

Part 3 - Aviation Combat Element

The ACE is task organized to conduct air operations, project combat power, and contribute to battlespace dominance in support of the MAGTF's mission by performing some or all of the six functions of Marine aviation: antiair warfare, assault support, electronic warfare, offensive air support, air reconnaissance, and control of aircraft and missiles. It is formed around an aviation headquarters with air control agencies, aircraft squadrons or groups, and combat service support units. It can vary in size and composition from an aviation detachment of specifically required aircraft to one or more Marine aircraft wings. The ACE may be employed from ships or forward expeditionary land bases.

MV-22 Osprey

Description

The MV-22 Osprey tiltrotor is a revolutionary, advanced technology vertical/short takeoff and landing (V/STOL), multi-purpose tactical aircraft to replace the current fleet of Vietnam era CH-46E and CH-53D aircraft. The MV-22 will join the AAV and LCAC as an integral part of the amphibious triad necessary to execute EMW. Specific missions include amphibious and land assault, raid operations, medium cargo lift, tactical recovery of aircraft and personnel (TRAP), fleet logistic support, and special warfare. The MV-22's design incorporates the advanced but mature technologies of composite materials, fly-by-wire flight controls, digital cockpits, airfoil design, and manufacturing. The MV-22 Osprey is capable of carrying 24 combat-equipped Marines or a 10,000 pound external load. It also has a strategic self-deployment capability with a 2,100 nautical mile range with single aerial refueling. The MV-22's 38-foot prop-rotor system and engine/transmission nacelle mounted on each wing tip allow it to operate as a helicopter for takeoff and landing. Once airborne, the nacelles rotate forward 90 degrees, converting the MV-22 into a high-speed, high-altitude, fuel-efficient turbo-prop aircraft. The MV-22 is a multi-mission aircraft designed for use by all the Services. The Marine Corps, Navy, and Air Force have committed to fielding, this unique aircraft. Procurement of the MV-22 remains the Marine Corps' number one aviation acquisition priority.

Operational Impact

The MV-22 will be the cornerstone of Marine Corps' assault support possessing the speed, endurance, and survivability needed to fight and win on tomorrow's battlefield. This combat multiplier represents a quantum improvement in strategic mobility and tactical flexibility for amphibious and prepositioned maritime forces.

Program Status

The experiences of the last year have revealed that considerable work remains to be done in the areas of engineering and design, quality assurance, developmental testing, training, and operational evaluation. The MV-22 program manager has developed a flight test plan that addresses all concerns that have been raised about the MV-22 and prioritizes the fixes necessary for safe operation. This plan includes three consecutive event driven stages. Under this plan, flight-testing should resume in April 2002, using existing prototype aircraft with prototype fixes. This testing would lead to Block A upgrades that would be incorporated into making the MV-22 a safe and operational aircraft for the fleet.

Procurement Profile:	FY02	FY03
Quantity	11	11

Developer/Manufacturer Bell Helicopter Textron, Fort Worth, TX
The Boeing Company, Philadelphia, PA



H-1 Upgrade (UH-1Y/AH-1Z) Program