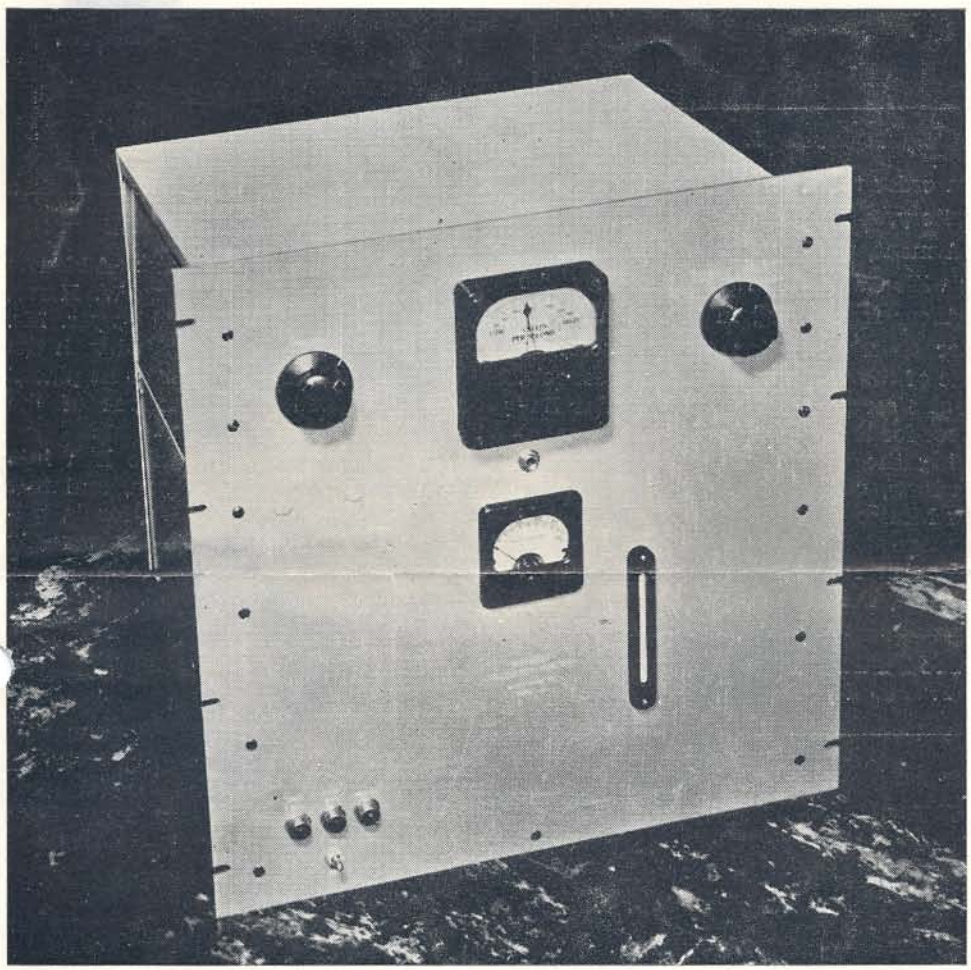
STUDIO REVIEW

GATES RADIO CO. QUINCY, ILLINOIS MARCH, 1948

GATES FREQUENCY MONITOR APPROVED



Gates Announces New AM Frequency Monitor

To round out the planned program during "G Year—1948" of making everything for the broadcasting station available from Gates, the official announcement of the new MO-2890 Frequency Monitor was made recently by the Gates Sales Department. This unit has been fully approved by FCC and carries approval No. 1469. In applying for use of this frequency monitor, broadcasters, or prospective broadcasters, need only state that the Gates MO-2890 Frequency Monitor will be employed, showing approval number 1469 and the frequency of its operation. Show all other data as approved.

The Gates Frequency Monitor requires 19¼ inches of standard 19 inch rack space. It is finished in Gates Gray (a medium gray matching most transmitter color schemes) but may be had in other colors with only slight additional charge if so desired.

Basically, the MO-2890 Monitor consists of a precision oscillator operating 500 cycles below transmitter frequency; amplified by one stage and then mixed into a detector stage with a small RF signal from the transmitter. The resulting beat of 500 cycles is further

(continued on page 7)

—— This Is "G" Year ——

NAB CONVENTION IN 1948

Remember to make your plans now for the NAB Convention in Los Angeles in '48. Plan on seeing the Gates line of complete equipment on exhibit. Any problems or questions on FM, AM, or television can be discussed with the Gates personnel in attendance. Remember — MAY 17 THROUGH 20 AT THE HOTEL BILTMORE, LOS ANGELES, CALIFORNIA.

—— The Swing Is to Gates in '48 ——

AIR SERVICE STARTED JANUARY 22

Mid-Continent Airlines, large mid-western operators of air passenger, express and freight service started operations on January 22 between St. Louis, Quincy and St. Paul-Minneapolis. As Mid-Continent Airlines fly as far south as Houston, Texas, and practically to the Canadian line, Quincy is thus linked by a single air ticket from the Mexican border to the Canadian border. Handy exchange points for other air connections, all on a single ticket, will be found at St. Louis and Des Moines, Iowa, with St. Paul for northwest connections.

The present schedule shows arrival in Quincy from St. Louis at 2:15 p. m. and arrival in Quincy from St. Paul at 11:56 a. m.

TWA started service from Quincy with two flights daily each way to Kansas City and Chicago effective March 3. These flights meet all important East-West planes, and Quincy is now only a matter of a few hours from Los Angeles or Washington, D. C.

