

NOT FOR PUBLICATION UNTIL RELEASED BY THE
HOUSE ARMED SERVICES COMMITTEE
TACTICAL AIR AND LAND FORCES SUBCOMMITTEE

STATEMENT OF

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BEFORE THE
TACTICAL AIR AND LAND FORCES SUBCOMMITTEE

OF THE
HOUSE ARMED SERVICES COMMITTEE

ON
FY 2007 NAVY AND MARINE CORPS MAJOR ROTORCRAFT PROGRAMS

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Mr. Chairman, distinguished members of the Subcommittee, thank you for this opportunity to appear before you to discuss U.S. Navy and Marine Corps major rotorcraft programs.

The Fiscal Year (FY) 2007 Budget request maximizes our Nation's return on its investment by providing the resources to responsibly meet today's growing challenges -- from Global War on Terrorism (GWOT) operations to peacekeeping/stability operations and small-scale contingencies -- and by transforming the force for future challenges. Our rotorcraft programs are an indispensable part of that transformation.

Your Future Navy and Marine Corps Team

We developed the *Sea Power 21* and *Marine Corps Strategy 21* visions in support of our National Security Strategy, the National Military Strategy, and other strategic guidance, such as *The Capstone Concept for Joint Operations*. A key objective of *Sea Power 21* and other transformation visions is to ensure this Nation can project and sustain credible force and influence on scene to promote regional stability, deter aggression throughout the world, assure access of Joint forces, and to fight and win should deterrence fail. *Sea Power 21* and *Marine Corps Strategy 21* guide the Navy's transformation from a threat-based, platform-centric structure to a capabilities-based, fully integrated force. Our AH-1Z/UH-1Y, MH-60R/S and CH-53K programs directly support all three pillars of *Sea Power 21*: Sea Basing (CH-53K and MH-60S), Sea Strike (AH-1Z, UH-1Y, CH-53K, VH-71A and MH-60S) and Sea Shield (MH-60R). We cannot fully exploit any of them without the capabilities these platforms bring to expeditionary assault, raid operations, anti-submarine and anti-surface warfare, medium and heavy cargo lift, fleet logistics and special warfare missions.

The Navy and Marine Corps Team of the future must be capabilities-based. Through agility and persistence, our Navy and Marine Corps Team will be poised for the "close-in knife fight" that is the GWOT, able to act immediately and decisively on a fleeting target. To do so, it must be properly postured in terms of operational availability and agility from platforms that are much more capable as a distributed, networked force. Because the sea can provide ready access to many of the world's potential areas of action, the Navy and Marine Corps are focusing

significant effort on joint combat power projection that leverages the littoral maneuver space of the oceans through Sea Basing. Sea Basing is a national capability and U.S. asymmetric advantage that will project and sustain national military power when needed, assuring joint access to operational areas of choice by leveraging the operational maneuver of distributed and fully networked U.S. forces operating from the sea, while accelerating expeditionary deployment timelines. The Sea Based Naval force will be distributed, netted, immediately employable and rapidly deployable, greatly increasing its operational availability.

The FY 2007 Budget request reflects the investments that will most improve this warfighting capability by developing and investing in future Sea Based and expeditionary capabilities for the Navy and Marine Corps.

Throughout the world, the Navy and Marine Corps Team continues to answer the Nation's call and play a leading role in GWOT. During 2005, the versatility and flexibility of expeditionary naval forces were repeatedly demonstrated while undertaking missions that ranged from major combat operations in Afghanistan and Iraq, to Humanitarian Assistance and Disaster Relief (HA/DR) operations in Indonesia and on our own Gulf Coast after Hurricanes Katrina and Rita.

The professionalism of naval forces was also on display in providing humanitarian relief to tsunami victims in Southeast Asia, earthquake victims in Pakistan, and to our own citizens along the Gulf Coast. After hurricanes Katrina and Rita left a swath of destruction across our southern Gulf Coast, the Navy and Marine Corps Team responded. Navy and Marine Corps helicopters from air stations around the country quickly flew into New Orleans in the critical first few days following the storm to rescue thousands of stranded citizens. USS BATAAN (LHD 5), conducting training exercises in the area, was first to respond with two MH-60S aircraft and several MH-53E aircraft. Total Navy and Marine Corps rotorcraft that responded to relief efforts in the area included 18 SH-60F, 17 SH-60B, 14 MH-60S, 10 CH-53E, 9 MH-53E, 4 UH-1N and 2 HH-60H helicopters.

