

## Appendix I

### Astronaut Training in Southwestern United States

Apollo-, Constellation-, and Pre-Artemis Training at Meteor Crater, Colton Crater, Schooner Crater, and the synthetic crater fields of northern Arizona., plus other sites described in this volume.

#### Meteor Crater

January 16, 1963	9 astronauts (Astronaut Group Two)
April 30-May 2, 1964	17 astronauts, flyover observations
May 20-22, 1964	12 astronauts, flyover observations
April 22-23, 1965	11 astronauts
May 16-19, 1967	19 astronauts
May 31-June 1, 1967	5 astronauts
July 10, 1969	1 astronaut (A12)
Oct 24, 1969	4 astronauts (A13)
June 4, 1970	4 astronauts (A15) Flyover and field exercises
Feb. 25-26, 1971	4 astronauts (A16) Exercise ( <b>Fig. 19</b> ) truncated due to 70 mph wind
April 27, 2011	2009 Class of Astronauts
July 24, 2012	4 astronauts
September 19, 2019	2017 Class of Astronauts
June 22, 2023	2021 Class of Astronauts

#### Colton Crater

July 15-17, 1970	6 astronauts (A15 crew and backup) – at Colton, plus Merriam, plus flyover
April 28-29, 2011	2009 Class of Astronauts (NASA, CSA, and JAXA); Exercises at Colton crater, SP Mountain, and Lava River Cave
July 24, 2012	4 astronauts

#### Rattlesnake Crater

Sept. 1, 1970	6 astronauts (A16 crew and backup)
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#### Sunset Crater (prior to production of synthetic crater fields)

April 30-May 2, 1964	17 astronauts
May 20-22, 1964	12 astronauts

#### Sunset Crater and Crater Fields

Oct 9-10, 1969	7 astronauts (Apollo 12 crew and backup)
Aug 14, 1969	3 astronauts (A14)
Nov. 2, 1970	6 astronauts (A15 crew and backup)
Nov 2-3, 1972	5 astronauts (A17) Sunset Crater and Cinder Lake; 2 <sup>nd</sup> , 20 km traverse with 6 stations in 5hrs15min; 3 <sup>rd</sup> , 12.75 km with five stations in 6hrs

### Black Mesa Crater Field

Mar 16, 1970 4 astronauts (A13) – created, too, a 24 ft diameter crater during the exercise  
June 5, 1970 4 astronauts (A15)

### Cottonwood Crater Field

Nov. 16, 1970 2 astronauts (final A14 field exercise)

### San Francisco Volcanic Field

June 18-19, 1970 4 astronauts (A14), SFVF flyover  
Nov 17-18, 1971 1 astronaut (A17), SFVF flyovers  
Feb 23-24, 1972 1 astronaut (A17), probably a flyover

### Nevada Test Site

Feb 17-18, 1965 6 astronauts  
Feb 24-25, 1965 6 astronauts  
Mar 3-4, 1965 2 astronauts  
Sept. 10-11, 1970 7 astronauts (A14) 10<sup>th</sup> at Schooner crater traverse of 2.7 km; Schooner similar in size to Cone Crater on Moon. 11<sup>th</sup> at Sedan crater.  
Nov. 12-13, 1970 3 astronauts (A16) 12<sup>th</sup> Sedan and Danny Boy; 13<sup>th</sup> Schooner.  
Oct. 27, 1971 8 astronauts (A16) – Schooner crater traverse as analog to North Ray Crater; including descriptions, sampling rocks and soils (including radial sampling), trenching, coring, raking, photography. Plus flyover. Brief show-and-tell at Sedan and Danny Boy.  
May 19-21, 1971 6 astronauts (A15 crew and backup) – 20<sup>th</sup> at Schooner crater; 21<sup>st</sup> on Buckboard Mesa  
Aug. 7-8, 1972 9 astronauts (A17) traverse plus flyovers. Schooner crater traverse with GROVER on 7<sup>th</sup>; On 8<sup>th</sup>, similar traverse at Danny Boy.

### Sierra Madera Crater & West Texas

March 14-15, 1972 Sierra Madera (A17) 4 astronauts, traverse with capcom; On 14<sup>th</sup>, with GROVER, seven stations over 5 km in 4 ½ hours with coring, trenching, sampling, raking, photography, special sampling, and descriptions. On 15<sup>th</sup>, eight stations of 2 km walking EVA.  
June 23-24, 1966 West Texas