## Apollo Astronauts Train at the Nevada Test Site

## Introduction

Nevada

National Security Site

Before Neil Armstrong stepped foot on the moon on July 20, 1969, Armstrong, and astronauts Dick Gordon, Buzz Aldrin, Dave Scott, and Russell "Rusty" Schweikart left their footprints on the Nevada Test Site, now known as the Nevada National Security Site (NNSS) as part of their



Astronauts examine the geology around the rim of Schooner crater. The area was thought to be similar to the South Ray crater at the Apollo 16 target landing site on the moon.



Apollo 16 astronauts in a moon rover in November 1970 near Schooner crater.

lunar training.

## **Training Mission**

Their three-day visit began on February 16, 1965. It was the first training mission by a group of astronauts from the National Aeronautics and Space Administration (NASA). Their mission was to carry out geological and geophysical studies at Sedan crater and Buckboard Mesa, which later aided the astronauts in observing and collecting material from the moon's surface, and helping expand knowledge and understanding about our solar system.

During their visit to the Nevada Test Site, astronauts were briefed by geologists from the Atomic Energy Commission's Nevada Operations Office, Special Projects Branch, and the United States Geological Survey Astrogeology Branch.

The first group of astronauts visited Sedan crater on the first day, where they practiced making geophysical observations around the lip of the crater. On the second day, they flew by helicopter over the rough Nevada terrain near the western edge of the site.

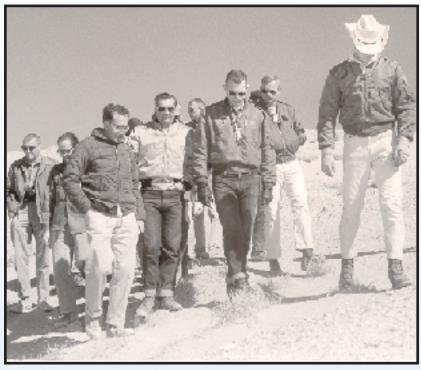
While there, they stopped and studied the geology of the ancient volcanic formations made by the Timber Mountain caldera, the largest caldera known in the United States, whose features are similar to those on the surface of the moon.

On the final day, the astronauts received briefings at the Nuclear Rocket Development Station.

Two groups of astronauts visited the Nevada Test Site on February 24 and March 2 to continue lunar training in the unique test site environment. The training was so successful that fifteen months after Armstrong landed on the moon, astronauts continued training at the test site in places such as Schooner and Sedan craters and Buckboard Mesa.

In 1965 E.M. Shoemaker of the United States Geological Survey, said that the setting of Schooner crater and the geology of the crater itself permitted clearly defined and achievable goals for the astronauts field reconnaissance trips and was considered an ideal training site.

Voice transcripts of the astronauts on the moon demonstrated that their test site training was realistic and useful. Astronaut J. W. Young, Apollo 16, applied the principles learned at the secondary craters of Schooner crater. Young recognized a secondary crater produced by ejecta from South Ray crater at the Apollo 16 station four site. H.H. Schmitt, Apollo 17, referred to one of the Buckboard Mesa craters while describing a 600-meter lunar crater in the Haemus Mountains west of Sulpicius Gallus.



Astronauts and geologists approach Sedan crater in 1965. From left, Bob Christiansen, USGS; Ted Foss, NASA Geologist; Dr. Alfred Chidester, USGS; Astronauts Dick Gordon, Buzz Aldrin, Dave Scott, Neil Armstrong and Rusty Schweikart are in the background.

## As the Nevada Test Site

established its role in proving the power of our nation's defense, it played another of many roles: providing a realistic training ground for the U.S. Space Program and contributing to the first manned expedition of the moon.

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