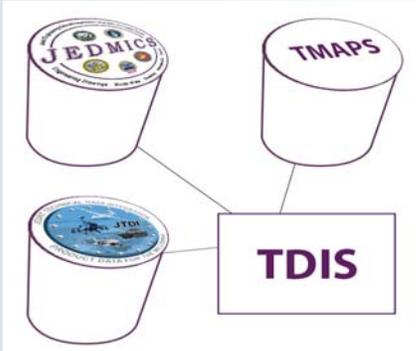




# Technical Data Integration and Search

## Project Snapshot



### Project Lead:

NAVAIR 4.1.9

### Project Dates:

Nov 2019 – Nov 2019

### Objectives:

- Reduced time to search and collect required engineering information across multiple systems.
- Reduce potential error and time required to packaging and distribute the technical data by automating the packaging and distribution process.
- Increase throughput of engineering requests which leads to higher platform availability.

### Estimated Savings:

50% reduction in labor hours associated with locating data across multiple data systems. A savings of \$2.5M annually

40% reduction in labor hours associated with packaging and delivery of technical data for internal REI. A savings of \$92.8K annually.

40% reduction in labor hours associated with packaging and delivery of technical data for external 339's. A savings of \$1.98M annually.

NAVAIR is responsible for the full lifecycle management of the weapon systems fielded in support of all Naval Aviation Assets. This project focuses on the in-service sustainment period need for engineering support activities; specifically, the ad hoc need for engineering support for depot and provisioning services. Two key elements of sustainment that drive request for engineering support are Depot Repair activities and part provisioning.

Naval Air Depots utilize an internal Request for Engineering Investigation (REI) tickets to elicit engineering support. Defense Logistics Agency (DLA) utilizes an external form called the 339 – Request for Engineering Support (RES). Both internal REIs and external RES categories of REIs often kickoff a series of actions to locate the pertinent technical data required by an engineer to disposition the request. The Technical Data Integration and Search project is focused on reducing the non-value added time of manually searching to locate and provide this technical data to an engineer.

The *Technical Data Integration and Search* project will involve the implementation of two pieces of software that will index the multiple databases and provide a single portal through which a user can perform a search of the disparate databases. Once this search is complete the user can initiate a workflow that will collect the files and metadata from the multiple databases, convert the CAD models to a validated neutral format (if necessary), package the information into one file, and send the package to an appropriate recipient.

The 12-month effort will be utilizing existing software that has proven functionality in either industry or government. The most significant challenge involves protecting intellectual property that is being indexed from multiple sources. The solution will need to demonstrate an ability to do multi-system indexing while meeting IA and Security requirements. The Project will analyze various database structures and define requirements for each component that make up the complete system. The project will develop a series of connectors to connect the search based application to master data repositories of JEDMICS, TMAPS, and JTDI.

**Naval Shipbuilding Advanced Manufacturing** is a Navy ManTech Center of Excellence, chartered by the Office of Naval Research (ONR) to develop advanced manufacturing technologies and deploy them in U.S. shipyards and other industrial facilities. NSAM's primary goal is to improve manufacturing processes and ultimately reduce the cost and time required to build and repair Navy ships and other weapons platforms. For additional information on this and other NSAM projects, please visit <http://nsamcenter.org>.

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