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A Brief History of the Defense Mapping Agency

The new organization became operational July 1972.

ON NOVEMBER 5, 1971, a Presidential Memorandum directed the consolidation of Department of Defense mapping, charting and geodesy operations (MC&G).

The Defense Mapping Agency (DMA) was then established by Department of Defense (DOD) directives dated January 1, 1972, as a separate agency reporting to the Secretary of Defense through the Joint Chiefs of Staff. DMA was assigned the mission of providing mapping, charting and geodesy support to the Secretary of Defense, the Military Departments, the Joint Chiefs of Staff, and other DOD components and organizations. DMA was also directed to be operational by July 1, 1972. In conformance with these directives, a consolidation of most mapping organizations within the Military Departments resulted in the DMA becoming one of the largest Department of Defense agencies. DMA thereby also became one of the largest mapping agencies in the free world. Presently, the DMA has almost 9,000 military and civilian personnel and currently an annual budget of about \$160 million.

Those organizations incorporated into DMA made up about 80 percent of Department of Defense mapping, charting and geodetic resources. Among them were the MC&G staff of the Defense Intelligence Agency (DIAMC); the Army Topographic Command, less its research and development unit and troop command; the chart production, nautical information and distribution activities of the Naval Oceanographic Office (hydrographic survey and oceanographic activities will still be accomplished by NAVOCEANO which remains with Navy); the Aeronautical Chart and Information Center of the U.S. Air Force; the Inter American Geodetic Survey (IAGS) formerly of the U.S. Army Forces, Southern Command; and the Department of Topography of the U.S. Army Engineer School. The 1st Geodetic Survey Squadron and the MC&G elements



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of the 15th Reconnaissance Technical Squadron, former U.S. Air Force units, were also allotted to DMA and have been assigned to the DMA Aerospace Center.

These essential services have been re-grouped by DMA into five Components (Figure 1). They are the DMA Aerospace Center, St. Louis, Missouri; the DMA Hydrographic Center, Suitland, Maryland; the DMA Topographic Center, Washington, D. C.; the Defense Mapping School, Fort Belvoir, Virginia; and the Inter American Geodetic Survey, Canal Zone. Each of these Components has its own background of success.

The *Defense Mapping Agency Aerospace Center* (DMAAC) is an outgrowth of the Aeronautical Chart and Information Center (ACIC), of the U.S. Air Force, which was created in 1928. It was then called the Map Unit and was under the Chief of the Information Division, Army Air Corps, in the Munitions Building, Washington, D. C. With the progression of aviation, new demands were placed on the organization for

more sophisticated aerial charts in an ever increasing volume. During January of 1942, the Map Unit came under the Office of the Chief of the Army Air Corps, and moved from the Munitions Building to Bolling Field, Washington, D. C. It was renamed the Map-Chart Division. By March of that year, the strength had increased to 42 officers and 142 civilians. In April 1944, the Division was redesignated the Aeronautical Chart Service under Headquarters, Army Air Forces. In August the organization was designated USAF Aeronautical Chart and Information Center (ACIC) and the Command Section transferred from Washington, D. C. to Second and Arsenal Streets, St. Louis, Missouri. By July of 1960, it was a separate agency operating under Headquarters, U.S. Air Force.

At the time ACIC was assimilated into the DMA organization, it had detachments located throughout the world—Canal Zone, Alaska, Germany, England, Hawaii, Philippines, Okinawa, Japan, and Southeast Asia. These squadrons and detachments served all military users of aeronautical charts and flight information to assure the production and distribution of products to satisfy their needs. The Aeronautical Chart and Information Center's production programs were then, and still are, under the present DMA organization, divided into four major elements: navigation and planning charts, flight information publications, air target materials, and special products. The Navigation and Planning Series include Joint Operational Graphics, Tactical Pilotage Charts, Operational Navigation Charts, Jet Navigation Charts, Global Navigation Charts and planning charts, Loran Charts, Missile Planning Charts, and DOD weather charts. Flight Information Publications (FLIPS) are produced for planning, enroute and terminal phases of military aircraft operations for the entire free world.

The *Defense Mapping Agency Hydrographic Center* (DMAHC) evolved from the Depot of Charts and Instruments established by the Navy in 1830 to collect and assume responsibility for the care and issue of charts and instruments to the Fleet. To supplement the inadequate supply of foreign charts available, a lithographic press was obtained for the Depot in 1837, and the first U.S. Navy nautical chart was published that year.

