

## Dual Sessions Studied

By FRED W. LINDECKE  
State Political Correspondent  
of the Post-Dispatch

Gov. Warren E. Hearnes said yesterday that two special sessions of the Legislature were being considered for next year because of the effect of Senator Earl R. Blackwell's referendum drive to prevent a tax increase.

Hearnes said that a brief session of about five days was being considered for January. At this meeting, an emergency appropriations bill and setting of the tax referendum on April 7 would be considered.

After the tax referendum, a full-scale 60-day special session might meet to consider the 1970-71 state budget and other matters, Hearnes said.

"This is one of many things being discussed," Hearnes said. "It makes a lot of sense."

However, he said that no plans could be made until it was determined whether Blackwell and his supporters would succeed in gathering at least 62,000 signatures on petitions to submit the tax issue to a referendum.

**Cites Advantage**

Two special sessions, Hearnes said, would enable the Legislature to consider the 1970-71 budget knowing whether the \$106,000,000 in additional revenue from the tax increase passed or failed in the referendum.

If the Legislature attempts to consider the 1970-71 budget with the referendum pending it will have no firm information on how much money the state will have, Hearnes explained.

He said that by delaying the 60-day budgetary session, the Legislature could benefit from later revenue reports by knowing more exactly how much money the state collected in the current 1968-70 fiscal year.

Hearnes said two weeks ago that legal precedent had been found to permit the Legislature to move the tax referendum date to April 7, even though the Blackwell petitions state that the election would be held Nov. 3.

Blackwell and his supporters have until Dec. 29 to submit their petitions to the Secretary of State. As Governor, Hearnes has the power to name the date when the Legislature meets in special session and to specify what subjects the General Assembly will consider.

**Blackwell's Post**

Whenever the Legislature meets, one item that will be covered will be the official removal of Blackwell as President pro tem of the Senate. Majority Democrats in the Senate caucused Oct. 24 and voted to oust Blackwell from this post.

But the entire Senate has not met to hold the formal vote. At the time of the caucus, Hearnes was considering calling a special session then. But he changed his mind when legislative advisers informed him that the session in that setting would be interpreted as a personal attack against Blackwell.

Hearnes said yesterday that many questions contributed to the indefinite status of plans for next year's Legislature. "Everybody has a different idea when the tax increase should be voted on, as well as all the other things," he said.

By "other things," Hearnes meant other issues that must be submitted to a state-wide vote next year, either in elections in April, August or November.

**Seven Amendments**

These include seven constitutional amendments and an undetermined number of questions generated through initiative and referendum petitions.

"Some school people want the tax referendum in April to get it over with as soon as possible, but other school people will have other questions on the April ballot and they don't want

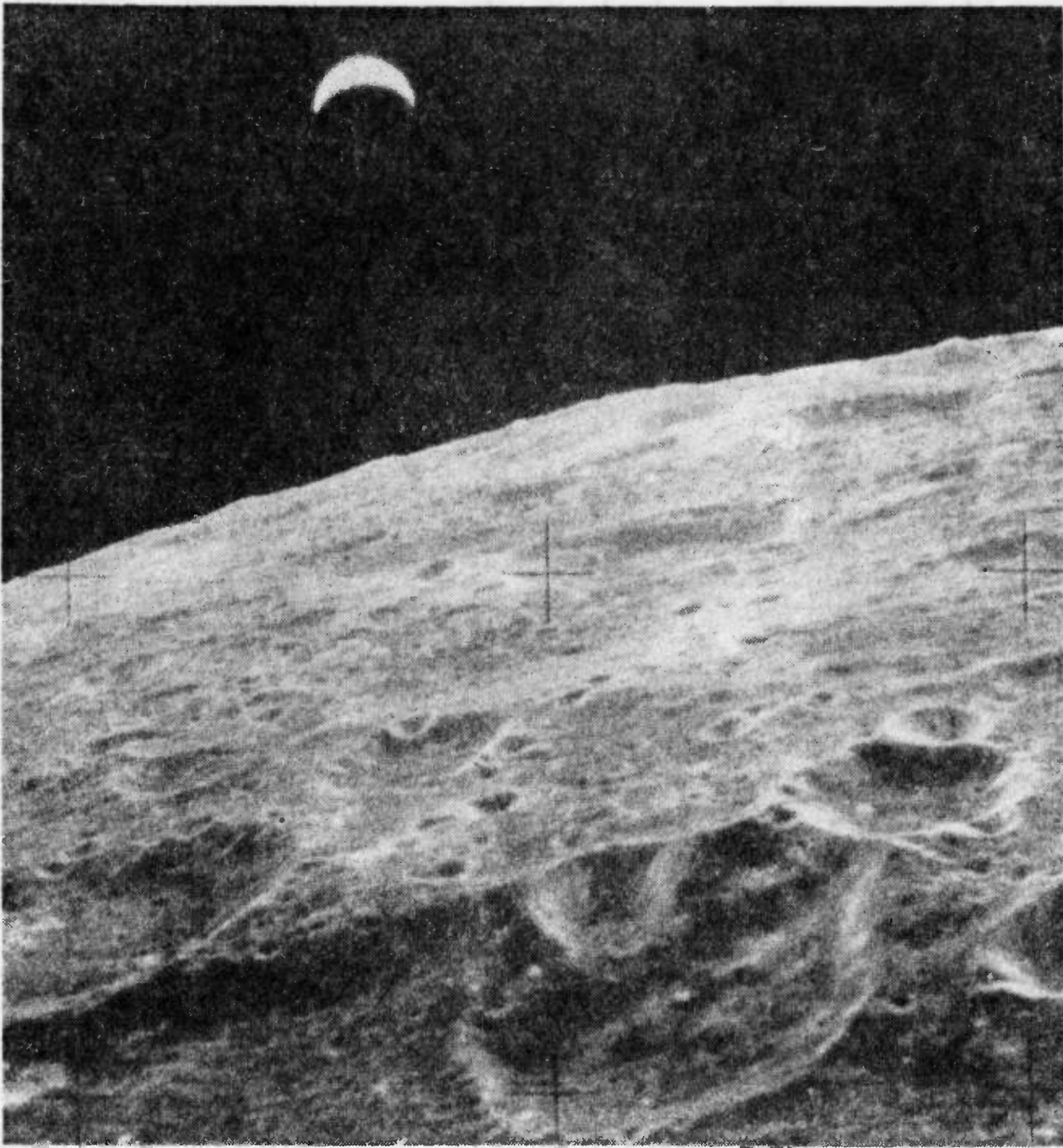
TURN TO PAGE 21, COL. 3

## Sunny

Official forecast for St. Louis and vicinity: Sunny today; high about 48; low tonight 32; sunny and warmer tomorrow with high in the mid 50s.

Temperatures	
12 noon	44
1 p.m.	44
2 p.m.	44
3 p.m.	44
4 p.m.	42
5 p.m.	42
6 p.m.	41
7 p.m.	31
8 p.m.	30
9 p.m.	28
10 p.m.	27
11 p.m.	25
12 p.m.	23

Other Weather Information on Page 7A



## The Backside of the Moon

Craters looming up on the gloomy backside of the moon, never seen from earth, were photographed by orbiting Apollo 12 astronauts. The only part of the earth in sunlight appears as a crescent. (UPI Telephoto)

## U.S. Antitrust Inquiry In Alaska Oil Leases

By WILLIAM K. WYANT JR. and AL DELUGACH  
Staff Correspondents  
of the Post-Dispatch  
SIXTH OF A SERIES

### Related Article and Photographs in PICTURES Section

ANCHORAGE, Nov. 30 — Superimposed on a map of the North Slope, oil lease tracts look like a giant chessboard. Something resembling a chess game was played with 179 of these 2560-acre squares on Sept. 10. But the music hall atmosphere and the crowd in the Sydney Laureate Auditorium here were not characteristic of chess.

The United States Department of Justice is curious as to whether that game was played properly by the participants — the oil companies. A salient question: Were antitrust laws violated by the joint bidding arrangements among various oil firms?

A national inquiry by the department into industry practices in bidding on federally controlled offshore oil was made public last month.

But the Post-Dispatch found an assistant U. S. attorney general from Washington at work here, compiling information on the same type of practices in the state lease sale.

He was on loan to the Alaska Legal Services Corp., a federally financed war-on-poverty agency. His assignment was to advise on matters of discrimination against natives, but the patterns of the September oil bidding were undergoing scrutiny.

The lease sale had all the earmarks of a Titanic competition. After opening speeches and some colorful song and dance, the day-long opening of bid envelopes within envelopes went on in an atmosphere of tension and suspense. Faces of oil executives beamed or fell with the announcements of some of the

closer contests. Whistles and cheers broke out at times from the throng of spectators.

For months before the sale, cloak and dagger security precautions were clamped on the oil fields. Helicopter-borne oil scouts (for which can be substituted "Industrial spies") peered at drilling rigs at Prudhoe Bay. Others bought drinks for roustabouts on leave in Fairbanks.

Frantic seismic tests and exploratory drilling were rushed by a number of companies to obtain information on the underground prospects.

