

# Executive Summary

Following the 2010 Naval Research Advisory Committee (NRAC) study and report on the *Status and Future of the Naval R&D Establishment*, the Assistant Secretary of the Navy for Research, Development and Acquisition (ASN RDA) tasked the NRAC to assess the Naval BA-4 account in a manner that focused on its adequacy as a primary transition vehicle for Naval S&T and as the first step in the formal systems acquisition process.

The NRAC 2010 assessment considered the “as is” capability to meet the Department of Navy (DON) technological needs and, in particular, the ability to innovate in areas of anticipated technological need. That study focused primarily on “technology push,” i.e., the Science and Technology (S&T) and Budget Activities 1 through 3. Of at least equal (and arguably greater) importance for successful technology transition is the BA-4 (Advanced Component Development and Prototypes) account - the “requirements pull,” counterpart of S&T.

The GAO report to Congress (GAO-07-1058 Defense Acquisition, September 2007) and the 2009 Weapons Systems Acquisition Reform Act (WSARA) pointed out the criticality of a robust BA-4 program. The total annual Naval BA 4 funding is on the order of \$4B (about twice the size of the entire S&T investment). The non-ACAT portion of BA4, in particular, receives minimal outside assessment or scrutiny.

This report provides an assessment of the Naval BA-4 account process, culture and structure. It focuses on the adequacy of BA-4 as a primary transition vehicle for Naval S&T and as the first step in the formal systems acquisition process.

Specific recommendations address the BA-4 process, culture, and structure:

1. Change the BA-4 *process* to accelerate innovation: Foster early iteration of technology and operational concepts to accelerate the transition process.
2. Change the BA-4 *culture* to improve probability of success: Build teams by embracing industry’s best practice of incentivizing movement of key personnel from project idea through prototype /productization.

3. Change the BA-4 *structure* to re-engage the Fleet throughout execution: Increase priority of line officer assignment to billets throughout the Naval material establishment.

The Panel recommends a transformational idea: Create and encourage *entrepreneurial skills* within the Navy which promote a willingness to take risks early in the Research, Development, Test & Evaluation (R&DT&E) process. And, in parallel, create opportunities for cross-organizational, cross-disciplinary team formation including a mechanism to allow for government personnel assignment to entrepreneurial companies for several years.

Finally, the NRAC Panel recommends restoration of the Department's senior line officer (3-star) to provide focus and oversight to the development of warfighter capabilities incorporating technology and innovation.