Quincy, Illinois, is rapidly becoming one of the major air terminals and due to its geographic position and the unusual fineness of its airport, which is a Class 4, could easily become an air hub for the entire United States.

Schedules are listed below:

Mid-Continent

NORTHBOUND Flight 41 - 42		SOUTHBOUND Flight 41	
Lv. St. Louis	1:25 pm	Lv. Minneapolis	8:00 am
Lv. Quincy	2:10 pm	Lv. Rochester	8:49 am
Lv. Ottumwa	2:59 pm	Lv. Mason City	9:27 am
Lv. Waterloo	4:35 pm	Lv. Des Moines	10:30 am
Lv. Rochester	5:23 pm	Lv. Ottumwa	11:07 am
Lv. Minneapolis	5:57 pm	Lv. Quincy	11:56 am
		Ar. St. Louis	12:36 pm

All Flight on Mid-Continent CST

TWA

WESTBOUND		Flight 391 (191)	Flight 139
Lv. Quincy-Hannibal	CST	11:13 am	5:28 pm
Ar. Kansas City	CST	*12:40 pm	6:55 pm
Ar. Wichita	CST	3:10 pm	8:30 pm
Ar. Amarillo	CST	5:15 pm	10:35 pm
Ar. Albuquerque	MST	6:15 pm	11:35 pm
Ar. Phoenix	MST	8:40 pm	2:00 am
Ar. Los Angeles	PST	10:10 pm	3:30 am
Ar. San Francisco	PST	1:00 am	5:55 am

*Connects with Flight 191

EASTBOUND		Flight 98	Flight 380
Lv. Quincy-Hannibal	CST	10:13 am	2:43 pm
Ar. Peoria	CST	10:55 am	3:25 pm
Ar. Chicago	CST	12 noon	4:30 pm
Ar. Dayton	EST	3:35 pm	7:20 pm
Ar. Columbus	EST	4:20 pm	
Ar. Pittsburgh	EST	5:35 pm	8:55 pm
Ar. Philadelphia	EST	7:50 pm	
Ar. Newark-New York	EST	8:40 pm	11:05 pm

STANLEY B. WHITMAN

Stan Whitman joined the Gates sales engineering force and is maintaining his headquarters at Waterloo, Iowa. His territory includes the north central states. The addition of Stan to our sales force means service to the broadcasters in this area. He has had over 10 years of broadcast experience, most of which was spent as an engineer in radio stations. His knowledge gained from actual operational experience will no doubt help him to serve you well. His address is: 246 Baltimore, Waterloo, Iowa. Phone 6098.

HAROLD L. ARMENT

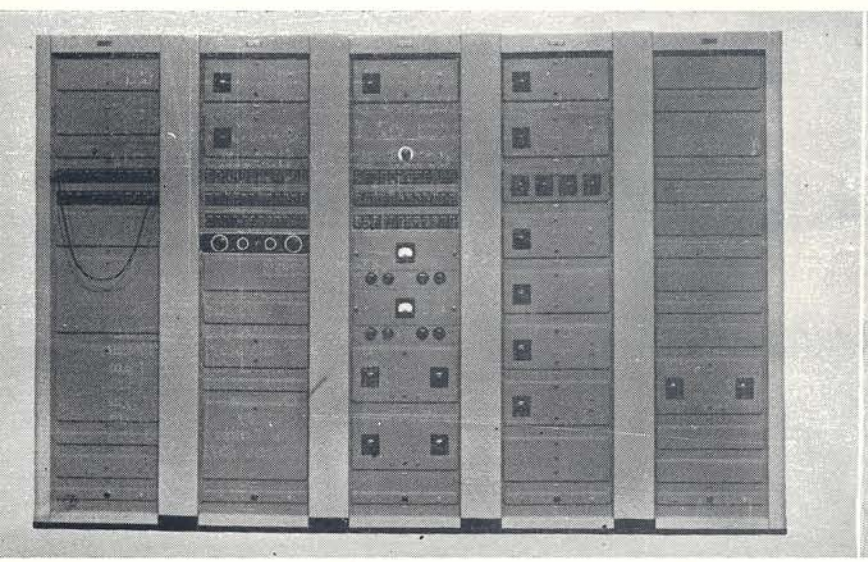
In order to better serve the southwest territory, a new sales engineer, Harold L. Arment, was employed. Before coming with Gates, Mr. Arment was a radio engineer freelancing in this same area. Prior thereto he was an instructor in some of the west coast Air Corps schools. He also served as Radio and Radar Engineer for the United States Government during the war. His territory includes Arkansas, Oklahoma, Colorado, Kansas, New Mexico, and he will have his headquarters at 2227 East 10th, Tulsa, Okla. For quick reference his phone number is 6-8779, Tulsa.

