This Old Air Base Is Still Alive and Kickin'

In the early 1950's the Korean conflict and the Cold War with Russia began. For these reasons a string of air bases was built across the country to defend against aerial attack. Part of this network of stations was the 790th Aircraft Control and Warning Station at Sublette, Missouri. This base, located six miles north of Kirksville on Highway 63, filled a radar gap between Kansas City, Missouri, and Des Moines, Iowa. Another reason for the site at Sublette was that the area is one of the highest points in northeast Missouri.

In the early 1950's the United States government purchased 54 acres of land in Sublette, which was used for the 790th Aircraft Control and Warning Station. In 1951 the station officially opened, housing 250 men in six barracks. There were four barracks for enlisted men, a barracks for non-commissioned officers, and one for commissioned officers, two radar towers, a mess hall, gym, mail room, PX, and an orderly room with an NCO club were also built for the 790th. Nine houses were built for married men and their families. A motor pool, auxiliary repair station, and a backup power system were also on the base.

The base had two height-finder radars which determined the height that an aircraft was flying. The main radar, stored in the giant “golf ball,” scanned a 200-mile area. This radar occasionally picked up unidentified aircraft. One incident on July 13, 1952, was verified by Major R. B. Abercrombie, commanding officer of the 790th A. C. and W. according to the Kirksville Daily Express. At approximately 9 p.m., an unknown object was detected on radar. The radar blip indicated a solid object, the size of a large aircraft. Before disappearing from the screen, it was clocked at a speed of 1700 miles per hour. The Air Technical Intelligence Command, the agency which investigates unidentified flying object reports, tried to explain this incident by saying a thunderstorm had caused the blip to appear on the radar. The Washington Center controllers dismissed this explanation by saying that no storms were in the area.

Mr. Alvin Henderson, an air patrolman at the Sublette base from August, 1951, to May, 1961, related another such happening. Mr. Henderson explained, “An object was being tracked that was dropping into radar coverage, hovering for a while, then leaving the screen straight up.” Objects were usually tracked as they flew in and through the 200-mile radar span. This object was dropping into radar coverage from heights above radar range and then returning straight up. The incident was never explained.

The air base was under tight security because of its importance; therefore, the base had frequent security checks. During these security checks the Air Patrol, who were commonly on guard, would be designated the “aggressors” and different guards from the base would be put on duty to protect against intrusions. The base would be put on alert and the mock aggressors would try to penetrate security.

Mr. Henderson took part in some of the security checks and explained to us one such check. “Me and a few other Air Patrolmen were designated as aggressors and were to try and break through security, plant fake bombs at strategic points, and escape if possible. We left the base and were not given a certain time to break in so the guards would not be expecting us. The base was put on full alert during these exercises. Me and the other aggressors split up outside, and snuck into the base from different spots around the fence. I climbed the fence and made it undetected to the ‘golf ball.’ I planted the fake bombs and was getting ready to leave when a guard caught me. He took me inside and was guarding me until the other guards got there. I caught him unaware, knocked him down, and escaped over the fence.”

Another security check was described in the Kirksville Daily Express issue of November 20, 1953. Harold Wood, the manager of the Travelers Hotel, was notified that a briefcase was found in the hotel parking lot. Finding a lost briefcase was not an unusual occurrence. However, when Wood opened the briefcase to find some identification, he found several time bombs with each fuse inscribed, “Time Bomb, Kirksville, Missouri.”

The giant “golf ball” located at the Sublette Air Base is made of fiberglass and measures 57.5 feet in diameter.
Mo., Nov. 19.” Wood thought it could have been a plot to kill the mayor of St. Louis, who was in town on that day.

Wood called the 790th squadron, told them the story, and the base promised to send a man to investigate the matter. While Wood was waiting for the airman to arrive, he was confronted by four strange men who demanded to know where Wood got the briefcase. The four strangers turned out to be part of an “aggressor” team. Earlier the aggressors tried by various and devious means to get inside the 790th A. C. and W. base and plant fake bombs. This team was simulating sabotage work. To the squadron’s credit, the aggressors were totally unsuccessful.

In the late 1960’s the United States defensive system was rearranged because of the threat of nuclear war. The defensive radar system now covers only the borders of the United States. Because of this change in strategy, most of the radar bases were put out of commission or taken over by groups other than the Air Force.

On October 23, 1970, the 790th Air Base was officially sold to Northeast Missouri State University for educational purposes. The University bought almost all of the 54 acres of land, including several buildings. When purchased, NMSU had big plans for the former air base which included a traffic safety center, an outdoor laboratory, a university without walls, and a campus F.M. radio station.

