



COMMAND AND CONTROL



The Command and Control (C2) facilitates delivery of systems that support Navy and Joint C2 at strategic, operational, and tactical levels. SSC Pacific provides the professional expertise to develop and/or deliver, test, and certify operational and tactical C2 systems and command centers that provide the common operational picture (COP), tactical situational awareness, and fused intelligence data used to support Navy, joint, and coalition warfighters' interoperability. As part of our core competency in this area, we also perform basic and applied research to explore and develop new technologies for C2 applications.



Operations specialist operates Global Command and Control System-Maritime (GCCS-M) aboard USS Bonhomme Richard from the East China Sea.

SSC Pacific Unique C2 Capabilities

- Command and control systems
- Systems and systems of systems engineering
- User-centered design, human systems interface
- Tactical data links (TDL)/C2, standards, network design, interoperability certification testing, and operational support
- TDL/BMDS testing and certification
- Human factors engineering/user-center design
- Software quality engineering/assurance
- Systems integration
- Command centers
- C2 basic and applied research

Today, U.S. Navy and other military services must take action to protect and operate within the cyber warfighting domain. SSC Pacific has a long history illustrating how the Navy has utilized technological advances across the cyber domain to maintain that critical warfighting advantage over all adversaries.

Some of SSC Pacific's current C2 efforts include:

Joint Space Operations Center (JSpOC) Mission System (JMS): JMS is an ACAT I Major Automated Information System (MAIS) providing C2 capabilities for space and replacing multiple legacy systems with sustainable hardware and open, evolvable software architecture.

Maritime Tactical Command and Control (MTC2): MTC2, a follow-on to the Global Command and Control System-Maritime (GCCS-M), represents a software-only program providing Navy warfighter command and control capabilities from Maritime Operations Center (MOC) level down to maritime tactical units, afloat and ashore enabling command decision-making.

Ballistic Missile Defense System (BMDS): SSC Pacific supports BMDS test missions (flight tests, missions, and ground test campaigns) and C4I block development of the BMDS as well as real-world operations and fleet/warfighter events (e.g., fleet BMD exercises, INCOs, SOVTs, SAGTs, INSURVs, CASREP T/S).

Command and Control Processor (C2P)/Common Data Link Management System (CDLMS): SSC Pacific is the software support activity for C2P/CDLMS, a shipboard system that provides real-time control and management of the Tactical Digital Information Links (TADILs) through interfaces with the host combat system and data link terminals. TADILs supported include Link-11, Link-16, S-TADIL J, Joint Range Extension (JRE), and Link-22.

Intelligent Multi-UxV Planner with Adaptive Collaborative/Control Technologies (IMPACT): Agility in tactical decision making, mission management, and control is the key attribute for enabling heterogeneous unmanned vehicle (UxV) teams to successfully manage the “fog of war” with its inherent complex, ambiguous, and time-challenged conditions. SSC Pacific is performing applied research on supervisory control and the machine learning of tactics that combine flexible play-calling, bi-directional human-autonomy interaction, “global” cooperative control algorithms, and “local” adaptive/reactive capability.

Science and Technology (S&T) System Engineering, Integration and Test (SEI&T): SSC Pacific is the technical performer for ONR Code 30 C4 and C2 Logistics Technical Area Manager (TAM). The project demonstrates the ability to increase/fuse command control situation awareness information that includes maneuver control, blue force tracking, intelligence, fires, and logistics by using of composable services at the tactical edge.

Global Command Control System – Integrated Imagery and Intelligence (GCCS I3): SSC Pacific provides system engineering, software/system design, and test integrated I3 products to DISA, ONI, JDISS, JPO, and PEO C4I. The capability supports operational commander’s situational awareness by providing capability for integrating actionable intelligence into the common operational picture.

Comprehensive Automated Maintenance Environment-

Optimized (CAMEO): CAMEO provides an automated logistics environment and condition-based maintenance capability supporting continuous integration and automation of operational, maintenance, and logistical processes and technical data to improve aircraft readiness and reduce sustainment costs for the warfighter community. SSC Pacific supports CAMEO by providing system/software engineering services for CAMEO/Readiness Integration Center.

Tactical Network Readiness Group (TNRG): SSC Pacific provides TDL Operational Verification Tests for all TDL-equipped ships and tactical aircraft. This unit-level assessment ensures deployment readiness, and provides an operational check of the Combat System or Operational Flight Program. The TNRGs also support exercises, real-world operations, and ship’s force troubleshooting. TNRGs are located in the Fleet Concentration Areas (FCAs) of Norfolk, San Diego, and Yokosuka, Japan. Each TNRG also has a Multi-Link Vehicle to support units outside of the FCAs, and the Rota, Spain BMD DDGs will be serviced by TNRG Norfolk.

With the Warfighter

SSC Pacific is providing around-the-clock support in the area of responsibility to assist and maintain operational readiness for systems providing imagery data in support of the C2 mission.

USSTRATCOM is establishing a new, 1 million square foot headquarters facility at Offutt Air Force Base (AFB) Nebraska. In support, SSC Pacific tasking requires us to have on-site expertise, with reach-back to Hawaii and San Diego offices, to design, develop, procure, integrate, install, and transition C4I/IT capabilities into the new C2 facility.

SSC Pacific operates, maintains, and manages the U.S. Navy’s Link 16 Network Design Facility (NDF), which provides critical pre-deployment TDL support to the U.S. Navy by providing Link 16 load files for Navy platforms, verifying and validating network requirements, and implementing Link 16 networks for Navy, joint and allied forces, as well as supporting representation at the US Joint Network Design Team (JNDT) and managing the JTIDS/MIDS Network Library (JNL) and the network description documents (NDDs) of every Link 16 network for the U.S. Navy.

For more information
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