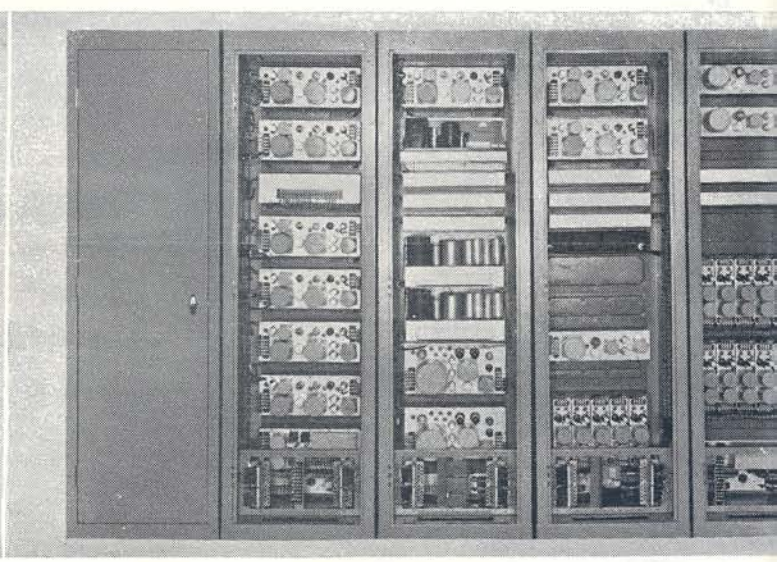
LAURENCE W. HARRY

Western States please note: Added to Gates personnel is Laurence W. Harry, a well known radio man and lawyer. Mr. Harry is thoroughly acquainted with the problems of the broadcaster as he placed on the air and still owns one of the first FM stations in Ohio.

Mr. Harry's work will take him into Washington, Arizona, Oregon, and into the California and lower California territory. His temporary address for ready assistance: 574 Hargrove St., Inglewood, Calif. Phone Oregon 8-1075.

WSOY, Decatur, Ill.

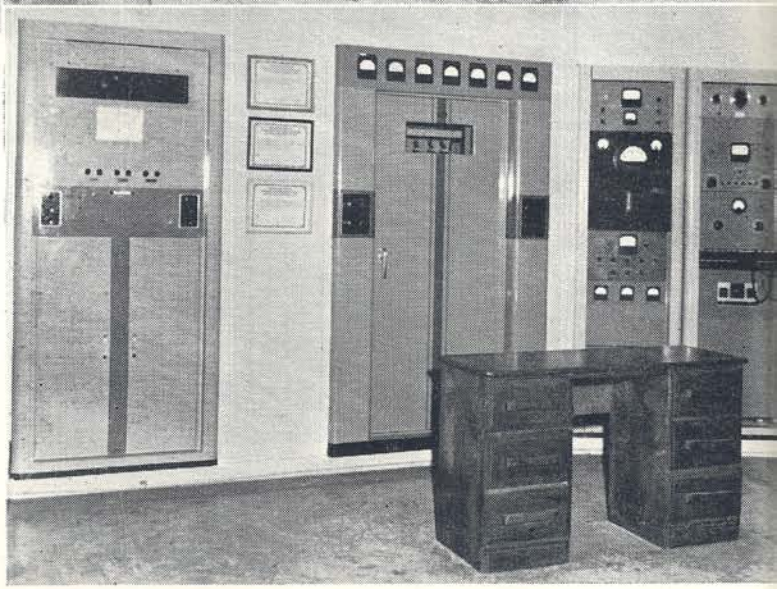




The above illustrations portray a new multi-rack installation of Gates speech equipment recently supplied to WSOY—AM-FM. These racks incorporate all of the new Gates SA series amplifying equipments with cast aluminum construction throughout and drop-down front panels for servicing of all under-chassis parts. Features of the SA series line of amplifiers is the lack of necessity of removing the equipment from the rack for servicing of every part; even the inside is illuminated so that the operator has needed light on such things as resistors, capacitors, transformer connections, etc. Neither is it necessary to remove the cabinet style strips to drop down the front panel.

Actually the WSOY speech equipment is not all shown in these photographs as the complete equipment consisted of eight racks of apparatus and two custom design horseshoe type control desks. This speech input system is considered one of the finest in the world with every facility provided for multi-studio operation, master control and dual operation in its finest sense of the word.

The Gates Company designs many custom-built complete speech systems for some of America's finest broadcasting stations and is ready to assist broadcasters in their requirements of this nature.



Above: Front view of $100,000 station of KREL at Goose Creek, Texas.

Upper right: Gates Studio Equipment including a CB-4 Desk raised to allow better vision of the studio.

Lower right: Transmitter, phasing units and the various racks. All equipment is built flush with wall, with workroom for engineer in rear.

Radio Station KREL, Goose Creek, Texas, is one of the "Show Stations" of the southwest. The station is completely housed in an air-conditioned $100,000 plant. The Gates BC1-E transmitter and all associated studio equipment, complete phasing units for its three tower directional pattern comprise the apparatus in use for the 1000 watts of transmission. The station is owned and managed by Virgil G. Evans. Mr. M. E. Dougharty is Chief Engineer.

MANY GATES CUSTOMERS USING AIR FREIGHT

The many modes of transportation have become so confusing that the very word "air" has become synonymous with expensive transportation. Little is known or publicized about air freight, but. interesting is the fact that air freight is on the average only about thirty per cent more expensive than straight railway express. On the average, an item that would demand a $10.00 railway express charge would demand approximately $13.75 air freight charge, or approximately $20.00 air express. These figures, of course, are only approximate.

For example, a shipment weighing 178 pounds was made recently to a station in North Carolina by air freight with the total air freight bill from Quincy amounting to $24.65, which will give the customer an excellent idea as to the reasonable expense for air freight where the need is urgent.

For example, a Dynamote Remote Amplifier which weighs about 55 lbs. packed, may be shipped air freight to the east coast for about $3.00 and to the west coast for about $12.00, which all will agree is reasonable.

