



Smithsonian Institution Archives

## Soviet Space Medicine Videohistory Collection, 1989

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## Collection Overview

<b>Repository:</b>	Smithsonian Institution Archives, Washington, D.C., <a href="mailto:osiaref@si.edu">osiaref@si.edu</a>
<b>Title:</b>	Soviet Space Medicine Videohistory Collection
<b>Identifier:</b>	Record Unit 9551
<b>Date:</b>	1989
<b>Extent:</b>	6 videotapes and 1 audiotape (Reference copies). 7 digital .wmv files and .rm files (Reference copies).
<b>Creator::</b>	
<b>Language:</b>	English

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## Administrative Information

### Preferred Citation

Smithsonian Institution Archives, Record Unit 9551, Soviet Space Medicine Videohistory Collection

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## Historical Note

The Institute for Biomedical Problems (Institut mediko-biologicheskikh problem, IMBP) was founded in 1963 to undertake the study of space medicine. It is located in Moscow, USSR, and consists of a Primate Space Flight Training Center, research laboratories and a small museum.

Oleg Gazenko attended The Second Moscow Medical School and The Military Medical Academy in Leningrad. He was a director of the IMBP (1967-1987) and was a specialist in gravitational physiology. He was a member of the first group of Soviet scientists to study the gravitational effects of acceleration and weightlessness on-board Soviet sounding rockets in the late 1940s and early 1950s. Gazenko participated in cooperative projects with the Life Sciences Division of the National Aeronautics and Space Administration (NASA), and oversaw preparation and evaluation of cosmonauts for long duration spaceflights.

Abram Moiseevich Genin attended The Second Moscow Medical School and The Central Institute for Advanced Training of Doctors in Moscow. A specialist in biophysics, Genin's early work dealt with biophysical problems of aviation, especially the mechanics of decompression disease. Genin also worked on the factors of life support in space: cabin pressure, weightlessness, and gravitational effects on the blood circulation.

Evgenii Shepelev attended The Second Moscow Medical School and specialized in the physiological effects of artificial environments. This work was essential for the successful execution of the Soviet space station program and would be critical for sending people to Mars. Shepelev used himself as the subject of the first Soviet isolation experiments in the late 1950s and early 1960s.

Irina Gireeva and Vladimir Magedov were also interviewed. Gireeva was an animal technician at the center; Magedov directed computer operations in the building.

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## Introduction

The Smithsonian Videohistory Program, funded by the Alfred P. Sloan Foundation from 1986 until 1992, used video in historical research. Additional collections have been added since the grant project ended. Videohistory uses the video camera as a historical research tool to record moving visual information. Video works best in historical research when recording people at work in environments, explaining artifacts, demonstrating process, or in group discussion. The experimental program recorded projects that reflected the Institution's concern with the conduct of contemporary science and technology.

Smithsonian historians participated in the program to document visual aspects of their on-going historical research. Projects covered topics in the physical and biological sciences as well as in technological design and manufacture. To capture site, process, and interaction most effectively, projects were taped in offices, factories, quarries, laboratories, observatories, and museums. Resulting footage was duplicated, transcribed, and deposited in the Smithsonian Institution Archives for scholarship, education, and exhibition. The collection is open to qualified researchers.

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## Descriptive Entry

Cathleen S. Lewis, curator at the Smithsonian's National Air and Space Museum (NASM), interviewed Oleg Gazenko, Evgenii Shepelev, and Abraham Genin about their research and participation in the Soviet aviation and space medicine program prior to 1964, as well as their work at the Institute. Lewis was primarily interested in documenting early work in the fields of aviation and space medicine. She also visually documented museum exhibits about the Institute's work in space exploration.

Session one took place at the museum of The Institute for Biomedical Problems. Cathleen Lewis and Andreas Tamberg (interpreter) conducted a group discussion with Gazenko, Genin, and Shepelev. In session two, Gazenko narrated a tour of the museum gallery of IMBP, which showed the use of animals in space exploration. In session three, Genin narrated a tour of the museum gallery of manned space exploration, which documented the development of the spacesuit, parachute systems, and factors for life maintenance in space.

In session four, Gireeva and Magedov led tours in the Institute's Primate Space Flight Training Facility, where they discussed primate training and conditioning in preparation for space flight. Session five documented interior and exterior shots of IMBP, without narration. Finally, an audio interview with Shepelev described his work in space medicine.

This collection consists of five videotaped interview sessions, totalling approximately 5:00 hours of recordings and 86 pages of transcript. Also included is one audio interview, totaling approximately 1:15 hours of audiotape and 19 pages of transcript.

All sessions were conducted in Russian with some English translation. Sessions were transcribed verbatim in Russian and were then translated to English.

## Names and Subject Terms

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

Subjects:

- Astronautics
- Biology
- Interviews
- Oral history
- Research
- Science -- History
- Space medicine
- Technology -- History
- Women -- History

Types of Materials:

- Audiotapes
- Transcripts
- Videotapes

Names:

- Gazenko, O. G. (Oleg Georgievich)
- Genin, A. M. (Abram Moiseevich)
- Gireeva, Irina
- Institute for Biomedical Problems (Rossiiskaia akademiia nauk)
- Lewis, Cathleen S., 1958- , interviewer
- Magedov, Vladimir
- Primate Space Flight Training Facility (U.S.S.R.)
- Shepelev, Eugenii

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## Container Listing

### Interviews

Interviews

#### **Session 1: November 28, 1989**

Interviews

At the IMBP, Gazenko, Genin, and Shepelev discussed activities in space medicine, from early training to work at IBMP, c. 1940-1989, including: Biographical information on Gazenko, Genin, and Shepelev; early work in the fields of aviation and space medicine; transition from aviation to space medicine; human factors motivating aerospace medicine; experiments with the participants themselves as subjects; biological symptoms identified during early space flights; and planning for a Mars voyage. Visual documentation included: Group interaction and museum environment.

