CHAIRMAN'S MESSAGE

The theme of the Nineteenth Space Congress is MAKING SPACE WORK FOR MANKIND. After more than two decades devoted primarily to space exploration and experimentation, the time has come to reap the harvest of benefits now available. The maturing of the space program and the economies of operation offered by the Space Shuttle make practical applications the name-of-the-game in the decade of the 1980's.

The reusable Space Shuttle is establishing itself as the economy vehicle of the coming decade. However, the demand for payload space is so great, the expendable launch vehicles will remain in service for an indefinite period.

The next ten years will see a proliferation of such useful space hardware as weather satellites and geosynchronous orbit communications spacecraft which have already begun to change the way our world functions. The shift from government-sponsored scientific research to private companies providing needed services for a profit is now well underway. The investment in space programs by the nations of Europe (operating as the European Space Agency), by Japan, Canada, China, India, Indonesia, and many others, indicates a growing international understanding of the importance of space in mankind's future.

This Congress features panel sessions which will provide an update on the Space Shuttle, an overview of future projects, a review of Department of Defense space activities, and a Thursday evening panel with the astronauts. The technical paper sessions will contain a variety of subjects while focusing on the user's activities. The international session will highlight participation from Europe and Asia and will complement papers from a number of industrial and government agencies from across our nation.

As in past sessions, we will have exhibits of state-of-the-art technology provided by major corporations which may be viewed in the exhibit hall. The technical presentations of the Youth Science Fair, which have been exhibited in conjunction with the Space Congress for several years, will also be available to our visitors.

To insure that our Congress participants can spend some time socializing and visiting old acquaintances while meeting new people, our calendar includes a banquet on Wednesday evening and a luncheon on Thursday. Both these affairs, as well as our panel and paper sessions, will feature aerospace leaders from industry and government.

The Florida weather should be pleasant in late April, and the closeness of the Kennedy Space Center for tours, and of Disney World, Circus World, Sea World, and other attractions of Central Florida for excursion trips assures family members an enjoyable stay.
PROGRAM

WEDNESDAY, APRIL 28

KEYNOTE ADDRESS (8:30 a.m. to 9:00 a.m.)
Speaker: Congressman Bill Nelson

PANEL SESSION I (9:00 a.m. to 11:30 a.m.)
SPACE TRANSPORTATION SYSTEMS UPDATE
Panel Chairperson: To Be Announced
A panel to update the Space Congress on STS performance to date and an in-depth look at the next twelve months.

PAPER SESSION I (1:00 p.m. to 4:00 p.m.)
A. SPACE POWER SYSTEMS
Session Chairperson: Luther E. Powell
Manager, Projects Office
NASA, Marshall Space Flight Center, AL
Covers supply and generation of power in space, including space platform applications, systems and solar arrays.

B. FUTURE SHUTTLE CARGO PROGRAMS
Session Chairperson: Chester M. Lee
Director, STS Utilization
NASA Headquarters, Washington, D.C.
An examination of Shuttle cargo capabilities and limitations, and objectives for maximum utilization of capability.

C. INTERNATIONAL SHUTTLE USERS
Chairperson: Dr. Dai J. Shapland
Spacelab Promotion and Use
Directorate of STS
European Space Agency, Paris, France
Examines the significance and potential of the Space Transportation System for the international community.

BANQUET (8:00 p.m.)
Officer's Club, Patrick Air Force Base
Speaker: Dr. Hans Mark
Deputy Administrator
NASA, Washington, D.C.

THURSDAY, APRIL 29

PANEL SESSION II (8:30 a.m. to 11:30 a.m.)
CONCEPTS FOR FUTURE PROJECTS
Panel Chairperson: John F. Yardley
President
McDonnell Douglas Astronautics Company
and McDonnell Douglas Technical Services Company
A stimulating, thought provoking look at concepts for future exploration and commercialization of space.

LUNCHEON (12:00 noon)
Officer's Club, Patrick Air Force Base
Speaker: To Be Announced

PAPER SESSION II (1:00 p.m. to 2:30 p.m.)
GETAWAY SPECIAL & AWARDS
Chairperson: To Be Announced
A review of the Getaway Special contest jointly sponsored by CCTS and TWA Services for defining potential Shuttle Payloads by High School and College Students.

PAPER SESSION II (2:00 p.m. to 5:00 p.m.)
A. EXPENDABLE VEHICLE PAYLOADS
Session Chairperson: James E. Weir
Chief - Automated Spacecraft Operations Branch
NASA, Kennedy Space Center, FL
A review of the expendable vehicle's past accomplishments and its role in the coming era of rapidly expanding space science applications.

B. SPACE MANUFACTURING OPERATIONS
Session Chairperson: Richard D. C. Whilden
Vice-President and General Manager
Test and Field Operations Division - TRW Space and Technology Group
Redondo Beach, CA
An examination of the problems and potentials of materials processing in the unique environment available in Earth orbit.

