## SECTION II - TERMS OF REFERENCE

1. BACKGROUND: The Navy actively participates in international armaments cooperation. By sharing Research, Development, Test and Evaluation (RDT&E) costs with our allies and friendly nations we reduce the cost of developing weapon systems. Cooperative programs enhance interoperability and standardization, and provide for economies of scale and accelerated delivery dates. The principle of international armaments cooperation is well founded.

Recently the Navy has experienced several problems in implementing these programs. Two ongoing cooperative development programs were terminated and several others appear to be in trouble. We are evaluating numerous weapons systems under our Foreign Weapons Evaluation (FWE) programs with only limited success in procuring these systems. It appears that we are giving away our technology without getting much in return. While we frequently send our people abroad to discuss foreign technology and programs, we do not efficiently collect appropriate information required to target the technologies needed to benefit the fleet.

A recent command inspection of Naval Office of Technology Transfer and Security Assistance (NAVOTTSA), by the Navy Inspector General (IG), highlighted many of the above areas as they relate to security assistance and technology transfer. However, many of the IG concerns also can apply to Navy IR&D programs.

- 2. Because of the above, the Naval Research Advisory Committee (NRAC) Panel should address the following issues:
- a. How can the Navy better identify and assess foreign technologies to facilitate the rapid and long term incorporation of these technologies into Naval weapon systems?
- b. How can the Navy better identify potential cooperative development programs? What fundamental elements impact the success or failure of a cooperative development program? Which elements should be considered in determining priority?
- c. How can industry be used to facilitate international cooperative programs and take advantage of available foreign technologies? What is necessary to maximize industry involvement in these programs and strengthen the U.S. industrial base? How can <u>IR&D</u> funding be used in these programs?

- a. Which weapon systems are susceptible to performance modifications caused by the natural environment?
- b. How much performance enhancement can be obtained with a more precise measurement/estimate of the natural environment?
- c. What degree of precision must be provided for each environmental parameter to enable a measurable improvement in weapons performance?
- d. What type(s) of sensors and techniques are necessary to achieve the required level of environmental knowledge?
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