In carrying out these missions, from Kabul to Baghdad, and Muzaffarabad to New Orleans, the Navy and Marine Corps performed superbly, taking advantage of their unique

capabilities to engage the enemy or rescue those in distress, achieving objectives ranging from eliminating a terrorist enclave to building enduring relationships and gaining influence through our goodwill gestures.

AVIATION PROGRAMS

The FY 2007 President's Budget request balances continued recapitalization for new capabilities and reduced operating costs while simultaneously sustaining the legacy aircraft that are performing magnificently in current operations. The Department's FY 2007 Budget request continues funding the System Development and Demonstration (SDD) Phase for both the CH-53K and VH-71, Low-Rate Initial Production (LRIP) for the H-1 Upgrades, full-rate production of 18 MH-60S, and continued initial full-rate production of 25 MH-60R. Moreover, the FY 2007 Budget funds the procurement of the V-22 aircraft at a rate of 16 per year (fourteen MV-22s and two CV-22s in FY 2007).

USMC Heavy Lift Replacement (CH-53K) Program

Navy and Marine Corps H-53 helicopters continue to make significant contributions in Afghanistan, the Horn of Africa and Iraq, and disaster relief operations in the Southeast Asia tsunami, hurricanes Katrina and Rita, and the Pakistan earthquake. Ten U.S. Marine Corps CH-53E Super Stallions flew more than 270 sorties in support of Katrina relief operations, lifting more than 350 tons of relief supplies and evacuating more than 700 people. Nine U.S. Navy MH-53Es lifted more than 730 tons of relief supplies and 3,400 passengers.

Vertical heavy-lift capability will continue to be critical to successful global operations in future anti-access, area-denial environments, enabling the joint concepts of Force Application and Focused Logistics within *The Capstone Concept for Joint Operations*. The FY 2007 Budget requests \$363 million of Research, Development, Test and Evaluation (RDT&E) funds to ramp up development of the CH-53K helicopter that will replace the current U.S. Marine Corps' heavy-lift aviation platform, the venerable but aging CH-53E Super Stallion.

The CH-53E, first fielded in 1981, continues to demonstrate its strategic value as a fully marinized, expeditionary, heavy-lift platform. But the CH-53E is reaching service-life and

performance limits as the GWOT drives operations from sea level to higher altitudes and into hostile environments and austere operating sites. The CH-53E cannot support our future operational concepts of Sea Basing and Ship to Objective Maneuver (STOM). To keep Fleet Marine Forces operationally effective well into the future, the Marine Corps is developing the CH-53K, a near-term and cost-effective replacement for the CH-53E that remains within the CH-53E shipboard footprint, and avoids L-class ship alteration or new ship construction costs. Addressing lessons learned from recent operations, the new-build CH-53K helicopter will be capable of externally lifting 27,000 pounds on a Sea-Level Hot day (103 degrees Fahrenheit (F)) to an unrefueled range of 110 Nautical Miles (NM) and delivering that cargo (e.g. two up-armored High Mobility Multi-Wheeled Vehicles (HMMWVs)) to a landing zone at a pressure altitude of 3,000 feet at 91.5 degrees F). This capability will be more than double the current CH-53E under the same conditions. Additionally, CH-53K helicopters will each be capable of routinely carrying 30 combat-loaded troops. Major systems improvements will significantly reduce Operations and Support (O&S) costs, include interoperable avionics, improve cargo-handling systems, and expand survivability and force protection capabilities.

A Service Life Assessment completed in 1999 identified a CH-53E fatigue life limit of 6,120 airframe hours, which initial CH-53E platforms will begin to attain in FY 2012. While the Marine Corps is also seeking short-term solutions to diminish the effects of this and other CH-53E issues in the FY 2007 budget, these solutions will not arrest the accelerating attrition, the continuing escalation of O&S costs, and the ever-increasing maintenance burden on an aircraft that is 24 years old. In addition, due to the abnormally high GWOT operational tempo, the CH-53E fleet is expending service life at a much faster rate than planned.

