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Sensor integrator instruction. The AFATDS will be utilized throughout the Warrant Officer Basic Course (WOBC) and reinforced during the 131A Warrant Officer Advanced Course (WOAC). Since the 94M has the primary responsibility for the maintenance of the Q53/50, the Warrant Officer Instruction Branch (WOIB) will utilize the allocated time that was traditionally spent on the AN/TPQ-36/37 maintenance for the Mission Command System and Sensor Integrator blocks of instruction. The new POI is currently being developed and it is anticipated the Mission Command (Systems Integrator) instruction will begin in Fiscal Year 2017.

Due to major software update(s) of the AFATDS,

to include merging of the legacy JADOCs capabilities into the AFATDS, the Targeting Technician is now able to utilize a single Army Battle Command System (ABCS) instead of multiple systems to perform their assigned duties. The AFATDS allows the Targeting Technician to clearly integrate with the entire ABCS Software Suite, organic sensor feeds, as well as gain access to Joint Mission Command and sensors greatly amplifying situational awareness throughout the operational environment. 

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Advanced Field Artillery Tactical Data System gets dramatic upgrade

With new software upgrades to include version 6.8.1.1, the Fires Mission Command System (AFATDS), will now have increased capabilities allowing it to dramatically improve integration of organic and joint targeting sensors and effective data sharing of Army and Joint Mission Command systems. This will enable the targeting process and fire support planning to deliver accurate and timely fires in support of the Commander's scheme of maneuver.

AFATDS v6.8.1.1, Software is to be released during the first quarter of FY17. Here are a few facts about what this upgrade will provide:

Commander's Guidance

AFATDS v6.8.1.1. can implement user provided commander's guidance governing how targets are attacked (e.g. target selection standards, high payoff targets, system attack parameters). It will streamline target delivery from sensor to which shooter using Mission Routing guidance, Mission Prioritization, and Munition Restrictions.

Mapping Display Abilities

Using WorldWind map engine and Digital Terrain Elevation Data (DTED) v6.8.1.1. Provides

a visual 3D display of all friendly units, enemy SI-TEMP, geometries, FSCMs, Air Coordination Measures (ACMs), Range fans, and munitions flight path (MFPs) for surface-to-surface fires. The enhanced mapping allows for Commanders to visualize the operational environment with proper altitudes and elevations providing near-real display of the Modified Combined Obstacle Overlay (MCOO).

Fire Support Planning & Attack Analysis

It will provide the Commander the ability to incorporate several JADOCs target managers (e.g. Joint Time Sensitive Target manager, Fires manager, Inter-AOC Manager). It will also give the Commander the capability of conducting a Fire Support Planning Course of Action (COA) Analysis with his assigned shooters. The FS COA displays tube strength, munitions required for mission success and system, by type, utilization. Attack Analysis will allow a by-type, by-target of when each tube will be engaging each target displayed on the scheduling worksheet.

ASL, ACO, and ATO Management

It will also manage the Air Strike List established

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at any echelon and can import/export DD form 1972 Joint Tactical Air Request (JTAR) as a fillable excel spreadsheet. The manager provides red/amber/green visual display of what is requested, JIPTL approved, flown, and BDA received. Air Control Order (ACO) can be imported over the communications protocol and displayed in 3D on the AFATDS system.

Interface with Mission Command Systems and Intelligence Systems/Databases

This has improved connection capabilities, namely the Link16 protocol. It allows AFATDS to connect to any device/platform/sensor that uses the JREAP messaging service. These items include the airspace defense system integrator (ADSI), JWACS, JSTAR, Sentinel Radar system as well as organic FF radar systems (Q-53 and Q-50). The units as well as FF radars can be managed for movement from the AFATDS for movement and range fan manipulation. Connections to Theater Battle Management Core Systems (TBMCS), ADSI, Air and Missile Defense Workstation (AM-DWS), Airspace information Service (ASIS) are now capable.

Precision Strike Suite Compatibility

It will be able to tie a target grid location to precision strike suite software allowing the user to mensurate the target receiving corrected LAT/LONG and adjusted altitude of the target location. This allows for precision target planning to occur all on one system.

Modernized Integrated Database (MIDB)

Can receive inputs from MIDB allowing the Commander to adjust his priorities of fires against what the enemy SITEMP and adversary facilities are within his operational environment.

Future Software Updates

After the 6.8.1.1 release in FY17 AFATDS the following features will be enhancements designed a software updates. Currently the Capabilities Development Document (CDD) has been staffed and approved however, bids for development have not be incorporated.

The AFATDS Increment 2 will be capable of us-

ing the full array of tactical, operational and strategic communications systems available within the theater of operations to support the needs of the maneuver and fires commanders. This includes but not limited to Warfighter Information Network-Tactical (WIN-T), VHF, HF, UHF, SATCOM, commercial and tactical internets and wireless wave forms developed to support Joint Battle Command-Platform (JBC-P).

It will also use adaptable software that will learn and change behavior, over time, based on how it is used, under what conditions, and its internal knowledge base in order to assist the operator to more effectively execute fires functions/tasks. AFATDS requires the capability to integrate technology advances that would enhance cognitive processes (e.g., reasoning and decision making), as well as incorporate intelligent software agents.

AFATDS web services shall be able to select an application and/or wizard that will permit the user to query data repositories resident on the Battle Command Servers or any data repository, regardless of service affiliation. Collaboration Service will provide automated rehearsal of the FA Support plan to validate planned and immediate targets against all managed lists.

The system will be able to conduct fratricide avoidance and collateral damage estimates and alert notifications within a single screen/presentation/user-interface. Digital Imagery Exploitation Engine (DIEE), will be hooked into AFATDS v7.0 incorporating a suite of software to include DCiDE (Collateral Damage Estimate tool), JMEM Weaponing Software (JWS) and Precision Strike Suite software.

AFATDS Increment 2 users will have the capability to publish software updates and/or patches by download for the syst4em; and the system will automatically check for any other required application or security updates at user specified times per Commander's guidance. This will allow the system to remain up-to-date and connected to other non-AFATDS systems during at all times.



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