critical circuitry. Although the contractor team believes Honeywell has made reasonable choices, limited specific redesigns may be required if some of the selected components fail characterization testing. All characterization tests are scheduled for completion by end of June 1993.

Henry O. Pohl (713) 483-3971

EDUCATION: The daily JASON Voyage IV downlinks are going well. Approximately 10,000 students are expected to participate during the March 1-13 event. The staff also attended the Texas Science Summit II. This is the second annual gathering of representatives from business, industry, government, and public education to discuss the enhancement of science education in public schools. JSC was represented at the Pathways ’93 Math and Science Career Expo, sponsored by Partners in Space, in Pasadena March 2-4. Approximately 8,500 students attended.

Douglas K. Ward (713) 483-3671

JOHN F. KENNEDY SPACE CENTER (KSC)

STS-55 (Columbia/D2) Status:
The leaking hydraulic line to the ET umbilical actuator which burst causing contamination of the Orbiter aft compartment components with hydraulic oil, has been replaced. Oil contamination from three main engine connectors, seven Orbiter connectors, engine heat shields, blankets, and six solenoid valves are being cleaned. Helium signature tests are expected to be performed on the main engines this weekend and hypergolic servicing will begin on March 8. There is no report to date on the failure analysis of the ruptured hydraulic line.

STS-56 (Discovery/ATLAS-2)
-OPF rollout occurred on March 2. ET mate is complete and integrated testing >1 starts March 6. Main engine installation will start on March 8 with projected rollout to the pad on the following weekend.

Orbiter Refrigerator/Freezer (ORF)
The ORF has been successfully operated in the freezer mode in Columbia in preparation for the STS-55 D-2 mission. The enhanced ORF will be installed in the backup position this weekend. The MAUS and RKGM payloads which were removed from Columbia for battery recharging have been reinstalled.

Miscellaneous
-Other payloads which remain in active processing and testing include SLS-2, SHOOT, SPACEHAB and ACTS. SPACEHAB installation into Endeavor is in progress.
-Nozzle to exit cone leak checks of the STS-51 aft segment are beginning.
-The NASA Headquarters team performing an independent assessment of SSF program costs are reviewing KSC's Space Station projects on March 3 and 4.

Robert L. Crippen (407) 867-3333

LANGLEY RESEARCH CENTER (LaRC)

Tests of a 1/4-scale Cessna Citation-X semi-span flutter model were completed in the Langley Transonic Dynamics Tunnel (TDT) on Thursday, February 18, 1993. Eight configurations were tested to obtain data to correlate with analysis results for wing bending-torsion flutter, aileron flutter, and aileron reversal. The flutter test results correlated well with analysis, and the objectives of the test were met. Four Cessna executives, including the Senior Vice President of Engineering, visited the TDT to observe the cooperative tests of their model. They were very complimentary to NASA for its renewed interest in general aviation.

Rodney H. Ricketts (804) 864-1207

Dr. Edwin Stear, Boeing Corporate Vice President for Technology Assessment, has established a group to advise the Langley formal methods team on the effectiveness of their effort to apply formal methods to avionics systems. An advisory group was recommended, in a recent Langley peer review of the formal methods work, to aid in the transfer of formal methods technology to the US Aerospace Industry. Formal methods use mathematical logic to produce designs with proven properties such as safety and successful redundancy management. They are especially applicable to digital systems since mathematical logic is the natural model of digital systems. Members of the