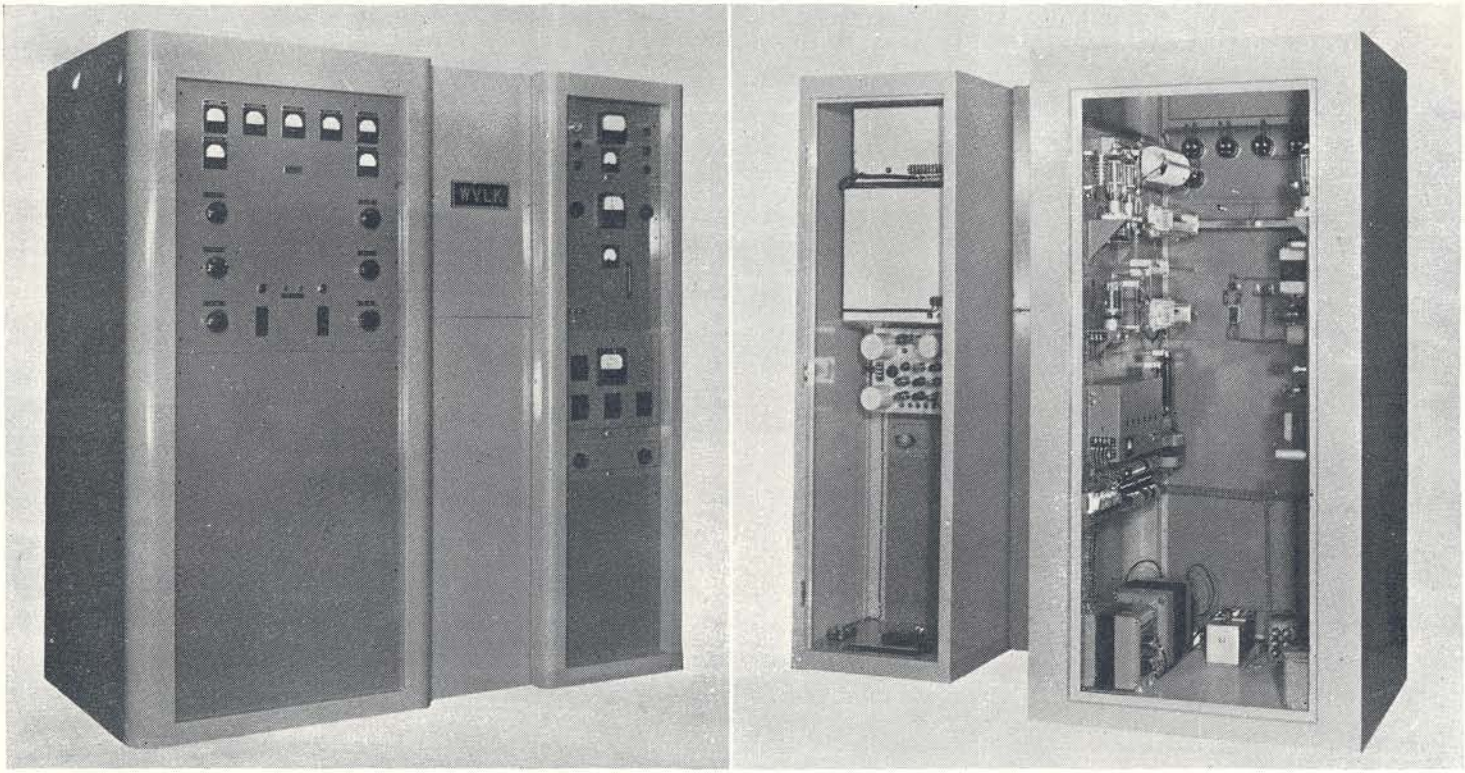
Air freight differs from air express in only one way. We, as the manufacturer, must deliver it to a carrier or to the airport. You, as the recipient, must call for it at the airport or have a carrier deliver it. However, you are notified immediately by phone of its arrival at the airport. If you do not have an airport serving your area the last lap to destination is handled by railway express.

There are six daily flights to the east, south, north and west out of Quincy now by Trans-World Airline and Mid-Continent. Every point in the United States is only hours distant from us. Arrangements have been made with TWA on extremely heavy shipments, such as radio transmitters, that might be demanded immediately because of fire or flood, to route planes handling freight cargo exclusively to the Quincy airport to accept these shipments.

—— This Is "G" Year ——

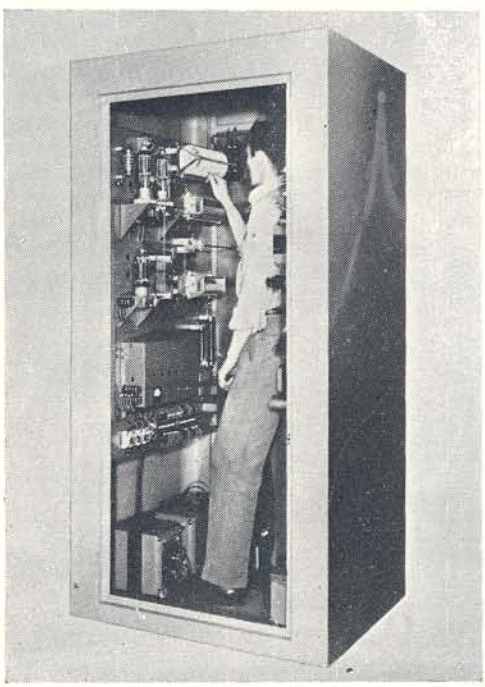
WHEN SPRING STORMS COME AND LIGHTNING STRIKES — REMEMBER GATES FOR REPLACEMENTS!

