

Managing Cold War Historic Structures:

The Mitigation of the New Hampshire Tracking Station A-Side Antenna, a Cold War Era Property at New Boston Air Force Station

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Key Points

- The process for identifying a historically significant Cold War property and options for managing.
- The example provided by the New Hampshire Tracking Station A-Side Antenna Project.
- Demonstration of historic significance through the historic context for the A-Side Antenna.

The New Hampshire Tracking Station A-Side Antenna



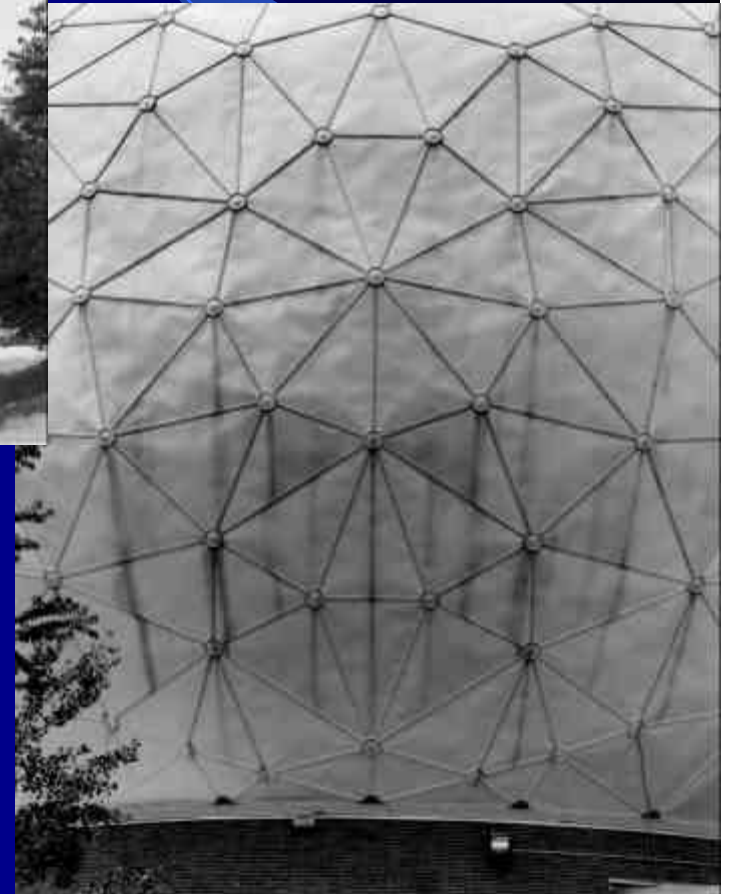
- Satellite tracking antenna built in 1960 as part of the first world wide satellite tracking network
- The antenna is scheduled to be replaced because of increasing reliability issues and improvements in the technology
- Similar situations are occurring throughout the military because of the ageing of Cold War era equipment



