Public Comment – John Wiltshire

Aloha, and thank you for coming to the State of Hawaii and for the opportunity to speak to your ground breaking commission. My name is Dr. John Wiltshire. I am the associate Director of NOAA's Undersea Research Laboratory at the University of Hawaii. Our laboratory runs two 2000m capability deep diving submersibles (20% of the world's deep diving research fleet) as well as a remotely operated vehicle. I am also an officer of the Marine Technology Society and was co-chairman of last November's Oceans 2001 conference which brought 1500 marine technologists to Hawaii. In the last two days the commission has heard a great deal about management issues. I would like to address the unfortunate present state of marine technology compared to its potential. While there has been outstanding recent progress in a few select areas of marine technology, the level of overall development which was seen in the U.S. in the 1960's through 1980's has not been maintained. By one account the level of government funding going into ocean research programs is only a few percent of that going into space programs. The main reason for this is that the space community has captured the public interest in a way that the oceans community has not. To give an example close to home, last year our laboratory alone discovered a dozen new species of deep sea organisms. Hawaii provides a unique natural laboratory for the study of deep sea volcanic processes on Loihi Seamount, the next Hawaiian island, which we closely monitor. We have found new deep sea interactions and organisms in the Northwest Hawaiian islands. Some of these may have the potential for new and potent drugs. All of this is done with 20 year old technology. The ocean community needs new exploration systems to exploit these opportunities. On a larger scale, the oceans can provide a vast array of energy solutions ranging from OTEC to methane hydrates, wave power, offshore wind developments, tidal and current generating capacity. In addition, there are many potential new marine technologies for food, mineral and fresh water production. Although much lip service is given to desalination as a way to provide critical fresh water supplies, the entire U.S. government research commitment to desalination is $1.3 million and most of that is looking at environmental impacts. We need the development of new types of marine platforms, ships, submersibles, bottom crawling equipment, instrumentation and sensors. I would urge the commission to go beyond looking at management issues and try to increase the size of the ocean development pie. One of the very successful, although small, examples of efforts in this direction is the work of CEROS, the defense Center for Excellence in Research in Ocean Science, which has lead to the development of several very exciting new ship and instrument designs here in Hawaii. In summary, we need to find and implement promising new technologies. We need to raise the visibility of the highly underutilized potential of the marine technology sector which has a great deal to contribute not only to the welfare of our nation but to humanity as a whole.