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Air Force Space Command Addresses Training Systems Requirements Analysis (TSRA) Shortfalls with the Help of ADVISOR Enterprise

> "Live to Train – Train to Fight – Fight to Win.
> It's all about training, the key to operational readiness and mission success."
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> CAPT (ret) Kelly "Bam Bam" Henderson

OVERVIEW

In August 2011, an Air Force Audit Agency report on *Air Force Space Command Training Systems* recommended to the Air Force Space Command (AFSPC) improvements to space system trainer management to address a significant shortfall of not establishing trainer requirements on several programs prior to Request for Proposal (RFP) release. As a result, 50 percent of trainers acquired by Space and Missile Systems Center (SMC) were not delivered on time, only 63 percent task coverage was achieved versus the 95 percent requirement, and 16 percent of the tasks could not be completed on the trainers (i.e. required either instructor workarounds or the use of the operational systems). The auditors concluded that timely completion of the Training System Requirements Analysis (TSRA) used to develop the System Training Plan (STP), which identify specific training needs, concepts, strategies, constraints, risks, data alternatives, resources, and responsibilities, prior to system development contract award will lead to more effective trainers that provide war-fighters with optimal/realistic training on mission critical space systems, while reducing trainer acquisition costs by almost $12.6 million per system or $101 million over the next five years. Additionally, the auditors recommended updating TSRAs and STPs as major modifications or changes occur with the mission/weapon systems.

CHALLENGE

In the past, Air Force Space Command (AFSPC) has used the Air Force Education and Training Command (AETC), Studies and Analysis Squadron (SAS) for conducting TSRAs. However, AFSPC recognized that in order to expedite their oversight of space system trainer management, a new approach to include a robust tool was needed to conduct TSRAs without compromising integrity. Moreover, since multiple analysts may be required to meet the demand and the analysis should be regularly updated as systems/sub systems change, AFSPC should own and have continuous access to the database, thereby maintaining continuity, facilitating configuration management, simplifying data sharing among stakeholders and the transition of analysis among analysts as the need arose.

SOLUTION

Based on a detailed evaluation, the SMC Space Training Acquisition Office (STAO) concluded that ADVISOR Enterprise would provide the rigor and consistency needed to meet auditor's recommendations, as well as functionality to expedite the analysis. Moreover, ADVISOR facilitated configuration management, system accessibility and data sharing.

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Next to ensure timely completion of all TSRAs, the STAO stood up a dedicated TSRA team and awarded a Department of Defense (DoD) contract to USfalcon to complete the first TSRA on the 614 Air and Space Operation Center (AOC)/Joint Space Operations Center (JSpOC) Mission System. The primary mission of the 614 AOC/JSpOC is to gain and maintain space superiority through centralized command and control of joint space forces, assets and operations (space control, force enhancement and space support) for Commander, Joint Functional Component Command for Space (CDR JFCC Space), a United States Strategic Command (USSTRATCOM) component command. The 614 AOC/JSpOC consists of five divisions and two detachments in multiple locations with specialists in the space operations, communications, computers, space weather and intelligence, surveillance and reconnaissance. The purpose of this TSRA is to determine and validate the new JSpOC Mission System (JMS) and Legacy Mission System's training requirements, objectives, and to select appropriate training system alternatives that satisfy those training objectives. The products of this TSRA effort will be used by the 614 AOC/JSpOC, SMC/STAO and AFSPC to ensure that the JMS and Legacy Mission Training Systems will effectively qualify crewmembers to perform operations.

The STAO TSRA Team is supported by CAPT (ret) Kelly "Bam Bam" Henderson, United States Navy and MAJ (ret) John Marley, United States Army, who both had recently retired from military service while working for the JFCC Space Missile Warning Center at Cheyenne Mountain Air Force Station in Colorado Springs, CO. The team's initial task was to complete the first two TSRA reports, Mission/Task Analysis (MTA) and Training Requirements Analysis (TRA) for the 614 AOC/JSpOC Mission System. "Mapping, updating and analyzing thousands of tasks for 27 Combat Mission Ready (CMR) positions within five divisions and two detachments across multiple locations can be daunting. Achieving this while tracking tasks performed by multiple positions, identifying sub-tasks unique to each position as well as entry and desired level knowledge/skills for each task/sub-task can be overwhelming without the right tools", explained John. To ensure that the analysis would yield the desired results, a strategy for conducting the TSRA was outlined during the three day ADVISOR training.

RESULTS

The STAO TSRA Team (Bam Bam and John) relied heavily on ADVISOR Enterprise to capture, update and map the thousands of tasks to various positions, divisions, detachments and locations. In addition to facilitating data entry and linking Mission Tasks to multiple positions, ADVISOR simplified data updates. With a single edit, changes automatically cascaded from Mission Tasks to all corresponding Job Tasks thus allowing analysts to easily compile and generate a Master Task List (MTL) as well as Master Training Task List (MTTL) for each position.

Furthermore, ADVISOR facilitated data collection from Subject Matter Experts (SMEs), as Bam Bam and John could login from any location with Internet access to edit, modify and expand the MTL and in-turn, allow them to interview SMEs and identify the tasks for each position in real-time. Finally, ADVISOR simplified data validation. Tasks, including reference codes for each position, could easily be exported to Excel and sent to SMEs for review. A step that could have taken up to two-and-a-half weeks to perform is now generated with one hour.

To date, even with the extended scope, the project remains on schedule. Moreover, AFSPC is very impressed with their ability to link mission tasks across multiple positions and the responsiveness to their needs. For example, the ability to quickly generate a task list for each division and detachment. Bam Bam and John also anticipate that ADVISOR's ability to compare entry level knowledge/skills to desired levels and identify specific as well as common knowledge/skills across multiple positions will lead to better training across the board while attaining the millions of dollars in savings that the auditors identified.

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CONTACT INFORMATION

For more information on this project, or how ADVISOR can assist you in managing training budgets and resources as well as clients' needs and expectations, please contact:

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