Requirements for the CH-53K were developed in consonance with STOM concepts from Expeditionary Maneuver Warfare in *Marine Corps Strategy 21*; the Naval concept of Sea Basing in *Sea Power 21*; and with lessons learned from recent operational experience. The Joint Requirements Oversight Committee (JROC) approved the Operational Requirements Document (ORD) that defines the necessary heavy lift requirement (HLR) capabilities in December 2004. We intend to achieve Initial Operating Capability (IOC) with the CH-53K, a heavy-lift helicopter with vastly enhanced performance capability, survivability and reliability in 2015.

The CH-53K will fill the future marinized, vertical heavy-lift requirement not resident in any other current or near-term platform, which is necessary for successful Sea Basing and joint operations. With increased range and payload performance under most environmental conditions, commanders will have the option to insert a force equipped with armored combat vehicles at a rate equivalent to two up-armored HMMWVs per sortie. To sustain the force, the CH-53K will be able to transport three independent loads tailored to individual receiving units during distributed operations, and provide the critical intermodal logistics air connector to facilitate Focused Logistics to the end unit. This reliable, cost-effective, heavy-lift capability will address critical challenges in maintainability, reliability, survivability and affordability found in present-day operations supporting the GWOT. The CH-53K will be the most capable, marinized, heavy-lift helicopter in the world, a truly transformational asset.

With respect to Joint Heavy Lift (JHL), the Marine Corps has been actively engaged in the Pre-Milestone A Concept Refinement (CR) Phase. The CR effort design point is 20 tons lifted 250 NM, with excursions exploring heavier and lighter loads lifted to longer ranges. The Army desires to conduct operational maneuver from strategic distances with the Future Combat System. The Marine Corps does not have a similar requirement, but envisions using an aircraft with JHL capabilities as a replacement for the KC-130. JHL as currently conceived would be able to land on and take off from an LHD, but would be too large to be based on LHDs due to size constraints. The Army's JHL requirement and the Marines' heavy lift requirement are separate.

Presidential Helicopter Replacement Program (VH-71)

The FY 2007 Budget requests \$682.6 million of RDT&E funds for SDD efforts on the VH-71 Program. The goal of this accelerated program is a seamless transition to the next generation of Presidential helicopter support enabling the secure and timely transportation of the President and Vice President of the United States. The VH-71 Program will use an evolutionary acquisition approach through a two-part incremental development to deliver a secure, survivable and capable vertical lift aircraft while providing uninterrupted communications with all required agencies.

The VH-71 will replace the aging legacy fleet of eleven VH-3D and eight VH-60N helicopters currently flown by Marine Helicopter Squadron One (HMX-1) to conduct the Presidential lift mission. The VH-3D performance limitations are inadequate to support the White House Military Office (WHMO) Operational Plan contingency and administrative missions. The need for the replacement helicopter was validated through a Mission Needs Statement (MNS) signed on September 16, 1999, which identified the capability and performance limitations of the VH-3D in meeting the WHMO mission requirements. The MNS also highlighted the current aircraft's inability to meet mission growth requirements, and service life and obsolescence issues. The VH-71 will meet the needs of the MNS by providing a significant increase in operational capability to HMX-1 and the WHMO in terms of range, airspeed, high/hot temperature operations, passenger lift capability, survivability, mission growth capability, and Senior Leader Communications.

The VH-71 Program was accelerated as a result of the White House Chief of Staff memorandum to the Secretary of Defense dated November 26, 2002. This memo expressed the need for an accelerated replacement schedule for the VH-3D due to the post 9-11 national security environment. The VXX ORD was approved by the JROC December 16, 2003. Based on current aircraft age and fatigue life limits, the decision to also replace the VH-60N aircraft with the VXX was validated by the JROC and endorsed by the WHMO. The IOC date was established as October 2009. IOC will be achieved upon delivery of four of the Increment 1 (Pilot Production) aircraft. Full Operational Capability is projected for FY 2015, once all the Increment 2 aircraft have been delivered. The total VH-71A procurement quantity is 26 aircraft (23 operational, three test article).

