



Smithsonian

National Air and Space Museum

James Hart Wyld Collection

Kate Igoe and Jessamyn Lloyd, 2006; Isaac Middleton, 2019

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Collection Overview

Repository:	National Air and Space Museum Archives
Title:	James Hart Wyld Collection
Date:	(bulk 1930-1939)
Identifier:	NASM.2005.0051
Creator:	Wyld, James Hart.
Extent:	0.5 Cubic feet (2 Boxes)
Language:	English .
Summary:	A collection of items attributed to rocket pioneer James Hart Wyld dating from the 1930s and 1940s. The collection consists of two boxes, with one containing notes and prints attributed to Wyld and the other containing original negatives.

Administrative Information

Acquisition Information

Anne W. Blizard, Gift, 2005, NASM.2005.0051

Related Materials

The American Rocket Society's Rocket Test Stand No. 2 is featured in negatives present in this collection. More information concerning this artifact can be found at [American Rocket Society's Rocket Test Stand No. 2](#).

Preferred Citation

James Hart Wyld Collection, Accession 2005-0051, National Air and Space Museum, Smithsonian Institution.

Restrictions

No restrictions on access.

Conditions Governing Use

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Biographical / Historical

Rocket pioneer James Hart Wyld was born in 1913 and received a degree in Mechanical Engineering from Princeton University in 1935. He joined the American Interplanetary Society (later the American Rocket Society) in 1931. In the late nineteen thirties, Wyld developed and tested the first modern liquid-propellant rocket motors. In 1941 he, along with John Shesta, Lovell Lawrence, Jr., and Hugh Franklin Pierce, formed Reaction Motors, Inc. (RMI), the first US rocket propulsion company.

Scope and Contents

This collection consists of approximately 140 black-and-white negatives (28 35mm strips of 8 frames each, seven 35mm strips of 2 frames each, and six 3.5 x 6 inch sheets), predominantly taken by James H. Wyld, of American Rocket Society meets and rocket tests and an Elmira, New York, glider meet, and images taken by Wyld on various trips around the New York City area and elsewhere. Buildings, engineering projects, and landscapes pictured include the Lincoln Tunnel and the Triborough Bridge (under construction), the Empire State Building, Central Park, Gilgo Beach and Long Beach (Long Island), Port Washington, Fire Island, the 1939 World's Fair in Flushing Meadows, the Vanderbilt Cup races in Mineola, New Rochelle, Cornwall, and the Catskills, all in New York. Also included are images taken in Princeton, New Jersey; Connecticut; Mount Washington, New Hampshire; and Massillon, Ohio. Individuals pictured include Frank Harrison, Albert Rice, and Bill Baum. The collection also consists of Wyld's personal papers including a diary covering the period of February 1931 to May 1936; a 1932 scientific notebook; two photographs of rocket test activities; a post card addressed to Wyld from "John" (possibly John Shesta) referencing a postponement; a portrait of James Wyld; handwritten report, "An Automatic Thrust and Mixture Control for Rocket Motors," 1946. an envelope full of information relating to a court case involving the American Society of Mechanical Engineers; a Princeton University Alumni Lectures pamphlet entitled America's Problem of National Defense by Professor Harold Sprout; five newspaper clippings related to rockets; an undated letter, missing the first page, to Wyld from Bernard E. "Ben" Smith regarding rocket testing; two letters, dating from 1938-1939, from Wyld to "John" (possibly John Shesta) regarding rocket testing; a report entitled Long Range Rocket, Section II (Propellant Systems) by Dr. Paul F. Winternitz, Director of Laboratories, Reaction Motors, Inc.; "Proposal for Unguided Liquid-Propellant Rocket Projectile" by an unknown author, possibly Wyld; two drawings of rockets; three pages of notes handwritten by Wyld, and a letter from Albert M. Paquin to the American Rocket Society, with handwritten comment attached, regarding financial assistance from the Society for rocket research. In addition, the collection contains a memo to Wyld regarding Reaction Motors, Inc. stock prices; and Wyld's handwritten notes and drawings entitled, "The Design of Streamline Hulls and Fins for Rockets," "The Nature of Rocket Flight" (noted as draft of Chapter IV of Introduction to Rocketry), "Pumping Mechanism" (appears to be missing pages), "Superchargine Airplane with Oxygen," and six additional pages of miscellaneous notes and drawings. Some pages of the notes have been initialled and noted by Shesta and Lawrence.