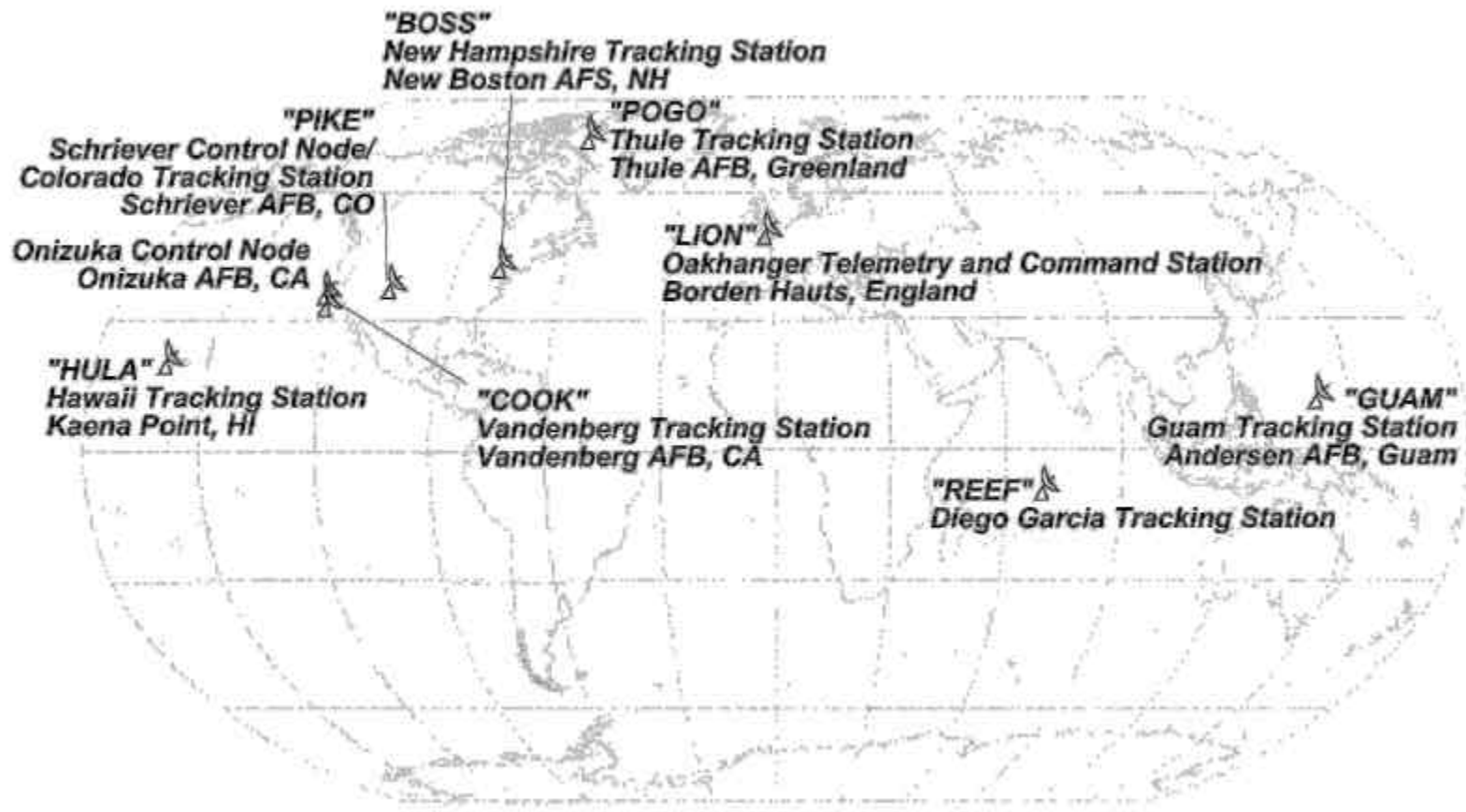
Construction of the A-Side Antenna
in 1960.



The completed radome of the A-Side Antenna.