The drama even included a "mystery train." Hundreds of miles from the Alaskan border in the Canadian Province of Alberta, 60 executives from 10 oil companies spent five days on a chartered train. It shuttled back and forth the 225 miles between Calgary and Edmonton at a cost estimated at \$10,000 a day. While security guards foiled inquiries from reporters who got



Weeds growing between rusted railroad tracks that lead to the abandoned Chicago, Burlington & Quincy Railroad freight terminal at the foot of Franklin Avenue. (Post-Dispatch by Lester Linck)

to the director of streets and wharfs. "We don't have the personnel to keep up with the leases and the other changes on the riverfront."

Abell's views are repeated up and down the corridors in City Hall.

"The city is the major owner of riverfront property. Most of

## Saturn's Rings Said To Be Ice

TUCSON, Ariz., Nov. 29 (AP) — Three University of Arizona scientists say the rings of the planet Saturn are made of blocks of ammonia ice.

Gerard Kuiper, director of the university's lunar and planetary laboratory, said yesterday that the finding was made at an observatory atop the Santa Catalina Mountains.

"The rings of Saturn are composed of blocks of ammonia ice 10 to 20 inches thick and about 10 inches wide. The rings may contain ordinary ice as well, but I am puzzled why we haven't found it yet," Kuiper said.

The group was formed by Hamilton Brothers Oil Co. and included Continental Oil, Cities Service and Sun Oil.

Paul Marshall, a vice president of Hamilton Brothers, said after the sale that only he and

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## Tax Bill Should Avoid Revenue Loss, Panel Says

WASHINGTON, Nov. 29 (AP) — Congress should rework the pending tax bill to eliminate any loss of revenue because the country faces continued inflation and a threat of recession, a Senate-House Economic subcommittee says.

The subcommittee issued tonight a generally gloomy report on the effort to stabilize the economy, but said that "we cannot agree" with those who say recession is inevitable.

The tax revision bill now being debated in the Senate would, unless amended, produce a net increase of 6.4 billion dollars in revenue next year. But, as tax reducing provisions were phased in, they would result in near balance in 1971 and thereafter net reductions estimated to level off at about 2.4 billions.

The subcommittee, however, questioned the projections, saying the loss might be 7 billion dollars by 1975. It said that "at

the very least" the relief should be trimmed, or new revenue-producing provisions added to produce a balance.

"This committee believes that there is as yet only a little evidence that inflationary forces are abating," the report said. "We share the view of some experts that monetary restraint in the last several months, if continued, may be so severe as to sow the seeds of future recession."

An ominous sign to watch, it said, is a build-up of inventories. It said that the national output in real terms was down 2 per cent in the last two quarters and that such lowering "has been, in the past, frequently associated with the upper turning point of the business cycle just before a recession."

"The fact that unemployment is on the rise now seems well established," the report continued. It said that Government witnesses, although saying they

did not intend to permit a substantial increase in joblessness, "were unwilling to specify any limit to the 'permissible' degree of unemployment."

Moreover, the subcommittee said, "There does not seem to have been any concerted effort on the part of the Government — Congress included — to see that if unemployment increases, the incidence of the concomitant suffering is kept to a minimum."

"We cannot afford to pursue a game of 'trade off' between rates of unemployment and inflation," the report asserted.

It said policy should be aimed at producing significant budget surpluses and a stable rate of increase in the money supply between 2 and 6 per cent a year. The lawmakers, it continued, should curb both military and nonmilitary spending programs for opportunities to make

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## Former Aid Of Thieu Gets Life For Spying

SAIGON, South Vietnam, Nov. 29 (AP) — A former aid to President Nguyen Van Thieu, a once high civil official and two other South Vietnamese were sentenced today to life in prison for spying for the enemy.

Of the 43 defendants in Saigon's biggest espionage trial, 37 were given sentences ranging from 20 years to one-year suspended sentences. Two were released pending further investigation.

The four sentenced to life by a five-man military tribunal were Huynh Van Trong, a former aid in Thieu's office; Le Huu Thuy, a one-time high civil servant in the Open Arms Ministry; Vu Ngoc Nha, a Communist who admitted he led the spy ring, and Nguyen Van Kinh, who said he had been a member of the Communist Party for 20 years.

These four and eight others had been charged with treason, but the prosecution did not ask the death penalty. The other eight received long sentences.

The remaining 31 defendants had been accused of lesser offenses, ranging from being accomplices to treason to disrupting public order. Of these, 13 were women.

The prosecution contended that all 43 were part of a Communist plot to infiltrate the government and gather information on deployment of troops and government programs.

The prosecution claimed that Trong made a trip to the United States in President Lyndon

B. Johnson's administration, allegedly on a mission to improve Johnson-Thieu relations, but actually to foment antiwar sentiment among Americans. His lawyer denied this.

The lawyer, Tran Van Tuyen, insisted that Trong was being used by the Viet Cong but was not consciously helping them and that Nha, the spy leader, was even closer to Thieu.

"Nha had two faces," Tuyen said. "On the one hand he was a Communist. On the other, he was close to Thieu and could see the President at will."

The lawyer said Trong did not know that Nha was a Communist, that he had been introduced to the ring leader by a Roman Catholic priest. Trong told the court he had turned over some information to Nha, but said he was not guilty of treason.

Phan Van Nghi, one of the two freed, is a journalist who was a accused of turning Pro-Communist when covering the Paris peace talks. He denied this, insisting he had supported and praised the South Vietnamese armed forces in his stories.

## Army Adds Charge Against Lt. Calley

FORT BENNING, Ga., Nov. 29 (AP) — The Army filed another murder charge today against Lt. William L. Calley Jr., already facing court-martial on charges of killing 109 civilians at the South Vietnamese village of My Lai in 1968.

The new allegation charges Calley with the murder of a man in Quang Ngai Province "in an incident that preceded the alleged My Lai incident by approximately one and one-half months," Fort Benning information officer John Gause announced.

No details of the Quang Ngai killing were given.

Gause said Maj. Gen. Orwin C. Talbot, commanding general

at Fort Benning, had named Lt. Col. Mack H. Hopper of the infantry school as investigating officer for the additional charge of premeditated murder.

"Evidence leading to the charge of murder was developed in the investigation by the Army of the alleged My Lai incident," Gause said. "The allegation charges Lt. Calley with the murder of one adult male."

Gause said that Hopper, upon completion of his investigation, would recommend whether the new charge should go to trial.

## My Lai Incident Linked To Plan

By RICHARD DUDMAN  
Chief Washington Correspondent  
of the Post-Dispatch

WASHINGTON, Nov. 29 — The alleged massacre at Song My, increasingly well documented by reports of witnesses and participants, has raised the major question of how high was the source of the order that led to the incident.

Secretary of the Army Stanley R. Resor said Wednesday that the primary issue to be resolved was "the extent to which the members of Company C were acting pursuant to orders from their company commander or higher headquarters when they destroyed My Lai's buildings and fired on its unresisting inhabitants."

Regardless of whether specific orders were given, it is a fact known to anyone who has followed United States war strategy closely that the inci-

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## Post-Dispatch Sunday Price To Be 35 Cents

The price of the Sunday Post-Dispatch will be 35c on and after next Sunday, December 7, 1969.

This Sunday price change has been deferred as long as possible. Greatly increased payroll and production costs make it imperative to make the change.

Sunday newspapers in many of the cities have found it necessary to change their selling prices to 35c.

The price of the daily Post-Dispatch remains unchanged.

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# DISCOVER the Wonderful World of FM RADIO



Faron Young



Henry Mancini



Barbra Streisand



Frank Sinatra



Bob Dylan



Patti Page



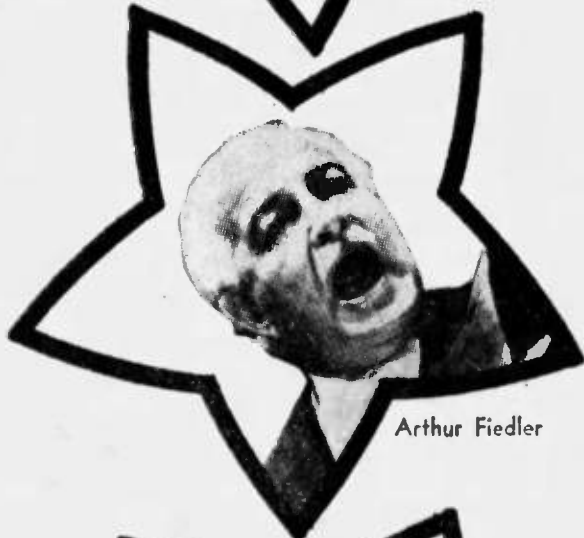
Dean Martin



Perry Como



Ernest Tubb



Arthur Fiedler



Mantovani



Van Cliburn



Andy Williams



## FM RADIO STATIONS' DIAL

		KCFM		KRCH		WMRY		WGBW					
	WIL		KADI		WOKZ		KMOX		KACO				
KSLH		KSHE		KFUO		KDNA		WGNU					
91.5	92.3	93.7	94.7	96.5	98.1	99.7	100.3	101.1	102.5	103.3	104.9	106.5	107.7

# DISCOVER the Wonderful World of FM RADIO



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**Panel Of Radio Personalities At KFUO**

Many round-table discussions are aired by KFUO AM and FM. Some of those who take part in these presentations of studies of philosophy and modern living (from left) are: the Rev. Walter Grotrian, Walter Wangerin, Brad Hol-

day, Pat Teper, Don Norman, Anita Colombo, Bob Wolf, C. B. Wismar. Others heard from time to time, not pictured, are John Hoyer, Herb Freer and Lynwood Smith.

