees. Mr. Price, who co-chaired the study with astronaut Dr. William Fischer, will discuss the source of the maintenance requirements, the techniques used in evaluating the performance of EVA crew and the SSF robots, and the major recommendations of the study. He will describe the configuration of each of the five SSF robots and their utility for performing inspection, orbital replacement unit (ORU) replacement, and EVA support.



### **DINNER MEETING:**

**SOCIAL: 5:30  
DINNER: 6:30  
PROGRAM: 7:30**

**MENU: Breast of Turkey (Cordon Bleu)**

**MEMBERS & SPOUSES \$8.00  
NONMEMBERS \$9.00  
STUDENTS/YOUNG MEMBERS \$7.00**

**FRANKIE  
333-6064  
LOCKHEED**

**SANDY  
845-0735  
COLLEGE STATION**

**CARROLL  
283-6000  
EAGLE**

**SARAH  
282-3160  
BENDIX**

**NOTE: THE DINNER RESERVATIONS DEADLINE IS FRIDAY, OCTOBER 12, AT 12:00 NOON.  
ANY CANCELLATIONS ARE REQUIRED PRIOR TO DEADLINE. NO-SHOWS WILL BE BILLED.  
ALL ARE WELCOME.**

**DINNER RESERVATIONS ARE NOT REQUIRED FOR ATTENDING THE PROGRAM ONLY.**

