

Abstract

- The purpose of this research is to analyze the potential advantages, disadvantages, and risks to cost, schedule, and performance of shifting the role of operational test and evaluation (OT&E) of the Next Generation Jammer Mid-Band (NGJ-MB) program from a dedicated OT&E squadron at Air Test and Evaluation Squadron Nine (AIRTEVRON NINE; VX-9) to a fleet aviation electronic attack squadron (VAQ).



NGJ-MB On Board the EA-18G Growler. Source: DOT&E (2020)

Methods

- Examination of fleet operational tempo and the Navy's Optimized Fleet Response Plan scheduling, resourcing, training, proficiency, tactical expertise, and administration.
- A strengths, weaknesses, opportunities, and threats analysis, followed by a cost-effective analysis, are used to analyze the risks to test execution and reporting compared to VX-9.

SWOT	Helpful to achieving the objective	Harmful to achieving the objective
Internal attributes of the organization	Strengths Incremental Product Delivery Development Test Program	Weaknesses Integrated Test Proximity to China Lake Advanced Weapons Lab Large Force Exercise Execution Flight Clearance Process Need to Execute Multiple Detachments Verification of Correction of Deficiencies Planning
External attributes of the organization	Opportunities Proof of Concept Capability to Face Peer Threat	Threats Congressional Scrutiny Maintenance Phase OFRP Cycle and Test Scheduling Test Range Scheduling/Availability Manning (Maintainers/Aircrew) ACTC Priority Aircrew Training/Proficiency/Test Execution Maintenance Training/Proficiency/Test Execution Test Reporting Test Assets (FMC Aircraft) Program Integration/Interoperability, and Network Security Funding Frequency Allocation/Spectrum Management

SWOT Analysis Summary

Results & Their Impact

- The consequences to cost, schedule, and performance to the NGJ-MB program give high confidence that fleet aviation squadrons should not be tasked to perform OT&E.
- Fleet squadrons are minimally resourced at the maintenance phase, having limited capacity to surge their momentum and focus on meeting the acquisition system's timely demands.
- Schedule drivers with test range availability, assets, and the requirement of test sufficiency in reporting put the completion of IOT&E at risk.
- A cost-effective analysis shows a 7% increase in cost to perform OT over a 2-week detachment with a VAQ unit to Nellis Air Force Base, Nevada compared to VX-9.



EA-18G Takes Off from Nellis, Air Force Base. Source: instagram.com

Recommendations

- VX-9 should be properly resourced, funded, and supported by the Navy to assess the operational effectiveness and suitability of the NGJ-MB pod.
- If VX-9 is not supported, the NGJ-MB program must accept higher risk to schedule, and cost with the greater likelihood that multiple VAQ units will have to perform OT&E throughout several detachments.