

# **Executive Summary**

## **Anti-Tactical Ballistic Missile Requirements-2000**

### **Purpose of Study**

Neither the need nor ability of U.S. naval forces to defend themselves and other friendly forces against Tactical Ballistic Missiles (TBMs) were fully understood during the events leading to, and during, Operations Desert Shield/Desert Storm. Additionally, a systematic examination of the depth and breadth of potential threats, outside those posed by the Soviet Union and Warsaw Pact forces, had not been conducted, nor had a multi-service/multi-agency consensus on the potential Third World danger been achieved. It quickly became apparent that a new and effective form of political/military suasion was readily available to, and employable by, nations previously lacking in the ability to pose a significant threat to their other than immediate neighbors. Furthermore, the employment of TBMs as instruments of terror continued even in the face of substantial and effective offensive and defensive measures. This first significant use of TBMs against U.S. forces led the Panel to define the threat, envision near-term and advanced system responses, and chart a future course of action for Navy involvement in the Anti-Tactical Ballistic Missile (ATBM) mission.

### **Observations**

The threat to naval and other forces posed by TBMs has rapidly evolved over the past few years to the point where both effective targeting and trajectory control capabilities will be achievable (even by Third World nations) in the near-term, if not today. The relative inability of U.S. naval units to adequately defend themselves and forces in near proximity against such a threat results partially from system design, based upon the lack of a credible threat in the past, and partially from the rejection of TBMs as militarily significant tools of modern warfare, given the rudimentary levels of targeting and terminal guidance currently resident in the Third World.

The Panel found a consistent trend of imminent capability in its review of the proliferation of both TBMs and, to a lesser degree, TBM technology. The Panel also noted that even as the capabilities of Third World countries were rapidly expanding, so too was the pace of technology transfer and introduction accelerating. An across the board examination of technology transfer in general clearly demonstrated that the time lag between initial deployment and export of new weapons systems was shrinking at a rapid pace. Furthermore, this trend was, in the face of the changing world order, rather likely to accelerate. It was this very real proliferation of technology and systems, the opening of Pandora's box, that led to the central recommendations contained in the body of the report.

With the emergence of a TBM threat, the ability of the Navy to respond effectively became central to the Panel's investigations. No insurmountable technical, or other obstacles were encountered which would call into question the feasibility of developing an effective defensive system. Indeed, the ability to quickly field a counter-TBM Self

defense is inherent in currently deployed U.S. Navy systems and could be potentially achieved in the near, rather than the far, term.

### **Conclusions**

Ships at sea are not currently at risk to the TBM threat, but other naval forces in port, operating in restricted waters or in an Amphibious Objective Area (AOA), can be threatened by TBMs today. Furthermore, militarily significant TBMs which can put ships, other naval forces, and allies operating in the coastal and near land environment at risk, will be fieldable by Third World countries in the not too distant future. The potential political impact of TBM employment has been amply demonstrated and will likely continue as a key ingredient in future regional and low intensity conflicts.

- The Navy's current Anti-Air Warfare (AAW) mission, in the view of the Panel, clearly contains the ATBM mission.
- Current ATBM capability is minimal and is primarily restricted to Self defense against endo-atmospheric (i.e. SS-21 type missile) threats.
- Current Navy systems are capable of counter TBM capability through relatively modest modifications. Significantly more capable threats than those currently arrayed will require substantial technical effort and significant financial investment. The efforts of the Strategic Defense Initiative Organization (SDIO) and other services must be leveraged in order to maximize capability and minimize development risk, while resolving the technical issues associated with such more advanced threats.
- Finally, incremental development of increasingly more capable ATBM systems is achievable, appropriate, and in keeping with sound management and Navy practices.
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### **Recommendations**

The Navy must implement a program to provide a near-term Self and Area defense against TBMs. A time-phased incremental approach is recommended.

The Navy should consider potential responses to future, more stressing threats especially in the theater and regional role where the Navy's unique presence and power projection capabilities could be significant enhancements to our national goals and missions.

The Navy should become an active participant with SDIO in relevant programs.