

STATEMENT BY

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(RESOURCES, WARFARE REQUIREMENTS AND ASSESSMENTS)

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LITTORAL WARFARE PROTECTION

Madam Chairwoman, distinguished members of the Subcommittee – I am General Dennis Krupp, Director of the Expeditionary Warfare Division. I want to thank you for this opportunity to appear before you and the opportunity to discuss Expeditionary Warfare.

Today, Expeditionary Warfare Forces are more relevant than any time in our history. Since 1969 naval forces have responded to some 90 operational contingencies around the world – half of these occurring in the past 10 years alone. This relevance is further validated by the propagation of expeditionary warfare in the international arena. Britain, France, Australia, Italy, Spain, the Netherlands, Greece, and Singapore – all these countries have, or are developing, doctrine, operations, and platforms to execute amphibious or expeditionary operations in the littorals. Therefore, we are not alone in recognizing the need for flexible, sustainable, responsive forces.

During the next decade, the Navy – Marine Corps team will continue to find itself in turbulent waters around the world. In response to the asymmetric threats our Sailors and Marines will likely face, Expeditionary Warfare will be instrumental in executing the emerging Navy and Marine Corps strategies, ***Forward ... From the Sea*** and ***Operational Maneuver From the Sea***.

As the Director of Expeditionary Warfare, getting the forces to the fight -- possessing the lift to get them there -- protecting them from asymmetric threats -- providing force protection -- and executing stated national objectives -- these are my priorities.

AMPHIBIOUS FLEET

We will have 12 Amphibious Ready Groups capable of meeting our national commitments anytime, anywhere with the delivery of USS IWO JIMA (LHD-7) in December 2000. These Amphibious Ready Groups will consist of a “big deck” Amphibious Assault Ship, a Dock Landing Ship (LSD), and an Amphibious Transport Dock (LPD).

LPD-17 San Antonio Class Amphibious Transport Dock

The newest of our amphibious ships will be the *San Antonio* Class or the LPD-17. This class of ship is pivotal in our force level transition from the amphibious fleet of the 1980's to that of the 21st century. When LPD-28 enters the Fleet in 2009, the amphibious fleet will consist of 36 ships or 12 three-ship ARGs (Amphibious Ready Groups) each containing one LHA or LHD, one LPD 17, and one LSD 41/49. By 2009, these 36 modern, highly capable amphibious ships will replace the older, less capable 63 amphibious ships of just ten years ago.

This significant acquisition program for the future surface navy, LPD-17 will provide 12 extremely capable warships to the fleet from 2002 – 2009. The lead ship, *USS San Antonio*, is in the final stages of what shipbuilders call "detailed design". In October 1999, construction will begin on *USS San Antonio* itself and the ship will be delivered to the Navy in November 2002. The ship will have over one-and-a-half times the displacement and over twice the vehicle space of the LPD 4 class.

The LPD 17 is revolutionary. It is based on the concept of "design for ownership". From the start, the program identified four fundamental principles to guide the government-industry team through the challenging process of ship design and construction. The ships must: 1) be warfare capable; 2) be mission flexible; 3) be technically adaptable; and 4) reduce total ownership costs. These principles have been sacrosanct as the ship design has matured and resulted in some 20 "design for ownership" workshops over the past three years. These workshop - conferences have solicited and received fleet input since 1995 on a variety of subjects to ensure that the LPD 17 design meets the needs of the Sailors and Marines who will operate on and from the ship.

Naval UAVs

A versatile technology that we are providing to the fleet is the Unmanned Aerial Vehicle or UAV. Our goal is to develop and field a Vertical Take-Off and Land Tactical (VTOL)/Tactical UAV (TAUV) which will give our deployed commanders a multi-purpose, multi-mission, flexible system to operate effectively in the littorals. The VTOL UAV can be a communications relay platform, a surveillance and reconnaissance system, or used to designate targets. This versatile system will be capable of operating from all air capable ships and will be controlled from those ships by the Tactical Control System or TCS. As envisioned, the VTOL UAV will not only provide increased range offensive capability for our Amphibious ships, but it will prove a valuable asset in Force Protection.

The Navy and Marine Corps have been working in this arena since 1986. The Pioneer was the genesis of the Naval UAV and has opened doors to the future of this exciting and necessary capability.

