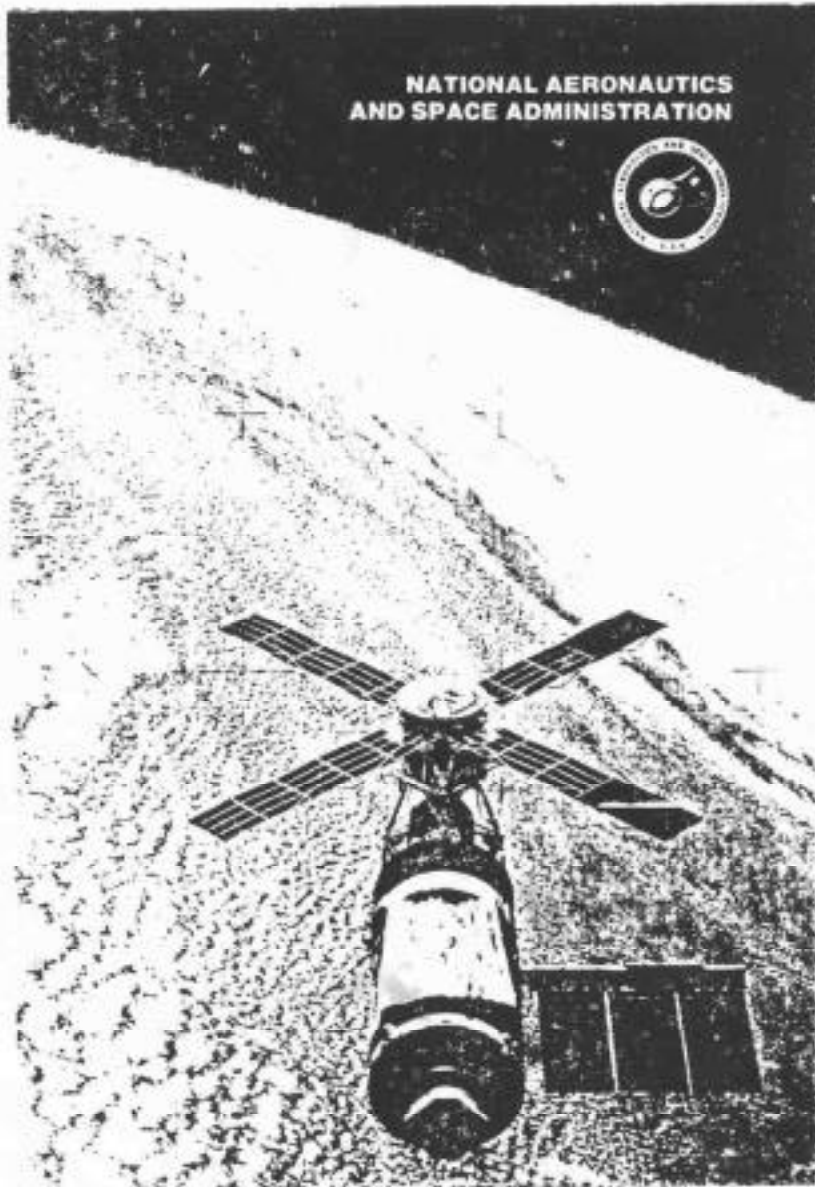


*The* American Association of Physics  
Teachers

presents



a  
videotape  
collection  
of  
its  
**twelve**  
  
**Skylab**  
  
**films**

AAPT Executive Office  
5112 Berwyn Road  
College Park, MD 20740

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## Foreword

The videotape that accompanies these teachers guides is a collection of the 12 single concept 8 mm Skylab films that were distributed by the American Association of Physics Teachers. These physics films were edited from the original NASA Skylab mission films by Robert G. Fuller and Thomas C. Campbell from October, 1975 to May, 1976. While some of the films consist of astronaut activities specifically carried out to illustrate some principles of physics, most of the film material was organized by Fuller and Campbell to demonstrate the behavior of physical systems in the so-called "zero g" environment of an orbiting satellite. In fact, the Skylab was freely falling in a circular orbit at an elevation where the magnitude of the gravitational force is about 80% of its value at the surface of the earth. You can experience this sensation for short periods of time by falling freely near the surface of the earth, some rides at amusement parks exploit this phenomenon.

The activities shown in these films were carried out by the three teams of Skylab Astronauts:

### First Team 5/25/73

Launched 9:00 a.m. EDT

Splashdown 9:49 a.m. EDT 6/22/73

Charles Conrad, Jr., Captain, USN  
Paul J. Weitz, Commander, USN  
Joseph P. Kerwin, M.D., Commander, USN

### Second Team

Launched 7:10 a.m. EDT 7/28/73  
Splashdown 6:19 p.m. EDT 9/25/73

Alan L. Bean, Captain, USN  
Jack R. Lousma, Major, USMC  
Owen K. Garriott, Ph.D., Electrical Engineer

### Third Team 11/16/73

Launched 9:01 a.m. EDT

Splashdown 11:17 a.m. EDT 2/8/74

Gerald P. Carr, Lt. Colonel, USMC  
William R. Pogue, Colonel, USAF  
Edward G. Gibson, Ph.D., Solar Physicist

This collection of teachers guides has not been changed from the original 1975-76 edition except for adding a correction because of the 30 frames per second playing speed of television and a more recent reference.

Please send any comments or corrections to the AAPT Instructional Materials Center, c/o Physics Department, University of Nebraska-Lincoln, Lincoln, NE 68588

**A Videotape Collection  
of the  
AAPT Skylab Films  
© 1975  
With Accompanying Teachers Guides**

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<sup>1</sup> These are given in (min: sec: frame). There are 30 frames in each second of playing time on television. Frames are numbered from 00 to 29. Much of the Skylab film footage was taken at 24 frames per second, so you will see the Skylab activities speeded up. Real time will be equal to (television play time) x 1.25.

## Skylab References

### General References:

**Skylab, Our First Space Station**, edited by Leland F. Belew, © 1977.

Stock No. 033-000-00670-5, U.S. Government Printing Office,  
Washington, D. C. 20402, \$7.00

**Skylab, Outpost on the Frontier of Space**, by Thomas Y. Canby,  
National Geographic Magazine, 146, 441-503, (October), 1974.

### Specific References:

#### **The Games Astronauts Play**

Skylab, A Guidebook, Stock No. 3300-005-8, U.S. Government Printing Office,  
Washington, D.C. 20402, \$2.10. (a) Crew Activities, p. 28.

Skylab, News Reference, March, 1973, NASA, Office of Public Affairs, Washington, D.C.  
20546. Crew Schedule p. VIII-1.

Skylab Experiments, Mechanics, Vol. 6, No. EP-115, U.S. Government Printing Office,  
Washington, D.C. 20402, \$.65. (a) Airplane flight, p. 3.

#### **Moving Astronauts**

Skylab, A Guidebook, Stock No. 3300-005-8, U.S. Government Printing Office,  
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