

ARES UPPER STAGE ENGINE (USE) OFFICE

Ares J-2X Vehicle Simulator: On November 15, Pratt Whitney Rocketdyne (PWR) delivered the Vehicle Simulator (VSIM) to Stennis Space Center (SSC). The VSIM will simulate the upper stage on the SSC test stands. The VSIM will send commands to and receive data from the J-2X engine, and is the primary interface between the J-2X, test site facilities, and test control personnel.



Figure 1 – J-2X VSIM Unit.

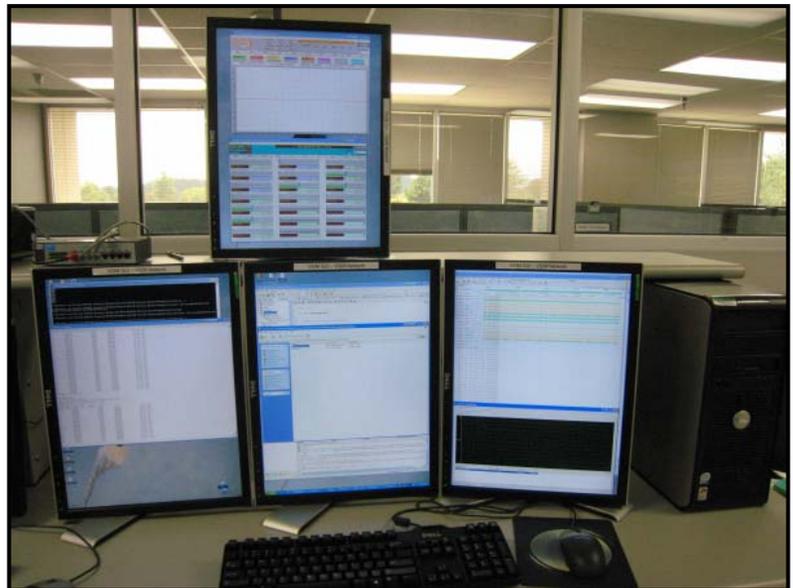


Figure 2 – J-2X VSIM graphical user interface (GUI) console.



Gas Generator Duct Manufacturing Technology Demonstrator: Arrowhead Products has completed the welding of the gas generator (GG) duct manufacturing technology demonstrator (MTD), shown in Figure 3. This duct appears deceptively simple but because of design considerations that drive the size, radius, and material thickness of the duct, it has proven difficult to manufacture. While there is still work to be done, reaching this point is a significant accomplishment.



Figure 3 – The completed GG duct manufacturing technology demonstrator.

**The Ares Projects look forward to
the launch of STS-133, Space Shuttle Discovery, on November 30.**