How “Radar Hill” in Citrus County Got Its Name

By Tom Page

4 November 2005

Many residents living in and near Inverness and Citrus County, Florida, have heard of “Radar Hill” in the Withlacoochee State Forest. Located about 9 miles south-southwest of Inverness, just south of County Road 480 (East Stage Coach Trail), “Radar Hill” in recent years has been the center of controversy in which local residents reportedly were criticizing Florida Rock Industries, Inc., for not doing enough to restore the land previously involved in limestone mining operations there.

But just why is that hill called “Radar Hill”? Was there ever some kind of radar tower there? If so, when and for what purpose?

The answers to these questions are, during the Cold War years, there indeed was a radar facility located atop that hill. Known as the “Inverness Gap-Filler Annex,” this radar facility was operated by the U.S. Air Force as part of a nationwide network of air-defense early-warning surveillance radars. The mission was to watch the skies for attacking Soviet bombers; fortunately, no attack ever came, thanks in part to this radar network all across the country.

Between the years of 1958 and 1970, the Inverness Gap-Filler Annex (GFA) operated a short-range radar designated as AN/FPS-14 (later replaced by an AN/FPS-18 set). This radar site’s purpose was to provide low-altitude radar coverage with an effective range of about 55 nautical miles between the high-power, long-range radars located at MacDill AFB, Patrick AFB, Cross City AFS, and Jacksonville NAS, FL. Those long-range radars had effective detection ranges of close to 300 nautical miles at high altitudes, but significantly less at low elevations. Due to the curvature of the earth, as well as hills, river valleys, and other obstacles, gaps existed at lower elevations where the long-range radars could not detect targets.

Consequently, a number of these gap-filler radar sites were positioned where needed all over the country. In the state of Florida, GFA sites were initially operated at Eglin AFB, Carrabelle, Perry, Bunnell, and Winter Garden. The Cuban Missile Crisis in 1962 prompted the Air Force to field additional GFA radars at Jupiter, Naples, and Long Key; at that time, the Air Force also added long-range radar coverage in the southern part of the state by tying in the FAA radar at Richmond (near Miami and Homestead) and the U.S. Navy radar at Key West NAS to the network.

The short-range GFA sites were normally unmanned, and were operated by remote control. Their respective surveillance data were transmitted over telephone lines to their parent long-range radar unit. The GFA sites at both Inverness and at Winter Garden were annexes of the 660th Aircraft Control and Warning (AC&W) Squadron – later 660th Radar Squadron – located at MacDill AFB near Tampa.
Why was “Radar Hill” chosen as a site for a gap-filler annex? According to Mr. Keith Mousel, Resource Administrator for the Withlacoochee State Forest, much of that state forest was originally federally-owned land. The relatively high limestone hills there (and also those near Winter Garden) blocked radar signals at low altitudes from the various long-range radar sites like the one at MacDill AFB, allowing corridors where attacking bombers could conceivably sneak in below coverage. Placing the short-range gap fillers on top of those limestone hills then plugged the holes. “Radar Hill” itself was one of the highest points in the Withlacoochee State Forest, and as such offered a clear line of sight for many miles.

Emphasis on was. The subsequent limestone mining operations removed most of “Radar Hill.” Later reclamation actions leveled the hill further, according to Mr. Mousel. The old gap-filler radar facility today is long gone. A visit to the site earlier this year revealed that not a trace remains.

So what did this gap-filler annex on top of “Radar Hill” look like? Below (left) is an actual aerial photograph obtained by Mr. Brian Rehwinkel from the online images at the University of Florida's "Florida from the Air" website. This particular photo was shot in January 1960 by the U.S. Department of Agriculture – courtesy of the Florida Department of Transportation. For comparison, on the right is a USGS aerial image dated December 1998 from the TerraServer-usa.com website.

And the next image is a close-up of the Inverness GFA radar facility from the same 1960 aerial photo.
The photo above, admittedly, is not very clear. The two U.S. Air Force photos that follow show what the Inverness GFA actually looked like close up back in the day.

Holly Ridge Gap-Filler Annex, NC
(nearly identical to the Inverness site)
Holly Ridge Gap-Filler Annex, NC
(nearly identical to the Inverness site)
An identical radar tower (showing the AN/FPS-14 radar antenna at the Myrtle Beach Gap-Filler Annex, SC, circa 1962, photographed by Ken Dohrman) is shown here; this was the same model radar that was installed at the Inverness GFA originally.

So, while all traces of the old Inverness radar facility are long gone, its location has come to be known as “Radar Hill.” No doubt more than one person has wondered why. Now those who have read this story will know the answer.

Maps showing “Radar Hill” are provided below (courtesy of MapQuest.com).
The final photo shows the former long-range radar station at MacDill AFB, the parent station for the Inverness Gap-Filler Annex. (Official U.S. Air Force photo)

660th Radar Squadron, MacDill AFB, FL (circa mid 1960s)