**KFUO, FM Station, Broadcasts 21 Years**

KFUO has completed 21 consecutive years of FM broadcasting.

Currently the station broadcasts classical music 9:30-11:30 a.m., 1-1:30 p.m. and 5:30-11 p.m. with some variation on times on weekends.

Among the major music segments are the Philadelphia Orchestra, Sunday at 3, the Boston Symphony Tuesday at 7 p.m., the Boston Pops Wednesday at 2 p.m., the BBC Showcase at 2 p.m. Thursday (repeated Sunday night at 11 p.m.) and the opera broadcasts at 1 Saturday (the Metropolitan is carried live from December to April).

The station also has a program of Broadway and motion picture music ("Stage and Screen") at 4 p.m. Monday through Friday, with interviews by Brad Holiday. "Chronicle" is a folk music show with C. B. Wismar Monday through Friday from 11 p.m. to 12:30.

Highlights of the religious programming are Encounter (an examination of the many facets of life that confront the Christian Church) heard at 5 p.m. Monday through Friday; Person to Pastor (a listener call-in type program) at 12 noon Thursday; the Lutheran Hour on Sundays at 2:30; news of all religious faiths at 7:30 a.m. and 4:30 p.m.; Church and People at noon Saturday that includes the various facets of ministry to the community; and the Word in Action, described as the "word of God acting on and through people" at 3:45 Monday-Friday. The Rev. Walter Grotrian is religious supervisor of these programs. An extension department of KFUO sends religious programs all over the world.

Other programs on KFUO include a light music and information program 8-9:25 a.m. Monitor. Patti Teper is hostess with Don Norman reporting

**FM Radio Came Of Age In 1960s**

Spurred by favorable government rulings and technical innovations, FM radio has emerged as an increasingly important medium in the 1960s. Indications are that this trend will continue, the Chase Manhattan Bank's technical services Division reported.

"The inherent superiority of FM, a strong demand for quality entertainment, broadening advertiser interest, and the promise of syndicated formats and station automation to offset rising operating costs are just a few factors that support an optimistic outlook," the bank report stated.

**More Auto Units**

A survey among United States automobile manufacturers disclosed that the installation of FM receivers is rising at the rate of 25 per cent a year.

**Entire FM Layout Displayed As Exhibit**

An entire FM radio station operation, sponsored by KMOX-FM in the Gateway Tower, recently was placed on display for a three-day period in St. Louis's only Stereo-Hi-Fi Show, which was staged at the Aeolian Music Company, 1004 Olive Street.

The event, "The Sounds of Tomorrow," featured four entire floors of exhibits, ranging from stereo components and tape recorders to consoles and speaker systems, which were sponsored by some of the leading manufacturers in the field.

The reaction to the FM operation was excellent, Robert Hyland, station general manager and CBS vice president, declared.



**Conductor**

Walter Suskind

**FM Began In '41**

The first commercial FM station licensed by the Federal Communications Commission, WSM-FM in Nashville, began operating in 1941.

St. Louis Symphony orchestra conductor appears from time to time on KFUO's "Symphony Preview."

**KFUO-FM**

**QUOTES:**

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**Planning For December**

Radio Station WMRY-FM's president, the Rev. William P. Coovert, OMI, (seated) and Bob Carpenter, general manager, discuss a program idea they hope to use early in December.

**Happy Attitude Prevails In Studios Of WMRY-FM**

"Hello" is almost a forgotten word at Radio Station WMRY-FM.

Try calling the station sometime and listen closely to the phone greeting. You will get an enthusiastic, cheerful "Have A Happy Day With WMRY!" The station's "girl Friday," who serves as secretary, receptionist and telephone operator, sort of sets you up. She makes you feel better and puts you in a good mood to conduct whatever business you may have with the station.

The "happy" attitude doesn't stop with the telephone operator. Walk into the station, which has the general appearance of a suburban ranch house, and you will be confronted with a series of psychedelic posters inviting you to "Have A Happy Day."

Run into the Rev. William P. Coovert, OMI, the president of WMRY, and you will be greeted with a big smile, a hearty handshake and a sincere "Have A Happy Day!" No matter where you meet him, you are sure to get a "Have A Happy Day" from Bob Carpenter, the station's general manager.

Listen to WMRY! Its stereo music is happy and at least 77 times a day in the station's 18-hour broadcast schedule you are invited to "Have A Happy Day." Each invitation is followed by a short motivational message designed to help the listeners live richer, fuller and more meaningful lives.

The radio station calls these terse, moving messages "Pearls of Positive Thinking." Here are a few samples: "Success is getting what you want; happiness is wanting what you get." "The love you invest in your neighbor is reflected like light from a mirror" or "Freedom is the combination of hard work, intelligence, and integrity."

Carpenter, a man with 22 years of radio experience, has a quick answer when he is asked to explain why WMRY is so "happy" conscious.

"Happiness is a quality that rubs off on other people," Carpenter stated. "Ever notice a fellow who smiles a lot and has a cheery word for everyone? In show business they would say 'he leaves them laughing.'"

Well, in the run-of-the-mill, day-to-day world, he leaves them a little more happy."

"How to best apply this quality of happiness to the radio station was discussed many times with our advisory committee. We finally decided we would make an all-out effort to inject an air of happiness in every thing we did at the station and in the personal lives of everyone associated with WMRY," he said.

"And it worked," he went on. "You'd be amazed by the number of letters and comments we receive about the way our telephone operator responds to telephone calls, about our happy music, about our 'Have a Happy Day' introduction to programs, about our happiness buttons, about our happiness posters which, incidentally, we will soon be offering to listeners who write in for them. Yes, the 'happy' idea worked and we're delighted that we can brighten the day a little for all those people who listen to us."

Father Coovert, who is really high on motivation, is primarily

responsible for the insertion of those stimulating, thought-provoking ideas which are used so many times in WMRY's broadcast day.

"WMRY is people conscious," Father Coovert explained. "we sincerely want to help them. It was felt that if we could provide short thoughts or ideas to motivate them to live better and more meaningful lives, we would have accomplished a worthwhile goal."

"The only way we can measure the success of our motivational programming is by the letters we receive and the comments we hear," Father Coovert stated. "Hardly a day passes when we don't receive at least a handful of letters commenting favorably on the idea. It is heartwarming to know that we are helping people, and it makes us a little proud to know that we are the only station, as far as we know, which provides this type of motivational programming."

WMRY went on the air as a noncommercial station in May, 1966, operating on 50,000 watts of power with a listening radius of about 125 miles. Owned by the Oblates of Mary Immaculate, a Congregation of Catholic Priests and Brothers, the station operated from its studios at the Shrine of Our Lady of the Snows primarily as a station for good music interspersed with short inspirational and religious programs, news and public service announcements.

Father Coovert was assigned by his superiors to WMRY-FM in June, 1967. Little by little, with the assistance of Father Edwin J. Guild, Superior of the Oblates at the Shrine, and members of the advisory committee, Father Coovert has effected changes in policy, procedures and programming until WMRY evolved into what he calls "America's First Motivational Radio Station."

Just recently Father Coovert announced that WMRY-FM

would go "commercial" effective Nov. 1, 1969. He explained the changeover from "noncommercial" to "commercial not-for-profit" was a move dictated by need. "Simply stated, WMRY needs additional revenue if it is to carry on the type of programming it considers so necessary and helpful to the listening community," Father Coovert stated. "Since it went on the air in 1966, WMRY has been supported solely by gifts and donations from generous listeners and friends. But this source of revenue is no longer adequate to keep WMRY on the air in face of rising operating costs, expanded operations and increased salary schedules."

"We are hoping to get just enough advertising revenue which, together with the generous assistance we get from benefactors, will meet our financial needs and keep WMRY on the air," he explained.

"The fact that we are now a commercial station will in no way alter or change our present program format," he added. "We will continue to offer at least 53 minutes of good music, motivational programming and news out of every hour of broadcast time. And we are just beginning. We have many more creative programming ideas which we plan to put on the air."

"We hasten to assure our listeners that should we ever reach the point where we are receiving more revenue than is needed to operate radio station WMRY, the surplus will be used for charity to help our foreign missions and to educate young men for the priesthood," Father Coovert said. "All WMRY-FM wants to do is to stay on the air, entertain and help its present listeners, and invite others to listen and 'Have A Happy Day!'"

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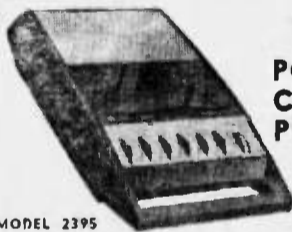
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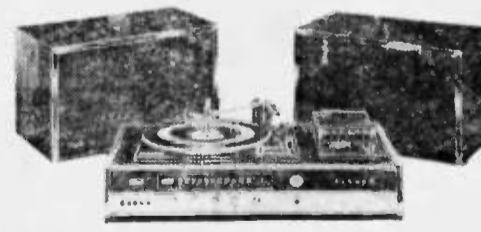
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# KCFM—How It Began And Thrived, At Times

By HARRY EIDELMAN  
President, KCFM

It was 15 years ago or more when I decided to put a radio station on the air. I was in the high fidelity business at Jefferson and Olive. Somewhere along the way I got the brilliant idea that if I put a radio station on the air I could advertise my high fidelity business and get lots of customers, because I would have a captive audience.