Names and Subject Terms

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

Subjects:

- Astronautics
- Rocket engines
- Rocketry
- Rockets (Aeronautics) -- Performance

Types of Materials:

- Negatives

Names:

- American Rocket Society

Container Listing

Box 1, Folder 1	Report and Lecture, (bulk 1930-1943) Language: English. Notes: A pamphlet containing a lecture by Professor Harold Scott entitled 'America's Problem of National Defense' The lecture was published by Princeton University in 1939. Also included in the folder is a document by Dr. Paul F. Winternitz entitled 'Long Range Rocket, Section II. (Propellant Systems). Topic: Rockets (Aeronautics) -- History
Box 1, Folder 2	Diary, (bulk 1931-02-10-1939-05) Language: English. Notes: A diary of Wyld's that is dated from the 10th of February, 1931 to May 1936. Topic: Rockets (Aeronautics) -- History
Box 1, Folder 3	Photographs, 1935 (bulk 1930-1943) Language: English. Notes: A collection of three prints. The first is a portrait of Wyld and is held with tape to a cardboard frame, the joining of which is fragile. The second depicts the launching of a V-2 rocket. The third is labeled as depicting the flight of a mail rocket at Greenwood Lake, New York in 1935. Topic: Rockets (Aeronautics) -- History
Box 1, Folder 4	Clippings, (bulk 1930-1943) Language: English. Notes: A collection of newspaper clippings covering the development of rocket propulsion systems in aviation. Topic: Rockets (Aeronautics) -- History
Box 1, Folder 5	Notes and Notebook, (bulk 1930-1943) Language: Text is in English and German. Notes: A collection of handwritten and typed notes by Wyld. The folder is made up of loose sheets of note paper and a single notebook. Topic: Rockets (Aeronautics) -- History
Box 1, Folder 6	Correspondence, (bulk 1930-1943) Language: English. Notes: A collection of Wyld's written correspondence to various individuals. Also included in the folder is an envelope containing pamphlets regarding the A.S.M.E petition to the Supreme Court in 1939. Topic: Rockets (Aeronautics) -- History
Box 1, Folder 7	Brown Notebook, (bulk 1943-03-20) Language: English.

	Notes:	A notebook containing notes taken by Wyld. The binding of the pages to the spine is fragile. Notebook states it begins on the 20th of March, 1943 but provides no end date.
	Topic:	Rockets (Aeronautics) -- History
Box 2, Folder 1	Photo Folder 1, (bulk 1930-1943)	
	Language:	English.
	Notes:	The folder contains a collection of negatives described as depicting various rocket meets during the 1930s. Also included are Princeton University Store photo envelopes which include Kodak advertisements.
	Topic:	Rockets (Aeronautics) -- History
Box 2, Folder 2	Photo Folder 2, (bulk 1930-1943)	
	Language:	English.
	Notes:	A collection of negatives depicting Glider meets during the 1930s. The negatives exist in strips within labeled paper.
	Topic:	Gliders
Box 2, Folder 3	Photo Folder 3, (bulk 1930-1943)	
	Language:	English.
	Notes:	A collection of negatives depicting Wyld and his family's personal outings. The negatives exists in strips, eighteen of which are contained in labeled paper wallets.
Box 2, Folder 4	Photo Folder 4, (bulk 1930-1943)	
	Language:	English.
	Notes:	Contains negatives depicting rocket test stands used by the American Rocket Society. The negatives are contained within labeled envelopes inside the folder. Included also are two paper scans of the negatives.
	Topic:	Rockets (Aeronautics) -- History