



# Smithsonian

*National Air and Space Museum*

## Japanese World War II Balloon Bombs Collection

Elizabeth C. Borja

2018

National Air and Space Museum Archives  
14390 Air & Space Museum Parkway  
Chantilly, VA 20151  
NASMRefDesk@si.edu  
<https://airandspace.si.edu/archives>

# Table of Contents

Collection Overview .....	1
Administrative Information .....	1
Scope and Contents.....	2
Biographical / Historical.....	1
Arrangement.....	2
Names and Subjects .....	2
Container Listing .....	3

## Collection Overview

<b>Repository:</b>	National Air and Space Museum Archives
<b>Title:</b>	Japanese World War II Balloon Bombs Collection
<b>Date:</b>	1860-1988 (bulk 1945-1983)
<b>Identifier:</b>	NASM.XXXX.0558
<b>Creator:</b>	Mikesh, Robert C.
<b>Extent:</b>	1.51 Cubic feet (3 legal document boxes)
<b>Language:</b>	Collection is in English and Japanese.
<b>Digital Content:</b>	<a href="#">Image(s): Japanese World War II Balloon Bomb Collection</a>

---

## Administrative Information

### Acquisition Information

NASM Generated, Transfer, unknown, NASM.XXXX.0558.

### Processing Information

Arranged, described, and encoded by Elizabeth C. Borja, 2018.

### Preferred Citation

Japanese World War II Balloon Bombs Collection, Acc. XXXX.0558, National Air and Space Museum, Smithsonian Institution.

### Restrictions

No restrictions on access

### Conditions Governing Use

Material is subject to Smithsonian Terms of Use. Should you wish to use NASM material in any medium, please submit an Application for Permission to Reproduce NASM Material, available at [Permissions Requests](#)

---

## Biographical / Historical

During World War II the Japanese constructed nearly 10,000 lighter-than-air balloons for the purpose of carrying destructive pay loads to the U.S. Between November 1944 and April 1945 these balloons made use of the prevailing west-to-east jet stream over the North Pacific Ocean. Nearly 285 sightings and fragment findings have been recorded in North America, and 5 deaths resulted. This was the first and only attack upon the American continent directly from an enemy homeland.

---

## Scope and Contents

This collection was gathered by National Air and Space Museum curator Robert C. Mikesch for his publication on this subject, "Japan's World War II Balloon Bomb Attacks on North America." The collection consists of the following: magazine and newspaper articles on the Japanese balloons; manuscripts and independent articles; 83 photos Mr. Mikesch used in his book and 68 miscellaneous photos collected for research purposes; also photocopies of Japanese balloon illustrations and Japanese balloon propaganda reports. The collection also includes the working files of Kiyoshi Tanaka, the Supervisor Technical Lieutenant Commander for the Japanese Navy balloon project, and multiple copies of Mr. Mikesch's publication.

---

## Arrangement

The collection is arranged as originally numbered and titled by Robert C. Mikesch. Additional folder title information has been added by the processing archivist in brackets.

---

## Names and Subject Terms

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

Subjects:

- Aeronautics
- Aeronautics, Military
- Air defenses
- Air defenses -- United States
- Balloons
- World War, 1939-1945

Types of Materials:

- Clippings
- Manuscripts
- Photographs
- Publications
- Reports

Names:

