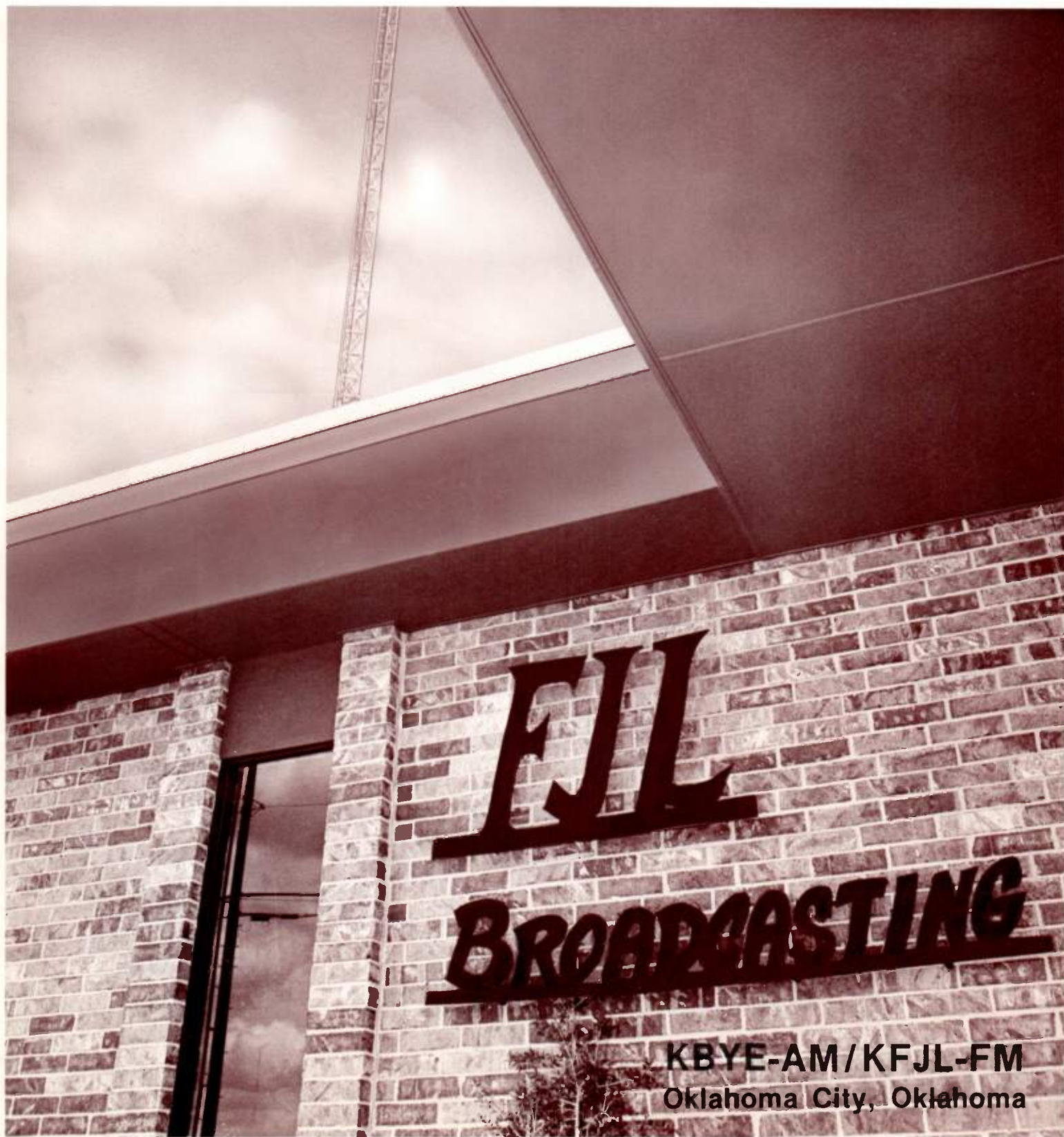




HARRIS
COMMUNICATIONS AND
INFORMATION HANDLING

am-fm radio profile

HARRIS RADIO EQUIPMENT APPLICATION REPORT



KBYE-AM/KFJL-FM
Oklahoma City, Oklahoma



KBYE-AM and KFJL-FM are owned by FJL Broadcasting, and recently moved to this new building, located on the outskirts of Oklahoma City. In the background is a Harris FMS-12, 12-bay circularly polarized FM antenna.

