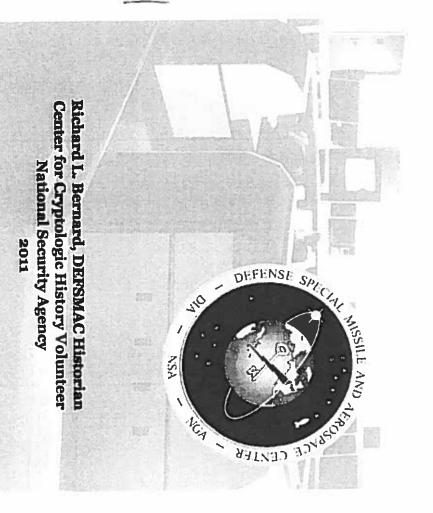
A Brief 50-Year (1960-2010) History of the Defense Special Missile and Aerospace Center (DEFSMAC)

The Forefront of Foreign Missile and Space Intelligence



Mission

DEFSMAC coordinates the collection of intelligence information on foreign missiles and satellites from the ground, from the sea, and from aerospace. DEFSMAC personnel then analyze the data and send reports to customers on the early intelligence results of the collection.

Formation and Charters



1958 -- NSA Soviet Missile and Space Center (SMAC) formed in NSA Office of General Studies (GENS)

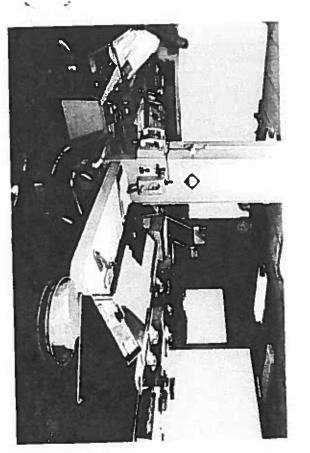
1963 -- DoD (Dr. Fubini, DDR&E) Study Group recommended combining DIA and NSA responsibilities in a Joint Center to manage all-source collection and perform early reporting of intelligence information.

1964 -- DoD Directive of 27 April 1964 formed Defense Missile and Astronautics Center (Defense/SMAC) to be operated by DIA and NSA and located at NSA.

2002 -- DoD Directive updated -- Center was renamed Defense Special Missile and Aerospace Center (DEFSMAC). Some additions and clarification of its mission and functions were added to the original charter.

DEFSMAC Organization, Location, and Staffing

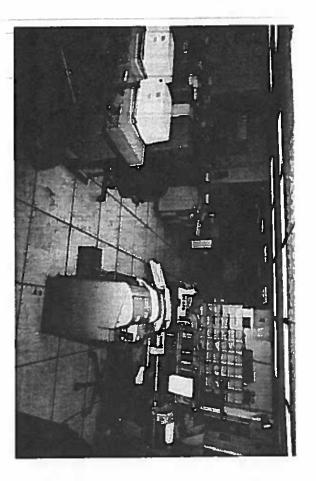
- DEFSMAC is a Department of Defense (DoD) organization. It is located at NSA Headquarters at Fort Meade, MD, and has been in operation 24 hours a day, 365 days a year, for almost 50 years.
- DEFSMAC is staffed by civilian and military members of the National Security Agency (NSA), the Defense Intelligence Agency (DIA), and the National Geospatial-Intelligence Agency (NGA).
- The Director of DEFSMAC has traditionally been from NSA, and the Deputy Director has traditionally been a DIA person. All other staff are fully integrated and assigned according to their primary skill



The 24-hours-a-day "Watch Operations" area at NSA in June of 1964 used paper-based information and manual working-aids.