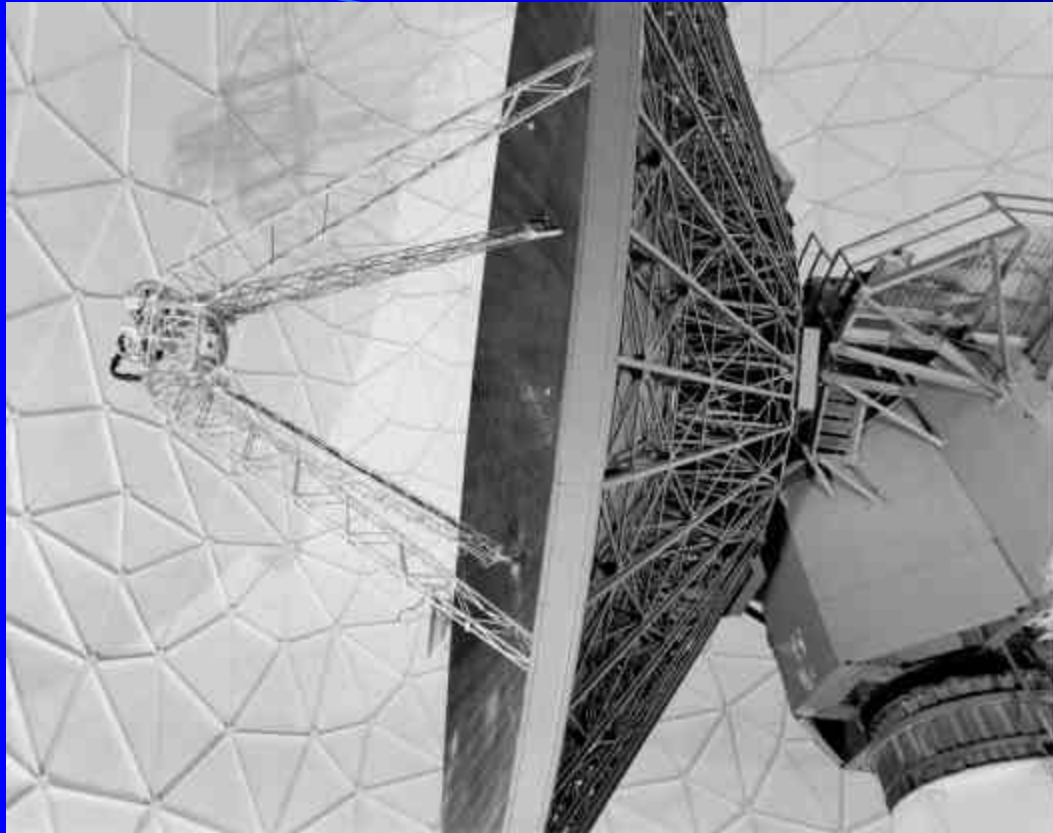


The Air Force Satellite Control Network



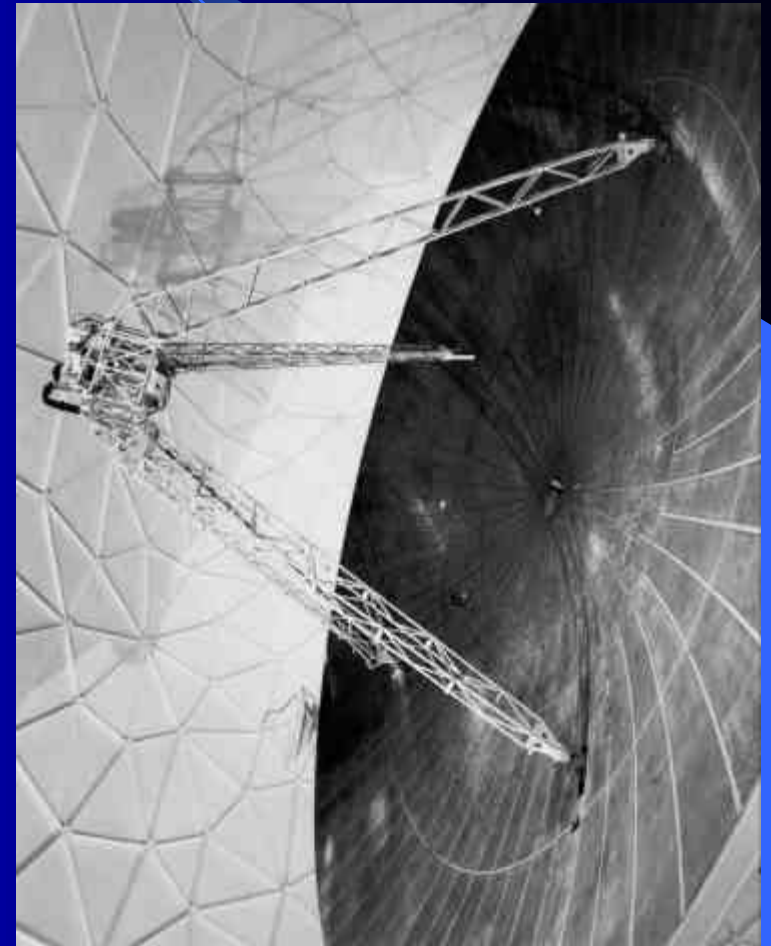


The control room for a satellite tracking antenna.



Three Primary Functions

1. Tracking (Location)
2. Telemetry (Information)
3. Command (Instruction)



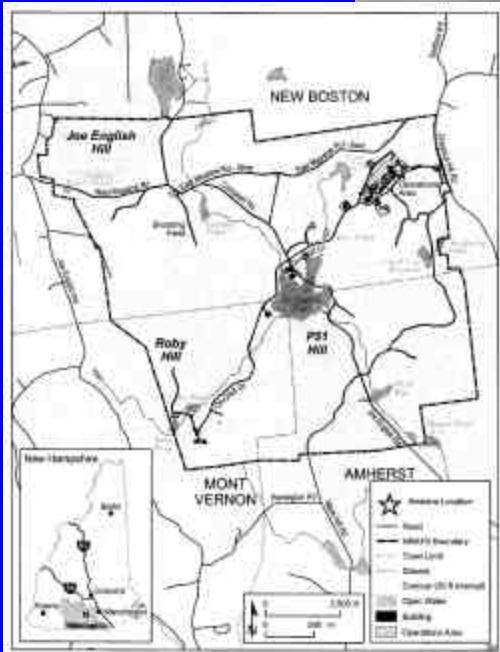
Strategies for Satisfying Section 110 Responsibilities