The Department completed a Milestone B/C Defense Acquisition Board on January 13, 2005, and the VXX Program received authorization to begin the SDD Phase and develop Increment 1 and 2 configurations concurrently. After a thorough source selection evaluation, compliant with all Federal Acquisition Regulations and all appropriate statutes, on January 28, 2005, a SDD contract was awarded to Lockheed Martin Systems Integration-Owego (LMSI-O) to introduce a new Presidential helicopter into initial service by October 2009.

Following the January 2005 SDD contract award, the Navy/LMSI-O VH-71 team integrated their program efforts, initiated detailed design, development and production activities, and conducted the Increment 1 System Requirements Review (SRR), Integrated Baseline Review (IBR), and on-going technical design reviews. A Senior Leadership Council, chaired by the Assistant Secretary of the Navy for Research, Development and Acquisition (ASN RD&A), meets monthly to ensure the program team has the required resources to meet the aggressive VH-71 program schedule.

V-22 Osprey

The FY 2007 budget requests \$1.6 billion of procurement funding for 14 MV-22s, associated spares, aircraft retrofit, and Economic Ordering Quantity investments supporting FY 2008 - 2012 multi-year procurement and \$268 million of RDT&E for continued development, testing and evaluation. The V-22 Program will procure a total of 16 aircraft in FY 2007; 14 MV-22s and two Air Force funded CV-22s. The Future Years' Defense Plan (FYDP) reflects a program total of \$10.456 billion for the V-22 Osprey.

The Undersecretary of Defense for Acquisition, Technology and Logistics conducted a V-22 Milestone III (MSIII) Program Defense Acquisition Board review in September 2005 which authorized the program to enter full rate production. Following that decision, and justified by the Cost Analysis Independent Group's Independent Cost Estimate, \$1.1 billion was removed from the V-22 Program's FYDP (\$864 million from MV-22). Additionally, on September 8, 2005, OSD certified to Congress that the V-22 complied with Section 123 of the 2002 Defense Authorization Act that limited the restriction on the V-22 production rate to the manufacturer's minimum sustaining rate, defined as eleven aircraft.

To date, 29 Block A and one Block B aircraft have been procured to support developmental testing, Operational Evaluation (OPEVAL), training and initial fleet fielding. The MV-22 completed OPEVAL in 2005 and fielding is underway at Marine Corps Air Station, New River, North Carolina. Two squadrons have commenced the transition from the 40 year-old CH-46E to Block B MV-22Bs. The first of these two squadrons will provide an IOC in

FY 2007. In full rate production, the aircraft procurement rate will ramp up to 42 aircraft per year. The program of record includes 360 MV-22s for the Marine Corps and 48 for the Navy.

The demands of GWOT and modernization of our Expeditionary Warfare capabilities have increased the urgency to rapidly field the MV-22 Osprey. Its design incorporates advanced technologies in composite materials, survivability, airfoil design, fly-by-wire controls, digital avionics and manufacturing. The MV-22 is capable of carrying 24 combat-equipped Marines or a 10,000-pound external load, and has a strategic self-deployment capability of 2,100 nautical miles with a single aerial refueling. It is vastly superior to the CH-46E it replaces, with twice the speed, three times the payload, and six times the range. The V-22 Osprey, as a joint platform for the Navy, Marine Corps, and Air Force is providing significant opportunities for joint training, tactics development, and mission execution.

Return to flight occurred on May 29, 2002. As of February 2006, more than 3,000 developmental flight and 7,800 operational test and training hours have been flown without mishap. Further, development efforts in support of U.S. Air Force CV-22 Initial Operational Test and Evaluation (IOT&E) continue both at Patuxent River, Maryland and Edwards Air Force Base, California. CV-22 IOT&E is scheduled to commence in the Fall of 2008.

