(U) Cryptologic Almanac 50th Anniversary Series

(U) Defense Special Missile and Astronautics Center (DEFSMAC)

(U//FOUO) A U.S. Department of Defense "Operations Center" at NSA, little known to the public at large, serves at the forefront of the U.S. missile defense and has done so since 1964. During April of 1964, Secretary of Defense Robert McNamara signed a DoD Directive establishing the Defense Special Missile and Astronautics Center -- known then as Defense/SMAC. The Soviet Union had been test-firing military missiles since shortly after World War II and had launched the first earth satellite in 1957. Many elements of the DoD were trying to collect COMINT (under NSA authority), RADINT (under DIA authority), and ELINT signals (which then included telemetry) under many authorities. (There was not much PHOTINT available in these early days.) Defense Department top management believed that there needed to be better coordination of all the efforts and therefore established Defense/SMAC, to be housed at NSA and staffed by both NSA and DIA personnel.

(S//SI) The SIGINT Missile and Astronautics Center (SMAC) at NSA had been following the COMINT signals associated with the missile test ranges and satellite launch facilities for years. This was the only reliable way to alert the various intelligence platforms (land, sea, and air) that an event was imminent. The SMAC formed the foundation of Defense/SMAC. Mr. Charles Tevis from NSA was named as the first director, and Colonel Max Mitchell, USAF, from DIA, the deputy director. Defense/SMAC not only alerted intelligence collectors of impending events using all-source information, but also issued initial analytic reports on the all-source intelligence data collection on behalf of all of DoD. During 1964 there were about 100 foreign missile and space launches for DEFSMAC to worry about.

Also in the early 1960s, NSA completed a plan that called for several new and/or improved telemetry collection facilities called the SPACOL (short for Space Collection) Program, and had received [redacted] dollars (over [redacted] in today's dollars) to build the [redacted] facility. The [redacted] sites

and the [redacted] was to collect telemetry from Soviet deep space probes. The Service Cryptologic Agencies (SCAs) and military departments were also aggressively developing other land, sea, and air platforms to collect RADINT (now part of MASINT), PHOTINT, and other ELINT signals from the missiles and satellites. The
North American Aerospace Defense Command (NORAD) was the focal point for the RADINT results, and NSA was the focal point for all the SIGINT activity and results.

(S) One of the most valuable sources of data on test missile firings and satellite launches comes from the telemetry signals usually present on the missiles and boosters that send satellites into space. Until 1971, telemetry was considered ELINT. However, in 1971 the DoD Directive clarifying NSA’s responsibilities defined SIGINT as comprising COMINT, ELINT and TELINT; thus it became quite clear that NSA was the DoD authority for all of these disciplines. By 1970 there were about 400 foreign missile and space launches each year to keep DEFSMAC busy. (Sometime during the 1970s Defense/SMAC was shortened to DEFSMAC, pronounced "deaf-smack.")

(S) In the early 1980s the term TELINT (telemetry intelligence) was broadened to include other key signals that also describe missile/space events and was renamed Foreign Instrumentation Signals Intelligence (FISINT). This did not affect DEFSMAC operations.

(S) Another key role played by DEFSMAC is in Joint Chiefs of Staff (JCS) operations directed against foreign missile/space activities. For these events the JCS assembles collection platforms when a foreign target nation fires a missile into international waters. These operations are normally recommended by DEFSMAC, which then often deploys to coordinate the overall operation. The results can be spectacular in terms of information gained. Sometimes the gain is unexpected as when inadvertently to collect foreign missile information. Operations involving resulted in

(S) By 1980 DEFSMAC was really busy. Foreign missile and space launches were now missiles. DEFSMAC was staffed by over people and had communications circuits to over locations, primarily to collection facilities and to recipients of the DEFSMAC initial analysis reports. Many of these circuits went directly that participated in the SIGINT aspects of operations and analysis because of their unique collection capabilities. In 1982 DEFSMAC was instrumental by providing the results of the

(S/ST) Also in the 1980s, conducted extensive
A joint team was formed between DEFSMAC and the Group
was located in DEFSMAC and provided much valuable intelligence on the
and later this effort ended.

(S) During 1990 there were foreign missile tests and space launches. Many
countries around the world were involved. The Gulf War in 1991 again gave
DEFSMAC a chance to shine with to the U.S. theater command battle staffs, enabling U.S. forces to implement both protection and countermeasures.

(S/SH) Once again brought fame to DEFSMAC. Extensive and announced by
DEFSMAC. This allowed a JCS operation to be carefully planned and executed. It also
provided an opportunity to use unique locations and assets of some of NSA's
to monitor the activity. Because of the
it was determined that this was a space launch effort

(S) In 2001 DEFSMAC reported on over foreign missile firings and space launches
and issued almost reports on that activity. With increased automation, there are now
only NSA and DIA people directly assigned to the Center, but there are many
others at NSA, DIA, and around the world that directly support the DEFSMAC mission.
This year the DoD plans to update the 1964 directive that established DEFSMAC and
revalidate the DEFSMAC with increased responsibilities and a minor name change
("Aerospace" will replace "Astronautics," subject to SecDef approval).

(U//FOUO) In 1997 DEFSMAC got a new home. Since 1966, the Center had been located
on the second floor of the Operations 1 building, just down the hall from the original
NSOC. While it had been modernized several times, it was in need of a major renovation
and reconfiguration. Space was found and a new center was created from the ground up. Operations were moved to the new location in 1997, and in
early 1998 the new Center was dedicated to Mr. Charles Tevis, the first Center director.
The brass plaque inscription reads, "His vision is our reality today and our inspiration for tomorrow."

[(U//FOUO) Center for Cryptologic History, 972-2893s]