

the 2010 Dome comes Down

The iconic structure that has come to symbolize the South Pole will be deconstructed this year. It has protected hundreds of scientists and staff for more than 30 years – far exceeding its lifespan. Despite the modern conveniences and efficiencies provided by the new elevated station, there is deep sentiment about the dismantling of the Dome at the bottom of the world.

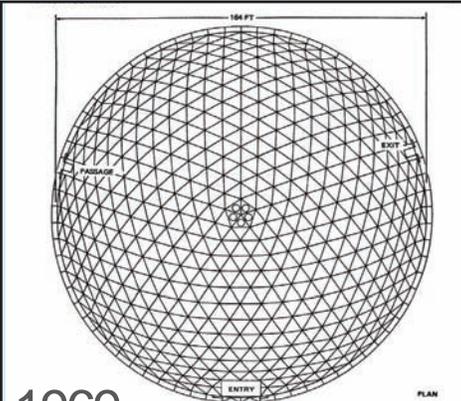
Timeline:

- 1911** Amundsen (December 1911) and Scott (January 1912) arrive at the South Pole.
- 1929** U.S. Admiral Richard E. Byrd is the first to fly directly over the South Pole.
- 1957** The U.S. Navy completes the first South Pole station. A group of 18 men and one dog are the first to spend the dark, cold winter at the South Pole.
- 1975** The U.S. Navy Seabees complete the geodesic Dome. It is intended to last 10 years and house 33 men during austral summers. Seventeen men spent that first winter under the Dome.
- 1995** The arches are now buried in snow and the footings of the Dome sit some 20 feet below the drift. Year after year the Dome has sheltered some 120 scientists and support personnel at a time. Work begins on designing and building a new facility.
- 2003** Operations begin transitioning from the Dome into the new elevated facility.
- 2008** The Dome is decommissioned. The new elevated station is completed and dedicated.
- 2010** The Dome will be deconstructed and removed from Antarctica as required by the Antarctic Treaty.
- Future** Pieces will be stored in Port Hueneme, CA. Using part of the Dome for display at the Seabee Museum is being discussed.

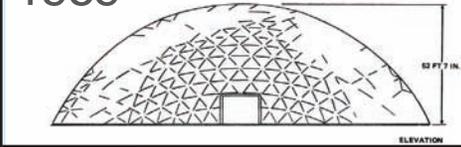
Consider this:

- South Pole is accessible by airplane only four months during the daylight of the austral summer.
- Structures are built on the polar plateau, elevation 9,306 feet, on two-mile-deep solid ice sheet that drifts about 33 feet a year.
- The average ambient temperature at South Pole is -49F (-15C), with a record high of 7.5F (-13.6C) and a low of -117F (-82.8C).
- The nearest human being is about 850 miles away.
- The Dome isn't heated or sealed. It shelters other buildings from the extreme wind and snow.
- The geodesic (great circle) Dome frame spans 164 feet and 50 feet high with arches 830 feet long. The dome structure includes more than 900 ten-foot panels made of aluminum alloys for maximum low temperature strength and minimum weight.
- Research at the station includes glaciology, geophysics, meteorology, upper atmosphere physics, astronomy, astrophysics, and biomedical studies. The low temperature and low moisture content of the polar air, combined with the altitude creates air that is far more transparent than is typical elsewhere, and the months of darkness accommodate sensitive equipment.





1969



1972



1972



1999



1999



2006



2008



2008



2007



2009



see www.usap.gov for more information and photos.

