
**IT ENGINEERING AND MISSION SUSTAINMENT PROGRAM
DISCIPLINE C
METEOROLOGY AND OCEANOGRAPHY (METOC) PROJECT SUPPORT
PERFORMANCE WORK STATEMENT**

Functional Area #C1 – METOC Project Planning Support

1. Support the identification of functional requirements and system engineering to facilitate the design, implementation and management of a robust and reliable Information Technology (IT) infrastructure to support METOC projects, such as Optimal Path resource routing applications, satellite applications, etc.
2. Perform a variety of studies, analysis, evaluations and assessments for advising and providing facts for decision makers on METOC projects.
3. Recommend improvements and updates to existing METOC project capabilities.

Functional Area #C2 – METOC Project Implementation Support

1. Assist Fleet Numerical Meteorology and Oceanography Center (FLENUMMETOCCEN) with the implementation of various METOC projects, such as Web OPARS, Smart Voyage Planning, and Advanced Climatology (ACAF) and satellite applications.
2. Provide IT and engineering services required to transition existing METOC applications from an operational test environment to operations at FLENUMMETOCCEN. The effort requires preparation of test plans, integration of existing software into the FLENUMMETOCCEN IT infrastructure and training of support personnel.
3. Maintain and provide updates to existing METOC applications. Provide reports of findings and make recommendations to enhance capabilities.
4. Prepare Test Plans for other applications as deemed necessary by FLENUMMETOCCEN. Applications will be integrated and tested with Naval Enterprise Portal – Oceanography (NEP-O) and OGC compatible viewers to include, but not limited to, Google Earth and C2RPC.
5. For any METOC Project capability delivered within the scope of these performance standards provide detailed Standard Operating Procedures (SOP) Document detailing procedures and processes for operation and maintaining services.

6. Transition a variety of applications from Naval Research Laboratory and other developers so that they are accessible to Department of Defense (DoD) users through FLENUMMETOCEN IT systems.

7. Create and maintain environmental applications and services that are database driven (both server side web-based and desktop) supporting system architecture production and dissemination requirements as directed for FLENUMMETOCEN and the Meteorology and Oceanography (METOC) Enterprise.

Functional Area #C3 – Web Optimum Path Aircraft Routing Service (OPARS)/Flight Weather Briefer (FWB) Integration and Maintenance

1. Be responsible for continuing efforts related to Web OPARS/FWB integration and continuing support for the Web OPARS UNIX file system (UFS). This includes routing algorithms, programming interface, database and user interface.
2. Modification of Web OPARS UFS to enable both transmitting completed flight plan information to FWB service, initiating a request for a Flight Weather Brief and responding to and displaying of resultant FWB products.
3. Implement sending a completed OPARS flight plan to FWB to have a weather brief generated. This includes further definition of interface schema and working out service interface requirements.
4. Responding to and resolving Web OPARS defects as identified.
5. Document Web OPARS/FWB interfaces, data structures, software configuration, and operating procedures.
6. Assist in the preparation of the "OPARS A2 SIPRNET System Test & Evaluation Security Requirements" document.
7. Improve and implement the capability to display completed OPARS flight plans in a GIS viewer.
8. Identify, trouble shoot, and correct OPARS/FWB interface issues as required.
9. Provide user training to the government on the capabilities and procedures developed. Interface with external agencies as required.

Functional Area #C4 – Numerical Weather Prediction Verification and Validation (V&V)

1. Using model output, deliver atmospheric and oceanographic model V&V products in a graphical format as deemed necessary. Models include, but are not limited to: NOGAPS, NAVGEM, COAMPS, WaveWatch III, Ensemble Forecast System (EFS)
2. Prepare Test Plans for atmospheric and oceanographic model V&V products as deemed necessary by FLENUMMETOCEN.
3. Perform a variety of studies, analysis, evaluations and assessments for advising and providing facts for decision makers on atmospheric and oceanographic model V&V products.