

UNCLASSIFIED//FOR OFFICIAL USE ONLY**(U) Cryptologic Almanac 50th Anniversary Series****(U) Joseph N. Wenger**

(U) Rear Admiral Joseph N. Wenger played a leading role in the development of both the Naval Security Group Command and the National Security Agency. He was one of the seminal figures in American cryptologic history and, more than anyone else, was responsible for establishing a cryptologic organization Navy-wide.

(U) Wenger was one of the first naval officers to realize the role of communications intelligence and its value--particularly in traffic analysis--to military planners. He was a pioneer in the development of machines for use in cryptanalysis, and he was among the first to recognize the need for centralization within the naval COMINT establishment.

(U) Born in Patterson, Louisiana, in 1901, Wenger was admitted to the Naval Academy in 1919 and graduated in 1923. His career between the two world wars was typical of many naval cryptologic officers. He was associated with the cryptologic element (OP-20-G) only when on shore duty. His only early association was his participation in training courses in 1925 and 1931 and his correspondence with Laurance F. Safford (sometime head of OP-20-G) about cryptology.

(U) Wenger's first real involvement with COMINT came while he was radio intelligence officer for the Asiatic Fleet, 1932-1934. In 1933 or early 1934, he began to assemble the reports of the various radio intelligence elements which had participated in obtaining intelligence on the Japanese Imperial Fleet maneuvers of 1933. His study and consolidation of these reports into a major study of his own crystallized his thinking on the value of COMINT and particularly the importance of traffic analysis in a military environment. He realized the valuable information which could be gained from studying Japanese communications procedures, traffic associations, systems, callsigns, and other message externals, and he recognized that this information could be just as important as that derived from reading message texts. He also understood the critical need to establish intercept stations to collect Japanese naval signals, and he was the inspiration behind the creation of OP-20-G's Pacific Ocean collection network.

(U) In 1935 Wenger returned to Washington to take charge of the research section (OP-20-GY) of the Navy's nascent communications intelligence organization. While in this position, he helped launch the Navy's effort in the field of machine processing and aided in the development and refinement of cipher devices which were adopted by the U.S.

Navy.

(U) Shortly after the outbreak of World War II, Wenger was once again in Washington in the headquarters of OP-20-G. He was instrumental in designing the plan for the reorganization of the naval COMINT structure which was completed in February 1942. This reorganization was a significant attempt to change the nature of OP-20-G from a decentralized operation to a centralized one. Wenger emerged as the deputy of OP-20-G and as such provided a technical continuity which lasted throughout the war.

(U) At the end of the war, Wenger worked to insure the continuity of the Navy's cryptologic efforts, threatened by demobilization, by retaining experienced personnel and promoting a reservoir of reservists. Wenger also strongly supported the creation of a company, Electronic Research Associates of St. Paul, Minnesota, which helped lay the foundations for the modern computer industry. In the late 1940s, he initiated a computer-based research project which became the first project undertaken by International Business Machines (IBM) for the U.S. government.

(U) Captain Wenger became a deputy director for COMINT of the Armed Forces Security Agency in 1949 and also served as the deputy coordinator of joint operations for the United States Communications Intelligence Board (USCIB). When the National Security Agency was established in 1952, Wenger became its vice-director in December of that year.

(U) In 1953 Admiral Wenger received the National Security Medal from President Eisenhower for his planning and organizational work in communications research. He served as director of communications-electronics on the Joint Staff of the United States European Command and as coordinator of both U.S. and NATO communications electronics plans and programs. In 1956 he was appointed director of communications electronics for the Joint Chiefs of Staff, and in 1957 he was designated as the chairman and U.S. member of the Communications-Electronics Board, Standing Group, NATO.

(U) After his retirement from the Navy in 1958, Wenger continued to serve as a member of NSA's Scientific Advisory Board. He was also a technical consultant for RCA and Syracuse University Research Corporation. His professional involvement in cryptology ended only with his death in 1970.

[(U//~~FOUO~~) Thomas R. Johnson, Center for Cryptologic History]

UNCLASSIFIED//FOR OFFICIAL USE ONLY