

Success Stories

ORS Successes 2012

27 Sep 2012: One-year anniversary of NRL's TacSat-4 Launch from Kodiak Launch Complex, Alaska Aerospace Corporation.

Sep 2012: Success Modular Space Vehicle Bus Flight Software (FSW) Critical Design Review. This review fulfilled the ORS Office established criteria for a FSW Critical Design Review. The MSV Bus FSW will be the first-ever componentized FSW architecture built to open standards and employed in space. This architecture is analogous to many Modular Open System Approach terrestrial applications, such as Google's Android operating system. The team includes: Northrop Grumman Aerospace Systems and their subcontracting partners (Space Dynamics Lab, Microcosm, and DesignNet Engineering).

Sep 2012: The ORS-1 fielding team was honored by Association of Old Crows for Exceptional Performance in Electronic Warfare and Related Fields as the recipient of the 2012 Integrated Product Team award. The award was presented to Mr. Thom Davis (ORS) and Col. Michael Moran (SMC/SD) at a ceremony in Phoenix, AZ on 24 September 2012.

Aug 2012: ORS-4, Super Strypi, Small Launch. The Aerojet Corporation completed the first hot-fire test of the LEO-7 Solid rocket motor on 14 August at Edwards Air Force Base. The LEO-7, a 7000+ pound solid rocket motor, will serve as the second stage of the Super Strypi launch vehicle.

July 2012: ORS-1: After one year of on-orbit operations, ORS-1 continues to support USCENTCOM in a highly satisfactory manner.

July 2012: Arctic Shield, a US Coast Guard (USCG) exercise to train and expand their capabilities in the Arctic Ocean north of Alaska as the waterways melt, will use TacSat-4 for USCG emergency operations supporting two new Shell oil vessels doing oil exploration for the first time in the North Arctic Slope.

June 29, 2012: One-year anniversary of ORS-1 Launch from NASA Wallops Flight Facility, Mid-Atlantic Regional Spaceport.

June 2012: The ORS Office and its partners, together with Northrop Grumman Corporation conducted a two-day Spacecraft Baseline Interim Design Review, successfully completing the Spacecraft Bus Critical Design Review process for the Modular Space Vehicle (MSV) program. This review moves work on this next-generation spacecraft design to the fabrication stage.

June 2012: TacSat-4 participated in Trident Warrior 12 (TW12: US Navy's major annual exercise). TacSat-4's bent pipe voice and data capabilities, networked Portable Ground Terminal (PGT), and Virtual Mission Operation Control user tasking were demonstrated.

05 April 2012: ORS conducted a successful suborbital launch (Spaceloft 6) from the New Mexico Spaceport to demonstrate enabling capabilities and test many space avionics-related systems. The launch provided a flight test platform that allowed enabling technology experiments to be exposed to launch vehicle flight conditions. It also helped mature business process for low cost space-flight demonstrations. Standardized integration canisters allowed for convenient hardware attachment and efficient payload spaceflight testing. The 110lb maximum payload mass capability of the Spaceloft vehicle was split amongst four ten-inch canisters rated for 10lbs each, three four-inch canisters rated for 4lbs each and three nosecone locations that accommodate 10lbs, 7lbs, and 1lb each. Over 7 payloads were on board including a global positioning system payload that tested of an "onboard metric tracker," which is important for automated launch operations.

April/May 2012: The TacSat-4 program supported USCG Cutter Juniper with antennas to allow SATCOM communication during its participation in the 100th anniversary ceremony for the Titanic sinking in the North Atlantic. Support was critical to the Cutter having SATCOM while underway.

ORS Successes 2011

2011: ORS-1 Team nominated for Rotary Nat'l Award for Space Achievement Foundation Stellar Award

November 2011: C4ISR Journal named ORS-1 as one of the top 25 most important intelligence, surveillance and reconnaissance concepts of the year

27 September 2011: TacSat-4 launched from Kodiak Launch Complex, AK; 1st Comm-on-the-Move demo providing real time support to US Coast Guard.

29 June 2011: ORS-1 launched from NASA Wallops Flight Facility, VA; 1st Operational Satellite Supporting Central Command Battlespace Awareness

ORS Successes 2007-2010

June 2010: TacSat-3 transitions to Air Force Space Command for operations.

July 2009: Launch of JUMPSTART, demonstrating first rapid transport and integration showing 6 day call-up to launch. Regan Test Site, Kwajalein Atoll

May 2009: Launch of AFRL's TacSat-3, the first tactical hyper-spectral Imager from NASA Wallops Flight Facility, Mid-Atlantic Regional Spaceport.

May 2007: ORS Office stood up at Kirtland, AFB, New Mexico