- Conduct a facility wide survey of all structures for historical significance
- Conduct a survey based on programmatic affiliation
- Conduct evaluations on a case-by-case basis as projects arise

Management Strategies for Historically Significant Structures

- Continued or adaptive reuse
- Relocation
- Documentation and removal

New Boston Air Force Station



- Section 110 responsibilities satisfied through a survey of Cold War era structures.
- A Programmatic Agreement was developed that defines how the Cold War era structures at New Boston Air Force Station are managed.

The A-Side Antenna Project

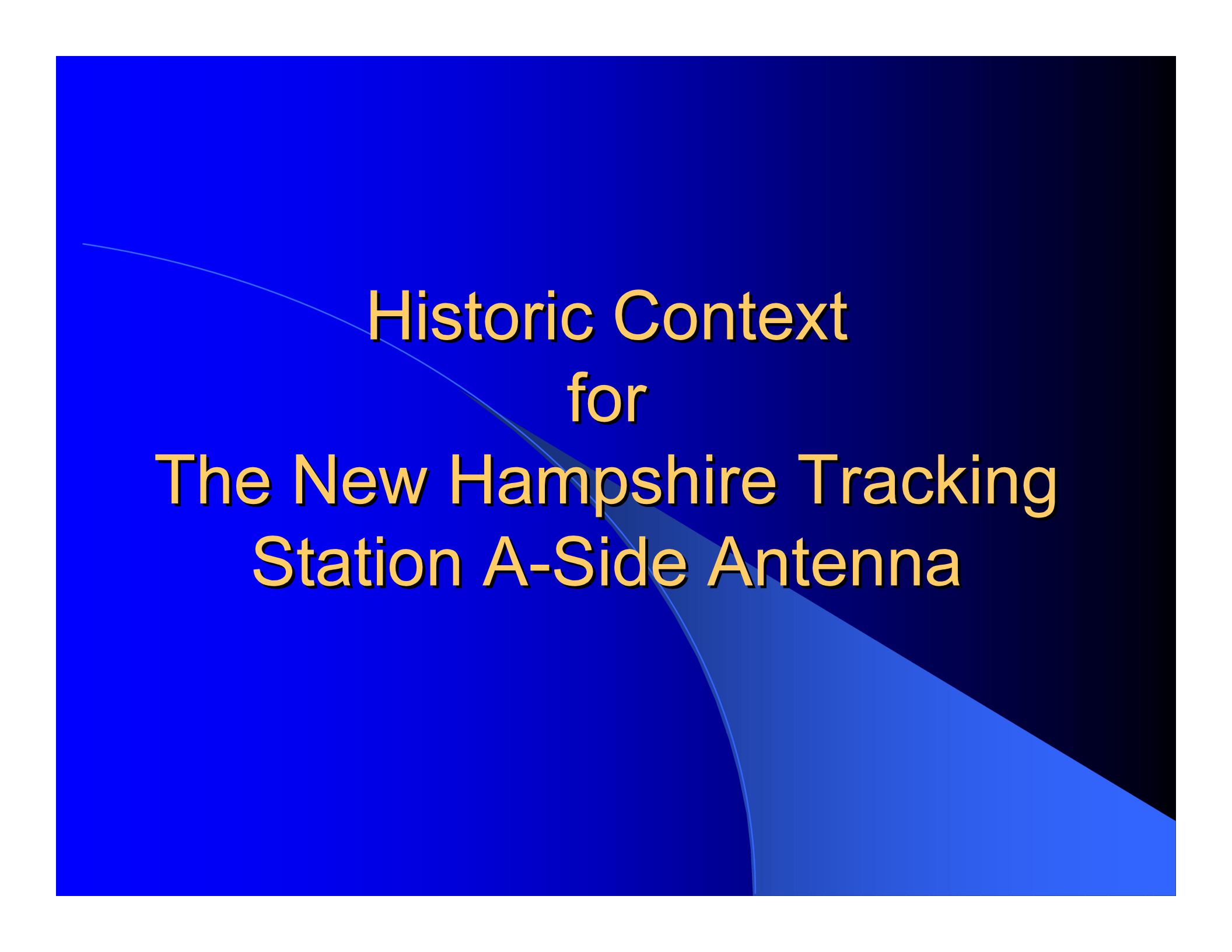
- Proposed replacement of the A-Side Antenna
- Due to space limitations at the station the new antenna would be built on the site of the original
- The A-Side antenna was found to be a contributing property to a Cold War historic district
- To mitigate the removal of the antenna, the antenna is documented to the New Hampshire Division of Historical Resources Documentation Standards for In-State Recordation