C. COMMERCIAL SPACE APPLICATIONS
Session Chairperson: Jerry C. Bostick
Acting Manager, STS Operations Program
NASA, Johnson Space Center, TX
Explores commercial uses and applica-

PANEL SESSION III (8:00 p.m. to 9:30 p.m.)
MEET THE ASTRONAUTS
Panel Chairperson: Richard G. Smith
Center Director, NASA John F. Kennedy Space Center, FL
A panel open to the general public with several astronauts and payload specialists discussing present and future activities for men and women in space as they relate to STS.

FRIDAY, APRIL 30

PAPER SESSION IV (8:30 a.m. to 11:30 a.m.)
DOD SPACE PROGRAM ACTIVITIES
Panel Chairperson: Brlg. General Joseph D. Mirth
Deputy for Space Launch and Control Systems
Space Division (SD/YV)
Los Angeles, CA
Provides a review of DOD program status and plans.

PAPER SESSION III (1:00 p.m. to 4:00 p.m.)
A. ENERGY CHOICES OF THE FUTURE
Session Chairperson: Dr. Gerald W. Lowery
Corporate Vice-President
Science Applications, Inc.
La Jolla, CA
Papers exploring possible significant sources of energy for our expanding, demanding technology in coming generations.

B. SPECIAL INTEREST TOPICS
Session Chairperson: Dr. John J. Thomas
Head, Division of Chemistry
Medical Research Institute
Florida Institute of Technology
Melbourne, FL
Explores the variety of disciplines potentially benefitting from use of the Space Shuttle's payload capabilities.

C. SPACE COMMUNICATIONS
Session Chairperson: Lee R. Allain
Vice-President of Engineering
Government Information Systems Division
Harris Corporation
Melbourne, FL
Probes the accomplishments, needs and special problems of communications in and from space.
STUDENT DISCOUNT

Students may attend individual panels or paper sessions at a special rate of $2.00 per session payable at the registration desk.

SPONSOR

The NINETEEN SPACE CONGRESS is sponsored by the Canaveral Council of Technical Societies (CCTS). The Council is composed of the Cape Canaveral area affiliates of 23 national, technical, and professional societies and an advisory group. Included in the group are five local colleges and universities, the Florida Solar Energy Center, and Brevard County Commission, the Brevard County School Board and the Brevard Economic Development Council.

PIONEERS' DAY

The Missile, Space and Range Pioneer's cocktail party and banquet will be held on Friday evening, April 30th, following the NINETEENTH SPACE CONGRESS at the Holiday Inn Oceanside on A1A in Melbourne. The Pioneers are the men and women who have been associated with aerospace since the beginning of the space program. Their banquet is an annual event well worth attending.

AIRLINES

Major airlines serving the Cocoa Beach area through Orlando Jetport include: Air Florida, American, Braniff, Delta, Eastern, Northwest, Ozark, Republic, United and USAir. Eastern serves the Melbourne airport. Limousine service is available from both airports to Cocoa Beach (call 305-783-1400 for departure times).

YOUTH SCIENCE FAIR

Regional Youth Science Fair displays and demonstrations will be open to the public in the Afterdeck Lounge at the Ocean Landings. Exhibits will be judged and awards presented there on Thursday evening April 29th, immediately preceding the "Meet the Astronauts" panel session.

EXHIBITS

Exhibits will include displays of the Space Shuttle, Shuttle payloads, solar energy and communication satellites. The exhibit hall will be open to the public Wednesday through Friday in the Quality Inn.

MOTEL RESERVATIONS

Rooms are available in the following motels, both within walking distance of the NINETEENTH SPACE CONGRESS. Reservations should be made in advance directly with the motel of your choice. Mention the SPACE CONGRESS in your reservation request.

Quality Inn ...... (305) 783-2252
Holiday Inn ...... (305) 783-2271

Other motels are available in the Cocoa Beach area within short driving distance.

AUTO RENTALS:

Reservations and rentals can be made at Cocoa Beach or at the Melbourne and Orlando airports. Agencies include:

- AVIS
- ECONO-CAR
- BUDGET
- HERTZ

ATTRACTION CENTERS

Late April in Florida is a delightful time of the year for the entire family. The weather is pleasant, the hardy find the Atlantic warm enough for swimming, and the tourist attractions are not yet crowded. Cocoa Beach offers a long stretch of swimming beach, surfing areas, and both deep-sea and shore fishing. Bus tours of the Kennedy Space Center and Cape Canaveral are available from the Visitors Center, a free, exhibit filled space museum which can be enjoyed by both children and adults. Within one to two hours drive are — a world of vacation fun in the Magic Kingdom of Walt Disney World — Sea World, one of America's finest marine attractions — the mystery and excitement of Africa in Busch Gardens — the famed Glass Bottom boats at Silver Springs — the beautiful gardens and daily water ski review with lovely aquamaids at Cypress Gardens — or see the show and be a performer at Circus World.

THE MAP BELOW GIVES THE EXACT LOCATION OF EACH ATTRACTION.