H-1 Upgrades Program

The light utility and attack helicopter communities play a critical role supporting Marines on the ground. It is imperative that we replace the 30 year-old UH-1N as soon as possible and upgrade the AH-1W. The H-1 Upgrade Program will allow us to do that. We expect to enter OPEVAL this spring and, with approval of the Defense Acquisition Board, enter into a third LRIP lot. The H-1 Upgrades Program will replace the Marine Corps' AH-1W and UH-1N helicopters with state-of-the-art AH-1Z and UH-1Y models. The program is a key modernization effort designed to resolve existing safety deficiencies, enhance operational effectiveness, and extend the service life of both aircraft. Additionally, the commonality gained between the AH-1Z and UH-1Y (84 percent) will significantly reduce life-cycle costs and logistical footprint, while increasing the maintainability and deployability of both aircraft. The

program will remanufacture 180 AH-1W helicopters into AH-1Z's, remanufacture 10 UH-1N/HH-1N into UH-1Y helicopters and build 90 new UH-1Y models.

The FY 2007 Budget requests \$446.4 million Aircraft Procurement, Navy (APN) funds to procure 18 AH-1Z/UH-1Y aircraft and \$7.7million RDT&E funds to complete the H-1 Upgrades Engineering and Manufacturing Development (EMD) Phase. The development program is nearly complete with two of the four EMD aircraft delivered and the remaining two due to deliver in March 2006. Developmental flight testing was recently completed and OPEVAL is scheduled to begin in April 2006. We are formulating plans to address deficiencies identified during developmental testing. Production continues on the first two LRIP lots awarded to Bell Helicopter in December 2003 and April 2005. The third LRIP lot will be ready to award in April 2006 pending entrance into OPEVAL.

Concerns have been raised relative to program cost and schedule. A restructure of the program has been proposed by the Program Office to address these concerns and technical issues we anticipate will be carried forward from OPEVAL. ASN (RD&A) directed an independent review of the proposed restructure and an assessment of alternative acquisition strategies before seeking approval from OSD to proceed with the program. The review of the proposed restructure shall address the risks of the test program, production costs and schedule estimates. The third LRIP lot will be ready to award in April 2006 once the independent assessment of the program has been completed.

The program continues to seek opportunities to reduce unit cost and minimize the negative impact the remanufacture strategy could have on military operations. Regarding the latter point, we anticipate that some number of AH-1Z airframes will be newly fabricated instead of remanufactured in order to reduce the amount of time aircraft would otherwise be out of service. The optimum mix of remanufactured and newly fabricated aircraft is being evaluated with the results to be reflected in future budget requests.

MH-60R/MH-60S Seahawk Multi-Mission Combat Helicopters

The President's Budget for FY 2007 provides \$916 million for 25 MH-60R and \$548 million for 18 MH-60S models, including all ancillary equipment, support equipment and

trainers for each model. MH-60R/S platforms are produced with 85 percent common components to simplify maintenance, logistics and training. H-60s will be deployed on every air-capable ship in the Navy.

MH-60R. The MH-60R completed a successful OPEVAL in September 2005 and was found to be operationally effective and suitable, and recommended for Fleet use in December 2005. Additionally, it was cited as having the following enhancements/improvements over the SH-60B/F aircraft that it will be replacing; significant capability improvement to perform surface and sub-surface warfare missions, functionally equivalent crew stations for flexibility and weapons simulation mode for in-flight training. Light Anti-Submarine Helicopter Squadron 41 was the Fleet Replacement Squadron for the SH-60B and now for the MH-60R aircraft. Four MH-60R aircraft were delivered to HSM-41 in December 2005 to start transition. IOC was declared by the Fleet in January 2006. The Navy plans to acquire 252 MH-60Rs.