In succeeding years the Depot became part of the Bureau of Ordnance and Hydrography. It became known successively as the Depot of Charts and Instruments, National

Observatory, the Naval Observatory, the Hydrographic Office, and the U.S. Naval Observatory and Hydrographical Office.

In 1866 Congress passed an act establishing a Hydrographic Office. The newly organized Office was separated from the Observatory and expanded to include responsibility for providing charts, sailing directions, and manuals of instructions for the use of all vessels of the United States, and for the benefit and use of navigators in general.

As naval aviation began to develop, the Office was assigned responsibility for providing the special air navigation charts required for carrier and long-range patrol aircraft. World War II and follow-on global Fleet operations generated new requirements for knowledge of the broad ocean areas and a Division of Oceanography was formed in 1946. Recognizing the increasingly important support role of oceanography both in the Office and the Fleet, the name of the Office was changed in 1962 to the U.S. Naval Oceanographic Office and the primary mission was expanded to include oceanographic products and data required by naval operations. It remained in this status until the transfer of its chart and nautical information production and distribution functions to the Defense Mapping Agency. The Oceanographic Office continues to operate under the U.S. Navy to carry out the oceanographic endeavor and to perform hydrographic surveys in support of DMA charting programs.

The *Defense Mapping Agency Topographic Center* (DMATC) had its beginning in a warehouse located at Fort Leslie J. McNair, Washington, D. C., where space was set aside in 1910 to accommodate a reproduction unit and lithographic school. These combined elements formed the Central Map Reproduction Plant (CMRP). With the advent of World War I, CMRP was reorganized and expanded, and in 1917 was renamed the Engineer Reproduction Plant (ERP).

With the coming of World War II, the demand for maps soon out-stripped the facilities of ERP. In 1942, it was redesignated the Army Map Service (AMS) and provided with new buildings of special design at Brookmont, Maryland, just over the District of Columbia line. By 1945, AMS, with several offices throughout the country, employed 3,500 people embracing many specialized skills and areas of knowledge.

In September 1968 the U.S. Army Topographic Command (TOPOCOM) was created. This included the Army Map Service, the Engineer Topographic Laboratories at Fort

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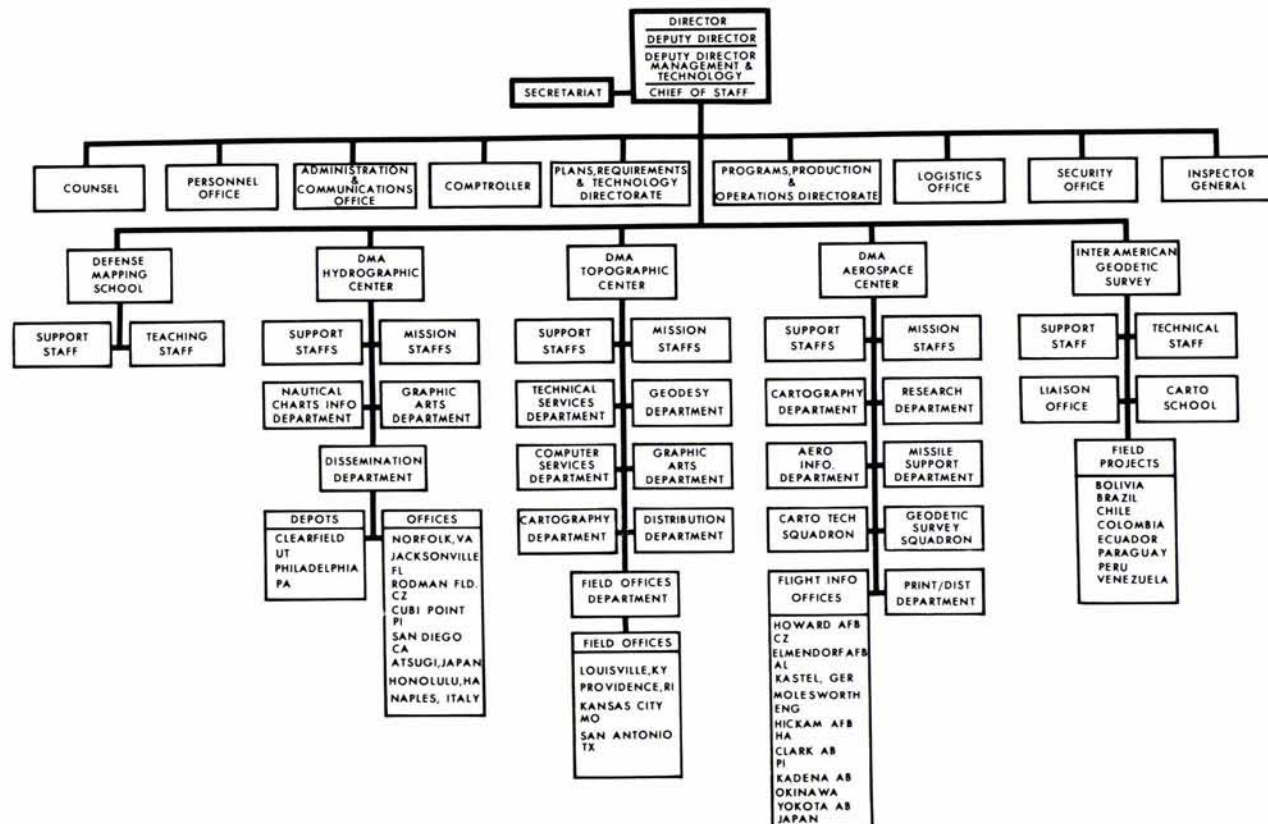