The Naval operational requirement is for a vertical take-off and landing (VTOL) TUAV system operating from austere locations ashore and from all air-capable ships. The Department of the Navy plans to initiate a VTOL TUAV acquisition program in FY00 that will lead to an initial operational capability in late

FY03. In the interim, the naval services will sustain the Pioneer UAV and its infrastructure to achieve the planned transition to the VTUAV.

A Congressionally directed VTOL TUAV demonstration program initiated in FY97 evaluated the current maturity of off-the-shelf VTOL UAV technology. Three contractors, Bell, Bombardier, and SAIC, participated in a land-based demonstration program conducted at Yuma Proving Ground, Yuma, AZ in FY98. The effort was very successful. Although Bell and Bombardier have been awarded follow-on contract options to participate in a ship-based demonstration phase beginning in FY99, the TUAV acquisition program will be open for full industry competition to bring the best ideas and capabilities to the Fleet in support of our Expeditionary Warfare requirements.

As a result of the dissolution of the Defense Airborne Reconnaissance Office, the Defense Airborne Reconnaissance Programs (DARP) were returned to the services. The Naval VTOL TUAV program is making headway regarding UAVs, and is funded to replace Pioneer through this DARP divestiture. We will maintain two operational Pioneer systems within the Navy and two within the Marine Corps as we transition from Pioneer towards the goal of operational VTOL TUAV systems for the naval services. To further these efforts, the Navy recently established the Naval UAV Executive Steering Group, which I chair.

Landing Craft Air Cushion (LCAC) Service Life Extension Plan (SLEP)

Landing Craft Air Cushion (LCACs) is absolutely crucial to the Navy and Marine Corps team to rapidly provide sufficient forces to achieve our assigned missions. LCACs transport 95 percent of tracked and wheeled vehicles for a Marine Air-Ground Task Force (MAGTF) during an amphibious landing. Therefore, the LCAC Service Life Extension Program (SLEP) is a vital program to the Navy and the Marine Corps to effectively project power ashore. Without a SLEP the first LCAC would face retirement in 2004, based on a 20-year lifespan. The naval services need the LCAC to maintain our amphibious lift capability now and to meet the goal of executing OMFTS.

Naval Sea Systems Command (NAVSEA) has been working with Textron Marine and Land Systems since April 1996 on LCAC SLEP research and development. The actual SLEP modifications are currently planned to be conducted in two phases.

Phase I. Over a period of several years electronics system recapitalization will take place at each Assault Craft Unit (ACU), where the craft are physically located. This will involve replacing current electronics components, which are increasingly becoming obsolete and unsupportable, with an open electronics

architecture using easily upgraded, Commercial Off-The-Shelf (COTS) components. The new electronics suite will be more reliable and less costly to operate and maintain.

Phase II. Buoyancy box replacement will be conducted at the Textron Marine and Land Systems facility in New Orleans, LA, where Textron will use design changes, coatings, and changes in materials to increase the LCACs resistance to corrosion. Phase II will also include the electronics upgrade of Phase I, until the entire active fleet is outfitted with the new configuration. The new buoyancy box will incorporate improvements to damage stability and trim control of the LCACs.

NAVSEA currently plans to transition from the research and development effort to the SLEP this year. Concurrently NAVSEA is also considering additional SLEP options, including an enhanced engine to provide improved operation in excessively hot environments and an advanced skirt that is more reliable and cost effective.

MINE WARFARE

An extremely pressing threat to our forces is the threat of sea mines. In terms of availability, variety, cost-effectiveness, ease of deployment, and potential impact on joint expeditionary warfare, mines are perhaps the most attractive weapons available to any country determined to prevent U.S. naval

forces from achieving sea control and power projection ashore. Mine countermeasures are critical to our ability to effectively control, shape, and dominate the battlespace.

As a result of mine threats during the Tanker War and the Gulf War, and with the shift towards a littoral-based warfare strategy, we have built, fielded and commissioned the most capable mine countermeasures force in our history.

In February the *Inchon* battlegroup, comprising the *USS Inchon* (MCS-1), and the Mine Countermeasures Ships *USS Avenger* (MCM-1), *USS Devastator* (MCM-6), *USS Champion* (MCM-4), and *USS Scout* (MCM-8) left Ingleside, TX. During the five-month deployment these ships will participate in exercises with navies from France, Spain, Italy, Greece, and possibly Malta. This is a banner deployment as it will demonstrate our mine warfare capability while deployed, allow us to exercise with our allies, and provide a viable, ready, and visible Mine Countermeasure Force in that region.

