

AMERICAN
INSTITUTE OF
AERONAUTICS AND
ASTRONAUTICS

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HOUSTON SECTION

# newsletter

AUGUST 1978

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other section functions (some are special one time shots and some do not fall nicely in the committee structure), I urge you to call me or anyone of your officers. I urge the membership to contact and work with the officers and staff. The list of officers, committee membership and other section officers for 1978 follows:

# FROM THE CHAIRMAN:

The RAC IV Meeting held in El Paso in May 1978 was attended by Regional Director, Jim McLane, as well as our Bill Simmons, the RAC IV Deputy Director for Membership, Joe Algranti, Houston Chapters RAC IV Representative and your chairman of four days.

The membership of the Houston Chapter can be justly proud of its accomplishments in recent years since it has received outstanding section awards, awards for membership, awards for newsletters, etc. I can seriously say I was impressed and very proud: In all matters it seemed Houston had something good to contribute.

It therefore places a burden on one and all to continue to excell since you cannot preserve "status quo". You either "slip back" or "forge forward". I therefore urge the membership to read the purpose, activities and membership of our various committees which follows in this issue, understand their functions, call them with any suggestion which you may have and advise them if you wish to join their committees.

The Houston Section NEWSLETTER is published at intervals from September through June at the Clear Lake Offices of Northrop Services, Inc., and McDonnell Douglas Corp., by the Houston Section AIAA. Address all contributions to Norman H. Chaffee/EP4, NASA, Johnson Space Center, Houston, Texas 77058.

# AIAA HOUSTON SECTION OFFICERS, COUNCILORS, COMMITTEES - 1978-79

OFFICERS	MAIL CODE	TELEPHONE
EDWARD L. HAYS, Chairman ROBERT STEPHENS, Vice-Chair-Ops EARL THOMPSON, Vice-Chair-Tech WILLIAM DICKSON, Secretary ROBERT GLOWCZSKI, Treasurer	NASA/JSC-ZS/5 MDAC MDAC LEC MDAC	483-2649 or 334-1791 488-5660 X 279 488-5660 X 302 483-3893 488-5660 X 299
COUNCILORS	7	
ALECK C. BOND H. E. (PETE) CLEMENTS STAN LOWY	NASA/JSC NASA/JSC TEXAS A&M	483-3971 483-2465
FRED WIERUM HUBERT DAVIS PHILIP DEANS	RICE NASA/JSC NASA/JSC	527-8101 X 3617 483-3083 483-6486
WILLIAM HAYES SHARON BARNES TOM MURTAGH	MDAC NASA/JSC NASA/JSC	488-5660 X 266 483-6100 483-4546
COMMITTEES & STAFF		
SARWAR NAQVI - MEMBERSHIP  W. STEWART/PUBLICITY & NEWSLETTER  N. CHAFFEE - PUBLIC AFFAIRS  R. LEWIS - LEGISLATIVE AFFAIRS  C. H. STEWART - PROF. PARTICIP.  J. SUNKLE - CONT. ED.  MARK CRAIG - UNIVERSITY AFFAIRS  BRUCE BISHOP - TAC  J. ALGRANTI - RAC REP.  J. McLANE - RAC IV DIR.  W. SIMMONS - RAC IV MEMBERSHIP  J. DISHLER - SCIENCE/TECH.  F. WIERUM - RICE STUDENT ADVISOR  J. RAND - TAMU & PAMU STUD. ADVISOR  R. BILSTEIN - UH MECH. ENG.  L. WOOD - STAFF	MDAC RTD NASA/JSC NASA/JSC NASA/JSC NASA/JSC NASA/JSC BOEING-HSO4 NASA/JSC NASA/JSC NASA/JSC NASA/JSC TEC RICE TAMU UH TRW	488-5660 X 238 334-2617 483-3918 483-3851 483-4926 483-4611 483-4702 488-0910 483-7226 483-226 483-2073 527-8101 X 3617 845-7541 488-9270 333-3133
C. VAUGHN - STAFF R. McMURDO - STAFF J. OBERG - STAFF	TRW NASA/JSC BOEING USAF	333-3133 483-4991 488-0910 X 205 483-2991
RICK FEINBERG - RICE/TAMU/PAMU STUDENT CHAIRMAN	RICE	526-2377
RON SWIM - HONORS & AWARDS	ROCKWELL	333-2030

# MEETINGS: DATES AND ATTENDANCE

The Executive Committee meetings will be held the 1st Tuesday of each month at noon in so far as possible.

