



Smithsonian

National Air and Space Museum

Rolf Engel Collection

Jessamyn Lloyd, 2008; revised and updated by Elizabeth Borja, 2022

2022

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Collection Overview

Repository:	National Air and Space Museum Archives
Title:	Rolf Engel Collection
Date:	(bulk 1935-1936) 1930-1974
Identifier:	NASM.XXXX.0856
Creator:	Engel, Rolf.
Extent:	0.79 Cubic feet (2 document boxes)
Language:	German .
Summary:	In 1928, along with Wernher von Braun, Rolf Engel joined the newly formed Berlin Section of the Verein Für Raumschiffahrt (German Rocket Society), where he participated in liquid propellant rocket experiments at the Raketenflugplatz (Rocket Airfield) with people like Rudolf Nebel, Willy Ley, Klaus Riedel and von Braun. Engel also worked as chief technical assistant to Johannes Winkler, who launched the HW-1 rocket on February 20, 1931 at a military parade ground near Dessau. This event represented the first launching of a liquid propellant rocket by someone other than Robert Goddard. This collection consists of files for eight different projects related to rockets conceived by members of the Verein für Raumschiffahrt, including Hermann Oberth, Rudolf Nebel, Franz Mengerling, Reinhold Tiling, Johannes Winkler and some unattributed work.

Administrative Information

Acquisition Information

Rolf Engel, Gift, 1965, NASM.XXXX.0856

Processing Information

Arranged and described by Jessamyn Lloyd, 2008; revised and encoded by Elizabeth Borja, 2022.

Preferred Citation

Rolf Engel Collection, Acc. NASM.XXXX.0856, National Air and Space Museum, Smithsonian Institution.

Restrictions

No restrictions on access.

Conditions Governing Use

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Biographical / Historical

Rolf Engel was born on August 10, 1912 in Menz/Ruppin, Germany. In 1928, along with Wernher von Braun, Engel joined the newly formed Berlin Section of the Verein Für Raumschiffahrt (German Rocket Society), where he participated in liquid propellant rocket experiments at the Raketenflugplatz (Rocket Airfield) with people like Rudolf Nebel, Willy Ley, Klaus Riedel and von Braun. Engel also worked as chief technical assistant to Johannes Winkler, who launched the HW-1 rocket on February 20, 1931 at a military parade ground near Dessau. This event represented the first launching of a liquid propellant rocket by someone other than Robert Goddard. From 1932 to 1935, Engel founded two research groups, Research Institute for Rocket Technology and Versuchsabteilung (Experimental Department), but they were short-lived due to lack of funding. In 1939, Engel was named technical director of Versuchsanstalt Für Strahltriebwerke (Research Center for Jet Engines) where work primarily focused on the development of fin-stabilized, solid propellant liquid rockets.

During World War II, Engel was a member of the Ministry of Armament's Commissions on Ammunition, Armament, and Ballistic Missiles and also a member of the Reichsforschungsrat (National Research Council). From August 1944 to April 1945, he served as the head of the test division of Waffen-Union Skoda-Brunn in Pibrans, Czechoslovakia. From 1946 to 1952, Engel worked in France as a consultant for ONERA (Office National d'Etudes et de Recherches Aéronautiques). From 1952 to 1957, he worked in Egypt advising the Egyptian Air Force as Director of CERVA (Compagnie des Engines à Réaction pour Vol Accélééré). From 1957 to 1962, Engel lived in Rome, Italy and served as a consultant to various guided missile manufacturers including SISPRE (Societa Italiana per lo Studio della Propulsione a Reazione) and Bombrini Parodi-Delfino. In 1962, Engel returned to Germany where he was named Director of the newly-formed space division of the Messerschmitt-Boelkow-Blohm (MBB) consortium in Munich. In 1971, Engel retired from active professional life for health reasons, although he published several books throughout the 1970s and 1980s. Rolf Engel died in 1993 at the age of 81.

Scope and Contents

This collection consists of files for eight different projects related to rockets conceived by members of the Verein für Raumschiffahrt (Germany Rocket Society), including Hermann Oberth, Rudolf Nebel, Franz Mengerling, Reinhold Tiling, Johannes Winkler and some unattributed work. The rockets discussed in the project files include Mirak and Doppelstaber (this may be another name for the Repulsor), as well as several other types. The files contain drawings, notes, and photographs. All materials are in German.

There are also several folders of National Air and Space Museum-generated copy photography and a set of photocopies of many of the images.

Arrangement

This collection is arranged in two series: Project Files and NASM Copy Photography. The first series, Project Files, contains drawings, notes, and photographs of Verein für Raumschiffahrt rocket projects and is arranged by project number. The second series, NASM Copy Photography, contains copy photographs, notes, and captions for materials from the Rolf Engel collection, generated by the National Air and Space Museum.

Names and Subject Terms

This collection is indexed in the online catalog of the Smithsonian Institution under the following terms:

Subjects:

Astronautics
Mirak Research Rocket (Germany, 1930s)
Repulsor Research Rocket (Germany, 1931)
Rockeyry
Rockets (Aeronautics)
Space flight

Types of Materials:

Photographs
Technical drawings
Technical notes

Names:

Oberth, Hermann, 1894-1989
Tiling, Reinhold, 1893-1933

Container Listing

Series 1: Project Files

Scope and Contents: This series contains drawings, notes, and photographs of Verein für Raumschiffahrt rocket projects and is arranged by project number.

Box 1, Folder 1	Project No. 939-1 Rak.1 Oberth, 1927-1935
Box 1, Folder 2	Project No. 939-2 Mirak-Nebel, 1929-1935
Box 1, Folder 3	Project No. 939-3 Doppelstaber/Nebel, 1929-1935
Box 1, Folder 4	Project No. 939-4 1L/3L/10L Nebel, 1930-1935
Box 1, Folder 5	Project No. 939-5 Furerwork Z [Firework], 1943-1944
Box 1, Folder 6	Project No. 939-6 Winkler HW2 HWIC, 1930-1935
Box 1, Folder 7	Project No. 939-7 M2 (Mengering), 1936
Box 1, Folder 8	Project No. 939-8 Tiling Bordrakete, 1930-1933
Box 1, Folder 9	Unnumbered Project Material, 1930-1944

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Series 2: NASM Copy Photography

Scope and Contents: This series contains copy photographs, notes, and captions for materials from the Rolf Engel collection, generated by the National Air and Space Museum and organized by subject.

Box 1, Folder 10	Image Photocopies
Box 1, Folder 11	Envelope: Extra Copies of Photos of the Rolf Engel Photos of Austrian Stick and Hale Rocket Launches
Box 1, Folder 12	Envelope: Reinhold Tiling, Johannes Winkler
Box 1, Folder 13	Envelope: Reinhold Tiling, VFR [Verein für Raumschiffahrt, German Rocket Society], Winkler
Box 2, Folder 1	Photo Captions, 1974
Box 2, Folder 2	Mirak
Box 2, Folder 3	Nebel
Box 2, Folder 4	Oberth/UFA [Universum Film AG]
Box 2, Folder 5	Raketenflugplatz
Box 2, Folder 6	Tiling Bordrakete
Box 2, Folder 7	Winkler
Box 2, Folder 8	Miscellaneous

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