Mr. Chairman and distinguished commissioners, aloha. My name is Bill Friedl and I am the Chairman of the Hawaii Section of the Marine Technology Society (or MTS), an international, non-profit professional organization. I would like to reiterate some points made to the Commission on 13 November 2001, in Washington, DC by Andrew Clark, the President of MTS, and provide a perspective that I believe represents the technically based small businesses that comprise an important part of our ocean community in Hawaii. Such small, technology-driven businesses are important to Hawaii even as the industry continues to develop and emerge within the local economic mix. Furthermore, these companies are important agents for transition of technology from academic origins to military and commercial applications.

In his November statement, Dr. Clark emphasized the following needs:

- Support for new technologies that foster commerce in, on and under the oceans through an "Office of Ocean Technology" within NOAA;
- A commitment to systematically "refresh" technical marine capabilities and upgrade or replace facilities that support ocean activities;
- Development of an integrated ocean observing capability;
- Support for a baseline program to map the oceans, census their content and document the findings;
- A commitment to reliable and secure transmission of information on, through and over the sea; and finally
- A commitment to foster emerging technical fields with potential commercial applications, such as marine-based biotechnology or advanced undersea vehicles.

Furthermore, yesterday's testimony before this Commission presented numerous examples of issues that must be approached through technology. This litany ranged from fisheries and resource management issues to ocean monitoring and surveillance. Briefly put, technology is critical to ocean exploration, enforcement and education and small ocean businesses are important agents for developing and applying technology.

Hawaii has a robust and dynamic technology-based ocean community and world-class ocean oriented academic institutions. Furthermore, as Nainoa Thompson emphasized yesterday, Hawaii also has a unique attitude or view of the sea that this Commission would do well to take...
to heart. But Hawaii is 5 time zones removed from Washington, DC and consequently, Hawaii-based capabilities are often overlooked when policies or programs are developed. Personally, I am somewhat surprised that the Commission's Science Advisory Panel does not include at least one member from the School of Ocean and Earth Sciences and Technology at the University of Hawaii at Manoa. Clearly, the School's programs and personnel define its quality and world-class status. Similarly, the commercial ocean technology sector in Hawaii deserves your consideration as you develop recommendations for national ocean policy and programs.

Mr. Chairman, I believe the best way to assure that the talent and attitude of Hawaii's technology-based ocean community are part of the nation's ocean future is to assure that the nation's ocean development programs are open, competitive and dynamic. Anything less will be a disservice to the individuals and companies involved in ocean technology development in Hawaii and a loss to our nation as a whole. Thank you for this opportunity to address the Commission. Aloha.

William A. Friedl
Chairman, Hawaii Section
Marine Technology Society

Technical Director
National Defense Center of Excellence
For Research in Ocean Sciences (CEROS)
73-4460 Queen Kaahumanu Highway Suite 111
Kailua-Kona, HI 96740
(808) 327-4310 billf@ceros.org