EXAMINER APPROVES SECOND TALL TOWER

FCC member disagrees again with military and civil aviation interests. New group formed to find compromise solution to tv tower problems.

AN FCC hearing examiner, for the second time within a month, has approved a tall tower for a tv station notwithstanding objections by military and civil aviation interests.

At the same time, the top ranking Joint Industry-Government Tall Structures Committee has come to an impasse in trying to work out a compromise between its aviation and broadcast industry members. It decided to establish a new working group, composed equally of representatives of both sides, to hammer out some compromise in the quest for a solution to the tall tower problem.

And, at another level, the aviation-broadcasting subcommittee of the Airdromes, Air Routes and Ground Aids Subcommittee (AGA) of the Air Coordinating Committee has drawn up a set of changes in marking and lighting radio and tv towers.

FCC Hearing Examiner Hugh B. Hutchison last week issued an initial decision recommending approval of the move of ch. 5 KGEO-TV Enid, Okla., to a site 31 miles southeast of Enid toward Oklahoma City and to mount its antenna 1,356 ft. above ground. The station now has its transmitter 9.5 miles east of Enid, with its antenna 816 ft. above ground.

Military and civil aviation objections were based on opposition to any tower more than 1,000 ft. above ground [B•T, Nov. 29, 1954 *et seq.*].

Last month, Mr. Hutchison issued an initial decision favoring the erection of a 1,610 ft. antenna by KSWS-TV Roswell, N. M. [B•T, July 4].

No Hazard to Air Travel

In both instances, Mr. Hutchison held that the tall towers could not be reasonably considered hazards to air navigation.

In the Enid, Okla., situation, Mr. Hutchison found the existing 816-ft. tower was more of a menace to airplanes than the proposed tower would be. The present tower is 4.5 miles from a civilian airport and 12 miles from a military airbase. The proposed tower would be 28 miles southeast of both airports.

He was also impressed with the fact that at its proposed location KGEO-TV would gain 397,667 more viewers in its Grade A coverage area and 280,772 viewers in its Grade B contour. These would be getting prime coverage for the first time, he said.

Answering charges of "straddling"—where a station allocated to one city attempts to cover a nearby, major market by locating its transmitter between the two cities—Mr. Hutchison ruled that KGEO-TV not only was guiltless of this alleged practice, but should be commended for the proposed move. He pointed out that 75%-85% of Enid's tv owners had antennas oriented toward Oklahoma City. KGEO-TV's signal from its present location comes in at right angles to these antennas, and the local station's picture is distorted. By moving toward Oklahoma City, the examiner declared, KGEO-TV's radiation will come into Enid from the same direction to which most of Enid's antennas are pointed.

The initial decision showed that KGEO-TV's revenues had declined from a high of $26,804 in October 1954 to a low of $13,598 in February of this year, while its operating deficit had increased from a low of $8,777 in October last year to a high of $20,100 in February 1955. Its staff has been cut from 44 to 30, it was explained. At the same time, the station is prepared to spend $250,000 in making the move to the new transmitter location, it was pointed out.

In hearing is the request of WSLA-TV Selma, Ala., to move its transmitter site nearer Montgomery and to put its antenna 1,993 ft. above ground. Due to be submitted is the request of WHAS-TV Louisville, Ky., for a 2,000-ft. antenna.

The Joint Industry-Government committee was established earlier this year after the military members of the ACC's Airspace Panel formally recommended that all towers 1,000 ft. or more above ground be disallowed. This proposal was discussed by the ACC's Technical Division and then forwarded to the top membership of ACC. Failing to agree among themselves, the ACC established a joint committee of government and broadcast representatives to work out a solution. It is chaired by CAA Administrator F. B. Lee and FCC Comr. Robert E. Lee.

The first step was the drawing up by each side to the controversy of a bill of particulars. Two weeks ago, these documents were submitted to the full committee which found them "incompatible."

A new working group was then established to review the problem and to attempt some solution acceptable to both industries.