Our regular monthly evening meetings will be the 3rd Tuesday evening of each month.

In addition, it is mandatory that each committee be represented at the monthly luncheon meeting. If the Chairman cannot attend a committee member will attend. If you are short on committee members contact the chairman; he will supplement your staff.

-- Ted Hays, Chairman

# National AIAA Meetings Scheduled Here:

Two National AIAA Meetings will be held in Houston next year (1979). The are back to back in March and are:

- 1. 6th ATAA Aerodynamic Decelerator & Balloon Technology Conference March 5-7, 1979
- 2. 5th AIAA Sounding Rocket Conference March 7-9, 1979

Ed Mason and Bev Steadman are working with the Conference Committee Chairman. Any member who wishes to assist Ed or Bev should get in touch with them.

### LOCAL AUTHORS ACTIVE

Local Houston area authors have been active over the past few months, and two AIAA-sponsored meetings this fall will draw major contributions from our area.

On September 27-29, 1978, the AIAA is sponsoring a meeting in Los Angeles on the topic "Large Space Platforms: Future Needs and Capabilities". The following will participate in the meeting:

- a. J. P. Loftus, Jr. (NASA/JSC) is Co-Chairman of session entitled "Future Large Space Systems: Space Platform Systems Needed to Meet Future Mission Requirements. What, Why and When?"
- b. Paper by J. P. Loftus, Jr. and J. W. Craig (NASA/JSC) entitled "Orbital Service Module Systems Concept."
- c. Paper co-authored by J. E. Mechelay (NASA/JSC) entitled "Skylab Rehabilitation and Rehabilitation."
- d. Paper by R. L. Johnston (NASA/JSC) entitled "Life Sciences Activities in a Special Laboratory Module."
- e. Paper by Hubert P. Davis (NASA/JSC) entitled "Orbital Transfer in the Shuttle Era and Beyond."
- f. A. J. Louviere (NASA/JSC) is co-chairman of the session entitled "Large Space Structures Support Equipment and Activities."
- g. C. E. Whitsett (NASA/JSC) is co-author of a paper entitled "Manned Maneuver-ing Unit A Space Platform Support System."
- h. G. C. Franklin (NASA/JSC) is author of a paper entitled "Habitability Design for Spacecraft."

On October 16-18, 1978, in Bethesda, Maryland, the AIAA will cooperate with IES and ASTM to sponsor the "10th Space Simulation Conference." The following Houston area people will participate.

- a. S. H. Nassif (NASA/JSC) will present a paper entitled "Orbital Construction Support Equipment Manned Remote Work Station."
- b. J. A. Rummel and W. C. Alexander (NASA/JSC) will present their paper entitled "Ground Based Simulation of Life Sciences Spacelab Experiments."
- c. R. G. Richard (NASA/JSC) will present a paper entitled "Experimental Evaluation of a Unique Radiometer for Use in Solar Simulation Testing."
- d. R. S. Redman and C. Wolff (NASA/JSC) are co-authors of the paper "Development of a Multipurpose Radiometer."
- e. A. Konradi and J. E. McCoy (NASA/JSC) are co-authors of the paper 'Space Plasma Laboratory: Experiments in Simulated Ionospheric Plasma."
- f. J. E. McCoy (NASA/JSC) has also authored a second paper, "Simulation of 10 Meter High Voltage Solar Panel Interactions with the Low Earth Orbit Electric (Plasma) Environment."
- g. O. L. Pearson (NASA/JSC) is author of the paper "Present Capabilities of the Large Space Simulation Chamber "A" at the JSC to Support Basic Plasma Physics Research."
- h. J. J. Gallegos, of Rockwell-Houston, will present his paper "Thermal Math Model Analysis of FRSI Test Articles Subjected to Cold Soak and Entry Environments."
- i. F. U. Williams (NASA/JSC) has authored a paper entitled "A Technique for Scale Model Rocket Base Heating Tests in a Very Large Volume Chamber."