—— The Swing Is to Gates in '48 ——



GY48 Radio Station

One of the newest items added to the Gates equipment is the GY48 Radio Station for 250 watts transmission. This all-in-one equipment includes a 250 watt transmitter complete with two sets of tubes, two crystals and ovens, an attractive joiner panel with call letter plate with your call letters thereon, and a complete rack equipment including Gates MO-2890 Frequency Monitor, Gates MO-2639 Modulation Monitor, Gates SA-38 Limiter and a Switching Panel. The entire unit is completely wired, ready to go, and the rack is provided with solid dialectric cable to connect monitors to the transmitter.



Note wireman inside of cabinet which is large enough to permit easy servicing.

Having realized a need for a low priced, yet high quality station transmitter the personnel of Gates' Engineering and Sales Departments put their heads together, so to speak, and after all the suggestions were assembled some were tried, some discarded, others changed, and as a result we have the 250-GY Transmitter.

The "front office" had many valuable suggestions from their close associations with broadcasters and the broadcasting field. The engineering staff, profiting from its many years of experience, both in the field and in technical development work, designed a unit which is the dream of station engineers—and, as many think, a probable gold mine for station owners.

While fabricating the unit ideas were received from various department heads as to accessibility, maintenance, servicing and again the practical suggestions were followed.

The cabinets were made in Gates' sheet metal department, and are slightly larger and more modern in design than other 250 watt models.

Shelves are hinged to the side to facilitate easy servicing or changing of parts. The components are standard top quality items used in other Gates transmitters.

Any new broadcaster, or an oldtimer, who is in need of a new transmitter or replacement would be more than proud of this attractive set-up in his station.

Prices are in line with the new economic outlook which is more prevalent these days. The entire all-in-one "deal" is $3950.00. It can't be beat in price or quality by any other comparable equipment.

Although priced as a complete set-up, any of the units can be bought individually. For more particulars drop a line to the Sales Department, Gates Radio Company, Box 290, Quincy, Illinois.

——— This Is "G" Year ———

"Supercabe"

Gates Enters Coaxial Cable Field

Realizing the industry's need for an additional source of supply for coaxial cable, and likewise the several weaknesses of such fragile devices as end seals, junction boxes, bends, etc., the Gates Company announced a few days ago a complete new line of "Supercabe" coaxial cable, including end seals, junction boxes, various types of bends, gas equipment and everything necessary for the complete installation.

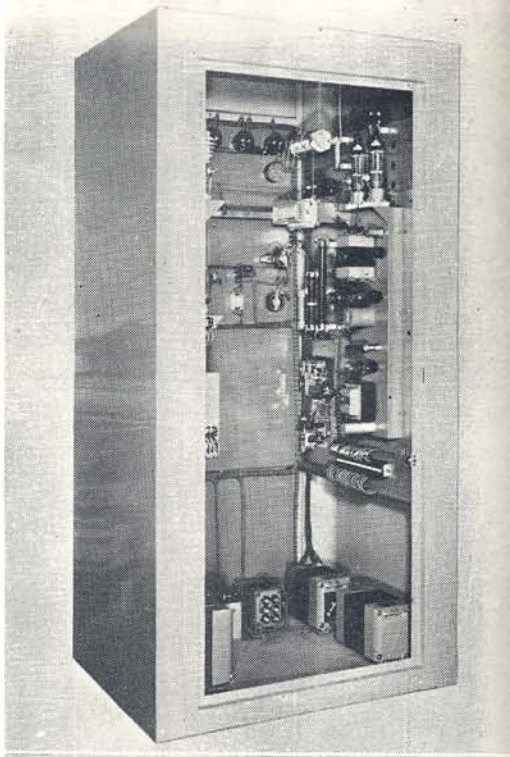
On the first production Gates made 7/8 inch, 70 ohm cable, because of its tremendous popularity. Soon to follow will be 1 5/8 inch, 51.5 ohm cable, and accessories.

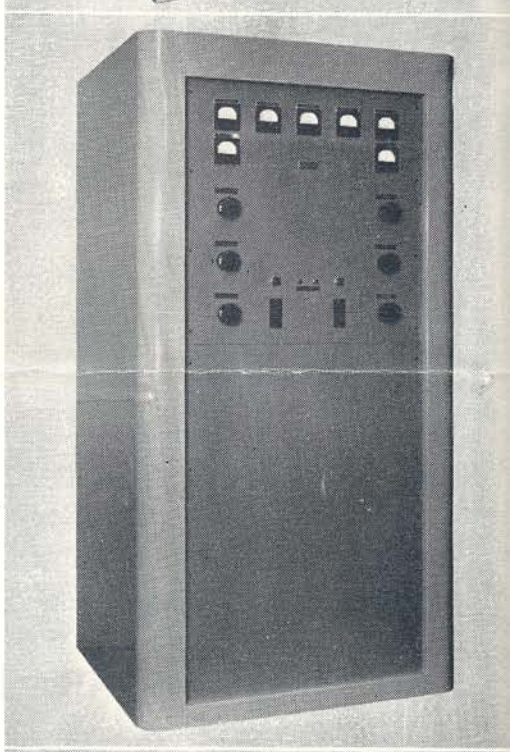
"Supercabe" is a rigid coaxial cable with flange end fittings and solderless center connectors. Every fitting, including end seals, junction boxes and bends are of the flange and solderless type. Thus, for the first time, rigid cable can be installed with all of the speed that is possible with soft drawn cable and produce the improved commercial appearance and structural advantages which is possible with rigid cable.