Requirements of the Documentation Needed to Mitigate the Removal of the A-Side Antenna

- Development of a historic context for the A-Side Antenna
- Physical description of the antenna and its components
- Large format photographic record of the antenna (4 in. x 5 in. negatives)
- Measured drawings of the antenna
- Product put on file with the New Hampshire State Historic Preservation Office for public use

Security Considerations

- Security review of the final report by New Boston personnel before submittal to SHPO
- Public version edited to ensure national security
- Full version kept on file at New Boston Air Force Station



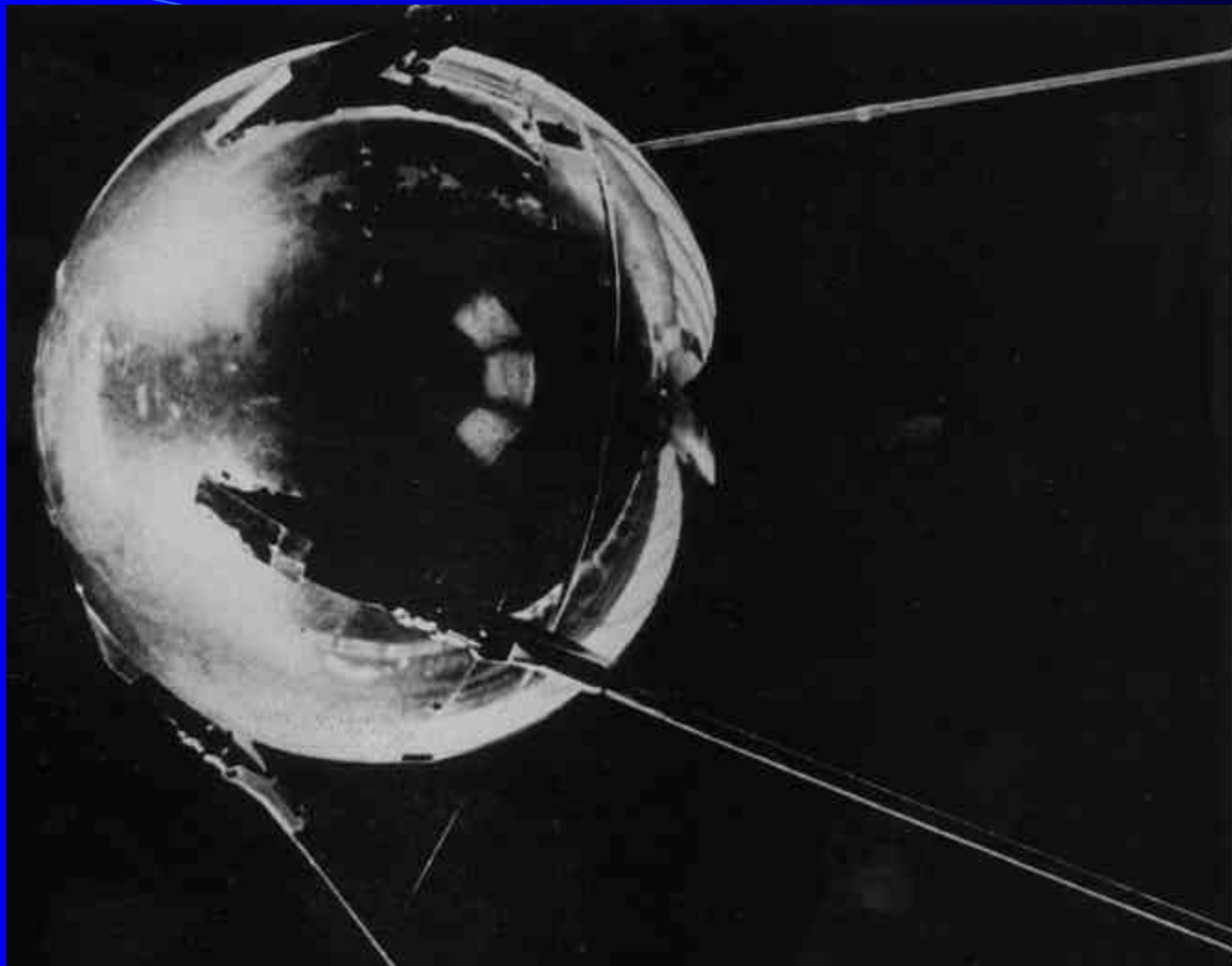
**Historic Context
for
The New Hampshire Tracking
Station A-Side Antenna**