Without really checking into anything, and not knowing any better, I started looking around and bought an FM transmitter. At that time they were easily available because just about everyone in the country believed FM was dead. St. Louis even felt that way because I believe the only noncommercial FM station on the air at the time was KFUP. But nothing bothered me. I was determined.

### Asked For License

I scraped up the money for the down payment and applied to the FCC for a license to operate a radio station at Jefferson and Olive. It was my intention at that time to put a small tower on the building there. I got the license and a list of available call letters. I liked the sound of KCFM and chose that one. Since then I've had reason to wonder why. People keep thinking it's a Kansas City station.

Then the fun really started. I found an engineer to help me get things started. The first thing he told me was that with a small tower on a building at Jefferson and Olive I wouldn't get a signal out 30 feet. He said I needed a larger tower with some height. I started looking around and found an old tower on top of the Boatmen's Bank Building that was used by an old Transit Radio Company. I found out that they were paying \$5000 a year on lease, and would like to get out from under it. So we negotiated a reasonable deal for them, pretty high for me, where I got the tower for half price, payable in advance. Again, I scraped up the money and got the transmitter. The great day arrived.

### Instant Acceptance

My engineer and I hooked it up, turned it on, and strangely enough we got phone calls. People loved the station with all of the classical music. Being naive, we went full steam ahead. I was operating with free help. People loved the idea of glamorous radio and wanted in on the ground floor. For the first month everything was fine, and lots of volunteers came in to get in on the fun and help run KCFM.

These were truly dedicated people who believed in FM. They played the records, made announcements and cleaned the equipment. But after a few weeks the novelty wore off and I would get calls from this unpaid help saying their mother wanted them to cut the grass, or one would call up sick, or one would have a big date. Before I knew what was happening I found myself running the transmitter and the turntables, day and night, and neglecting the high fidelity business. Glamorous it wasn't.

It was inevitable. I had to start salaried people. Even though the salary rate then was around \$1 an hour, we were on the air 19 hours a day, and no revenue was coming in. The electric bills were coming in though, and there always seemed to be a \$700 tube that would pick a bad time to burn

out. Things really got rough.

We practically bankrupted the Hi Fidelity Co. to keep KCFM on the air, and it was getting discouraging, particularly when we couldn't sell a 5-cent piece of advertising. Nobody believed we had a big enough audience that would buy. I was beginning to believe they were right. It hadn't helped my high fidelity business in sales.

But a few dedicated people and I marched on, and we weathered two hectic years. During that time I found out that among my other duties at KCFM, I would have to do some selling on my own. One of the accounts I sold was a banking institution.

The president of that bank claimed we didn't have any listeners. So I got our announcer to ask everyone listening to KCFM at that time to drop us a post card with comments. The replies filled a bushel basket, which I promptly took into the president's office and dumped on his desk.

### A Fine Sponsor

The post cards and letters covered his desk and spilled over on the floor. That was one of our finest sponsors for quite a while.

Advertisers still weren't breaking down our doors though, so I decided to get into the background music business to help carry the freight. I went to the people who had all of the transit bus radio receivers and bought them all for \$1 a piece. That night my partner and I sat down and started rebuilding them to make them work for background music.

We played easy-listening music during the day and whenever a commercial came on, we pushed a button which shut off the commercial so the background music customer couldn't hear it.

Unfortunately there were times when our system didn't work, and the customer in the store would be listening to soothing music and suddenly the commercial would come on loud and clear and tell him to go to that customer's competition.

### New Ruling

While we were fighting this problem, the FCC came up with the ruling that we couldn't use this system. We had to go into what they called multiplexing, which was a scrambler built into the transmitter which scrambled a separate program, and for which you needed a special receiver.

This was a very fine idea with

one minor exception. It didn't work. But, we got the equipment anyhow and started ironing out the bugs. In one year we debugged it sufficiently to get ourselves into the background music business on a small scale.

Among the other impressions that multiplexing made on me... I found I liked the sound of the word, and so our background music service became "multiplex music." Multiplex music not only helped the overhead... it carried the entire overhead for a while.

Time marched on, and we decided we needed to get out of the location we were in because we needed larger facilities. We rented a large warehouse on DeBaliviere and put up a small tower, right through the roof, and moved our equipment in.

### Signal Too Weak

To say the roof fell in is putting it mildly. Our signal at this new location was not getting out the front door. After many phone calls to the company that made the antenna we were using, with many suggestions from them that didn't work, they sent us a new antenna.

The men on the staff at that time, along with yours truly, climbed the tower that very day, at 2 a.m. We started making the necessary changes and taking measurements. It wasn't funny that cold morning, but now it seems pretty comical.

Herewe are, freezing on that tower in pitch black night, and all of a sudden two policemen come up the ladder with flash lights and guns drawn and want to know what we were doing there. My answer was "what do you think we're doing here in zero weather, a couple of hundred feet off the ground."

Things finally got in shape. We got a signal out. We had a sales staff. Our problems seemed to be diminishing. Then one week later I got a call about midnight from the announcer on duty who said the place was full of smoke, what should he do? I gave him the only advice I could come up with at the moment! Call the

### 1000 Stereo Stations

By the end of 1969, more than 1000 FM stations will be broadcasting in stereo. There is a huge backlog of stations awaiting stereo transmitting equipment.

fire department and get the heck out of there.

I got dressed and started out for the station. When I got within a mile of the place I could hear the sirens and could see the flames. The tower was down... lying across the National Food Store next door, and there was nothing left of the building that had been KCFM. DeBaliviere looked like the fourth of July. Within an hour every member of the staff was standing in the street looking at the ruins.

The next morning we gathered at the ashes and tried to decide where we could go with KCFM now. We could take the insurance money, which would not pay off one third of our bills and fold up. Or, we could try to rebuild something. The consensus of the entire staff was, let's go forward. They even offered to go without their paychecks until we were back in business, but that didn't become necessary.

Through the courtesy of Channel Nine, we put a small antenna on their tower at Boatmen's Bank. We took the antenna out of the ashes and fixed it up... took an old transmitter and rebuilt it and carried it down to Boatmen's on a Sunday, up the elevator and hooked it up ourselves.

### Educated Audience

FM listening strength is greatest among listeners 18 to 49 years old with a college education and high income, audience profiles by numerous FM stations have indicated.

# WIL-FM Going Stereo

Competition in the St. Louis market is keen, and broadcasters, whether concerned with AM or FM radio, have discovered that it takes more than a little effort to attract and to retain listeners.

To attain success today, broadcasters need such tools as good equipment to send out a strong signal and must know what the listener wants. As the old saying goes, find a need and fill it.

WIL-FM feels it is filling the need of the adult listener who enjoys hearing such artists as Frank Sinatra, the Tijuana Brass, Percy Faith, Johnny Mathis, Barbara Streisand, and other top entertainers of this kind.

By carefully selecting the best hits of these artists and introducing some of their newest best sellers, WIL-FM has discovered it can successfully attract an audience.

Added to the music programming are newscasts from both the WIL News Department and the American FM Radio Network, weather reports, time and temperature, and public affairs and public service programs.

When LIN Broadcasting Corp. acquired WIL-FM more than two years ago, management felt WIL-FM should provide more hours of programming on its own, without simulcasting much of the programming of its AM twin, WIL. For that reason, several thousand dollars worth of new equipment was purchased and installed to ensure 24 hours daily of solid and consistent programming. Since embarking on full-time programming, WIL-FM has continually built an expanding audience.

Because of the acceptance of FM radio and WIL-FM in par-

ticular in the St. Louis area, management recently obtained extensive new equipment that will provide WIL-FM with a stronger signal and will permit the station to broadcast in stereo.

WIL-FM will be operating soon on full power of 97,000 watts. In the next three weeks, WIL-FM expects to have its new transmitter and antenna complex installed. This will mean that it will be broadcasting in full stereo 24 hours daily. For listeners with stereo receivers, it will mean a new dimension in radio service at 92.3 mg.

# KCFM

### SAYS:

"With F.M. in your car you can concentrate on your driving, since we have only a few interruptions each hour".



# KFUO Radio

Needs YOUR Help

KFUO, operated by The Lutheran Church—Missouri Synod, devotes about seventy per cent of its broadcast schedule to classical music, public service, news and educational features. The station is non-commercial and absolutely dependent upon contributions from its listeners. KFUP receives no financial support from the church's governing body. Any individual or organization who appreciates this cultural and community service may contribute to this segment of KFUP's operation.

Contributions will be used for record purchases, rental fees for the taped concerts of some of the world's great symphony orchestras, personnel and technical equipment. It is hoped that a new transmitter and stereo equipment can be purchased. Send your contributions to KFUP, Clayton, Missouri 63105. KFUP is non-profit and gifts are tax deductible. Your support is urgently needed.

# KFUO

850 kHz — AM  
99.1 MHz — FM

Owned and Operated by the Lutheran Church—Missouri Synod

5000 WATTS  
6700 WATTS

801 DeMun Avenue

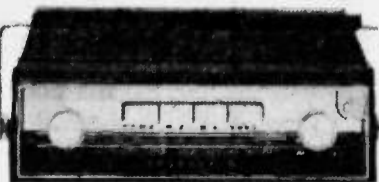
St. Louis, Missouri 63105

(314) 725-3030

Enjoy FM Radio in Your Car  
or Take It With You Into the House!

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"The Giant of the Orient"



FM - AM  
CAR  
RADIO

Locks under the dash. Easily taken out to use anywhere.