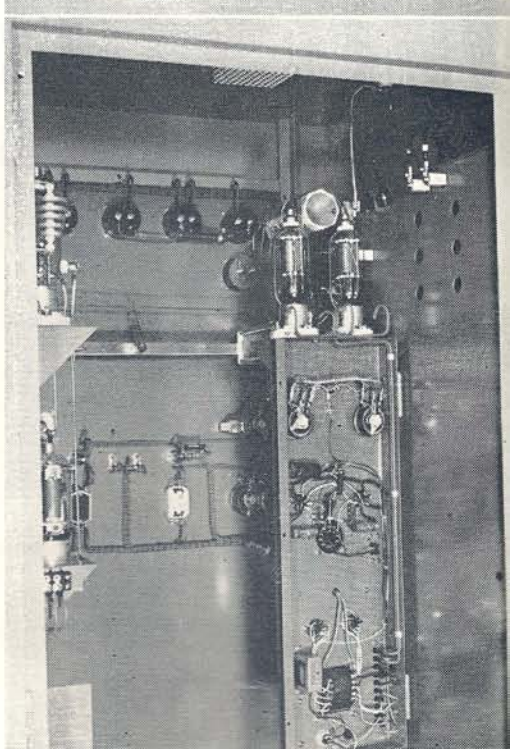
Another feature is the end seal design with replaceable Alsimag insulators, completely eliminating the necessity of purchasing a new end seal because of insulator breakage. No remade plumber's fittings have been employed in "Supercabe". All fittings are exclusive cast designs developed by the Gates Engineering Department.

Immediate deliveries are being made on "Supercabe" 70 ohm 7/8 inch line and fittings.

—— The Swing Is to Gates in '48 ——







Top: Rear view of 250-GY Transmitter.
Center: Front view of new 250 watter.
Bottom: Inside view showing the hinged shelf arrangement on side.

1948 ON THE AIR

A new year always brings another group of new stations on the air. Among the newer ones you will soon be hearing, which have a complete line of Gates broadcasting apparatus, are:

Radio Station WCNU,
Crestview, Florida ..... 1000 watts

Radio Station KCOH,
Houston, Texas ..... 1000 watts

Lampasas Broadcasting Co.,
Lampasas, Texas ..... 250 watts

North Plains Broadcasting Co.,
Dumas, Texas ..... 250 watts

Dalhart Associates,
Dalhart, Texas ..... 500 watts

Antigo Broadcasting Co.,
Antigo, Wisconsin ..... 250 watts

Southwestern Broadcasting Co.,
McComb, Miss. ..... 250 watts

Henderson Broadcasting Co.,
Athens, Texas ..... 250 watts

Radio Athens, Inc.,
Athens, Georgia ..... 250 watts

GATES STUDIO REVIEW

Published Bi-Monthly by the Gates Radio Company, Quincy, Illinois

MAIN OFFICE AND FACTORY—123 Hampshire Street, Quincy, Illinois.

WASHINGTON, D. C., OFFICE—Warner Building, 13th and E Street, N. W.

WEST COAST—(Temporary address): 574 Hargrove St., Inglewood, Calif.

NORTH CENTRAL—246 Baltimore St., Waterloo. Iowa.

SOUTHWEST CENTRAL—2227 East 10th Street, Tulsa, Okla.

DISTRIBUTORS:
Specialty Distributing Co., Atlanta, Chattanooga, Macon and Savannah.
Houston Radio Supply Co., Houston, Texas.
Canadian Marconi Co., P. O. Box 1690, Montreal Quebec, Canada.

Radio Station KGON, Oregon City, Oregon, using Gates 250 watt equipment. Mr. T. V. Ehmsen is one of the owners and takes an active part in the management of the station.

EDITORIAL

In having sales personnel travel throughout the United States, such as is true with the Gates Company, we obviously receive all types of reports with candid comments, usually made by broadcasting station men and passed on to our office, regarding the controversial issue of FM versus Television. It is recognized that investing in FM is a serious consideration. This is true especially of broadcasting stations that operate in a moderate sort of way and do not have the so-called Pioneering Money that can be charged off as a loss and also because of a less favorable tax position. However, from all of the reports received it has become clearly evident that most broadcasting stations that do not have FM would buy FM if they could convince themselves that FM was a certainty and not a passing fancy. In fact, many broadcasters seemingly have convinced themselves that FM is a passing fancy since some sales propaganda, either circulated by salesmen or otherwise, has created the feeling that Television will supplant FM.

As far as this probability is concerned, in answer to the Television question, when Television supplants FM it will likewise supplant AM in our opinion. Obviously those who can see and hear a program are not going to have either an AM or FM radio set operating in another part of the room to create interference or to bring in a competitive program. The net result is that Television is a separate field in itself which, price-wise so far, is untouchable by 98% of the American broadcasting stations and will continue to be so for many years. Those who have seen Television agree it is excellent but likewise agree that both receiver and transmission-wise it is still in the pioneering stage and that such things as moderate priced projected Television will be in demand before Television takes over in the American home.

