

Terms of Reference Venture Capital Technology Panel

Objective

To identify emerging standards and technologies in the technology sector that the Department of the Navy should incorporate into its technology roadmap, and by extension to the fleet/force.

Background

In House Report 107-532, the House Appropriations Committee encouraged a fresh look at how innovative technologies can be more rapidly introduced into system acquisition in all mission areas. The Committee specifically asked the Department of the Navy to evaluate venture capital initiatives within the Army and the CIA, and directed that a report on Navy plans be provided to the Congress.

Several long-term trends make it critical that the Department of the Navy improve its ability to identify potentially significant new technologies from commercial sources, and to rapidly and efficiently exploit them. First, the proportion of the United States' total research and development investment (federal and non-federal) dedicated to defense is declining. Additionally, the service lives of major weapons systems are being extended at the same time that they are increasingly reliant on commercial components, many of which have a short lifecycle. The commercial technology consumption is increasing, and the "half-life" of technology – how long it is relevant in the marketplace – is decreasing.

The Department of the Navy seeks a relationship with venture capital that optimizes the prospects for rapid introduction of innovative technologies into acquisition. To this end the Commercial Technology Transition Office of the Office of Naval Research began over a year ago to study the issues involved. The CTTO recently conducted two role-playing "wargames" with venture capital, industry and government players in order to evaluate specific partnering models. The following major conclusions on venture capital engagement emerged from those efforts:

- The greatest value to the Department will be in early awareness of emerging commercial technology trends, allowing time to plan ahead for their potential use in Naval systems. Some venture capitalists are willing to invest their time to understand Naval technology needs and to recommend potential solutions in the sectors where they invest.
- Venture capitalists can provide awareness in a few areas which, although they do not address all Naval needs, are critical. Knowing the direction of prominent investors with insight into the commercial market can aid the DON in developing systems that leverage commercial investment.
- The Department of the Navy may be able to interest venture capitalists in areas of interest to DON. By creating a forum for the exchange of ideas, the subcommittee might interest commercial sector development dollars into areas of interest to the Navy.

This NRAC study aims for a dialogue with the venture capital community aimed at early awareness of emerging trends in critical high-technology areas such as information technology, advanced microelectronics and photonics, wireless networking, and biotech. This panel is anticipated to run for two years, providing guidance semiannually to NRAC.

Specific Tasking

This NRAC study will examine current approaches to technology within the Navy and compare to commercial approaches. Specifically, this NRAC study will:

- . • Review the Navy and Marine Corps development plans in areas of its expertise (IT, communications, logistics, etc.) and provide feedback on ways to more closely align those plans with emerging trends that panel members see in the commercial sectors.
- . • Identify emerging commercial sector technologies for potential use by the Navy and Marine Corps. These technologies might be broad trends where the Navy can benefit from an early awareness, or it might be specific technologies that provide disruptive advances that the Navy could benefit from early adoption or development.
- . • Review technologies within the naval research enterprise that are considered particularly valuable and potentially of commercial interest. Recommend paths to make these technologies available to the commercial sector quicker and for the benefit of the nation/Navy/Marine Corps.