

H. Stennis Space Center (SSC)

Several significant activities have taken place in calendar year 2013 on the SSC range, and new developments are on the horizon.

1. Engine Testing

As a safety precaution to general aviation in the immediate airspace, Restricted Airspace R-4403 is activated during engine testing. During 2013, the test stands operated 5 projects resulting in approximately 128 hot fire tests for a total of 5,920 seconds. R-4403 was activated for 17 tests, like the engine test shown in Figure 39.



FIGURE 39: ENGINE TEST SSC

2. NASA-US Navy Mobile

Construction Battalion 11/Underwater Construction Team (UCT) 1 Combined Underwater Surveying and Tactical Training

SSC and the United States Navy Mobile Construction Battalion 11/Underwater Construction Team 1 (UCT-1) combined the performance of NASA-required underwater surveying with the UCT-1 pre-deployment tactical training requirement. The UCT-1 training combined operational and tactical missions to provide a realistic pre-deployment training/certification opportunity for the war fighter. During the operational training portion, the UCT-1 performed diving operations (underwater inspections and surveying) in support of SSC construction projects combined with tactical scenarios integrated into the diving operations. The tactical portion included the use of military vehicles, weapons and the discharging of blank rounds. The UCT-1 training objectives were met and the mission was a success for the U.S. Navy and SSC. The multi-agency integration represented excellent fiscal stewardship and realistic pre-deployment training that benefited both cooperating agencies.



FIGURE 40: US NAVY MOBILE CONSTRUCTION BATTALION 11/UNDERWATER CONSTRUCTION TEAM (UCT) 1 COMBINED UNDERWATER SURVEYING AND TACTICAL TRAINING

3. Application for Air Range Information and Notification (AARIN)

SSC uses an electronic range request system called Application for Air Range Information and Notification (AARIN) to track and communicate flight operations to key SSC personnel. AARIN allows the Range Safety Manager to de-conflict air operations and ground testing activities at the Center. Aerial access to the Center is requested in AARIN. The AARIN system was developed to allow pilots onsite and offsite of SSC the opportunity to request access to SSC airspace. Seventeen requests to use SSC airspace were submitted to the AARIN system, nine of which were approved, seven were denied, and one request is being evaluated.

4. Special Use Airspace

SSC and the Naval Special Warfare Command (NSWC) have submitted a request to the FAA to modify the special use airspace associated with SSC, specifically modifications to R-4403. The purpose of this action is to provide containment capabilities conducive to protecting the general aviation community while maintaining priority of engine testing and supporting tenant missions at the Center. Additionally, protection to the surrounding communities from noise and aerial impacts (i.e., turbulence) is critical to maintaining engine testing capabilities at SSC. For mission success within the Federal City and to protect the public including the general aviation community from future testing, special use airspace R-4403 is being modified.

5. Unmanned Aircraft Systems (UAS)

The SSC Range Safety Program reviews and evaluates the compatibility of each proposed UAS or Unmanned Aerial Vehicle (UAV) on a case-by-case basis. Currently, the DoD Special

Operations Command (SOCOM) is the only agency operating UAVs at SCC. While SOCOM applies for the COAs, maintains the vehicles, and operates the UAVs, the SSC Range Safety Manager provides de-confliction between the Special Forces flights and NASA missions. The COA or Waiver for SOCOM is Puma 2012-ESA-29-COA-R.

Puma certificate 2012-ESA-29-COA-R is effective from July 20, 2012 through July 19, 2014. Operation of the Puma AE UAS in Class G airspace at or below 1000 feet AGL, except in the northern airspace area under the Picayune Class E airspace where the Puma will remain at or below 500 feet Above Ground Level (AGL). Night flight is acceptable.



FIGURE 41: PUMA UAS