Long Lines site: Hillsboro, Missouri

AUTOVON switch, Echo-Foxtrot ground entry point, Combat Ciders ground entry point

- Common Language Identifier: HLBOMO
- **Coordinates:** A: 38°19'32.40" N, 90°31'41.80" W (38.32567 N, 90.52828 W) B: 38°19'30.9" N, 90°31'42.80" W (38.32525 N, 90.52856 W)
- County: Jefferson
- AT&T call sign: KAQ78
- Antenna Structure Registration (ASR): A: 1005496; B: 1279684
- **Height (overall):** A: 88.7 meters (291.01 feet); B: 74.4 meters (244.09 feet)
- Current owner: AT&T
- **Currently in use?** Yes, site has AT&T cell repeaters. Building in use by AT&T.
- Horn antennas? Yes. Tower A KS-15676 horn-reflector antennas (x7), Combat Ciders ground entry point antennas (x3), Echo-Fox antenna. Tower B KS-15676 horn-reflector antennas (x2), Combat Ciders ground entry point antennas (x4, one missing)
- **Original hops:** 1960 <u>Gray Summit (NW, telephone only)</u>; St. Louis CO (NE, telephone only); Waterloo, Illinois (ENE, telephone only); <u>Lawrenceton</u> (SE, telephone only)
- Later hops: 1979 Richwoods

Of the more than 70 former AT&T Long Lines sites in Missouri, Hillsboro in Jefferson County could easily be called the "holy grail."

The AT&T Long Lines site about seven miles north of Hillsboro along Route 21 was a critical site, not only for its microwave capabilities. The site was a major switching hub and the western terminal of the L5 coaxial route. Most importantly, however, were the eight orange antennas spread across both towers and the lone UHF antenna array atop the 290-foot northern tower (which I refer to as the "A" tower). The eight orange antennas were used for the Combat Ciders secure radio system. The UHF antenna array was used for the Echo-Foxtrot radio network, which communicated with Air Force One — the United States' presidential aircraft.

The southern tower is 244-feet tall and also contained KS-15676 microwave and Combat Ciders antennas.

At the base of the towers are large concrete hardened facilities built on top of an underground facility. The facility was expanded in 1964, <u>according to a story in *The Jefferson Republic*</u>.

Hillsboro also housed a cesium fountain clock used to keep precise time within the telephone network.

In 1960, all microwave routes through Hillsboro only handled telephone traffic. Hops in 1960 were northwest to Gray Summit, northeast to the downtown St. Louis central office, east-northeast to Waterloo, Illinois, and southeast to Lawrenceton. By 1966, television traffic had been introduced

Last updated: 03/17/25

HORNS ACROSS MISSOURI: Hillsboro

along the St. Louis-Hollister and Hillsboro-Campbell routes, which included Hillsboro's hops to the St. Louis CO, Lawrenceton and Shirley. (The "St. Louis ring route" remained telephone only, which included Hillsboro's Gray Summit and Waterloo hops.) A southwest hop to Richwoods was added between 1966 and 1979. (It is unknown whether that hop carried telephone traffic only, or both telephone and television traffic.)

The former microwave links are dead, but AT&T still owns and operates the property. According to someone on the Long Lines Facebook Group, Hillsboro still has active fiber optic links to Scott Air Force Base in Illinois, Cape Girardeau and Creve Coeur. There are many fiber optics cable markers in the vicinity, along with "surveillance zone" warning signs around the property perimeter. The aforementioned commenter said the underground portion of the building has been abandoned by AT&T.

Online site page:

https://personal.garrettfuller.org/blog/att-long-lines/missouri-long-lines-sites/long-lines-site-hillsboro-mo/

Last updated: 03/17/25

Photos: October 17, 2024



Northern ("A") tower with portion of the base station structure.



The "B" tower, left, contains four Combat Ciders ground entry point antennas (one is missing), while the "A" tower contains three Combat Ciders ground entry point antennas. These antennas allowed the site to communicate with special military aircraft. Horn-reflector antennas are present on both towers.



A closeup of the top platform on the "A" (northern) tower shows two of the three Combat Ciders ground entry point antennas (orange), along with the site's Echo-Foxtrot UHF antenna (above right edge of top horn facing camera). The Echo-Foxtrot antenna allowed the site to communicate with special aircraft such as Air Force One.