1970s-DEFSMAC Organization Matures

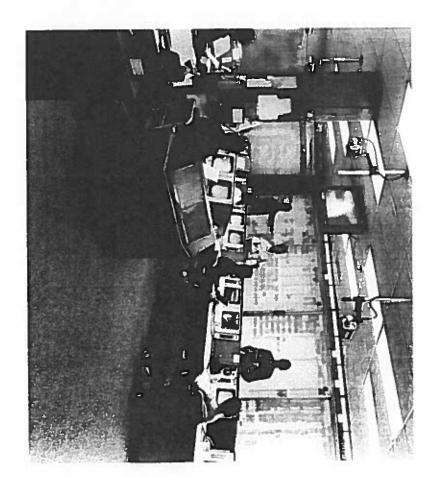
- DEFSMAC leadership was a Director, a Deputy Director, and a small staff.
- The Operations Directorate (OP) coordinated current data collection operations (24 hours a day), collection resources management, and target development.
- The Intelligence Directorate (IN) reported on missile systems, space systems, and spacecraft operations. The Data Systems Development (SY) element provided computer system upgrades and supported current operations and intelligence reporting.



The 1970s-1980s teletype communications to collection locations and customers with paper-based operations and first installation of PCs to replace teletype machines

1980s-First Major Modernization and Expansion

- Many new missile and satellite intelligence "targets" required expansion of DEFSMAC operations and support areas.
- DEFSMAC and the United States Space Command (USSPACECOM) expanded cooperation and support.



The 1983 modernization and expansion of DEFSMAC started the use of computer-based displays and consoles.

1990s – New Center Location and Challenges

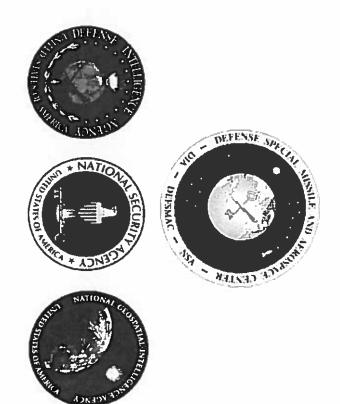
- Worldwide increase in foreign missile and space tests and operations
- · Reduction of many collection ground-based facilities
- DEFSMAC gets crisis/war role.
- Relocation and complete modernization of the Center provided increased worldwide communication access to collectors and customers.



The new location included modern computer console workstations, equipment, and extensive interactive databases and computer resources.

2000-2010 Highlights

- Updated 24-7 Operations Watch Area included additional analytic and reporting tools and an improved data support architecture.
- A new Center name Delense Special Missile and <u>Aerospace</u> Center (still DEFSMAC)
- The National Geospatial-Intelligence Agency (NGA) formally joins the Center partnership.



DEFSMAC, now a truly collaborative effort of three U.S. Department of Defense Intelligence Agencies

AUTHOR'S BIOGRAPHY



Richard L. "Dick" Bernard was Director of DEFSMAC from 1980 to 1983. He was awarded the NSA Meritorious Civilian Service Award for his performance in this position.

Dick was first assigned to NSA as a computer maintenance supervisor in 1953 while serving as a second lieutenant in the U.S. Air Force. In 1955 he was sponsored for a year of study at George Washington University to complete his Master of Engineering Management degree.

Mr. Bernard's NSA assignments included several positions in the Research and Engineering organization; Project Manager in the Office of Special Program Management; Chief of the Office of Space, Microwave, and Mobile Systems; and Deputy Group Chief for the Line-of-Sight Systems Group.

In 1985 Dick retired from NSA as a Senior Cryptologic Executive Manager and became a Systems Engineering Program Manager in industry until 1995. He then returned to NSA as a part-time consultant for the Center for Cryptologic History and authored several classified publications, primarily on electronic intelligence (ELINT), telemetry intelligence (TELINT), and DEFSMAC. He recently completed an unclassified brochure on NSA ELINT history for use by the NSA Cryptologic Museum.

Dick expects to culminate his DEFSMAC history efforts in April 2014, the 50th anniversary of the DEFSMAC initial charter.

This publication presents a historical perspective for informational and educational purposes, is the result of independent research, and does not necessarily reflect a position of NSA/CSS or any other U.S. government entity.