Interviews

Transcript, 1-47 pages, of videotape recording, 2 hours, 20 minutes.

Interviews

Video Recordings of Interviews: Total Recording Time: 2 hours, 20 minutes

Note:

- Original Masters: 7 Beta videotapes
- Preservation Masters: 7 Motion jpeg 2000 and 7 mpeg digital files
- Dubbing Masters: 3 U-matic videotapes
- Reference Copies: 2 VHS videotapes, 3 Windows Media Video and 3 Real Media digital files

Interviews

#### **Session 2: November 28, 1989**

Interviews

At the IMBP, Gazenko narrated a tour of the museum gallery showing the use of animals in space exploration, c. 1940-1989, including: Instrumentation for experiments with mice, rats, and dogs; prototype hermetic chambers; Earth landing equipment; canine flight clothing; rat cage and flight package; animal feeding and oxygen systems; Biosputnik Program; and agreements with NASA on research in space medicine. Visual documentation included: Museum gallery and artifacts listed above.

Interviews

Transcript, 11 pages, of videotape recording, 40 minutes.

Interviews

Video Recordings of Interviews: Total Recording Time: 40 minutes

Note:

- Original Masters: 2 Beta videotapes
- Preservation Masters: 2 Motion jpeg 2000 and 2 mpeg digital files
- Dubbing Masters: 1 U-matic videotape

- Reference Copies: 1 VHS videotape, 1 Windows Media Video and 1 Real Media digital files

Interviews **Session 3: November 29, 1989**

Interviews At the IMBP. Genin narrated a tour of the gallery on manned space exploration, c. 1960-1989, including: Development of spacesuit and parachute systems; problems of weightlessness; selection of cosmonauts; designing the cosmonauts' couch; experiments in cabin pressure; safety equipment for Soyuz missions; factors for life maintenance in space; and cooperation between the Institute and other organizations. Visual documentation included: Life-sized model space sphere; landing chairs; photographs of cosmonauts; cosmonauts' clothing; and training equipment.

Interviews Transcript, 1-19 pages, of videotape recording, 1 hour.

Interviews Video Recordings of Interviews: Total Recording Time: 1 hour

- Note:
- Original Masters: 3 Beta videotapes
  - Preservation Masters: 3 Motion jpeg 2000 and 3 mpeg digital files
  - Dubbing Masters: 1 U-matic videotape
  - Reference Copies: 1 VHS videotape, 1 Windows Media Video and 1 Real Media digital files

Interviews **Session 4: November 29, 1989**

Interviews At the IMBP's Primate Space Flight Training Facility. Gireeva and Magedov narrated a tour, c. 1989, including: Primate training and conditioning for space flight; the implantation of skull caps for physiological monitoring; cage areas; veterinary and surgical areas; training equipment; and data processing. Visual documentation included: Monkey training stations; monkey with sensor attached to head; operating room for implanting sensors; monkey flight chairs; and computers.

Interviews Transcript, 7 pages, of videotape recording, 20 minutes.

Interviews Video Recordings of Interviews: Total Recording Time: 20 minutes

- Note:
- Original Masters: 1 Beta videotape
  - Preservation Masters: 1 Motion jpeg 2000 and 1 mpeg digital files
  - Dubbing Masters: 1 U-matic videotape
  - Reference Copies: 1 VHS videotape, 1 Windows Media Video and 1 Real Media digital files

Interviews **Session 5: November 30, 1989**

Interviews Consisted of video images of the interiors and exteriors of the IMBP buildings, c. 1989, including: Front and rear exteriors of main building; views of the grounds; general views of museum galleries; display panels; close-ups of exhibit artifacts; and model showing future plans for Institute complex.

Interviews Transcript, 1-2 pages, of videotape recording, 40 minutes.

Interviews Video Recordings of Interviews: Total Recording Time: 40 minutes

- Note:
- Original Masters: 2 U-matic videotapes
  - Preservation Masters: 2 Motion jpeg 2000 and 2 mpeg digital files
  - Dubbing Masters: 1 U-matic videotape
  - Reference Copies: 1 VHS videotape, 1 Windows Media Video and 1 Real Media digital files

Interviews **Audio interview: November 30, 1989**

Interviews At the IMBP. Shepelev discussed his work in space medicine, c. 1945-1989, including: Early years at the Institute for Aviation Medicine; work on the design of a hermetically sealed capsule; oxygen and water regeneration systems; space capsule ecology, including the use of microflora; difficulties in achieving reliable results in experiments; and activities of the Soviet-American working group for life sciences.

Interviews Transcript, 1-19 pages, of audiotape recording, 1 hour, 15 minutes.

Interviews Audio Recordings of Interview: Total Recording Time: 1 hour, 15 minutes

- Note:
- Original Masters: not available
  - Reference Copies: 1 audiotape