Harris' fast emergency service gets KBYE/KFJL back on air only one week after disastrous fire!

Monday, September 13, 1976, is a date which will not soon be forgotten at KFJL-FM/KBYE-AM, Oklahoma City, Oklahoma. That is the day the station was nearly destroyed by fire.

The events which led up to the fire are still not completely known, but apparently thieves broke into the station to steal records and money, and then set fire to the FJL Broadcasting-owned station to destroy any traces of themselves. If there was a bright side to the incident at all it was the fact that the thieves closed the door when they left, thus shutting off much of the oxygen supply that would have completely destroyed the station.

When the fire was put out and the poisonous fumes dispersed, FJL Broadcasting owners Jerry and Tom Lynch were able to survey the extent of the damage. The internal components of the Harris BC-1H1 AM Transmitter and FM-20H3 FM Transmitter were melted by the estimated 1500°F temperature in the transmitter room. The audio consoles, cart machines, turntables, limiters and audio accessories in both AM and FM control rooms were destroyed. The recently purchased Harris System 90 automation system was a charred mess. Telephones, light fixtures and other plastic furnishings throughout the building were unrecognizable. And the items that were not melted were heavily damaged by smoke.

HARRIS CORPORATION PROVIDES EMERGENCY SERVICE

Within hours, a Harris Corporation representative was at the scene, and along

with FJL Broadcasting Vice President Tom Lynch, made an 8-page list of equipment needed to replace that damaged in the fire. Less than 3 days after the order was called in to the Harris office an electronics van was on the way to Oklahoma City carrying all the items on the list. The equipment included an FM-20H3, 20 kW FM Transmitter; MW-1, 1 kW AM Transmitter; Dualux 80 Audio Console; Stereo 80 Audio Console; and an assortment of cart machines, turntables, limiters, AGC's and other audio accessories. (A replacement System 90 automation system was ordered at a later date.)

The quick delivery of equipment, along with a great installation effort on the part of FJL's staff enabled both stations to be on the air by Monday, September 20...only one week from "Fire-day the 13th," as it is now referred to.

"It was amazing that we were back on the air so soon," says FJL Vice President Tom Lynch. "You couldn't ask for better emergency service than we got from Harris."

When the emergency situation arose, it was no coincidence that Harris Corporation was called on to supply the needed equipment.

"The reason we went to Harris was because several years ago our AM transmitter went out and we needed a new one fast," says Mr. Lynch. "The Harris salesman came that same night, and we got the transmitter in just a couple of days. Since we were then in the planning stages of a new facility, we decided to go all-Harris with the new equipment."

The modern new facility is situated on a

beautiful 11-acre tract on the outskirts of Oklahoma City, complete with a large lake. A contemporary-styled brick building houses the two radio stations, which carry two very different formats...KBYE-AM broadcasts Country Gospel music while KFJL-FM, a black formatted station, programs jazz music and local news.

However, the different formats make sense when their development is traced back several years. KBYE-AM started as a Country Gospel station and in the early 1960's incorporated some Black Gospel into its programming. Eventually KBYE-FM was established to give greater air time to Black music, and in 1971 the demand was so great it became KFJL-FM...the first station in Oklahoma programmed exclusively for a black audience.

"The feedback from the black community is that KFJL is 'their station'," says program Director Ron Williams. "We are now more progressive, and are trying to get on a personal basis with our listeners. Our jazz music format is adult oriented—no teeny-bopper stuff—so we not only get a large part of the black community, but also many white listeners who like jazz."