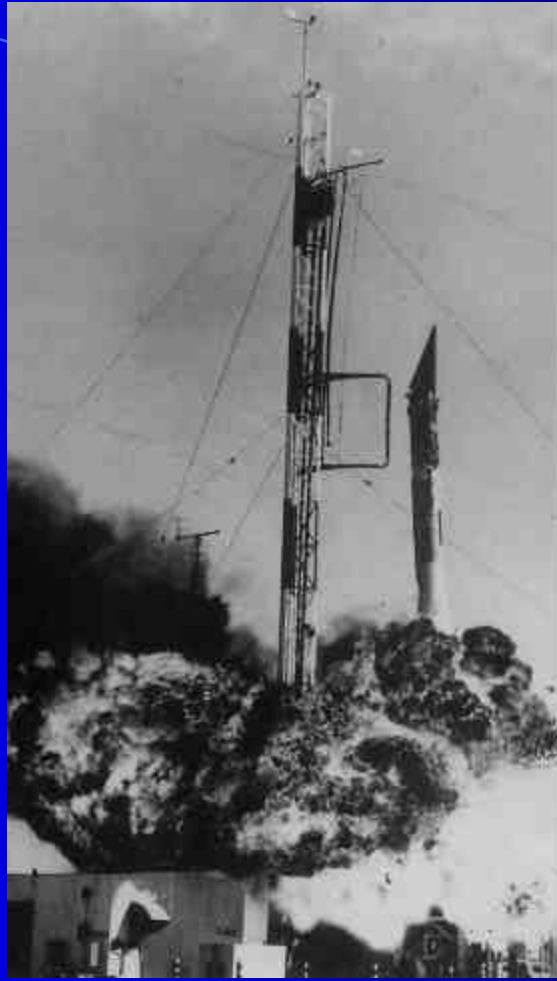
The V-2 rocket was one of the first functional rockets developed.



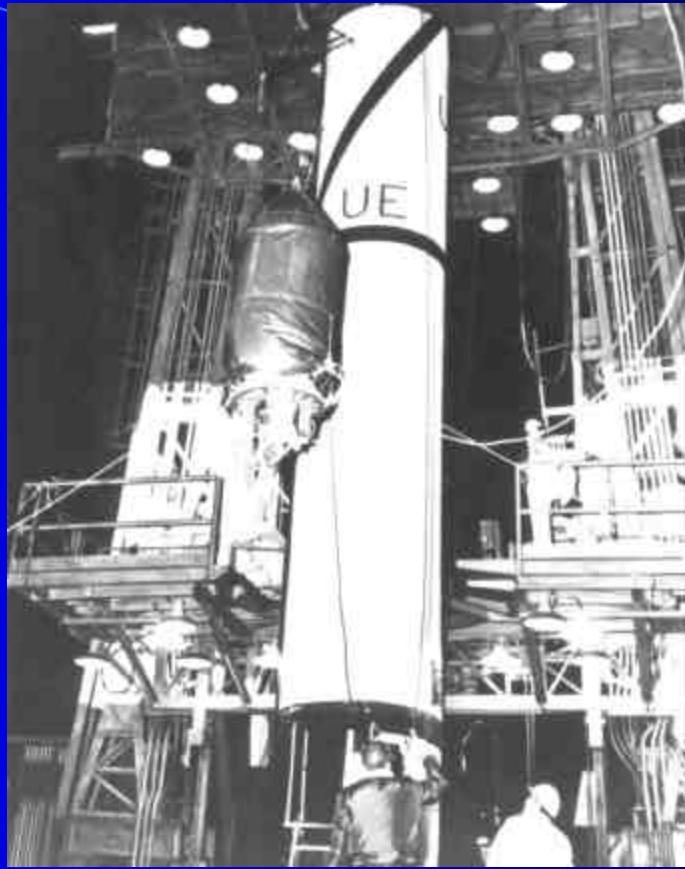
Prior to satellites, reconnaissance was provided by U2 spy planes.



