



DEPARTMENT OF THE NAVY

PROGRAM EXECUTIVE OFFICE
THEATER SURFACE COMBATANTS
2531 JEFFERSON DAVIS HIGHWAY
ARLINGTON VA 22242-5165

IN REPLY REFER TO
Ser TSC/111
8 May 2001

Dr. Richard Roca
The Johns Hopkins University
Applied Physics Laboratory
Laurel, MD 20723

Dear Dr. Roca,

I am pleased to provide this introductory letter to the *Technical Digest* devoted primarily to Aegis and your other combat systems work.

The Navy today faces challenges that are as great or greater than any in our history. The mission of the Navy is to maintain, train and equip combat-ready Naval Forces capable of winning wars, deterring aggression and maintaining freedom of the seas. Implicit in that mission statement is the capability to project power and bring stability. We currently have a small Navy relative to the task and a technological edge that must be maintained to carry out the Navy's missions.

How do we maintain our technological edge and carry out our various missions? How do we function in such an environment? That is where APL comes in. Your expertise and particular niche is Missile Defense and associated combat systems. In the near term, virtually every Navy program is focused either on littoral operations or Ballistic Missile Defenses, and fighting in these environments is extremely hard. APL is deeply involved in these endeavors and is providing the required technological leadership. We critically need innovative ideas, technical expertise and engineering discipline to help us in the way ahead because the crystal ball into the future is not clear, and the threat is forever changing.

The challenge of the future is to define, in system-level terms, the Navy's capabilities and contribution to our national mission. What system will follow Aegis? What weapons are required to defend against the ever-advancing threat? What new fire control systems and ship systems are required? How do we better operate with our sister Services and with our Allies? Do we have the tools to do the job? Are basic and applied research properly directed? The Standard Missile and Aegis have been adapted and are able to keep ahead of the current threat and have been able to do so because of the wisdom and forward thinking of our predecessors. Our vision into the murky future must be equally foresighted, and we count on APL for this vision.

This Laboratory has been important to the Navy in the past, and it has made a huge difference in the Navy, in Surface Warfare, and the nation, and will, I am sure, continue to do so for many years to come. The Navy is counting on APL to help us walk forward, see the crystal ball more clearly and come to conclusions on issues that are critical to our National Defense. Keep up the good work! Help us keep ahead of the ever more difficult threat to our National Security.

Sincerely,

A handwritten signature in black ink, appearing to read "K. K. Paige". The signature is fluid and cursive, with a large loop at the end.

K. K. Paige
Rear Admiral, U.S. Navy
Director, Theater Air and Missile
Defense and Systems Engineering