SYSTEM 90 GIVES "NEW SOUND"

The "new sound" of KFJL is partly due to the Harris System 90 program automation system which is used during about 80% of the 24-hour broadcast day.

"Automation makes what we thought sounded good sound even better," says Vice President Tom Lynch. "And it's giving us a chance to expose much more music to the community and in a much more professional manner."



Program Manager Ron Williams pulls a cart from the new Harris System 90 program automation system which is used by KFJL-FM. A Teletype 33 ASR clear text logger is used with the System 90.

Most KFJL listeners do not even know they are listening to a machine. When the System 90 first went on the air, Program Director Ron Williams jokingly announced on the air that "Brother Otto" was coming on next. The station was soon receiving calls for "Brother Otto", so the System 90 has been referred to by that name ever since.

The music played through the System 90 is a combination of that supplied by a program service and album cuts recorded at the station. The automation system operates 24-hours-a-day except for a live music program during morning drive time and special feature programs in the evenings.

During regular operation the System 90 uses a main format/sub format type of programming, in which the music and ID's are the main format, and the commercial content comprises the sub format.

However, on Sundays, which are devoted to Gospel music and church services, a sequential format completely different from the Monday through Saturday programming is used.

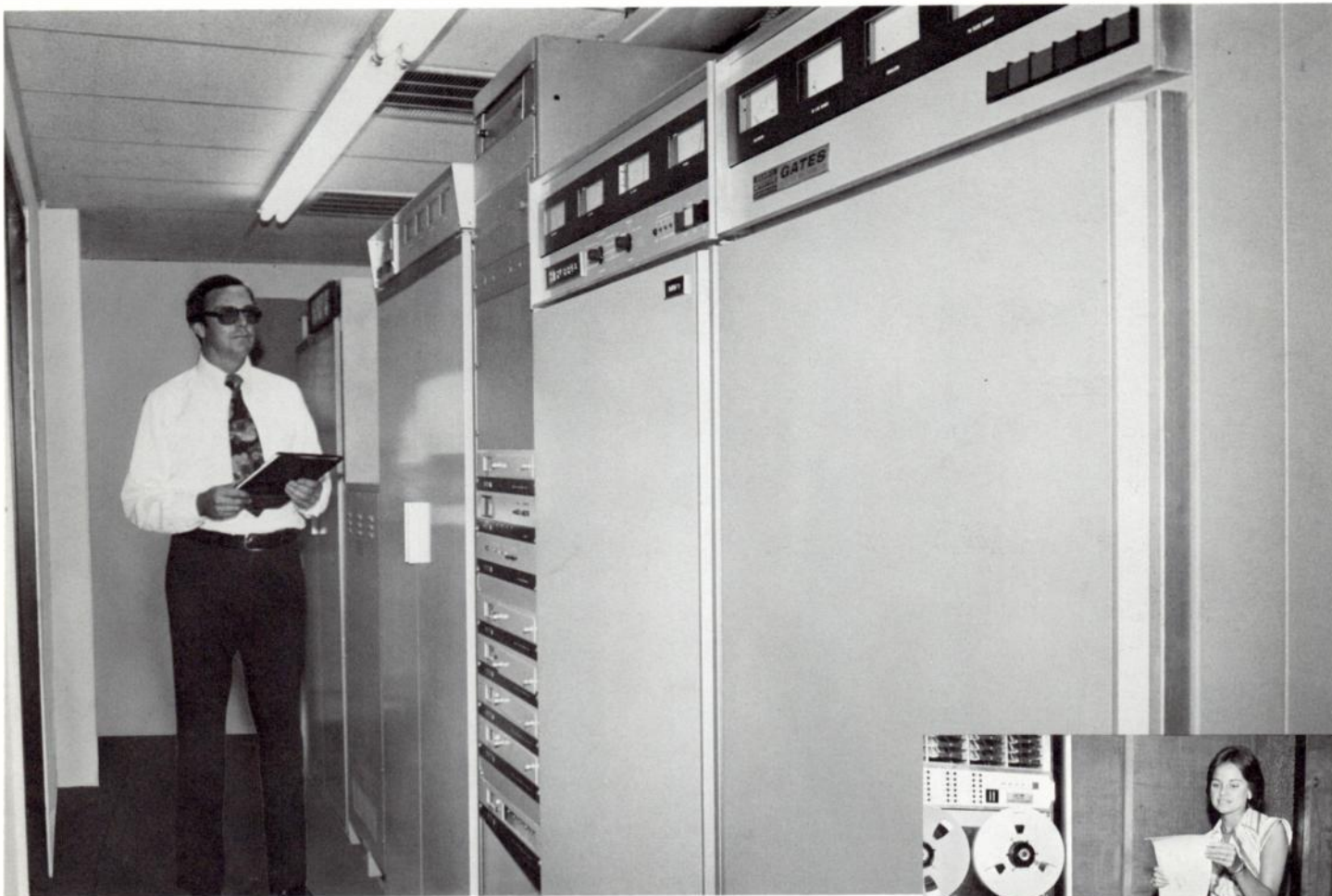
"We've only scratched the surface on what can be done with the System 90," says Chief Engineer Carl Smith. "There are so many different ways to accomplish the same objective...the versatility is just unbelievable. I can program it to do virtually anything I can think of. And the amazing part is, it is so simple to operate."



