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Volume LXXX

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Number 21

The California Tech

Voyager I Brings Jupiter Back Alive

A Sentimental Journey...

by Eve Bennett

"Jupiter and the Mind of Man, A Symposium" was held on the eve of Voyager 1's closest approach to Jupiter. The informal discussion was held between the reunited members of the 1971 symposium "Mars and the Mind of Man". Present were: Walter Sullivan, Science Editor of the *New York Times*; Carl Sagan of Cornell University; Ray Bradbury; Bruce C. Murray, Director of JPL and Professor of Planetary Sciences at Caltech; and Arthur C. Clarke via film and satellite from Sri Lanka.

After opening remarks by President Goldberger, Mr. Sullivan introduced the panel. Then he gave a mythological history of Jupiter and his moons. Arthur C. Clarke's film was generally a 'hello'. He said that on the night previous to making the film, he had seen Jupiter very clearly through his celestial telescope.

Carl Sagan mentioned that on his way to the program at Beckman from the Ath, he could see Jupiter. This caused him to feel that Voyager's probing eye, which gives knowledge, also gives a loss of innocence. He also mentioned Asimov's description of the solar system which is: one star, four planets (Jupiter, Saturn, Uranus, Neptune), and debris. He said that our search for life beyond earth is important because alien explorers (if they exist) easily might overlook our civilization on our piece of debris.

After speaking, Sagan showed slides of Jupiter and dome of its moons. From first indications, it seems that the colors of Jupiter's atmosphere roughly correspond to the temperature and depth. The blue, blue/white areas are points at which we are seeing fairly far in and are about room temperature. The red areas are near or at the outer surface and are very cold.

When his turn came to speak, Bruce Murray pointed out that money for space projects are allocated by politicians who have a sense of history. The money for Voyager was appropriated eight years ago by politicians

who could not expect to be in office when the project gave its rewards. He also said Voyager reflects the good points of the United States.

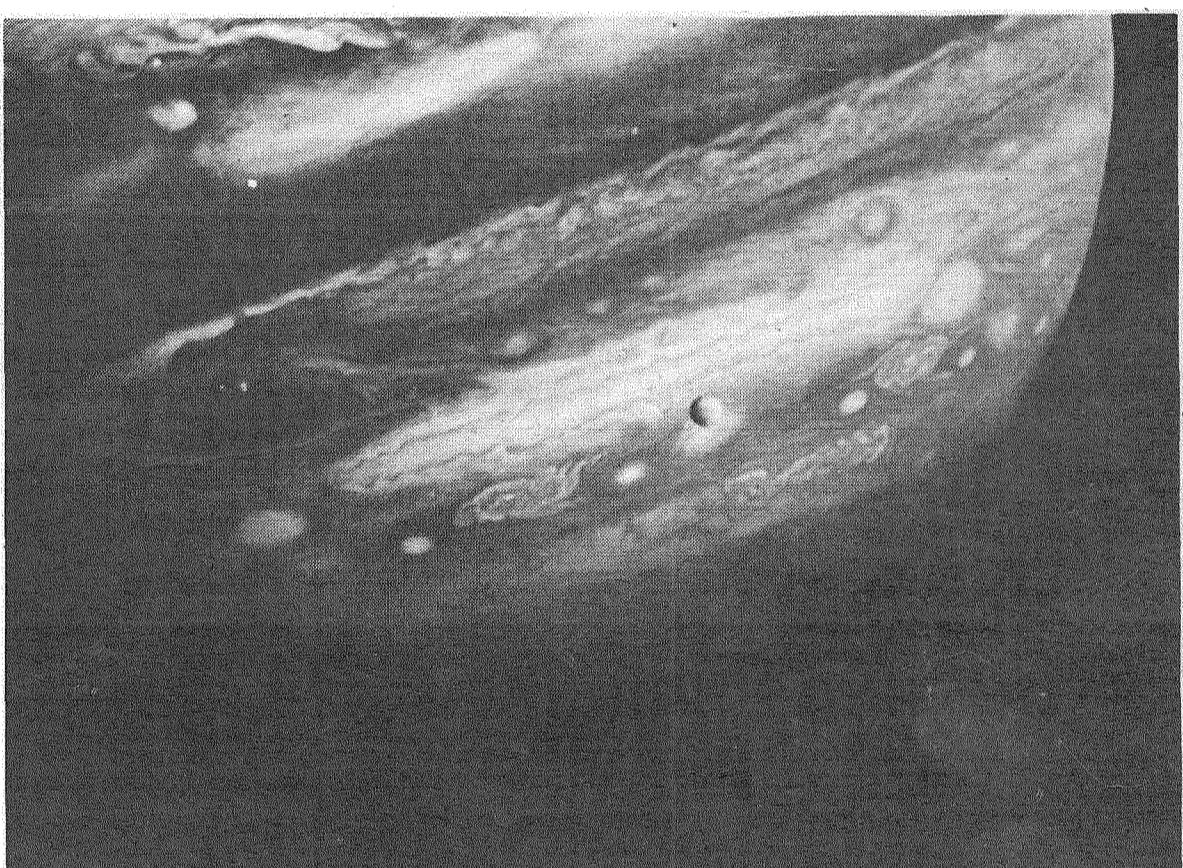
Ray Bradbury asked his listeners to stop and consider the historical significance of the night. He said "because of a night like tonight, 1984 will not come." Because of the good results of the mission, he feels that we have been putting good information in our machines. They are good representatives--through them, our sensibilities and our souls are out beyond Jupiter. He feels that with computers "we can save up moments of time." Contrary to Sagan's statement, he felt that space travel is a sign of our moving back into the Garden of Eden, where was our original innocence.