Congratulations to each of you on your fine work and professional recognition.

## PUBLICITY AND PUBLIC AFFAIRS COMMITTEE

The objectives of the Publicity and Public Affairs Committee are twofold: One internal to AIAA, and one external to it.

First, it is our objective to notify the internal technical community (local AIAA members, JSC technical community, Houston technical community, and regional AIAA sections) of our current and upcoming activities. This includes meetings, courses, classes, mini-symposia, etc. On this line we put up and distribute meeting notices locally, advise the local press/media of our activites, and notify other AIAA sections of our plans and activities. I think we're doing a good job here and we have over 25 local Section members who participate every month in this publicity activity.

Our second objective is to bring to the public information of interest about the U.S. Space Program and its benefits, past, present and future; about NASA and its activities; about the aerospace industry; and about AIAA. We have had limited and sporadic activity in this area and we are planning to be more active by revitalizing our speakers bureau to make available knowledgable speakers for meetings and gatherings in the Houston area;

by providing the "canned" AIAA slide series and/or movies to interested groups; by initiating a new "AIAA host" program to operate in conjunction with the JSC visitors program; and by providing speakers for "career day" presentations at area schools. More specifics will be forthcoming on some of these public affairs activities. We can use lots of help in this area and I would be happy to talk to any of you about how you might help out during the coming year.

Norman Chaffee NASA/JSC 483-3918

#### LEGISLATIVE AFFARIS COMMITTEE

The purpose of the Legislative Affairs Committee is to communicate between secion members and government legislators and to encourage direct communication with elected representatives. Current committee members are Robert E. Lewis, Chairman, and Robert J. Ward. Our objective is for all members to make their personal views known on legislative actions affecting the technical, professional or personnel environment of the aerospace community.

#### UNIVERSITY AFFARIS COMMITTEE

The University Affairs Committee is responsible for supporting the AIAA student chapters at local universities, for administering the Shuttle payload purchase program, Project Enterpirse, and for coordinating section participation in the region's science fairs. Members of the committee are Bill Schoolmeyer, Vernon Shields, Jim Meador, and Mark Craig, Chairman.

The Houston Section currently has student chapters at Rice, Texas A&M, and Prairie View A&M Universities. The University Affairs Committee assures that each of these student chapters has access to section resources and a point of contract for section support. Committee members work with chapter officers and faculty advisors to establish worthwhile programs and activities.

One such program is Project Enterprise. The Houston Section has recently pruchased shuttle small self-contained payload space for Rice and Texas A&M while McDonnell-Douglas has purchased payload space for Prairie View A&M. In the coming year, committee members will be working with each of these schools to aid in the establishment of a substantive educational program which is to be centered around the design and construction of a shuttle payload.

The committee is also responsible for awarding AIAA prizes at the Greater Houston and Brazos Valley science fairs. Junior and senior division winners at each fair are given an award and a special tour of JSC.

#### SCIENCE AND TECHNOLOGY COMMITTEE PLANS

The Science and Technology Committee plans to continue the tasks of last year to update its charter and supply an insert for the AIAA Newsletter, entitled "Sci-Tec Scanner". Highlight trends from non-aerospace scientific editorials or technical publications would be used.

For example, have you read Newsweek, July 3, 1978 "Science" on the "Growing R&D Gap" that reports our creative gap is slowing down; or Optical Spectra, June 1978, Editorial for R&D, "Support for Science", which discusses the role of government within R&D, or Proposition 13 shock waves on Federal R&D policy making, reported in "News from Washington", IEEE, Spectrum, July 1978.

How did you react to "The Research and Development Methods of Wilbur and Orville Wright" by Malcolm L. Ritchie, Wright State University in Astronautics and Aeronautics, July/August 1978?

