

United States Holocaust Memorial Museum Archives
Finding Aid
RG-10
Small collections
(July 31, 2006)

RG-10.228;
ACC. 1995.A.300:

Title: The Samuel and Irene Goudsmit collection, 1944-1985 (bulk 1944-1945).

Extent: 8 folders, .5 linear feet, (1 Holinger box).

Provenance: Rene C. Grosser and Michael S. Issacs, executors for the estate of Samuel and Irene Goudsmit, donated the collection to the United States Holocaust Memorial Museum on 4 February 1995.

Biography: Samuel Abraham Goudsmit was born in The Hague, Netherlands on July 11, 1902. His mother, Marianne Gompers Goudsmit, ran a millinery shop and his father, Isaac, was a wholesale dealer in bathroom fixtures. Goudsmit studied theoretical physics at the University of Leiden (1919-26), did experimental research at the University of Amsterdam (1923-26), and received his Ph.D. in physics from Leiden in 1927. In that year he married Jaantje Logher and immigrated to the United States.

His first position in his adopted country was on the physics faculty at the University of Michigan. He remained there until World War II when he joined the staff of the Radiation Laboratory at the Massachusetts Institute of Technology. From 1944 to 1946, he was detailed to the War Department as Chief of Scientific Intelligence of the Alsos Mission, which moved with the advancing Allied forces in Europe to investigate the German atomic bomb project. After the war Goudsmit was a professor of physics at Northwestern University (1946-48) and then became senior scientist at Brookhaven National Laboratory (1948-70). He served as the Managing Editor and later Editor-in-Chief of the American Physical Society (1951-74), founding its Physical Review Letters in 1958. From 1975 until his death he was a Visiting Professor at the University of Nevada, Reno.

The discovery of electron spin in 1925 with fellow student George E. Uhlenbeck is generally considered Goudsmit's most significant contribution to physics. It led to the recognition that spin was a property of protons, neutrons, and most elementary particles and to a fundamental change in the mathematical structure of quantum mechanics. For their groundbreaking work, they received Research Corporation Awards in 1953, Max Planck Medals in 1964, U.S. National Medals of Science in 1976, and were made Commanders in the Royal Netherlands Order of Orange-Nassau in 1977. Goudsmit also made the first measurement of nuclear spin and its Zeeman effect with Ernst Back (1926-27), developed a theory of hyperfine structure of spectral lines, made the first spectroscopic determination of nuclear magnetic moments (1931-33), contributed to the theory of complex atoms and the theory of multiple scattering of electrons, introduced the statistical random line problem (1940), and invented the magnetic time-of-flight mass spectrometer (1948).

Goudsmit was the recipient of many other awards and fellowships, lectured around the country and abroad, was a Visiting Professor at a number of universities, including Harvard University and Rockefeller University, and was the author of The Structure of Line Spectra with Linus Pauling (1930), Atomic Energy States with Robert F. Bacher (1932), Alsos (1947), Time with R. Claiborne and the editors of *Life* Magazine (1966), and numerous articles and editorials.

Goudsmit had one daughter from his first marriage, Esther Marianne, and in 1960 married Irene Bejach. He died in 1978.

The majority of the collection concerns the establishment and building of the Nazi *Jägerstab*.

The *Jägerstab* [fighter command] was established on March 1, 1944. Planned as a temporary solution, it brought together representatives of the airplane industry, and specialists from the departments of the Reichsluftfahrtministerium [Reich Air Ministry] and the Ministerium für Rüstung und Kriegsproduktion [Ministry for Arms and War Production]. Albert Speer was one of the members. The construction of bomb proof underground production facilities for vital industries had top priority. Hitler was very enthusiastic about the idea, ordering "a massive movement of the German industry to underground locations."

In spite of the fact that the whole idea (at that point in the war) was unrealistic, underground production facilities (totaling three million square meters) were planned. The project was to be completed by the beginning of 1946. In the Third Reich and the occupied countries the search for suitable locations started; mine shafts, caves, stone quarries, and auto and subway tunnels became objects of interest. In spite of the endless lists of suitable places, only a few could provide industry with the conditions they were looking for. So while the lists became shorter and shorter, the notion was born to construct specially equipped bunkers.

