

STATEMENT OF
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BEFORE THE
STRATEGIC SUBCOMMITTEE
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Nuclear Posture Review (NPR) Objectives

Research and Development (RDT&E,N)

The most significant change in the Navy strategic programs budget is in research and development. SSP's RDT&E,N budget increases from about \$34 million in FY 2003 to about \$102 million in FY 2004. This arises from the need to enable the dramatic changes articulated in the new Strategic Framework outlined by the December 2001 Nuclear Posture Review (NPR). The inherent flexibility in warhead loading of the TRIDENT submarine launched ballistic missile force enables the Department of Defense to execute the reduction of deployed nuclear warheads to achieve the Moscow Treaty and congruent NPR objectives in force structure. The NPR goes beyond a mere changing of force levels to describe the changes in the framework for, and nature of the Nation's strategic forces needed in the future. Navy efforts in contributing a Sea Shield element of missile defense are implemented in other programs, while the TRIDENT program makes significant Sea Strike contributions to the offensive and infrastructure legs of the new Triad described in the NPR. These contributions are achieved by "Applications" programs in specific technology areas and in focused development programs for specific capabilities. Applications programs develop and evaluate new technologies for potential use in existing and future strategic systems. The strategic guidance and reentry body applications programs have existed for about eight years. This effort is increased in FY 2004. New applications programs in strategic propulsion and radiation hardened electronics are contained in the FY 2004 budget. Separate from the applications programs, a specific technology solution, Enhanced Effectiveness (E2), has been identified and included in the FY 2004 budget. E2 is a technology development effort fully supported by the Commander, US Strategic Command, for achieving improved missile accuracy. It aims at enhancing the accuracy of an existing weapon system, the W76/ MK4 reentry body used on the TRIDENT submarine-launched ballistic missile (SLBM).

Applications programs have the major goal of sustaining unique strategic technology, design talents and infrastructure needed by the Nation to maintain dominant strategic forces. In essence, these applications programs are the Nation's "seed corn" in strategic offensive missile systems. This is needed to both develop future replacement systems and to fix any performance issues within existing systems. Since the Navy and Air Force have a common need for this talent in strategic missile (ICBM and SLBM) technologies, the Department of Defense has a strategy of executing coordinated, complementary programs in each service. The Navy and Air Force carefully coordinate technology areas and critical skills to obtain maximum synergy in meeting the Nation's need in this critical area.

The Navy has four major applications program efforts included in the FY 2004 budget request: Reentry System Applications Program (RSAP), Strategic Guidance Applications Program (GAP), Strategic Propulsion Applications Program (SPAP), and Radiation Hardened Applications Program (RHAP). Each of these is briefly described.

production for actual use. The RHOC has developed a technology road map that coordinates these efforts into the Department of Defense investment strategy. In addition, the RHAP will sustain critical skills in radiation hardened electronics design and simulation techniques to support the ability to design radiation hardened strategic missile, guidance and reentry systems. These efforts become of greater importance because of the shrinking industrial base for radiation hardened electronics, the fast-moving commercial electronics market, the unavailability of underground testing resources and the loss of radiation hardened expertise. The RHAP will compliment RSAP and GAP efforts by specifically focusing on those tasks required to ensure producibility of radiation hardened parts. The FY 2004 budget requests \$20 million for the radiation hardened applications program.

Enhanced Effectiveness Program (E2). Enhanced Effectiveness provides increased capabilities articulated in the NPR, such as prompt accurate strike, defeat of critical targets and selective nuclear options. This program is a three-year effort culminating in a flight test demonstration of a TRIDENT reentry body with dramatically improved accuracy. The approach is to integrate existing technologies into a reentry body extension. The extension would attach to the existing W76/MK4 warhead, giving it the size and weight of the larger W88/MK5 warhead. Since the current D5 missile is capable of carrying either the MK4 or MK5 warhead, the changes to the missile are minimal.

The FY 2004 budget contains about \$30 million for the Enhanced Effectiveness effort. The E2 program is an R&D effort; it includes no funding for procurement. Any procurement program that employs this technology will be presented to Congress for authorization in future budget requests.