



President Ronald Reagan

# Where do we get 'Star Wars?'

By Sharon Watkins Lang  
SMDC/ASTRAT  
Historical Office

Almost as soon as President Ronald Reagan introduced his Strategic Defense Initiative, the effort and its associated projects were mocked as nothing more than science fiction — "Star Wars" technology.

Since March 1983, however, the two concepts have been tied together. The current system is even referred to by some writers and critics as the "Son of Star Wars."

The question is where did it begin? The term itself refers to George Lucas' popular 1977 science fiction film. It soon became a part of the vernacular and was used to criticize

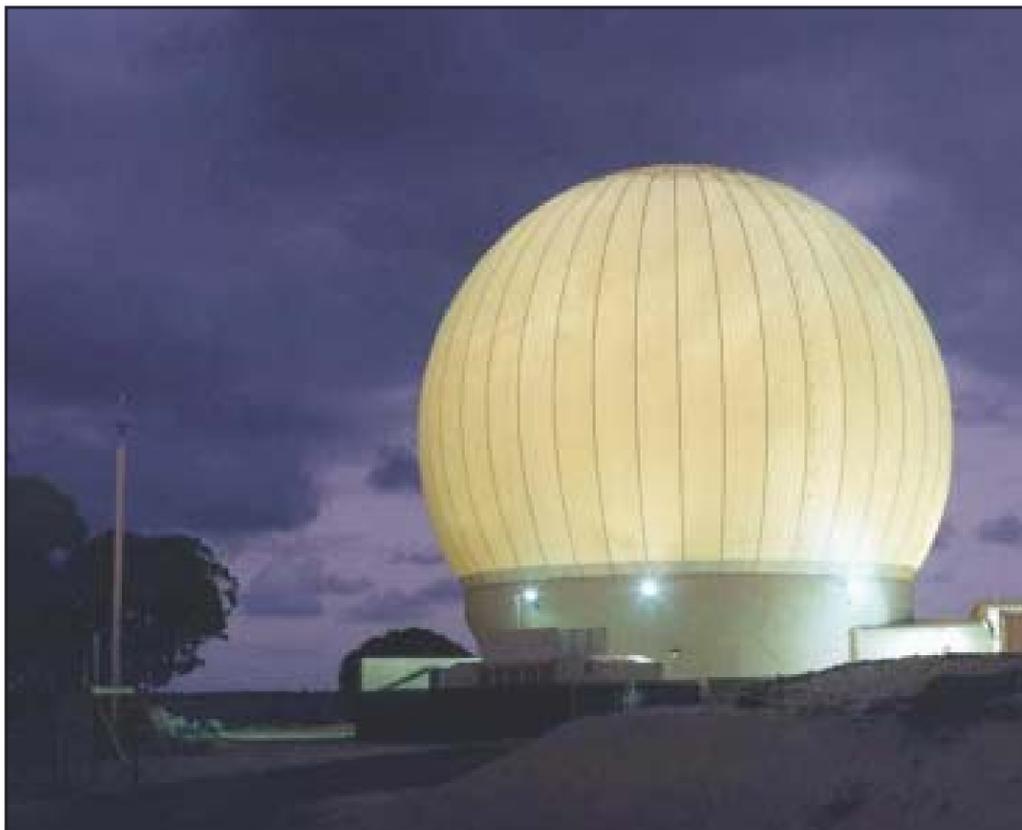
various space-based Pentagon projects.

The historians at the Missile Defense Agency, however, trace the link to a March 24, 1983, article from *The Washington Post*. This article quotes Senator Edward Kennedy (D-Massachusetts), who described the president's proposal as "reckless Star Wars schemes."



**Exoatmospheric Reentry Vehicle Interceptor Subsystem (ERIS)**

- Midcourse interceptor
- On-board multi-band seeker and data processor
- Infrared Focal Plane Array Technology
- Advanced Beryllium optics and tracking algorithms
- Lightweight – 160 kg
- Tests conducted – 3
  - Intercepts attempted – 2
  - Successful intercepts – 1
- Functional Test Validation for the GBI



**Ground Based Radar (GBR)**

- Perform surveillance, acquisition, tracking, discrimination, fire control and kill assessment
- Phased array, X-band Radar
- Radiating surface 12 meters in diameter
- Full power acquisition range – 4,000 km or more (prototype reduced range)
- Part of the National Missile Defense System
- Prototype constructed at Kwajalein



**Airborne Optical Adjunct/Airborne Surveillance Testbed**

- Prototype of the Boeing 767
- Modified cupola — 86 feet long and 10 feet high
- Originally designed for two sensors
- Aircraft-based LWIR technology
- Wide field of view optics
- Focal plane array with 30,000 cryogenically cooled LWIR silicon detector elements
- Three color scanning
- Sensor sensitive enough to detect the heat of a human body at a distance greater than 1,000 miles
- Operate at altitudes in excess of 40,000 feet
- Gathers data in the boost, postboost, midcourse and reentry phases



**Ground Based Surveillance and Tracking System (GSTS)**

- Midcourse and Terminal Sensor
- Ground-based missile launched LWIR and visible wave-band sensor
- Lightweight beryllium optics
- Mission — locate, track and discriminate targets from decoys
- Relays data to ground based station to provide weapon tasking and in-flight target support
- Reusable sensor payload
- Provide means to see over-the-horizon

all as 10,000

al components —

ft operation

CEPT (U)

