

Floor by Floor Description of the Cannonball Tower Facilities

Antenna Deck: There were two levels that needed to be accessed. The lower external area was accessed through a single blast door a ladder then allowed ascent to a catwalk which circled the tower. Internal access to the upper antenna area and the roof was accomplished by climbing a ladder first to a catwalk circling the interior wall then a ladder to the pressure hatch in the roof.

Eighth Floor: Eight systems of microwave equipment were installed on this floor. Three systems went to Cactus, three systems went to Cowpuncher and two systems went to Corkscrew. All maintenance spares for the radio equipment was stored on this floor. The facilities main power panel, for the emergency generator, air conditioning and lighting systems. All of the equipment in this room was mounted on a shock proof floor which was suspended from the ceiling by heavy steel springs.

Seventh Floor: This floor contained the dining area, the kitchen with a pantry full of C rations, and a rest room with shower. Since the tower was manned 7/24 this was the most used area in the facility.

Sixth Floor: Contained bunks and bedding for up to twelve people.

Fifth Floor: All of the voice multiplexing equipment for the microwave routes terminated here on voice patch panels. The FM mobile base stations and UHF air to ground terminal was also located on this floor. The Single Sideband (SSB) console was equipped with a 1 KW transmitter with two receivers, a DC patch panel for all TTY circuits with associated frequency shift keying (FSK) equipment. A four channel RF multi-coupler interfaced with a 32 ft. telescoping whip on the roof, a 40 ft. supported tower with a rotatable three element beam, a 60 ft. supported tower with a rotatable three element beam, and 60 ft. self-supporting steel lattice tower supporting a rotatable log-periodic antenna. The primary use of this system was to provide Presidential communications with worldwide communications as well as for any emergency situation. All of the equipment in this room was mounted on a shock proof floor which was suspended from the ceiling by heavy steel springs.

Fourth Floor: Was a secure Cryptographic Comm. Center. The entrance from the elevator was a steel door with a combination lock and the area around the floor hatches and ladder was enclosed by a steel wall and door. All lines coming into the comm. center were filtered from Radio Frequency Interference (RFI). All of the equipment in this room was mounted on a shock proof floor which was suspended from the ceiling by heavy steel springs.

Third Floor: The administrative office area contained work stations for four people. All necessary supplies were stored on this floor.

Second Floor: This floor was the facility workshop it was stocked with spare parts for all of the mechanical equipment. Tools necessary to complete any repair activity was also available for use.

First Floor and Entrance: The entrance was a 12 inch thick steel blast door that opened by using a hydraulic system. The first floor also had a radiation de-contamination station which consisted of a dressing room and a shower. There were supplies such as gas masks and other equipment necessary to detect or combat any Chemical, Biological, or Nuclear contaminants. There was also a hot water tank located on this floor.

Basement: All of the facilities mechanical equipment was located here. The HVAC power panel, the air purification system, the elevator control panel, the water system pump and water chiller for the air handling units located on each floor. All of the telephone cables from external sources including a 100 pr. underground cable from the AT&T site at Hearststone Mt. entered the building and terminated on the main distribution frame (MDF). The sites telephone key system was also located in the basement.

Buildings and grounds: The site had a fully functional helicopter pad, an emergency generator and garage, and an old two room cabin used to store equipment. The site had a 5 ton dump truck with snow plow and salt spreader to keep the access road passable in the winter. There was also a 1000 gallon 2.5 ton water tanker to keep the water supply at capacity. A 40 ft. TV tower with a three element rotatable beam antenna was attached to the rear of the garage and a 60 ft. TV tower with a three element rotatable beam antenna was attached to the front of the garage. In the clearing between the tower and helicopter pad was a 60 ft. self-supporting, steel lattice, rotatable, log-periodic antenna. This antenna could be lowered to the ground as required maintenance dictated.

Cross Section View of Tower