- Japan. Navy
- Mikesch, Robert C.
- Tanaka, Kiyoshi

---

## Container Listing

Box 1, Folder 1	1. Finders Aid - Balloon Bomb, 1988
Box 1, Folder 2	2. Magazine Articles, 1945-1988
Box 1, Folder 3	3. Balloon Bomb Book - Master Copy. [Mikesh, Robert C. Japan's World War II Balloon Bomb Attacks on North America. Master Copy], 1973
Box 1, Folder 4	4. News Clippings, 1905-1977
Box 1, Folder 5	5. Japanese Language Accounts, 1946-1985 Language: Japanese.
Box 1, Folder 6	6. Exhibit of Balloon Bomb Device [National Air and Space Museum's Balloon Bomb Control Device Exhibit in Japan], 1974-1975 Language: Japanese.
Box 1, Folder 7	7. Manuscripts, 1964-1978 Notes: Mikesh, Robert C. with Chris Cross. 1965. The World's First Intercontinental Missiles. Mikesh, Major Robert C., USAF (Ret.) undated. Japan's Paper Balloon Bomb. Higham, Robin. 1978. Draft Article and Correspondence.
Box 1, Folder 8	8. Miscellaneous Reference Sources, 1903-1987
Box 1, Folder 9	9. Fragments of Balloon Material [and Reports], 1945-1972
Box 1, Folder 10	10. Photographs - Album and Miscellaneous [Folder 1 of 2], 1860-1974
Box 2, Folder 1	10. Photographs - Album and Miscellaneous [Folder 2 of 2], 1860-1974
Box 2, Folder 2	11. Working Files of K. Tanaka [Kiyoshi Tanaka], 1940-1975
Box 2, Folder 3	12-1. Japanese Free Balloons, Control Devices, 1945 Notes: Guggenheim Aeronautics Laboratory, California Institute of Technology. April 4, 1945. Japanese Free Balloons, Control Units. Analysis of Operations and Construction. [two copies]
Box 2, Folder 4	12-2. Study of Japanese Free Balloons, 1944-1945 Notes: Western Defense Command. November 4, 1944 - February 10, 1945 . Intelligence Study No. 1, A Study of Japanese Free Balloons and Related Incidents." [three copies]
Box 2, Folder 5	12-3. Japanese Balloon and Detachment Devices, 1945

	Notes:	Technical Air Intelligence Center (TAIC). May 1945. Report #41, Japanese Balloons and Attached Devices. [Wright Field Technical Document Library Number D52.8/125]  Air Technical Intelligence Group. November 23, 1945. Report No. 138, Japanese Balloon Bombs (Interview of Major General Kusaba and LTC Miizuma). [Wright Field Technical Document Library Number D72.31/721]
Box 2, Folder 6	<a href="#">12-4. Japanese Balloons, 1945-1946</a> Notes:	Weidner, George E. Office of the Chief Engineer, GHQ, Army Forces Pacific. January 2, 1946. Engineer Technical and Technical Survey, Japanese Bombing Balloons.  Fourth Air Force Historical Study No. III-2. 1945. Chapter X: Japanese Balloon.
Box 3, Folder 1	<a href="#">12-5. The Great Japanese Bomb Balloon Offensive, 1968</a> Notes:	Conley, Cornelius W. 1968. The Great Japanese Bomb Balloon Offensive." [two copies]
Box 3, Folder 2	<a href="#">12-6. Balloon Bomb, 1945-1951</a> Notes:	Kusaba, Sueki, and Kiyoshi Tanaka. Translated by Kiyoshi Tanaka. 1951. Amendment of Mr. T. Takada's Article on 'Balloon Bomb' in the Shizen (the Nature), Vol. 6, No. 1-3.  Notes in Japanese by Sueki Kusaba.  Takada, Teiji. Translated by Ken Suda. 1951. Balloon Bomb.  Takada Article in Japanese.  9th Military Laboratory. November 10, 1945. A Report on the Research of the Bombing Balloon.
Box 3, Folder 3	<a href="#">12-7. Documents - Misc., 1901-1975</a> Notes:	Arakawa, H. 1956. Basic Principles of the Balloon Bomb. Meteorological Research Institute, January.  Western Defense Forces, Situation Maps to Accompany Air Annex to G-2 Periodic Report No. 188.  Tatsu, Hirada, 1964. Paper-made ICBMs.  Summarized Translation in Koku-Fan. September 1964.  [Wiss, John.] Undated. Use of Differential Equations to Predict the Stability of a System: Japanese Balloon Missile.  Mikesh, Robert C. October 10, 1970. Interview - Dr. Clarence S. Ross, Retired U.S. Geological Survey.  Rand, James L. 1975. Superpressure Balloon Loads.  Nishimura, Jun, and Haruto Hirose. 1970. Recent Activities of Scientific Ballooning in Japan.  Japanese Explosive Ordnance (Bombs, Bomb, Fuzes, Land Mines, Grenades, Firing Devices, and Sabotage Devices), TM 9-1985-4/TO 39B-1A-11. 1953. [selected pages]

Balloons, Manned, Early 1900s, Miscellaneous References,  
1901-1902.

Box 3, Folder 4

13. Extra Copies - Japan's World War II Balloon Bomb Attacks on North  
America [four copies], 1973