To be effective, we need to:

- (1) Provide our members a broad view of science/technology as seen by other organizations or publications.
- (2) Plead the case of R&D...its results and why we need more.
- (3) Increase the awareness of non-aerospace members of our area to the political aspects and advantages derived from aerospace science and technology.

We are looking for HELP! We need both new committee members and editorial/technical inputs. Please send either to J. Dishler (Chairman), 483-2073, or D. Dougan (all the rest), 333-2162.

--J. J. Dishler

# TECHNICAL APPLICATIONS COMMITTEE MEMBERSHIP/OBJECTIVES FOR 1978-79

# M. MBERSHIP

Name Frank Barnes

Bruce Bishop
Ken Johnston
Al Mitchell
Dudley Nelson
Jim Scott
Pete Woodling

# Company Affiliation

Lockheed (333-6408) Boeing (488-0910) Rockwell(333-2030) GE (483-2711) MDAC (488-5660) TRW (333-3133) JSC/FE (483-5283)

#### **OBJECTIVES**

- 1. Provide technology applications information at each monthly program meeting.
- 2. Man a technology applications booth at one major non-aerospace conference.
- 3. Develop communication tool (i.e., brochure) for disseminating technology applications information to potential users in Houston area.
  - 4. Broaden membership.

-- B. A. Bishop (TAC Chairman)

#### HONORS AND AWARDS COMMITTEE

1. Ron Swim - Rockwell (Chairman) 333-2030

- 2. Mac Bolfe Boeing 488-0910
- 3. Phil Deans NASA/JSC 483-6486
- 4. Bill Hayes MACDAC 488-5660
- 5. Tom Murtagh NASA/JSC 483-4546

## MEMBERSHIP COMMITTEE

Sarwar Naqvi (Chairman) - MDAC 488-5660 X 261
Chet Vaughn - JSC/EP6 483-4991
Carl R. Huss - JSC/FD 483-4788
Bill Geissler - MDAC 488-5660 X 235
Michele Brekke - JSC/CG6 483-4637
Charles Texeira - JSC/EX4 483-5181
Ken Robinson - 1BM 333-3300 X 3655
Jose Alvarez - Ford 483-6226

NOTE: Incomplete at this time (any volunteers?).

# MEMBERSHIP MATTERS

Top Award to GLOWCZWSKI. Congratulations are in order for Bob Glowczwski of McDonnell-Douglas for winning the Membership Chairman Award for sections of 500 members or over. Bob amassed 111.64 points to clinch the award, nearly twice those of Dave Clymer, Pacific Northwest Section, who won 2nd place in this category. This is the third year in a row that the Houston Membership Chairman received an award; Bill Simmons won in 1975-76 and received 2nd Place in 1976-77. Now let's all get behind our '78-79 "MC", Sarwar Naqvi, and help him keep our chain unbroken.

1977-78 Campaign. As indicated above, we had a very good year! At the beginning of the year, June 30, 1977, we had 507 members assigned to our Section. During the year Bob and his hard-working team signed up a total of 152 new members, 30% of our June 30th base. We ended up the year on 6/30/78 with 617 assigned members, a net growth during the year of 21.7%, which far exceeded the 10% increase goal established for Region 1V Sections by its hard-hearted Deputy Director-Membership, Bill Simmons. We showed him!

1977-78 Regional/National Statistics. Here's the final score (a/o 6/30/78):

			- 20	June	30, 197	8
		6/77	New	% Of	Asgd	% Of
		Base	Mem	Base	Mem	Base
25			117			
*	Sections	of Region	<u> </u>			
Albuquerque	1911	160	21	15.6	178	11.25
Central Texas		22	3	13.6	22	0.00
Holloman-Alamogordo		34	. 7	20.6	39	14.71
Houston		507	152	30.0	617	21.70
Inland Missile Range		39	6	. 15.4	39	0.00
North Texas		541	56	10.4	544	0.55
Oklahoma		90	17	18.9	108	20.00
Southwest Texas		100	17	17.0	107	<b>7.00</b>
4)	Re	gions				
		/1	~ 0.1.	10 1	(70)	2 1.6
Region 1		6477	784	12.1	6701	3.46
Region II .		1750	253	14.5	1897	8.40
Region III		1835	239	13.0	1852	0.93
Region IV		1493	283	19.0	1654	10.78
Region V		1536	217	14.1	1626	5.86
Region VI		7967	818	10.3	8126	2.00
NATIONAL (ASGD)		21058	2594	12.3	21856	3.79

