

**FROM THE COMMANDING OFFICER AND THE EXECUTIVE DIRECTOR**

We are pleased to present the first edition of the Biennial Review, a publication that reflects the innovative research, diverse expertise, and unique capabilities of Space and Naval Warfare Systems Center, San Diego (SSC San Diego).

The Center's vision is to be the Nation's pre-eminent provider of integrated command, control, communications, computers, intelligence, surveillance, and reconnaissance (C<sup>4</sup>ISR) solutions for warrior information dominance. This publication features a collection of papers describing significant C<sup>4</sup>ISR research and development—a representative sampling of the many technical efforts at the Center in support of our Nation's warfighters. In addition to delivering programs designed to provide C<sup>4</sup>ISR capabilities, SSC San Diego pursues a unique range of work in other vital leadership areas, such as ocean engineering, environmental science, marine mammals, and the military application of robotic systems.

SSC San Diego encourages its scientists and engineers to explore new ideas through an independent research program and through the development of advanced technology concepts. This Biennial Review showcases not only the range of scientific and engineering work conducted at the Center but the talent and creativity of our technical staff. We are proud of their efforts.

June 2000 marked the 60th Anniversary of SSC San Diego. We look forward to a bright and productive future, continuing a rich tradition of providing our country's warfighters with C<sup>4</sup>ISR technology and systems support—and to contributing to the Navy/Marine Corps goal of achieving information dominance.

We sincerely hope you will find the unique ideas and technical insight presented in this publication both useful and interesting.



Dr. Robert C. Kolb  
Executive Director



Captain Ernest L. Valdes, USN  
Commanding Officer