After Bradbury's reading of an original poem, the participants were invited to comment upon one another's statements. Sagan cautioned that "societies which are not exemplary can sometimes do exemplary things." He reminds that there are still many problems to be solved on earth. He also pointed out that the cost of a reconnaissance of the entire solar system comparable to the coverage of Jupiter would cost about one year's overrun of the budget for the Anti-Ballistic Missile.

Bradbury mentioned a theory by Lamarck that genetics can give in to will. An example is that perhaps a short-necked giraffe looked up long ago and upon seeing lush higher leaves wished that he had a long neck. Eventually, the species developed such a neck. As an analogy, he said that our quest into space may mean that we will become "the biggest damn giraffe in history." Sagan typically had the last word by pointing out that perhaps it is something in our genes which makes us have the will to go into space.

At the conclusion of the discussion, Gov. Brown briefly addressed the gathering. He, like many others, felt it "hard to grasp the significance of what is happening."

Photo courtesy of JPL.



Voyager I took this photo of Jupiter and two of its satellites (Io, left, and Europa) on February 13, 1979. Io is about 350,000 Km above Jupiter's Great Red Spot; Europa is about 600,000 Km above clouds.

Something Bugging You?

Tap into CIA Chief's Talk

by Ray Beausoleil

On March 29, 1979, at 8:00 pm, in Beckman Auditorium, the Caltech Y will bring Admiral Stansfield Turner, Director of the CIA, to present his views on the topic "Protecting Secrets in an Open Society." After the Admiral's talk, questions from the audience will be accepted. This event is open only to members of the Caltech-JPL community, their families, or

their guests; identification will be required at the door.

On March 9, 1977, Admiral Turner was sworn in as Director of Central Intelligence; in this capacity, he heads the Intelligence Community (the U.S. foreign intelligence agencies) as well as directs the CIA.

Admiral Turner has come under considerable fire lately for the CIA's apparent inability to

Continued on Page Three

Pucksters Fail To Reach Goal

by Grant T. Yokum

By this writing the Caltech Pucksters will have completed their regular season play with an astounding 14-2 record. This won-loss record is the club's best since their 1974-75 season, when the Beavers went undefeated and won the coveted Warden Cup (after finishing first, they bought the trophy and presented it to themselves). After a brief road trip over spring recess, the Pucksters will return the first of April to begin the play-off series, which will

culminate (the team hopes) in the return of the Warden Cup to its point of origin.

In the victory over Irvine last Sunday, the stars of the game were the never-say-die, always-give-it-a-try guys, the legendary *third line*. By name they are Dave Braisted, Mike Chobotov, Dave MacFarlane, and Alex Ortiz. These guys have not missed a game and have sat on the bench more than most. Against Irvine (who is presently battling it out for last place with Northridge) the foursome was given the starting roll and, true

to form, they failed to take advantage of it. Their failure to score in the 5-0 rout, was attributed not to Irvine's defense, but to the *third line*'s inability to stay out of each other's way. Chobotov had some harsh words for MacFarlane when, in the final seconds of the game, they collided and prevented each other from shooting and scoring what would have been a certain goal. They did, however, get in the opponents' way and were not scored upon, and it is with this optimism that they are given this week's headline spot.