The Russians shocked the world with the launch of the Sputnik I satellite on October 4, 1957.



The U.S. response to Sputnik was the launch of the Vanguard rocket which exploded on the launch pad in December 1957.

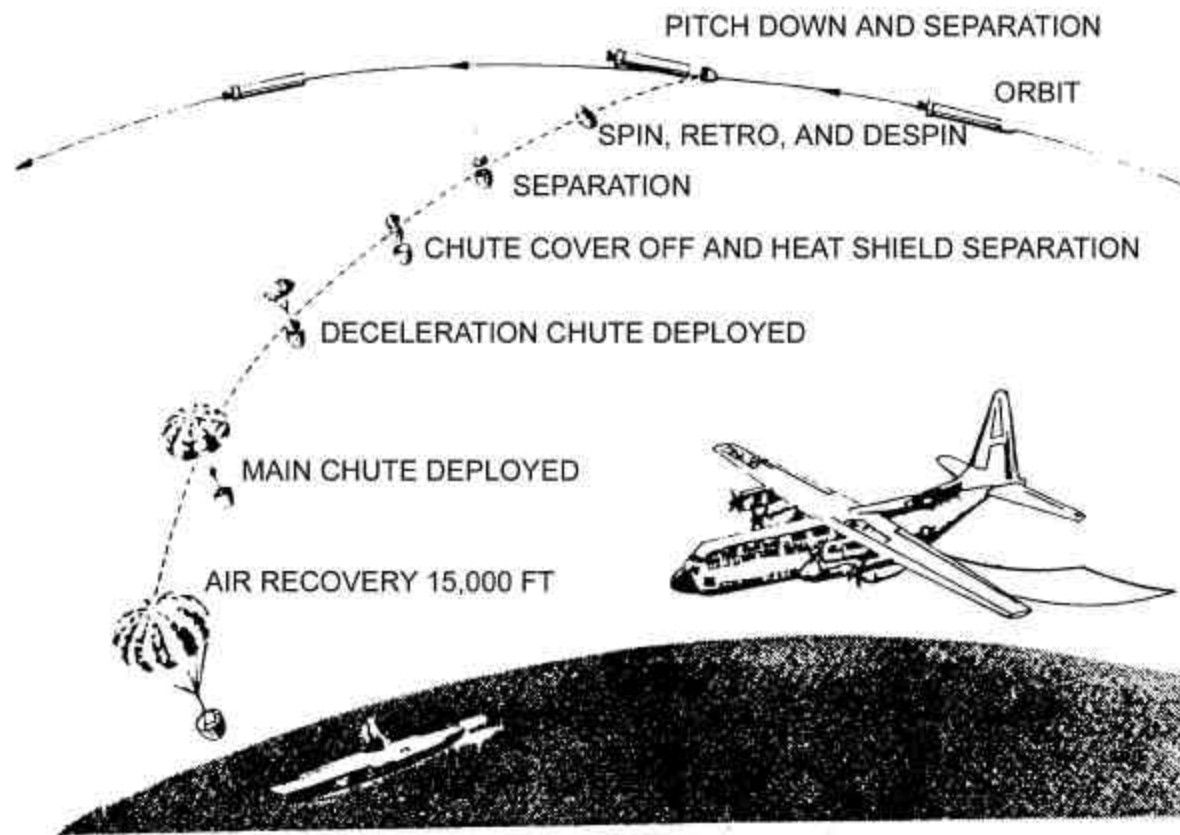


Explorer I, launched on January 31, 1958, was the U.S.'s first successful satellite.



- Antenna completed in 1960
- Aided many of the earliest satellite programs including Corona (Discoverer), VELA, and Meteorological Satellites

Corona Satellite Film Recovery Process



TYPICAL RECOVERY SEQUENCE

Lessons From The A-Side Antenna Project



- Proper management of historic properties can be achieved without affecting the facility mission
- Successful management requires planning
- Due to the proper management of cultural resources at New Boston, issues were identified early in the planning process and were addressed without effecting the project schedule