Many other models in car or home AM-FM radios, stereo tape players and TV.

ED ROEHR AUTO RADIO CO.  
2710 LOCUST ST. 2203 S. BIG BEND  
533-9344 645-7088



### Token Of Appreciation

The Greater St. Louis FM Radio Association presented an AM-FM transistor desk-set receiver to Federal Communications Commissioner Kenneth Cox at a dinner recently. Pictured are some association members with the commissioner: from left, front row, Shelly Grafman, KSHE; Harry Eidelman, KCFM; Bob Carpenter, WMRY-FM; Commissioner Cox, Homer Griffith, WIL-FM. Second row, from left: Tom Perryman, WIL-FM; Jack Samuel, Executive Secretary and Public Relations Director of the Association; Alex Grammaticoff, WGNU-FM; Bob Osborne, KMOX-FM; Chuck Norman, WGNU-FM.

### Sales Rise

In 1968, according to the Electronic Industries Association, sales of FM-equipped radios in the United States totaled 17,300,000 units, up from 12,600,000 in 1967 and almost triple the 1965 total. More than three-fifths of the 1968 sales consisted of portables.

### Woman Who Helped Make FM Popular

Miss Gert Bunchez, president of Gert Bunchez & Associates, national radio station representatives, was among the women who helped build FM popularity in St. Louis.

Miss Bunchez was sales manager of KCFM and then became associated with Century Broadcasting Co., operators of KSHE, St. Louis; WABX, Detroit;

KMAP, Dallas, and WFMF, Chicago. She later was affiliated with KMOX-FM.

Then she established her own company with offices now in six cities—St. Louis, New York, Chicago, San Francisco, Los Angeles and Dallas — representing 15 radio stations across the country.

Her St. Louis office is 7730 Carondelet Avenue, Clayton.

## FM Eliminates Static And Cuts Interference

FM means frequency modulation in the strict definitive sense but in the terms of broadcasting pleasure it stands for considerably more.

In the first place, FM has much less interference to affect programs than does AM broadcasting.

For example, in AM (amplitude modulation) or conventional broadcasting the program employs the entire width of the carrier waves. These carriers run side by side with a mere hairline between them. They are like congested cars inching along on the expressway.

On FM, the carrier waves from the station to the receiver have adequate space between them and each belt is so wide that the program remains in the belt and refrains from bothering, or colliding, with the program next to it on another belt.

Furthermore, when an FM set receives two programs on the same carrier wave, it automatically selects the nearer of the stations — the stronger one — and ignores the other one. This may be accomplished when the desired FM program is only four or five times, not 100 times as in AM, stronger than the one desired. In effect, the FM receiver screens out and rejects the weaker signals.

In the second place, FM provides more fidelity of tone.

Carrier waves in FM broadcasting are spaced 200,000 cycles apart which permits full reproduction of the entire range of the human ear. The same waves in AM broadcasting are spaced only 10,000 cycles apart. If modulation up to 15,000 cycles were tried, the signals would interfere with each other.

Each of the conveyor belts

would vary more in width than the spacing between adjacent belts. Thus, in FM the conveyor belts are spaced far apart and their speed can change without mutual interference so that you can hear all the original tones as produced in the studio — from the deepest bass to the highest overtone.

### Ban On Static

In the third place, FM does away with static.

When lightning crackles in the sky in an electrical storm, when a neighbor turns on an electric shaver or vacuum cleaner, the carrier wave also picks up some of these disturbing sounds, noises and vibrations. The FM receiver does not register these interferences and delivers only the radio program signals.

Furthermore, FM tells it like it is — actually in music. With AM broadcasting, the studio control man constantly is required to increase the sound level of the quiet, smooth passages and lower the volume when the orchestra or artist really interprets the music to the maximum. In AM, one hears music interpreted by the studio engineer — not by the

### FM Radio Growth Is Reported

If receivers, broadcast revenues and station equipment are viewed together, FM radio is a business that expanded from under \$20,000,000 a decade ago to nearly \$300,000,000 in 1967, a Chase Manhattan Bank report disclosed.

"It should well surpass the billion dollar mark by 1975," the review of the industry predicted.

"Meanwhile, advertisers will be increasingly inclined to view FM as part of an over-all radio medium, and FM's characteristics will continue to assure its dominant role in the broadcasting of music—a distinct advantage because specialization is the byword in radio today," the report noted.

conductor or musician. With FM it's not necessary for the studio engineer to monitor the volume of a program. One hears it just as the artists perform it, contributing significantly to the realism of FM music.

## KMOX-FM

Bob Osborne, Thom Lewis, et al, say:

"Catch us on your F.M. dial by the dash in your car . . . We're going places."

# 18 HAPPY HOURS A DAY WMRY-FM

# 101.1

## STEREO RADIO

AMERICA'S FIRST MOTIVATIONAL RADIO STATION



- MOTIVATIONAL
- INFORMATION
- INSPIRATIONAL
- PUBLIC SERVICE
- ENTERTAINMENT
- CREATIVE PROBLEM SOLVING



## Varied Program Format Featured By FM Radio

By ROBERT HYLAND

Vice President of CBS and General Manager of KMOX Radio

FM radio is no longer a poor, high-brow relative to the traditionally prosperous AM broadcasting operations.

Barely 30 years old as a commercial enterprise, FM has become a highly sophisticated operation with impressive ratings, varied program format, and increased broadcasting power.

In many locations, FM has won the reputation of being a formidable competitor to music-and-entertainment-oriented AM.

At KMOX-CBS, FM and AM are viewed as two distinct broadcast services, each dedicated to broadcast quality within its program specialty. Each maintains its own news staff, editorial policy, advertising department, radio personalities, and production studios.

While independent, KMOX FM and AM are complementary, forming a partnership for broader audience service. They both follow a uniquely tailored programming philosophy aimed at separate, well-defined audiences. AM concentrates on hard news, sports, and information programming. FM on the finest in music and entertainment.

Robert Osborne, programmer, directs his air waves to a vast listening audience who enjoy a schedule of good popular music which is consistently and dependably available 24 hours a day. He gives them the bright, smooth music of the day interspersed with reports on time, temperature, weather and news. A staff of four experienced radio personalities, including Jim Butler, Charles Hefti, Paul Jay, and Thom Lewis, join Osborne in establishing a personal rapport with the listener.

In a typical week of 168 hours of broadcast time, KMOX-FM devotes 78 per cent of its air time to music and entertainment, 8 per cent to news, 5 per cent to public affairs broadcasting, and 11 per cent to commercial matter.

Since its inception, KMOX-FM has been a leader in the development of stereo radio in the local area. It pioneered the stereo channel check service, which enables stereo radio buffs to adjust their stereo tracks to maintain proper sound balance. It is one of the few stations in the country to produce live stereo remote broadcasts.

KMOX-FM's "What's Happening," a program which mixes interviews on timely topics and music, originates nightly between 11 p.m. and 12 midnight, from a remote stereo studio located in the "Top of the 230" in Clayton.

KMOX-FM will take a second excursion into remote stereo production on Dec. 24, 1969, when it will bring to the area FM audiences a live broadcast of the traditional Christmas Eve Midnight Mass services from the St. Louis Cathedral.

The growth and development of FM is nowhere quite so evident as in the increased advertising traffic it is experiencing. The trend of advertisers to think FM began about five years ago and has mushroomed beyond expectation in the last year alone. More and more the big advertising client is including the FM sector in his promotional budget — and getting highly favorable returns.

Mrs. Nancy Poole of KMOX-FM sales reports that both large and small advertising agencies have developed a keen interest in the ratings and rates of FM stations and are beginning to maintain FM media statistics with a zeal once reserved



Robert F. Hyland

for AM communication outlets.

It is true both locally and nationally that many FM stations are out-pacing many of their AM audience competitors in attracting the advertising dollar.

In view of the facts, one can hardly doubt that FM radio has become a popular communications vehicle. The stations in existence are not only growing in popularity, but new stations are entering the market at a noteworthy pace. A recent study indicates that the ratio of FM to AM stations has jumped from one to six in 1958 to one to two in 1969.

The excellent tonal quality, which once made FM the favored circuit for serious music, figures significantly in its broader application to music and entertainment of all varieties and has earned FM a permanent position in the broadcasting world.

We at KMOX-CBS regard our FM capability as an integral part of our broadcasting personality and an essential element in providing total radio service to the local area.

FM radio station KDNA, which operates at 102.5 MHz (megacycles), from its studio in Gaslight Square, has one of the most unusual, colorful and casual broadcasting operations in the industry.

Organized by Jeremy D. Lansman, general manager and technical director, and Lorenzo W. Milam, who is active in West Coast radio stations, KDNA pro-

vides a potpourri of programming that combines classical, folk and "heavy music" with readings and talk segments. Rock, jazz and eccentric musical forms also are played.

Even the station's call letters are derived from an out-of-the-ordinary source. The DNA stands for deoxyribonucleic acid, regarded by scientists as "the building blocks of life."

## Stereo FM Research Conducted By Zenith

As a pioneer and leading proponent and developer of FM radio broadcasting and FM radio sets for more than 20 years, Zenith Radio Corp. has long been conducting research on improving FM broadcasting and receiving systems.

One of the new ideas was a practical method of allowing one FM broadcast wave to carry another piggyback, using a single FM channel in such a way that the listener in the home could receive both channels of true, high fidelity, stereophonic broadcasts from a single radio station.

