

Ancient artifacts or alien remains??

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Anyone who has wandered north of the Cypress Creek fence-line has probably noted a series of concrete bunkers along the remains of what appears to be an overgrown road. Regretfully, these are neither ancient artifacts nor alien remains. However, they are an interesting part of Brevard County history.

In the early days of the space program, circa 1954, the Eastern Test Range had three tracking sites in operation at Cape Canaveral, Jupiter and Grand Bahama Island. Range stations were also being built on the islands of Eleutheria, San Salvador, Mayaguana and Grand Turk. Additional stations were built as the range length increased, and as tracking requirements increased. Initially, many tracking stations were equipped with radars derived from WW II systems. As technology matured, sophisticated optical cameras were added. The early range activities initially supported “winged” missile activities (SNARK and NAVAHO), but were later eclipsed by ballistic missile programs.

To meet more stringent ballistic missile requirements, several systems were designed and added to various sites. In the early 1960’s, as the Cold War was gaining momentum, the MISTRAM (MISsile TRAjectory Measurement) system was installed at Eleutheria, Bahamas and at Valkaria (between Valkaria and Grant) to support MINUTEMAN ICBM test flights. The system provided highly accurate range (distance) measurements to the dummy warheads being tested. The MINUTEMAN ICBM later became the mainstay nuclear weapon delivery system for the space portion of the nuclear triad (space, aircraft, submarine). The Valkaria site was

named the Valkaria Missile Tracking Annex.

The layout of the Valkaria Missile Tracking Annex can still be seen on many modern maps. The layout shown is extracted from the latest available topographic map, and shows the MISTRAM system to be laid out in an inverted “L” shape, with the apex of the L located at Valkaria airport. One leg of the L passes through Cypress Creek. The concrete bunkers and other structures that can be found between Grant and Valkaria are the remains of the MISTRAM system.

The MISTRAM systems were deactivated after completion of the MINUTEMAN III Research, Development and Test program in the early 1970’s.

As an interesting footnote, a Swedish amateur space enthusiast collected signals from the Soviet LUNA 20 spacecraft, an unmanned probe to the moon (1972). According to him, he came to the conclusion “that the LUNA 20 signals are a classic example of ranging, amazingly similar to those used at Cape Canaveral called MISTRAM....”.

Coincidence? Or an example of Cold War espionage and intrigue? We will probably never know.

For additional information on the history of the Test range and the space program in general, refer to www.patrick.af.mil/heritage/heritage.htm, which provided most of the information for this article. (NOTE: Broken link)

www.users.wineasy.se/svengrahn/trackind/luna20/LUNA20.htm describes the LUNA 20 ranging signal, and compares it to the MISTRAM system. (NOTE: Broken link)

A new link can be found at:

<https://en.wikipedia.org/wiki/MISTRAM>