FIG. 1. Organization of the Defense Mapping Agency.

Belvoir, and the topographic portion of Topographic and Military Engineering Directorate, Office, Chief of Engineers. Under TOPOCOM, five major subordinate commands were established: the U.S. Army Engineer Topographic Production Center, Data Center, Troop Command, Engineer Topographic Laboratories, and Distribution Center. At the same time, the Army also established the function of Topographer of the Army on the staff of the Chief of Engineers, with this responsibility being delegated to the Commanding General of TOPOCOM as a dual function.

When the Defense Mapping Agency was formed in 1972 some of TOPOCOM, except for the Engineer Topographic Laboratories and the Troop Command, became part of it and was designated the Defense Mapping Agency Topographic Center.

The *Defense Mapping School* (DMS) traces its lineage back to the spring of 1918 when the School of Surveying, Map Reproduction and Ranging was opened at Camp A. A. Humphreys, now Fort Belvoir, Virginia. The purpose of this School was to train enlisted men and officers in mapmaking. It became part of the U.S. Army Engineer School and remained a department of that School until it joined DMA on July 1, 1972. Now, DMS is charged with the expanded mission of providing formal military education in the mapping sciences to personnel of the Department of Defense.

The *Inter American Geodetic Survey*

(IAGS) was originated in 1945 by President Truman toward the end of World War II. At that time, he directed the War Department to establish long-range mapping and charting relating to the Caribbean Area, Central and South America. To carry out this mission, the Caribbean Defense Command, which was assigned the responsibility, issued an initial directive on April 15, 1946, forming the Inter American Geodetic Survey (IAGS). Over the ensuing years, the organization experienced a number of changes that finally culminated in its becoming a part of the Defense Mapping Agency.

To coordinate this complex organization, the smallest feasible headquarters staff has been assembled in the Washington, D. C. area. Of the total 9,000 people authorized, only 190 make up the headquarters staff. This figure of slightly over 2 percent of the total, is the smallest such ratio of any Defense agency.

The Defense Mapping Agency has been fully operational since July 1, 1972. Obviously, these relatively few months have not been a substantial springboard from which to launch overly optimistic predictions. On the other hand, if early results offer any yardstick, DMA people believe that within a year the Defense Mapping Agency will have fully justified its existence in terms of increased production for the dollars invested, people and facilities more effectively made use of, and responsiveness to the requirements of the U.S. military forces.

Notice to Contributors

1. Manuscripts should be typed, double-spaced on $8\frac{1}{2} \times 11$ or $8 \times 10\frac{1}{2}$ white bond, on *one* side only. References, footnotes, captions—everything should be double-spaced. Margins should be $1\frac{1}{2}$ inches.
2. Ordinarily *two* copies of the manuscript and two sets of illustrations should be submitted where the second set of illustrations need not be prime quality; EXCEPT that *five* copies of papers on Remote Sensing and Photointerpretation are needed, all with prime quality illustrations to facilitate the review process.
3. Each article should include an abstract, which is a *digest* of the article. An abstract should be 100 to 150 words in length.
4. Tables should be designed to fit into a width no more than five inches.
5. Illustrations should not be more than twice the final print size: *glossy* prints of photos should be submitted. Lettering should be neat, and designed for the reduction anticipated. Please include a separate list of captions.
6. Formulas should be expressed as simply as possible, keeping in mind the difficulties and limitations encountered in setting type.