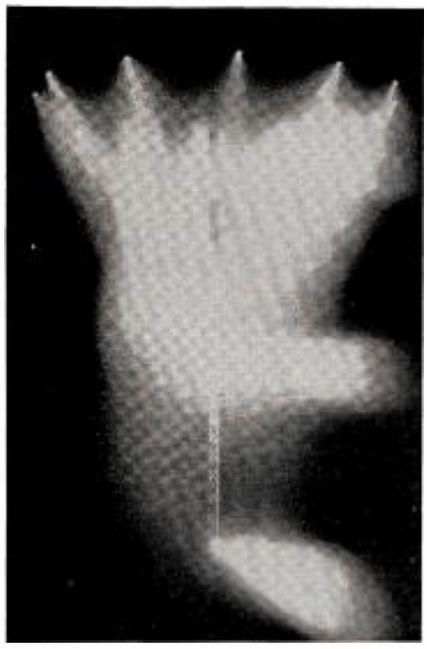
The new working group is headed by J. A. McCrary, secretary of the ACC's Technical

A Little Light on a Tall Question

AIRPLANE PILOTS are watching with vital interest an experiment taking place in Louisville which may eliminate one of their nightmarish mental hazards—that of determining where the guy wires run for tall structures.

WHAS-TV Louisville, at its own expense, has established a test of "area" lighting which, if successful, would permit pilots to spot not only radio and tv towers, but also the whole segment occupied in airspace by such a structure. This is preparation for its proposed 2,000-ft. tv tower which it has asked the FCC to approve [B•T, Feb. 21].

The test is being conducted on the 675-ft. radio tower of WHAS about 19 miles east of Louisville. Two types of equipment are being used:



THIS is the scene that an airplane pilot will see at night if current experiments by WHAS Louisville for substituting "area" lighting for structure lighting work out. It is one of the first experiments to define a radio or tv tower and guy wires to improve the visibility of tall towers for pilots. WHAS-TV has proposed a 2,000-ft. tower; this is how it will be lighted if current tests on the WHAS tower prove out.

For nighttime: Four rotating beacons are installed. Two are mounted on the tower, one at the top and the other about 100 ft. above the base. The other two are mounted about 1,500 ft. apart on the ground as markers for the tower's guy anchors. The beacons mounted on the tower rotate in a horizontal plane; those on the ground rotate in a vertical plane. The beacons are Westinghouse TVI lights, each employing a 1,000-w mercury vapor light source, which gives off a bluish-white beam. This is enclosed by a clear glass dome. Estimated peak candlepower is 19,500-ft. candles. This compares to the estimated 1,830-ft. candles of power of the standard red hazard warning beacon, employing two 500-w incandescent lamps.

This lighting is a cross-section, covering two guy anchors only.

In addition, 30-ft. letters of red neon tubing, forming the abbreviation "HAZ" (for hazard), are on the ground at the southeast guy anchor. Present red rotating beacon atop the WHAS transmitter building as well as the standard flashing beacon and fixed red bracket lights are continued in operation.

For daytime: Rotating, helical mirrors are installed. One is mounted on each face of the square WHAS tower, approximately 10 ft. from the top. On the ground, spaced about 750 ft. from the tower base, are four more reflectors as markers for guy anchors. The 30-ft. HAZ marker is painted international orange for daytime viewing. A 100-ft. diameter circle of white rock, with the tower base as the center, is also in existence to aid in identification. The assumption is that sunlight reflected by the mirrors will form a cone of light, making identification easier for pilots.

The Louisville experiment is being conducted with the cooperation of the marking and lighting study group of the Airdrome, Air Route and Ground Aids subcommittee of the Air Coordinating Committee. This group has been working for the past year in seeking means of improving the marking and lighting of tall structures, including guy wires.

Early last year, tests were made at WFAA-TV Dallas with a neon-blaze source light, developed originally by Westinghouse for airport approach lighting.