MH-60S. In FY 2000, there were five Navy expeditionary squadrons with 70 H-46 aircraft performing vertical replenishment missions. MH-60S aircraft were procured to replace them. The first squadrons received the MH-60S in 2001. All H-46 aircraft were transitioned out of the Navy by the end of FY 2004. The MH-60S was approved for full-rate production in August 2002 and is currently undergoing scheduled block upgrades for combat and airborne mine countermeasure missions. The Navy plans to acquire 271 MH-60S aircraft. To date, 87 MH-60S aircraft have been delivered to three geographic areas, Guam, San Diego, and Norfolk with more than 117,000 hours since IOC in 2002. The MH-60S is using a block approach to incrementally add new war fighting capability to the aircraft. Block 1 is the basic aircraft that was purchased to replace the H-46's in the vertical replenishment, vertical onboard delivery and amphibious search and rescue (SAR) mission areas. Block 2 will add airborne mine countermeasures capabilities. Block 2 is further broken down into 2A for the integration and fielding of the AQS-20 mine hunting sonar, which will reach IOC in FY 2007; and 2B which will add the AES-1 Airborne Laser Mine Detection System, the ASQ-235 Airborne Mine Neutralization System, the ALQ-220 Organic Airborne and Surface Influence Sweep System and the AWS-2 Rapid Airborne Mine Clearance System. Block 3 will add the Armed Helo capability to conduct Combat SAR and sub-surface warfare missions. Block 3 is further broken down into 3A, which will add a forward looking infrared radar (FLIR), 8 Hellfire missiles, and

two additional crew served guns, which will reach IOC in FY 2006; and 3B which will add Link 16 for an IOC of FY 2008.

COMBAT EXPERIENCE IN IRAQ

Throughout the last year, we have had a very significant portion – approximately 15 percent - of our Marine Corps rotary wing fleet deployed in support of the GWOT. Our current force deployments include approximately 160 helicopters, the majority of which are operating in Iraq. The exact composition of this force does not remain completely constant, but it is roughly comprised of 65 to 70 H-1 aircraft, 55 to 60 CH-46E aircraft, and 30 to 35 CH-53 aircraft. We have sustained losses during GWOT operations of 23 helicopters, with an additional 25 aircraft damaged to an extent that they required repair outside of the theater of operations; these losses and damaged aircraft have been distributed roughly equally amongst the different types of helicopters. The losses have been caused by a variety of factors, including small arms fire and shoulder-fired missiles, as well as the hazardous desert flying environment.

Through the hard work of our Navy and Marine Corps aviation maintenance teams and contractors, every Marine helicopter in OIF today supports combat operations with an upgraded Aircraft Survivability Equipment (ASE) suite. All assault support aircraft deployed to GWOT are equipped with the “V2” upgrade of the AAR-47 Missile and Laser Warning Set and the new ALE-47 Countermeasure Dispensing systems. AH-1W, UH-1N and KC-130 aircraft have received the more advanced APR-39AV2 radar detection system. All AH-1W aircraft deployed with Marine Light/Attack Helicopter Squadrons (HMLAs) in theater have received advanced infrared (IR) suppression kits to reduce IR signature. CH-53E aircraft are outfitted with interior ballistic armor and wield new ramp-mounted GAU-21 .50 caliber machine guns. Lastly, CH-46E aircraft are armed with ramp-fired M-240 7.62 caliber machine guns and are equipped with lightweight armor and lightweight armored cockpit seats. Of the 650 helicopters in the Marine Corps inventory, 78 percent are currently modernized with upgraded ASE. Every aircraft is fully funded to receive these upgrades and we are projected to be complete by 2007. We will continue to provide our helicopters the best ASE available.

SUMMARY

Our mission remains bringing the fight to our enemies while continuing to be vigilant and well prepared at home and abroad. The increasing dependence of our world on the seas, coupled with a growing uncertainty of other nations' ability or desire to provide access in a future conflict, will continue to drive the need for agile Naval forces and the capability to project decisive joint power by access through the seas. The increased emphasis on the littorals and the global nature of the terrorist threat will demand the ability to strike where and when required, with the maritime domain serving as the key enabler for U.S. military force.

Accordingly, we will execute the GWOT while transforming for the future fight. We will continue to refine our operational concepts and transform our technology to deliver the dominant military power envisioned in *Sea Power 21*. We will continue to pursue the operational concepts for seabasing persistent combat power, even as we invest in technology and systems to enable Naval vessels to deliver decisive, effects-based combat power in every tactical and operational dimension. We look forward to the future from a strong partnership with Congress that has brought the Navy and Marine Corps Team many successes today. We thank you for your consideration.