The critical shortcoming however, of relying exclusively on dedicated MCM systems is the reaction speed to a mine threat. Currently, dedicated MCM forces must be requested from CONUS bases when needed, which causes an operational pause in the scheme of joint maneuver. There is an inherent delay of airlift, sealift, and ship transit time to get the MCM forces to the scene.

We have taken the concept of a dedicated mine countermeasures force providing all the countermine resources in support of the joint operational campaign just about as far as it will go. Recognizing the asymmetric threats we will likely face, we are now developing and fielding systems that are responsive, in-stride, and “organic” to the battle group, thereby increasing our capability to operate unconstrained in the littorals.

“Organic Mine Warfare,” will decrease the response time necessary to commence the MCM campaign and expand the overall MCM capability of the Navy. This consists of integrated onboard MCM sensors and weapons that make up the combat systems package of Navy Joint Task Force ships, submarines, and helicopters. It requires that the forces comprising the Navy’s Carrier Battle Groups (CVBGs) and Amphibious Ready Groups (ARGs) execute the mine countermeasures mission as a core warfighting competency, or a mandatory mission of those Battle Groups.

To evaluate the current effectiveness of mine countermeasures force capabilities, the Navy conducts the Mine Warfare Readiness and Effectiveness Measurement (MIREM) Program. MIREM collects and analyzes high quality data to meet Navy requirements for quantitative MIW effectiveness measurement. In order to evaluate progress toward the goal of improved MCM tactical speed and improvement, the Navy is inaugurating a Capstone Requirements Document (CRD) to define the requirements of MCM operations

as a “system of systems.” This warfare area requirements document may then be used to baseline current requirements and to identify shortfalls in the existing set of MCM systems.

We are assessing our status and progress of the Mine Warfare Campaign Plan to achieve a quantifiable level of effectiveness. The process is ongoing with continuing high-level technical analysis. This methodology uses standard measures of effectiveness (MOE) and measures of performance (MOP). It compares the relative payoffs in MCM tactical timeline reductions for programmed force structures, as laid out in the MCM Campaign Plan, and will be included in the Mine Warfare Certification Plan.

Under Public Law 102-190 the Fiscal Year 1999 National Defense Authorization Act extended the requirement for annual certification of the Navy’s Mine Countermeasures (MCM) Programs until FY2003.

The MCM Program has been submitted to the Office of the Secretary of Defense for approval. Additionally, I am pleased to report to you the following:

1) Mainstreaming Mine Warfare. The CNO has stated that one of his priorities is to make Mine Warfare a core warfighting competency of the naval services. To that end, we have embarked on the Fleet Engagement Strategy, a program that involves active participation and coordination between the

operational Fleet, education, industry, and research institutions. The Navy leadership is fully engaged in this effort. Today, my staff is fully engaged with the fleet staffs, research and development laboratories, and the Navy's education and training centers of excellence. This effort has definable milestones and goals and will demonstrate measurable progress in the near term.

2) Mine Warfare Funding. The FY00 President's Budget has afforded the opportunity for us to accelerate the introduction of the organic mine warfare capability. We are dedicated to providing our deployed battlegroup commanders with the necessary 'organic' systems and capabilities to assess or defeat the potential mine threat anywhere in the world.

3) Maintain the Dedicated Force. Finally, we will continue to provide the necessary resources to the dedicated Mine Warfare Force to ensure that as we introduce the organic capability to our deploying Battlegroups, that we do not mortgage the capability that they bring to the fight.

The Navy is changing the culture of Mine Warfare, transforming it from a domain for specialists into a basic, core skill for all. The Navy commitment to mine countermeasures programs and our vibrant Fleet Engagement Strategy will ensure the Navy-Marine Corps team continues to be a pivotal force in support of Joint Operations.

SUMMARY

Mr. Chairman, ladies and gentlemen of the committee – in today's volatile international climate Expeditionary Warfare is relevant. We have been and will continue to be the force of choice in response to global contingencies. I firmly believe that we are heading in the right direction with the current and future Amphibious Fleet, with relation to UAVs, and Mine Warfare – all of which essential to force protection in the littorals.

Thank you for your continued support, interest in, and concern for our Sailors and Marines. I am prepared to answer any questions you may have.