



# Yucca Lady

## Introduction

Yucca Lady, a World War II Boeing-17G Flying Fortress Army Air Force serial number 44-83575, was flown to the Nevada Test Site (now known as the Nevada National Security Site – NNSS) in 1952, where she was instrumented and subjected to three atmospheric nuclear tests as part of the Operation Tumbler-Snapper -- Vulnerability of Parked Aircraft to Atomic Bombs series, conducted in April and May 1952. The project would determine the effects of a nuclear device detonated above an airfield, particularly upon the aircraft parked on the field or dispersed in a surrounding area. Aircraft 44-83575 was one of 28 aircraft subjected to nuclear tests while positioned at different locations in Yucca Flat.

## Test History

During the first nuclear test, *Baker*, a one-kiloton device, was detonated April 15, 1952, while aircraft 44-83575 was parked 10,354 feet from ground zero. Effects from the resulting blast showed no discernable damage. The second test, *Charlie*, a larger 31-kiloton device, was detonated on April 22, 1952, with the aircraft positioned about 10,000 feet from ground zero. Blast effects were substantial, but the aircraft was repairable. For the third



*The Yucca Lady sits on Yucca Lake, inoperable before restoration.*

test, *Dog*, a 19-kiloton device was detonated on May 1, 1952, with the aircraft positioned 7,792 feet from ground zero.

At the end of the test program, the aircraft was declared scrap and towed to the edge of the Yucca Lake airstrip to cool, or allow the radiation to decay so it could be sold along with 800 tons of scrap metal accumulated from the test program.

In early January 1965, when all contamination had decayed from the aircraft, it was offered as part of an 800-ton lot in a salvage sale where it was bought by a scrap metal company. The company promptly received an offer for the derelict World War II aircraft.

## Restoration Begins

In March 1965, arrangements were made for the partial restoration and removal of the aircraft at the NTS. Parts were brought in from all over the country to replace those damaged, stolen or vandalized throughout the years. Damaged skin was fabricated and replaced on site; engines and props were stripped, cleaned, repaired and tested; 4,000 feet of new control cable was installed; all electrical wiring and instrumentation was replaced. As she neared completion, the jeers and laughter of those that said she would never fly again faded as the sounds of four 1,200 horsepower Wright-Cyclone engines echoed across the desert on May 14, 1965, and the newly christened “Yucca Lady” rose into the sky over the test site.



## Yucca Lady Fights Forest Fires

Yucca Lady was thoroughly restored and converted to an aerial tanker, including the installation of a large tank and special bulkheads in her bomb bay. From 1966 until 1986, the Yucca Lady served the fire service by dropping retardant on forest fires throughout the southwest United States. In January 1986, she was purchased as an investment by a Massachusetts resident, then eventually owned by the Collins Foundation, which dedicates itself to preserving machines that helped build the world and keep it free.

## Yucca Lady is Renamed

The aircraft underwent a complete restoration to her wartime configuration, including full military colors, representing one of the finest B-17 restorations in existence today. The aircraft was renamed *Nine-O-Nine* (serial number 42-31909) in honor of a 91st Bomb Group, 323rd Squadron airplane which completed 140 missions during World War II without an abort or loss of a crewman.

## Finished?

In August 1987, while performing at an air show in western Pennsylvania, the restored *Nine-O-Nine* was caught by a severe crosswind just moments after touchdown. The right wing lifted and the airplane rolled off the runway and crashed through a chain link fence, shearing off a power pole and rolling down a 100-foot ravine, resulting in extensive damage. It took donations from individuals and corporations and thousands of volunteer hours to make *Nine-O-Nine* airworthy again in 1992.

## *Nine-O-Nine*

The *Nine-O-Nine* still takes flight around the United States as part of the Collins Foundation's Wings of Freedom tour, offering tours through the aircraft and in some cases, the opportunity to fly aboard this historic craft.



*The newly restored and fully operational Yucca Lady prepares for take off from the Yucca Lake airstrip in 1965.*

For more information, contact:  
U.S. Department of Energy  
National Nuclear Security Administration  
Nevada Site Office  
Office of Public Affairs  
P.O. Box 98518  
Las Vegas, NV 89193-8518  
phone: 702-295-3521  
fax: 702-295-0154  
email: nevada@nv.doe.gov  
<http://www.nv.energy.gov>

