



*Recent activities specific to the Elements include:*



*Figure 1: Test Stand A-3 Construction Site at SSC*

**Upper Stage Engine (USE)**

- ***Test Stands A-3 and A-1 Continue Construction:*** Stennis Space Center (SSC) Test Stand (TS) A-3 construction is continuing. Much of the work involves installation of smaller components such as pipes and supports, platforms, handrails, etc. The yellow pipes (shown in Figure 1) are being staged for installation of the water supply line. The major A-3 components, which include the test cell, diffuser, and the chemical steam generator (CSG) system, are in fabrication. Figure 2 shows components of the CSG module including the support structure, CSG cans, and piping manifolds. Nine modules containing three cans each will be installed at A-3. They will provide approximately 5,000 pounds of steam per second to the diffuser ejectors for the purpose of evacuating the test cell to an absolute pressure of approximately 0.16 pounds per square inch.





SSC TS A-1 construction is also underway. The major activity on A-1 at present is the installation of a new Thrust Takeout Structure (TTOS) to support a new Thrust Measurement System (TMS). Metal work on A-1 in preparation for TTOS installation is seen in Figure 3. Delivery of a TTOS component, one of several steel girders, is seen in Figure 4.



*Figure 2: TS A-3 CSG Module Components in Fabrication*



*Figure 3: TS A-1 Thrust Drum Leveling Plate Stiffener Modification*

*Figure 4: Delivery of SSC TS A-1 TTOS Girder*





## Flight and Integrated Test Office (FITO)

- *Special Test Equipment (STE) – Integrated Vehicle Ground Vibration Test (IVGVT):* The IVGVT team has just completed the 50% Design Review of the STE for the full stack configuration. In addition, the Conceptual Design Review for the second stage configuration was also completed.



*STE Design Team*