The traffic safety center had the highest expectations. This center was to include 1,000 feet of four-lane divided highway with entering and exiting ramps, a steep hill, a gravel road, and a series of maneuvering exercises. Also included in the plans were traffic signals, multiple intersections, garage parking, a skid pan area, and a control tower. The traffic center was to serve the Kirksville public school system and the surrounding area for drivers’ education programs. The cost to set up a program of this magnitude would have been very great. The plan would

Top photo: This illustration shows the radar that rotates inside the “golf ball”. The radar is 42 feet wide and 22 feet high. (Photo courtesy of Sublette Air Base) Bottom photo: This is the computer terminal and radar screen presently in use at the base. This terminal transmits the radar information to the Air Traffic Control Centers in Kansas City and Chicago.
have called for allocations from federal, state, and local monies. Also, the University found that to receive these
grants, the property had to be on public school land. Since
NMSU had neither the money nor the desire to deed the land
to the Kirksville R-III School District, the plan was aborted.
Another idea was a campus F.M. radio station. The University
would offer courses in radio programming. This plan also
required too much money and this idea was eliminated.
The only major use the University has found for the facility
is for storage purposes. The supplies of NMSU were stored in
Kirk Auditorium on the NMSU campus. The need for more in-
tramural sports facilities prompted the University to move
the stored supplies to the old air base. Included in the pur-
chase of land at the air base were houses to accommodate
faculty and married students of NMSU. The University owns
five three-bedroom and four two-bedroom houses.
The Community Action Agency was relocated at the base
in August of 1977. The agency was formed to help solve com-
munity problems such as health care, housing and energy, and
education. It also helps with job development, consumer pro-
tection, disabled people, the aged, and many other activities.
Another branch of the C.A.A., the Head Start Program, is
also located at the base.
When the air base was turned over to the University, the
United States government retained rights to five buildings
that now are used by the Federal Aviation Administration.
Like the Air Force network of radar, the F.A.A. fills a gap in
the network of radar stations across the nation. The main pur-
pose of this radar today is to track and collect data on any air-
craft in the 200-mile radius that the network covers. The in-
formation gathered is automatically sent by computer to two
Air Traffic Control Centers in Kansas City and Chicago.
The base has two radar systems. The basic radar sends out
a pulse of electrical energy that is reflected to the ground sta-
tion when it hits an object. The F.A.A. explained to us, “The
time it takes the pulse to travel to the object, and the time it
takes to return, enables the radar to establish a range. This
radar beam rotates in a circle and can also be used in tracking
weather.”
The secondary radar, also known as a beacon, works
somewhat like the basic radar except for one difference:
rather than sending out an energy pulse, it sends a coded
message to equipment on the airplane. This message in-

By Darren Schneider
Kent Snipes

structs the aircraft equipment to send a message back, giving
the identity of the aircraft and its altitude. This type of radar
was also used by the Air Force when the base was under Air
Force control. The message sent out by the radar was changed
frequently so only friendly aircraft could know the code. If
any enemy aircraft flew into radar coverage the beacon would
not be able to receive a message from the plane since the
enemy would not be on the same frequency. This is how
enemy aircraft could be detected.
Currently there are six technicians employed at the radar
station to repair the computers if a breakdown occurs. The
F.A.A. is installing a remote monitoring system which will
enable it to watch a number of indicators from Kansas
City. As explained by John Row, technician at the Sublette
Air Base, “This system would only need a few checks maybe
once a week. This could cut the amount of time needed to
watch the system. The six of us work eight-hour shifts now;
whereas, with this new system it would only take one or two
technicians a few hours, once a week, to check the system.
The equipment will transmit to the F.A.A. the information on
whether the system is working correctly. In addition, a com-
puter will monitor the radar and automatically adjust it to
compensate for weather conditions. This “smart” radar is
believed to be one of the most advanced systems anywhere.
When completed, all similar radars in the United States will
be modified to look like the Kirksville System.
Since the radar station is such an integral part in the
Federal Aviation Administration’s network of radar, it looks
like the air base will be in use for years to come. From the
790th Aircraft Control and Warning Station to the present-
day occupants, the Federal Aviation Administration, Com-
munity Action Agency, and Northeast Missouri State Univer-
sity, the air base has avoided being idle. Often when driving
by the base it may seem desolate, but this old air base is still
alive and kickin’.

The Sublette Air Base as it looks today.