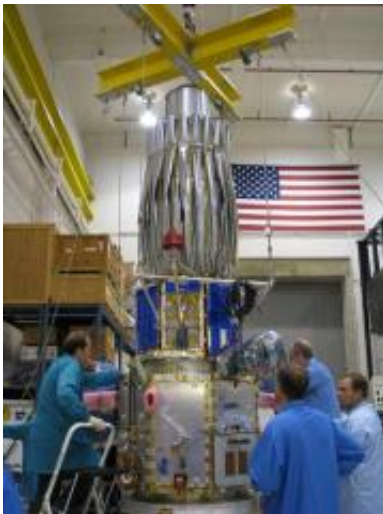


TacSat-4 spacecraft complete and awaiting launch

December 1 2009



Naval Research Laboratory engineers have completed work on TacSat-4. Credit: Naval Research Laboratory

Naval Research Laboratory (NRL) engineers have completed all environmental and performance testing on the TacSat-4 COMMX payload. This completes the entire TacSat-4 spacecraft as the spacecraft bus was completed in May 2008. The launch date was fall 2009, however it was moved to August 2010 because of Minotaur-IV technical issues and changing DoD mission priorities.

TacSat-4 is a Navy led joint mission to augment current satellite communications (SATCOM) capabilities and to advance Operationally

Responsive Space systems. The TacSat-4 mission was selected by a joint process cumulating in a flag and general officer vote by Army, Navy, Air Force, Marines, and US Strategic Command. TacSat-4 provides ten Ultra High Frequency (UHF) channels, which can be used for any combination of communications, data ex-filtration, or Blue Force Tracking (BFT).

TacSat-4's unique orbit augments geosynchronous SATCOM by providing near global, but not continuous, coverage including the high latitudes. TacSat-4 improves on current SATCOM by providing communications-on-the-move for existing radios without requiring antenna pointing. TacSat-4 provides flexible up and down channel assignments, which increases the ability to operate in some interfered environments. The Virtual Mission Operations Center tasking system coupled with the orbit allows dynamic reallocation, within 24 hours during normal operations, to different theaters worldwide enabling rapid SATCOM augmentation when unexpected operations or natural events occur.



TacSat-4 illustration showing solar arrays stowed and showing COMMMx payload. Credit: Naval Research Laboratory

TacSat-4 spacecraft with payload antenna stowed. Credit: Naval Research Laboratory

Source: Naval Research Laboratory ([news](#) : [web](#))

Citation: TacSat-4 spacecraft complete and awaiting launch (2009, December 1) retrieved 24 April 2024 from <https://phys.org/news/2009-12-tacsat-spacecraft-awaiting.html>

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