



Smithsonian

National Air and Space Museum

Vornado Plane Material [Ralph K. Odor]

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National Air and Space Museum Archives
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Collection Overview

Repository:	National Air and Space Museum Archives
Title:	Vornado Plane Material [Ralph K. Odor]
Date:	1929-1986 (bulk 1930s)
Identifier:	NASM.2016.0012
Creator:	Odor, Ralph K., 1895-1987.
Extent:	0.54 Cubic feet (1 box, 1 reel, and 1 DVD)
Language:	English .
Summary:	Ralph K. Odor (1895-1987) was an inventor who conceived an aircraft design in the 1920s in which the air was pushed from a propeller into a tube, later named the Vornado Plane. This collection consists of approximately 0.54 cubic feet of material relating to Ralph K. Odor and the Vornado Plane.

Administrative Information

Acquisition Information

Donald Morris, Gift, 2016, NASM.2016.0012

Processing Information

Arranged and described (2016), updated, and encoded (2020) by Jessamyn Lloyd.

Preferred Citation

Vornado Plane Material [Ralph K. Odor], NASM.2016.0012, National Air and Space Museum, Smithsonian Institution.

Restrictions

No restrictions on access.

Conditions Governing Use

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Biographical / Historical

Ralph K. Odor (1895-1987) was an inventor who conceived an aircraft design in the 1920s in which the air was pushed from a propeller into a tube. A small model of the aircraft was tested in 1929. In 1932, Odor was invited to work with the Oklahoma Agricultural and Mechanical College, Oklahoma Engineering Experiment Station (Project No. 26), to further develop his propeller assembly concept and it was there that the name "Vornado Plane" was born. Odor filed a patent on his propeller assembly in 1934, which was approved in

1938. The Vornado Trust was formed in 1935 to handle all legal and financial aspects of the Vornado Plane and Vornado principle. In 1936, Odor began to work with Kern Dodge, a mechanical engineer and member of the Vornado Trust. Additional testing was conducted on using the Vornado principle for air circulation and by 1938, the concept of the Vornado Plane was put aside to focus on using the technology for fans. Additional patents were granted to this end in the late 1930s and early 1940s. In 1939, the Vornado Trust contracted with the Propellair company to produce fans using Odor's principles, however these plans were derailed by World War II.

Scope and Contents

This collection consists of approximately 0.54 cubic feet of material relating to Ralph K. Odor and the Vornado Plane including photographs; news clippings; technical reports and drawings; patents; legal documents; test reports; documents outlining the history of the Vornado Plane's development; and correspondence. Also included are two CDs which hold scans (made by the donor) of some of the textual and photographic materials contained in the collection as well as a 16mm film showing a test of a Vornado Plane scale model at the Oklahoma Agricultural and Mechanical College, and a copy of the film on DVD.

Arrangement

Collection is arranged by type of material.

Names and Subject Terms

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

Subjects:

- Aerodynamics
- Aeronautics

Types of Materials:

- Motion pictures
- Patents
- Photographs
- Reports
- Technical drawings

Container Listing

Box 1, Folder 1	Notebook 1 [Folder 1 of 2]
Box 1, Folder 2	Notebook 1 [Folder 2 of 2]
Box 1, Folder 3	Notebook 2 (Legal Book 1)
Box 1, Folder 4	Discs with Scans from Notebook 1 and Notebook 2 (Legal Book 1)
Box 1, Folder 5	Test Reports
Box 1, Folder 6	Information on the History of the Vornado Plane
Reel 1	Film of Vornado Plane Scale Model Test
Video 1	Copy of Film on DVD