CIA from one

predict the seriousness of the crisis in Iran. Many officials within the CIA, while recognizing Admiral Turner's value as an innovator, complain about his inability to get along with his subordinates and sometimes question whether he can competently run the agency. Known for his affinity for advanced technological gadgets such as spy satellites, in 1977 Admiral Turner ousted 800 employees from the CIA's Directorate of Operations. Other

members of the Intelligence community claimed that, as a result, the CIA was so shorthanded that in 1978 it could not investigate two suspicious situations overseas (undisclosed as yet).

In January, the *L.A. Times* stated that Admiral Turner's remote personality has hampered external CIA relations as much as it has caused internal morale problems. He reportedly has difficulty dealing with National Security Adviser Zbigniew Brzezinski and has been criticized

(through the proper channels) by President Carter.

Those who defend Admiral Turner claim that the Iranian foul-up cannot be appreciably blamed on him or the CIA. The agency was ordered by the White House to avoid the Shah's enemies and allow internal criticism so that U.S. support would appear to remain confident; in addition, only the U.S. Ambassador had been authorized to report the Iranian situation to Washington.

In an interview with *Time*

magazine, Admiral Turner confidently countered attacks on himself and his agency. He noted that he had predicted last July in *Time* that Iran would soon be in deep trouble.

He does not believe low morale to be as extensive as has been reported or as significant in reducing the CIA's effectiveness. Members of other governmental intelligence organizations respect the agency's results. In addition, Admiral Turner acknowledges the CIA's recent turmoil (he is the

fifth director in six years) and declared that he is as responsible for the long-term success of the agency as for its rebuilding. "I'm taking this agency through some very important changes. How do you set it up so it runs 200 years?"

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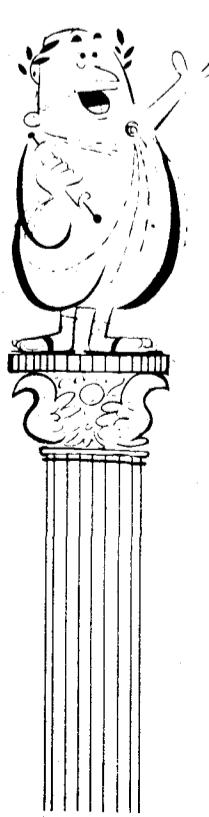
Hi, Carolyn! Hi, Janie!

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Warm Rink?

An underwater hockey team is now in the process of formation. If you want to know what underwater hockey is or want to play it, contact Dave Wheeler, x2154, mail code 1-55.

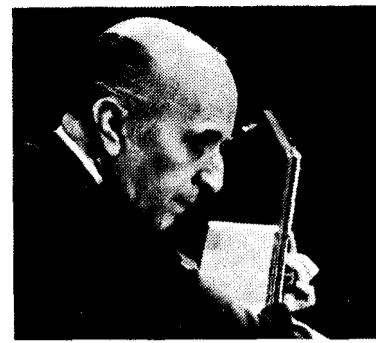
LOST: Honeywell charger for camera flash. In Baxter / Ramo during *Music Man*. Contact Pam Crane, 793-0761.

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The Master Returns

Flamenco guitarist Carlos Montoya will perform in Beckman Auditorium on Friday, March 9, and Saturday, March 10. Montoya recently celebrated the 60th anniversary of his debut, and his 75th birthday. For the Caltech concerts, both at 8 pm, Montoya will perform his own arrangements of traditional Spanish gypsy dances and rhythms. For ticket information, phone 793-7043.

Art from two
we glorify our faults? And why all the white? Despite what psychological connections we may conceive as appropriate to this community, one feels, with dread, the operation of a leisure-suit mentality that seeks to "match" this supposed art with Beckman? Someone tell me this was not a consideration, please.

The one piece which succeeds in its setting is "Feather" to the west of Dabney. It is interesting in that it manages to transcend its stony limitations and calls to

Who?

*Happy Birthday,
Glen Herrmannsfeld!*

it and informs "the other"; the familiar becomes new; everything around it fits into a more perfect harmony. It is, as Stuart Ender might say, suggestive. The others are dead, as dead as stone can be, dead ends, in and of themselves trite and, by their size, pretentious. They look like over-sized Ivory soap carvings.

Art, through grace and subtlety, can humanize; through purpose and spirit, unify—if only in revolt against such senseless clutter. A once restful scene has grown noisy, and worst, like a child, unthinkingly blurts out, to our horror and embarrassment, the family secrets to strangers.

Yours truly,

*—Cheri Erickson
Graduate Student*

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