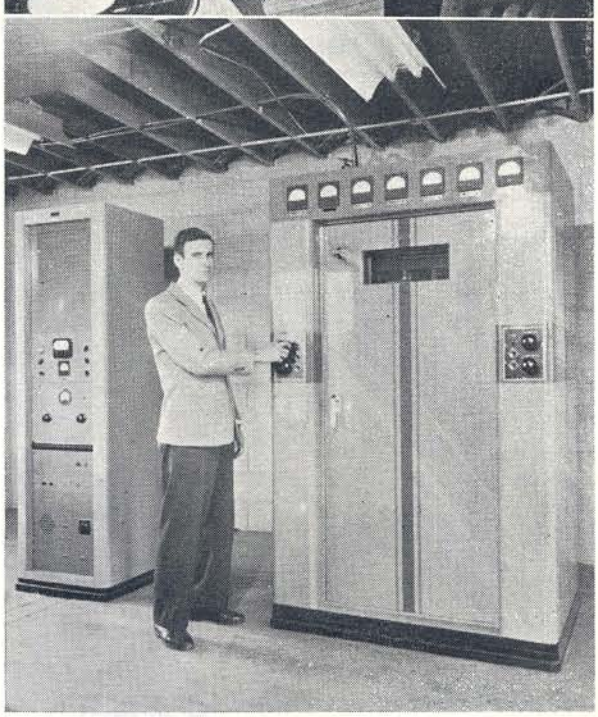
As a result, Frequency Modulation is another mode of broadcasting, and in our opinion, no more to be compared to Television than we would compare the picture show or Coney Island as a parallel to radio broadcasting. Those who satisfy themselves that Television will run around FM will possibly find themselves out-channeled and someone else occupying the FM channel about which they were thinking.

The Gates Company has realized for some time the feeling of caution of broadcasters, in many instances, in proceeding with FM installations. As a result, Gates, a moderate sized company that has itself grown slowly but securely, and experienced in its many early years the pangs of a limited budget, has made available a new FM package, consisting of a complete 250 watt FM transmitter, a new design antenna that will mount on existing AM towers, coaxial cable, FM monitor and everything ready to operate a complete FM transmitting unit, that can be installed rapidly and successfully, to produce a good signal for many miles yet does not require a genius to make the installation and start successful transmission.

This package has been priced complete at $4990.00 and has been rightfully tagged "Test Market Equipment" for FM. This package will enable broadcasters to test FM and prove for themselves its possibilities with a very moderate investment. None of the equipment supplied in this package with the exception of the transmission line and moderate priced antenna need be discarded to make a higher powered installation at a later date. The Gates 250 watt unit is basic for all Gates FM transmitters, including the 10 KW, and the same is true for the monitoring equipment.

It is felt that many broadcasters will avail themselves of this package, instead of using a combination of items that must be installed with difficulty and having results, as a combination, yet to be proved. The Gates FM package offers a completely tested and proved installation from crystal oscillator to antenna.

— P. S. Gates



Radio Station KIMO, Independence, Missouri, recently on the air reports excellent coverage over this territory with their BC1E and other Gates equipment.

WENTURA BECOMES BRASS HAT

During the great ice storm of January 1 through January 5, from which many of the younger generation will date all events, Francis Wentura, Assistant Chief Engineer of the Gates Radio Company came into his own right and became for a few days a favored executive of the Chicago, Burlington & Quincy Railroad and was not exactly slighted by such railroads as the Chicago and Northwestern, Minneapolis & St. Louis and Santa Fe.

Through his 500 watt amateur rig and the emergency network set up through ARRL for such eventualities, Wentura became one of the key men in the actual operation of railroads, because of the complete lack of telephone and telegraph service. It was not unusual to drop in at Wentura's house any time during the day or night and find him turning around a Big Four unit, 5000 HP Electromotive diesel locomotive somewhere in Iowa, or assigning a train crew to the Super Chief, or instructing the American Royal on the Burlington's fast Chicago-Kansas City run to proceed at a speed no greater than 30 MPH.

As a sideline, Wentura also took all copy from the Associated Press as used by Quincy Newspapers, Inc., and one radio station, WQDI-FM.

—— This Is "G" Year ——

GATES ANNOUNCES NEW AM FREQUENCY MONITOR

(continued from page 1)

amplified and applied to the frequency meter which is calibrated 30 cycles each side of zero. A phone jack is provided for aural monitoring and a meter is also provided for carrier indication.

The temperature chamber has been designed after most critical analysis of many types by the Gates engineering department. There are two ovens: one located inside the other, with the inside oven controlled by a mercury column thermostat operating at a variance of not more than 0.2 degrees C. The crystal is in this oven. The outer oven operating at slightly lower temperature is held within a few degrees variation. The tube and other oscillator units are also enclosed in this oven. The two ovens together, which are well insulated, form an accurate temperature control system to approximate primary standard conditions.

The MO-2890 Frequency Monitor sells for $615.00 and delivery will be good by time you receive this news.

HOUSTON RADIO HAS ANNUAL SALES MEETING

Houston Radio Supply Company of Houston, Texas, engineering representatives for all Gates products in the southwest, had its annual sales meeting in the spacious offices of Houston Radio with all banquet sessions held at the Rice Hotel and the Houston Club. Representatives from all of the Houston branch sales offices, Memphis, San Antonio, Dallas, New Orleans and Baton Rouge were present. Two days of talking, asking questions and listening to news about new lines and budget allotments for the coming year were all a subject of lively discussion.

Mr. Wayne Marcy, sales manager for Houston Radio, addressed the large number of sales representatives in the morning session, while L. T. Holland, President of the company, addressed them in the afternoon session on Friday, January 16. The evening session was a banquet get-together during which a short address was given by Mr. Gates from Quincy on the subject of "Prospects or Prospectors."

The Houston Radio Supply Company is located at LaBranch at Clay with telephone number Capital 9009. The company is the sales representative for Gates Radio Company products in the south central and southwestern states.

—— This Is "G" Year ——

RADIO CLASSES

In line with the company policy for highest quality production, classes in radio theory, as well as mathematics, have recently been started for all company personnel.