1978-79 Goals and Status. Where do we go from here? Up, up and Away!!! Old Mr. Hard Heart ain't never satisfied - he's levied a 15% increase in assigned members as the goal for every section in Region IV. So we have a target of 710 members assigned to the Houston Section on June 30, 1979. Can we do it? Last year we did it: Let's keep up the momentum, we're off to a good start as shown below:

	Status as of 7/31/78				_		
	6/78	6/79	New	% Of	Asgd	% Of	MC
	Base	Goal	Mem	Base	Mem	Base	Pts
	Sections of	Region I	٧				
•••			<del></del>	1 12	181	2.81	6.18
Albuquerque	178	205	2	1.12			
Central Texas	22	25	0	0.00	22	0.00	0.00
Holloman-Alamogordo	39	45	1	2.56	42	7.69	15.38
Houston	617	710	13	2.11	628	1.78	8.10
Inland Missile Range	39	45	1	2.56	39	(2.56)	5.13
North Texas	544	626	5	0.92	548	0.74	3.50
0klahoma	108	124	1	0.93	109	0.93	3.71
Southwest Texas	107	123	1	0.93	111	3.74	6.54

NOTE: In the MC Award race Houston is now leading in the "over 500" class, Albuquerque is #3 in the "175-499" class and Holloman is #2 in the "under 175" category.

. · · · · ·		\$tatus as of 7/31/78					
	6/78	6/79	New	% Of	Asgd	% Of	MC
	Base	Goal	Mem	Base	Mem	Base	Pts
*	Re	gions					
Region I	6654	7652	51	0.77	6743	1.34	3.64
Region II	1987	2182	22	1.16	1924	1.42	4.90
Region III	1852	2130	13	0.70	1854	0.11	2.22
Region IV	1654	1902	24	1.45	1679	1.51	5.86
Region V	1626	1870	14	0.86	1641	0.92	3.50
Region VI	8126	9345	60	0.74	8183	0.70	2.92
NATIONAL ASGD	21856	25081	184	0.84	22024	0.77	3.30

NOTE: There is no MC award among the regions, however "points" give an indication of the member recruiting/retention activity on a comparative basis.

1978-79 Dues. All members should have received their advance billing for their 1978-9 dues. If you have not received it please let you MC know immediately. Although dues are not yet due, why not pay now and help AIAA save money. Each billing costs AIAA about 40¢ and this is money sorely needed to serve you in so many ways. Payment now is the best time - about midway between IRS Trauma Day and Christmas shopping. Do a favor to both yourself and your society - Pay Now!!!

# PROGRAM PLANS FOR AIAA - HOUSTON SECTION 1978-1979

The Section Officers, Committee Chairmen, and Councilors have been hard at work during the summer months planning and scheduling the monthly programs for the 1978-1979 program year. The current schedule of programs is as follows:

DATE		PROGRAM	STATUS
September 19		Spacelab - Yokum Gray ESA	Tentative
October 17		Energy - Bob Gammage US Congressman - Texas	Firm
November 21		Antarctica, Dr. Hackerman President, Rice University	Firm
December 12	40	Aviation History, Dr. John Bertin, U.T. at Austin	Tentative
January 16		Seasat, Larry Smith	Firm®
February 20		Life Sciences Payloads Dick Johnston, Director SLSD, JSC	Firm
March 20		Third Annual Mini-Symposium	Firm =

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Aviation History, Dr. John Bertin, U.T. at Austin

Seasat, Larry Smith