After many months of testing, Zenith applied to the Federal Communications Commission for permission to conduct experimental stereophonic FM broadcasts over the company's pioneer FM station, WEFM, Chicago, one of the oldest FM stations in the United States.

WEFM (using KS2XFJ experimental call letters) began transmitting Zenith stereo FM broadcasts on June 30, 1959 — without interfering with conventional or monophonic FM reception.

Zenith disclosed details of its stereo FM broadcast system in a report to the FCC in July 1959. These experimental broadcasts continued under special authorizations until Oct. 28, 1960.

On March 15, 1960, Zenith filed comments with the FCC proposing a system utilizing a subcarrier frequency of 39 kilo-

cycles and 19.5 Kc. for the pilot frequency, and urged the adoption of the Zenith system as the national standard.

In summer 1960, Zenith, in co-operation with other members of the industry, made the fruits of its broadcasting experience available in field tests of all proposed stereo FM systems in Uniontown and Pittsburgh, Pa.

Results of these tests and the detailed comments on Zenith's system and five others then being considered for authorization by the FCC were filed with the commission in October 1960.

On April 20, 1961, the FCC announced national standards for stereo FM broadcasting, which the industry has hailed as the greatest advance in broadcasting since the introduction of television.

The FCC approved stereo FM standards, with only minor modifications, are those first proposed, developed and air-tested by Zenith Radio Corp. Their adoption and the beginning of stereo FM brings a new dimension to FM radio and usher in a new era in the enjoyment of FM radio listening in the home.

Less imaginative, or more normal, call letters usually refer to a city's initials.

The talk part of the programming sometimes delves into the way-out, off-beat satire that is savored by college students. Some of the personalities employ weird sounds in what are termed "monster collages." Such electronic concoctions involve several voices, instruments, sound tracks and special sound-effect records.

KDNA remains on the air from 7 in the morning until past midnight. However, on weekends and holidays unusual personalities can be heard from 2 a.m. to 7 a.m. A KDNA listener can hear opera one time and the next be provided with philosophy and wit ranging from contemporary to the classics.

The station started out on a shoestring and has been fortunate in being able to improvise equipment to permit quality broadcasts. Changes are being planned for its antenna high above the Continental Building.

An air of informality exists at the studio, 4285 Olive Street, once the headquarters of Pom Pom Joe's, a bar that thrived during Gaslight Square's brief heyday. Visitors to this quaint

broadcasting facility are invited, but are urged to call beforehand — 652-6161.

The infant station uses many volunteer announcers and engineers to supplement the efforts of a small staff. The results are often surprising but the KDNA owners explained their different concept: "To attempt to marry the idea of music — classical, folk, rock — to talk on a paying basis."

Handling commercials and business is Paul Lacey. Lansman, a Clayton High School dropout, supervises the technical matters and holds a first-class engineer's license from the Federal Communications Commission.

### Award To KFUP

KFUP has been the recipient of an Armstrong Award for FM Excellence. The award is named after Maj. Edwin Armstrong, "the father of FM broadcasting," and presented through Columbia University. The station has also won three awards from the Institute for Education by Radio and TV (the Ohio State Awards) which are considered to be the "Oscars" in the educational broadcast field.

## WIL-FM

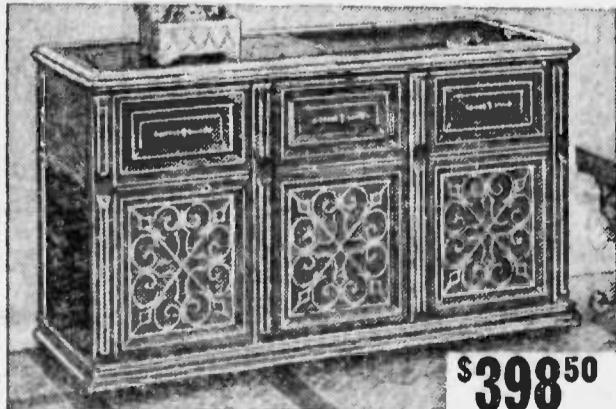
SUGGESTS:

"Be sure your car radio is F.M. Relaxed, easy listening makes for better, safer driving." Ask Homer Griffith, he knows.

## Magnavox STEREO

with AWARD WINNING SERVICE

Schweig-Engel's trained and experienced service department has received the National Appliance and Radio Dealers Association 1969 Quality Service Award. This means better tone and service for you!



\$398<sup>50</sup>

Hear why Magnavox Astronic FM Stereo sounds better— Better air suspension speakers, finer micromatic changer— Solid state Stereo FM/AM tuner with signal sentry. Powerful stereo amplifier. They're all here on Schweig-Engel's floor from \$219.00.

DEPENDABLE SERVICE FOR HALF CENTURY

## SCHWEIG-ENGEL

The Oldest Radio and Television Company in St. Louis

4933 DELMAR OPEN EVENINGS 'TIL 7:30 FO. 7-1885

The Finest in . . .

## COUNTRY & WESTERN MUSIC

FEATURING SUCH ARTISTS AS:

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(615) 244-8978 BOBBY BOBO, PRESIDENT



# HEAR THESE GREAT NASHVILLE PERSONALITIES ON THE ST. LOUIS AREA'S TOP COUNTRY WESTERN STATIONS

... WGNU (920)

... WGNU-FM (106)



**FARON YOUNG**

The Singing Sheriff who's been for some time one of the biggest of all country music names with a succession of hit records. His latest for Mercury is "Your Time's Comin'."



**DONNA COTTRELL**

Her latest release is "I Intend To Cry A Lot" on the Stop Label. The multi-talented Donna inherits her musical ability from her family. She not only sings... but writes beautiful music too.



**NARVEL FELTS**

His many hits include "Mountain Of Love" and a new one coming out in a few weeks. For the past few years Narvel has been a top attraction in the U.S.A., Canada and abroad. For bookings contact Narvel Felts Enterprises, P.O. Box 144, Malden, Mo. 63863.



**MIKE TUTTLE**

Only 12 years old but he's already made his mark in the business with two excellent Christmas records, "A Letter To Santa" which he also wrote with collaborator Harry Neal.



**PAULA DAY**

On Jade Records with "Please Forgive Me" another great release of "Some Old Tavern" in January. Paula's a real westerner, born and raised on a farm southwest of Bismarck, North Dakota.



**BILL DUNIVEN**

Exciting new personality currently riding the charts with his special treatment of an old standard, "It's Only Make Believe" on Dandy Records. A native of southeast Missouri, Bill is booked exclusively by Music City Talent, Nashville, Tennessee. Telephone: (615) 291-0574.



**LORETTA LYNN**

Considered by many to be the biggest attraction among all the girl country singers, her name is always at the top of the country western record charts. Her latest for Decca is "Wings Open Your Horns."



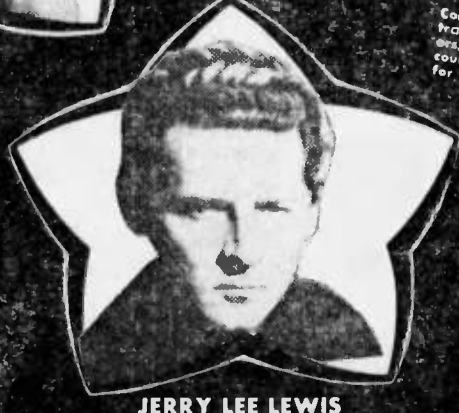
**JIMMY FLAME**

Jimmy's latest record is "Name Just For You." This good looking young man, born in Baltimore, Md., is rapidly becoming one of the big names in the world of country music.



**CARROL DEANE**

A St. Louis girl and a new recording artist in country music. Carrol's latest record "You Can't Have It All" has given her career a substantial boost. She's been making personal appearances in and around the St. Louis area — another Carrol Deane record slated for release soon.



**JERRY LEE LEWIS**

This great star comes to country music from the rock and roll field where he was a headliner for years. Today he is just as big in country music. His latest hit on the Smash label is "She Even Woke Me Up To Say Goodbye."



**SHARON WILSON**

The little girl with the great big voice, one of the most infectious performers currently working country western clubs. More than one country music buff has said "Sharon Wilson reminds me of Patsy Cline." Her latest hit is "Let's Go All The Way."



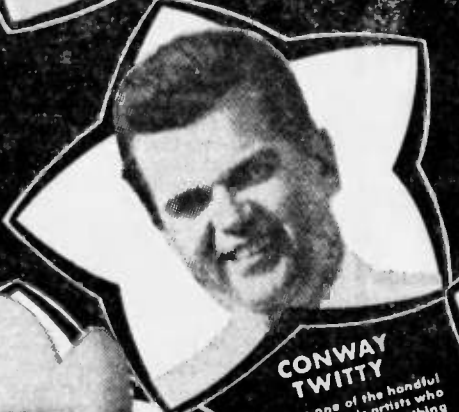
**CRYSTAL MARTIN**

This dynamic young "sweetheart of the Country Lads" is already a country music veteran at the tender age of 13. She has had her credit appearances with such names as Stokemall Jackson, the Compton Brothers and other Grand Ole Opry stars. She has made several successful television appearances. She was on the Cherry Label's "Found Out The Hard Way."



**ERNEST TUBBS**

For more than twenty years, The Texas Troubadour has been one of the very biggest names in country music... and, like a fine wine, Ernie gets better with age. He was elected to the country music hall of fame several years ago — latest for Decca is "Just A Drink Away."