These classes are separated into Elementary and Advanced Divisions. Circuit Theory, Audio Equipment, Low and High Power Transmitters, FM, Phasing and Antenna problems. Also test and laboratory technique are subjects being covered.

The various engineers are in charge and much interest has been shown. A better understanding of all work is thus made possible, and a more thorough knowledge of the use of the equipment made facilitates conscientious application in their work.

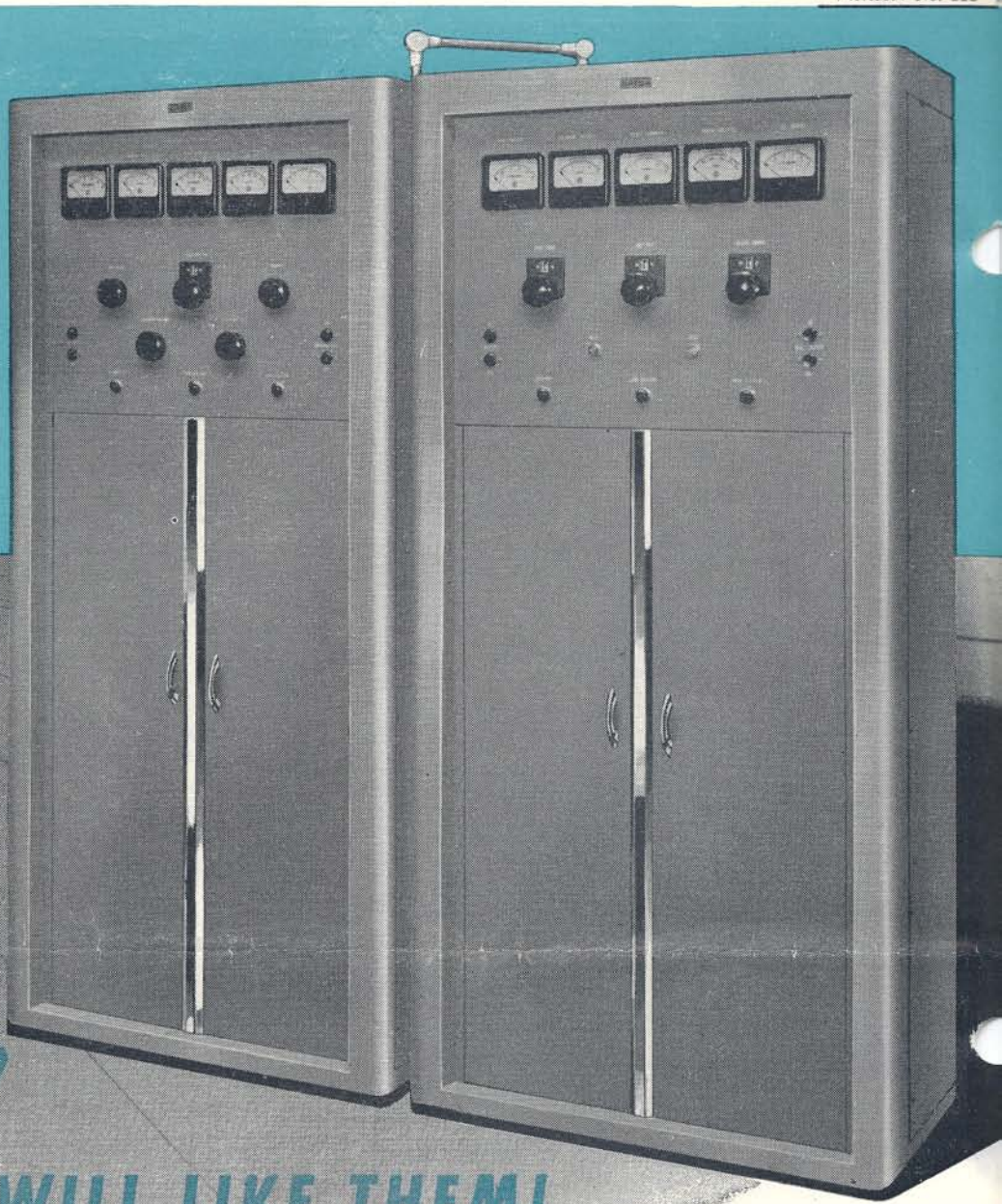
—— The Swing Is to Gates in '48 ——

When it comes to FM, write for the new complete FM Package Deal. It's the top in quality, the low in price, and just the thing for your new FM Station.

GATES

Proudly Offers

FM



BROADCAST TRANSMITTERS

In One's and Three's

AS *you* WILL LIKE THEM!

A cool operating, conservatively built, fine performing FM Transmitter. That best describes the Gates one or three kilowatt equipments shown here. The Broadcaster need not be a proving ground where Gates FM is installed. He can rely on steady performance day in and out.

The left cabinet is the complete, basic 250-watt Transmitter. The right cabinet is either the one or three Kw. amplifier, as you wish it. As an added advantage, your Gates 3 Kw. is 100% usable without a single alteration, when you convert to 10 Kw.

Gates FM embodies genuine engineering talent. Skilled broadcast, audio, and Radar engineers designed and supervise the building of these excellent Transmitters; yet best of all, the high development expense has been completely charged off. Thus when you buy Gates FM you are buying *all equipment.*

You will find these FM equipments listed in your copy of the new deluxe edition of the Gates catalog, or write for complete detail.

GATES RADIO CO.

QUINCY, ILLINOIS, U. S. A.

25
25th Anniversary Year