Ron Williams cues a record on a Harris CB-1201 Turntable. Both control rooms are almost entirely Harris equipped, including Dualux 80 and Stereo 80 audio consoles, four CB-1201 turntables and several Criterion cartridge machines.



Business Manager Stacie Jennings makes a one-time bulletin insertion into the System 90 program automation system by merely punching several keys on the control console.



FJL Vice President Tom Lynch inspects the renovated transmitter room during a free moment. Two new Harris transmitters—a MW-1, 1 kW AM transmitter and FM-20H3, 20 kW FM transmitter—were ordered, delivered and installed in only one week after a fire ravaged the building. (Inset) - Traffic Manager Catherine Stow inspects the clear text logging printout of the System 90's programming.

LOUDER, CLEANER SIGNAL WITH NEW MW-1 TRANSMITTER

The AM side of the station has also noticed its share of changes since the new Harris equipment was installed.

"There has been a tremendous improvement in KBYE's signal since we started using the solid-state MW-1," says Mr. Smith. "We put up a new 499-foot tower when we moved to our new facility, and with the MW-1 we've had to reduce our power to 776 watts output...and we still get a louder, cleaner signal than with the old BC-1H1. Naturally, that means less wear and tear on the transmitter, since it is just 'coasting' along. No question about it—you can tune in anywhere in the Oklahoma City area, and we have the loudest, cleanest signal on the dial."

The 100% solid-state MW-1 derives this loudness from the unique performance of

its patented Progressive Series Modulator. The Progressive Series Modulator (PSM) is a simple series regulator, connected in such a way as to provide efficient high level modulation without the use of a modulation transformer, modulation reactor, power supply choke or 70 kHz filter. This eliminates components which have limited transmitter performance in the past.

There is no doubt that the new Harris transmitting and audio equipment have had an impact on the sound of both KBYE and KFJL. But there have also been improvements which the listeners in Oklahoma City are not aware of.

"Since we now have almost 100% new equipment, our day-to-day problems have been cut way back," says Vice President Tom Lynch. "Now we can concentrate on increasing our business instead of worrying about our equipment. This is very important right now since FJL Broadcast-



ing is in the process of purchasing radio stations in other markets."

The Harris System 90 in particular has made its presence felt in the area of fiscal management.

"The System 90 has freed our people to get new ideas and be more creative, which gives us new features for the salesmen to sell. But the real bonus with the System 90 is in the area of employee benefits and salaries, which are going up all the time."

"We have forecast that the System 90 will pay for itself in four years, and that counts maintenance and parts. Everything after that is gravy!"

HARRIS CORPORATION Broadcast Products Division
P. O. Box 290, Quincy, Illinois 62301 U.S.A.