**CONWAY TWITTY**

Another one of the handful of country music artists who produce. It seems, nothing but hits. Conway is another rock and roll and he is a big favorite in St. Louis where he has appeared personally several times. His latest for Decca is "To See My Angel Cry."



**RAYMOND PARISH**

Who hails from Fort Worth, Texas... Ray Parish's latest records include "A Heartache's Like A River," "Painter's Blues," and "You Pour The Wine." Besides being an outstanding vocalist and guitarist, Parish writes most of the material he sings.



Jimmy Snyder  
Darrell McCall  
Hal Willis  
Jack Blanchard  
and Misty Morgan  
**WAYSIDE RECORDS**

America's fastest growing C&W Label  
Dist. Mercury-Smash

PLUS... Glen Campbell, Kitty Wells, Sonny James, Tammy Wynette, Bill Anderson, George Jones, Hank Williams Jr., Charlie Pride, Jack Greene, Roger Miller, Johnny Cash, David Houston, Lynn Anderson, Jean Shepard, Bobby Goldsboro, Chet Atkins and many, many others!!!!

**WGNU-FM 50,000 WATTS 24 HOURS A DAY**



### KSHE Rocks For 24 Hours Every Day

"Real Rock Radio 24 hours a day" is the motto at KSHE-FM. "Rock Stars," featuring live interviews with national rock groups and individuals, is an evening program that "tells it how it is and where it's happening."

KSHE's rock program now features "advance pressings" by many of the more popular aggregations. There are exclusive airings on this station.

Round-the-clock, personalities such as Prince Knight, Gary Bennett, Steve Rose, Phil Sanford and Don Corey, hold forth. The station is at 95 on the FM dial.



### Warmup For Kiel Show

Chuck Norman of WGNU-FM reassuring Jeannie C. Riley with an anecdote in a get-together just before her appearance in the WGNU-FM show recently at Kiel Auditorium.

### WGNU-FM Contributes To Program Diversity

Radio station WGNU-FM has, if nothing else, made a substantial contribution to program diversity on the St. Louis area FM dial. This was accomplished by doing something that would have seemed heretical to the FM devotee a few years ago — featuring country-western music. The station went on the air with 5000 watts of power in 1963 as an extension of the broadcast service being provided by its sister station, WGNU-AM.

In 1965, the power was increased to 50,000 watts and, in 1967, the station went to a 100 per cent modern country-western format, broadcasting 24 hours a day. This, according to owner and general manager Chuck Norman, was one of several "firsts" for WGNU-FM among St. Louis area FM stations: First to program country music, first to carry a regular continuing schedule of high school sports, primarily football and basketball and primarily of games in the Southwestern Illinois conference. Also it was first to carry a sports event live and direct from Busch Memorial Stadium — this the CBC-St. Louis U. High School game earlier this month.

#### New Goal in View

Sometime in 1970 the station expects to add still another first: the first FM station in the area to broadcast country-western music in stereo. The station has added another unusual feature (for FM) to its night time programming — almost every night doing live interview-record shows from various country-western night clubs and restaurants in the St. Louis area.

The station has done its share of outside promotions too, sponsoring several shows at Kiel Auditorium that brought to the St. Louis public such Nashville names as Eddy Arnold, Jeannie C. Riley, Dottie West, Jim Ed Brown, Don Bowman, Bobby Bare, Red Sovine and others. Coincidentally, though the WGNU-FM disk jockies bill themselves as the "Nashville Cats," only one of them is from Nashville — that's afternoon man Johnny Edwards.

The others were all born in the St. Louis area — Bob Baker, Jay Andrews, Mike Haile, Scott Morris, Neal Parks, Al Stevens and Jay Clark.

#### Few From St. Louis

St. Louis, a city that has played a big part in the development of jazz, has been rather sterile in the development of country music names. About the only person born here who made it big in the business was

the late Fred Rose, founder of Acuff-Rose Publishing, discoverer of Hank Williams and original member of the country music hall of fame.

Ferlin Husky and Eddy Arnold had some connection with the city in the early stages of their careers, but the city will have to look to the stars of tomorrow to give it a firmer hold on the hearts of the nation's country music buffs.

Two of them, Norville Dollar and Narvel Felts, are already well known; Dollar largely because of his television show of several seasons ago which he plans to resume in the near future, and Felts because of the enormous success he has enjoyed with his Presley-like style

in night clubs all over this country and Canada.

#### The Future Book

WGNU-FM feels that some big country music name of the future will come from the following area talents: Sharon Wilson, who reminds listeners of the late Patsy Cline and who is packing big crowds in to south county's Adams Rib; Crystal Martin who has signed an excellent contract with Cherry Records and who amazes listeners that such a big voice can come from such a girl — she's 13 years old; Carrol Deane, who makes her home in south St. Louis and whose recent record, "I Can Give You Everything", was one of the most requested country records of the year; Bill Duniven, who started as a disc jockey and who has just made a revival of Conway Twitty's hit of several seasons ago, "Its Only Make Believe," and lovely Donna Cottrell who writes music as well as sings. Her "I Intend To Cry A Lot" created a lot of new fans. She wrote the flip, "A Bottle A Day."

These people have the basic requirements for success: talent and drive. Now, if they can just get the breaks.



### Starting The Day's Work

Pictured at his desk in the business office of KSHE-FM, 9434 Watson Road, is Sheldon Grafman, general manager.

### Program Guide

KFUO FM offers its listeners a free monthly program guide. It not only lists all KFUA programs and their air times, but also all of the classical music selections. Write to Program Guide, KFUA Radio, Clayton, Mo. 63105.

### Frequency Varied

Frequency modulation, or FM, is the transmission of information by varying the frequency of a radio signal.

### FM Audience Said To Be 32,000,000

The Chase Manhattan Bank disclosed that FM's audience jumped from 12,000,000 adults a week in 1964 to 32,000,000 in 1967. By then half of all homes with radios had at least one FM receiver.

The bank's report said "Today, an estimated three out of five have sets, and penetration is closer to 70 per cent in the nation's largest cities."

The Chase Manhattan report predicted that FM's weekly audience could exceed 75,000,000 by the mid-1970s.

"Traditionally, FM listeners have been above average in education and income—mainly because in the past receivers were expensive and FM was strictly a 'class' medium. But FM programming is now far more diversified than in the 1950s, when formats were generally limited to classical music."

## WMRY-FM

SAYS:

"Going to and from work, tune us in as you drive . . . It costs so little to have F.M. in your car with our easy sounds".

## WELL SAID . . . PETE!



*Pete Raku...TV-RADIO*

### 'Easy Sound' KCFM Radio

If you creep slowly along the radio dial you'll find something like 30 stations — give or take a few according to your location — scrambling for the attention of the audience in the Greater St. Louis area.

There are the inevitable sounds of hard rock, there are stations specializing in country-western, some so-called good music middle-of-the-roads, sports and talk, religion-oriented outlets and a few that slant their stuff towards the Negro population.

Name it, friend, it's available. So many different types and shades of sound from such a plethora of stations that one wonders at times how they all manage to squeak out a living.

"It isn't always easy for some of them," says Harry Eidelman with a laugh. "I should know from experience of 15 years of sweat and tears. And I'm not kidding about that. Remember when our station burned down in '61? We cried and sweated a lot to get it rebuilt."

EIDELMAN is the president ("hell, president, I do anything that needs to be done!") of KCFM, located at 532 DeBallviere and one of the oldest FMers in business.

He reports that business — audiencewise — is pretty good at KCFM nowadays, too, because the station is providing radio for people he calls "the forgotten listener."

Can you translate that for us, Harry?

"Well, we're talking about music and I think that too much of radio has gone 'big beat' or 'mod' — whatever you want to call it — aimed at the youngsters," he replies.

"It's okay if you like that kind of noise (which they do), but I think there also are a lot of people out there who want quiet, easy, listening music. The type of stuff that the housewife can have on in the background while she's working. You can sing it, you can hum it, you can hear it without feeling annoyed. Know what I mean?"

I ALLOWED as how I am aware of the feeling.

There's one station in town that seems to specialize in music that sounds like it was recorded at a convention for snake charmers. After 15 minutes of its high-pitched, johnny-one-note screeching, one is moved to start towards the receiver with its destruction in mind.

But I suppose even that music has appeal to a minute segment of the audience somewhere. Possibly youngsters who look over their granny glasses and laugh: "KCFM! You're kidding! That's the station that plays all that 'ice-skating music'!"

"EXACTLY what I'm talking about," Eidelman replies. "We've got a format that is made up of the old standards — the Montavani sound, the 'Moon

River' and 'Stardust' sound that doesn't drive you nuts. If that is 'ice-skating music' that's what we are doing."

KCFM RADIO also is one of the few stations (blessed are they) in the St. Louis market that hews to a policy of restricted commercials.

"We interrupt just four times an hour," says Eidelman. "The breakdown comes to about eight minutes of commercials and 52 minutes of music."

"I'm doing that because I honestly believe the listener should be getting a better break than he is from most commercial radio. Did you see that story in Broadcasting magazine where the FCC caught some of those birds (no cities designated) running all the way up to 28 minutes of commercials in an hour? Awful!"

IN SUM, let's go back to the thought in the lead paragraph of this column — St. Louis has a fantastic array of radio for every splinter of the audience.