To fulfill the requirements of industry, the bunkers had to be located near rivers, canals and railways, as well as near gravel pits for the production of concrete. Hitler again asked for support for the underground movement. He also formulated a list of demands; one was that the bunkers had to be built on an immense scale: 60,000 to 80,000 square meters for each bunker. On the drawing board they had six to eight floors and were partially underground. Six bunkers were to be completed in seven months.

Restrictions on access: No restrictions on access.

Restrictions on use: No restrictions on use.

Summary: The collection consists of typescript and handwritten originals and tissue copies of miscellaneous correspondence in German and English, circa 1944-1945. Includes but is not limited to the following: letters, directives, memorandums, drawings, annotated maps, telegrams, etc., which relate to the Nazis constructing underground installations in Germany and Austria using slave, forced, and POW labor (the *Jägerstab*).

In addition, there are some documents relating to medical experiments performed by German physicians in Nazi concentration camps.

Organization and Arrangement: Thematic. Organized into the following series: Series 1: War souvenirs and Nazi trophies. Series 2: The *Jägerstab*. Series 3: Quedlinburger Castle. Series 4: Nazi cold-water experiments on humans.

Language: Primarily German with some English.

Preferred Citation: Standard citation for the United States Holocaust Memorial Museum.

Inventory:

Series 1: War souvenirs and Nazi Trophies.

RG-10.228*01

Folder 1: Handbill of Shukow's and Kurasow's order of the Day #2 dated 10 June 1945, terminating all Nazi organizations and rallies.

Two empty envelopes bearing cancellations and seals from Himmler's office, addressed to Prof. Gerlach.

Two unaddressed envelopes from Goering's office.

Allied aerial-bombardment propaganda handbill encouraging foreign workers on German soil to sabotage.

Blank certificate bestowing the Nazi War Service Cross First Class.

5 gummed correspondence seals from Himmler's office.

Yellow-cloth Jewish star of Dutch origin (transferred to art and artifacts).

Adolf Hitler's personal bookplate (unused, unmounted).

8 blank pages of Goering's letterhead.

Allied propaganda flyer (British?) attesting to the efficacy of RAF bombardments.

Series 2: Jägerstab.

RG-10.228*02

Folder 2: Approximately 120 pages of correspondence from, to, or concerning Fegelein, Muller, Speer, Milch, Sauer, Bischoff, Kammler, Pohl, Leeb, Himmler, and Geist relating to the production of *Jägerstab*.

Folder 3: Progress reports of the *Jägerstab* and charts quantifying production output.

Approximately 20 pages of correspondence between Pohl and Brandt concerning the use of concentration camp inmates for the building of underground facilities.

Folder 4: Approximately 20 pages of correspondence regarding aircraft production and weapons testing at the underground sites.

Folder 5: Approximately 30 pages of correspondence concerning the “Quarz” project, together with detailed color maps of the underground installations employing slave labor for a variety of industrial projects.

Folder 6: Approximately 40 pages of correspondence between Himmler, Borman, Pohl, Kammler, Milch, and Ohnesorge concerning raw materials for weapons manufacture and the building of tunnels and caves.

New York *Times* article, dated 3 November 1985, concerning the Nazi’s nuclear weapons program in the tunnels.

Series 3: Quedlinburger Castle.

RG-10.288*03

Folder 7: Approximately 30 pages of correspondence concerning the Quedlinburg castle and its use by the Napola Ilfeld Institute for the education of young Nazis, together with detailed floor plan and map of the castle.

Series 4: Nazi cold-water experiments on humans.

RG-10.288*04

Folder 8: 228 page U.S. Army G-2 (Intelligence) report concerning Nazi cold-water experiments on humans titled, The Treatment of Shock From Prolonged Exposure to Cold, Especially in the Water.

Approximately 50 pages of correspondence and reports between G-2 branches concerning the same.