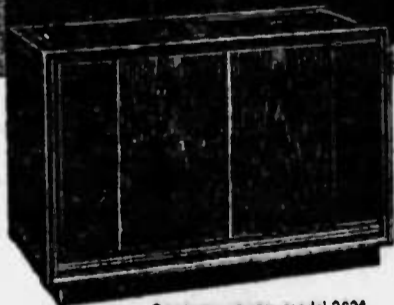
FM radio was a stepchild of the medium for a decade plus, but stations such as KCFM are now picking up more and more aficionados who lean to the "easy listening" sound.

Report from Globe-Democrat, Oct. 27, 1969

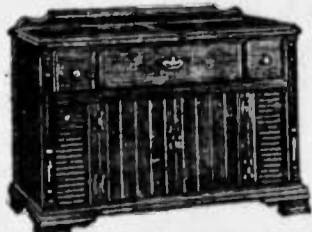


**ASTRO-SONIC STEREO**  
FM/AM RADIO-PHONOGRAPHS  
...bring you the full beauty of music!

Your Choice of three space-saving styles! **\$298<sup>50</sup>**



Ideal for smaller rooms or apartments—less than 40" long, yet each brings you outstanding performance! You'll thrill to exciting Stereo FM; drift-free, noise-free Monaural FM; plus selective AM radio; and your favorite records played on the fabulous Magnavox Micromatic Player that lets your records last a lifetime. 20-Watt undistorted music power, two 1,000 cycle Exponential Treble Horns and two high-efficiency T2" Base Woofers project thrilling sound from both sides and front of fine-furniture cabinets—all on concealed swivel casters for easy moving. Record storage area. Why not fill your home with beautiful music?



Other Magnavox FM Stereo Radios from \$79.95  
Over 20 Years a MAGNAVOX Direct Factory Dealer

WE INSTALL  
WE SERVICE

**Newberry**  
RADIO COMPANY  
MAGNAVOX HOME ENTERTAINMENT CENTER

Convenient TERMS  
Burdick

2401 S. KINGSHIGHWAY VE. 2-2000

## KCFM - 93.7 - STEREO

ONLY 4 INTERRUPTIONS AN HOUR!



# KRCH Plays For Adults Relaxing, Good Music

Operating in the center of the FM dial at 98.1, with a power of 80,000 watts, KRCH features music for the "forgotten generation — the adults."

The station's relaxed, good-music format has 75 per cent instrumentals and 25 per cent vocals — selections from Broadway shows, updated versions of old favorites, and new good-music numbers.

KRCH, called K-arch after the Gateway Arch, began broadcasting in May of 1967. It pioneered the format of 52 minutes of music, with only 8 minutes of commercial time an hour in the St. Louis area. Station management says this format has proved highly successful, as it gives the FM listener what he wants, radio programming that is pleasantly relaxing and not constantly interrupted by talk, while offering advertisers a choice of commercial messages, ranging from spot announcements to sponsorship of quarter and half-hour segments of music.

Along with avoiding "wall-to-wall commercials," the station has consistently emphasized more music and less talk. Rather than a listening diet with overly large portions of disk jockey chatter, pitches and drawn-out introductions of musical selections, KRCH listeners enjoy almost continuous music, with only the briefest identifications, the name of the selection and the artist. Naturally, these are facts the listeners want and need, if they should want to add a particular selec-

tion to their own record collections.

### Variety of Programs

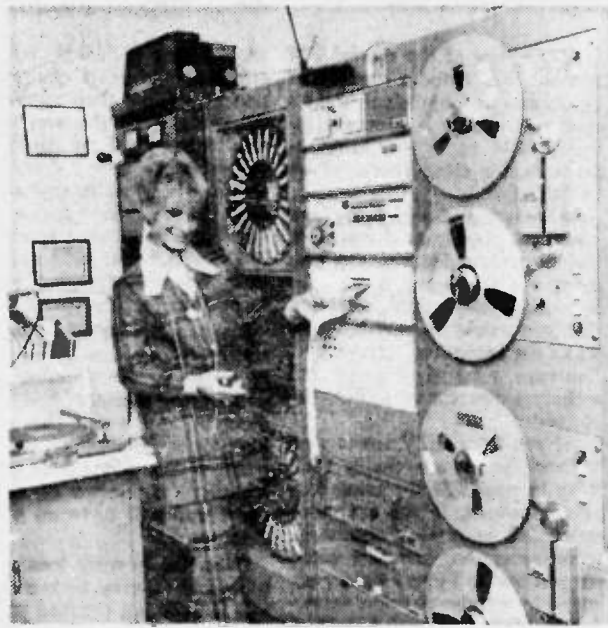
Every talented musical group and vocalist who records for an adult audience is heard on KRCH. Another audience-pleasing feature of the station's format is that each day's programming includes the widest possible variety of artists, so that there is never the monotony that can come from too much of even a very good thing.

KRCH broadcasts from studios in the Siteman Building at 111 South Bemiston Avenue, Clayton. The station is on the air 24 hours a day and the balanced good music programming continues around the clock. The tempo of the music is carefully regulated to suit the hour of the day, more up-tempo selections in daytime hours, more relaxed programming in the evening.

Time announcements are made twice in each hour on KRCH, and at least one minute of each broadcast hour is devoted to a message of public service. The station has been recognized by numerous local and national charitable organizations for its assistance in their various drives and projects.

### Weather Line

KRCH, in co-operation with Sears, Roebuck and Company, also provides a unique service to the public, a telephone weather line which gives callers the current temperature, humidity and forecast for the St. Louis vicinity. The weather line is in operation 24 hours a day, and in the past 12 months, more than one million persons have



## Automation At KRCH-FM

Joyce Bloth, station manager, pictured with the automated equipment of Radio Station KRCH-FM. The station calls itself the "Gateway To Good Music".

called to find out the weather outlook for today, tonight and tomorrow.

KRCH is owned and operated by Foreground Music, Inc., with S. Gerald Mollner, president, and Richard H. Friedman, vice president.

Plans for the near future include the addition of an all-new stereo transmitter, tower and antenna system which would de-

liver 100,000 watts of horizontal power along with 50,000 watts of vertical power. As soon as the FCC approves KRCH's application for power increase and new transmitter location, KRCH will move its tower to the roof of the Colony Motor Hotel in Clayton.

# KFUO Depends 2038 Stations On Listeners For Support

Operated by the Lutheran Church Missouri Synod, KFUO devotes about 70 per cent of its broadcast schedule to classical music, public service, news and educational features.

Noncommercial, the station is strictly dependent on contributions from its listeners and does not receive any financial support from the church's governing body. Therefore, any individual or organization who appreciates this cultural and community service may contribute to this segment of KFUO's operation.

Among the station's expenses for programs are record purchases, rental fees for the taped concerts of some of the world's great symphony orchestras, personnel and technical equipment.

Plans for a new transmitter and stereo equipment are now being formulated. Contributions may be sent to KFUO's Community Service Programming, Clayton, Mo. (63105).

There are 2038 FM radio outlets in operation, an increase of 10 over July and 162 over August of last year. In addition, education FM stations are rising and now total 382.

## KDNA

### REITERATES:

"We capture your mind with comment and controversy... plus the greatest variety of music on F.M. If you don't have F.M. in your machine, you'll miss us!"

### FM-Only Ad Sales

RKO General is establishing separate sales and programming divisions at its FM stations and has created an FM-only national sales force. The new sales division will represent all RKO-owned FM stations in addition to selected outside FM stations.

**7 out of 8  
WANT ADS  
are in the  
ST. LOUIS POST-DISPATCH**

# KMOX/FM 103.3

103.3 STEREO 103.3

MUSIC  
...to  
light  
your  
fire

103.3 STEREO 103.3

# KMOX/FM 103.3

"Congratulations to the St. Louis area FM STATIONS who bring wonderful entertainment to the area Listeners."

Jim Saltzman  
Manager of  
Liberty UA Distributing Corp.



THESE AND MANY OTHER FINE ARTISTS ARE ENJOYED DAILY ON THE FM STATIONS





### Up-Tempo At WCBW-FM

Neal Kassabaum, a broadcasting major at Southern Illinois University, Edwardsville, at the console of WCBW-FM, starting the "Jetstream" program in the evening.

## Radio Station Is Operated From Family's Basement

If listeners were to describe WCBW in one word, that probably would be "diversified." Scheduled programs include polkas, and rock and country-western in addition to a basic sound of instrumental music.

WCBW, at 105 on FM, began broadcasting nearly six years ago in Columbia, Ill., a community of 5000 just across the Jefferson Barracks Bridge from south St. Louis County. The station realized a dream of Joe Lepp and his family, who still operate it from the basement of their home.

WCBW soon grew to a staff of three full-time and six part-time employees. Most are combination announcers and engineers.

Dorothy Lepp, the owner's wife, has charge of the office and writes local news for two comprehensive broadcasts. Dan and Rick Lepp, their sons, assist with the office work and are both licensed engineers.

#### Friendly Atmosphere

Steve Williams, WCBW's production manager, has worked at three other radio stations and one television station but prefers WCBW because of its relaxed, friendly atmosphere.

"It's just like working at home," he says. "Dorothy is an excellent cook and usually whips up an extra meal for the announcer on duty when she makes supper for the family. So the fringe benefits are tremendous — just like my wasteline."

Williams feels that the friendly surrounding of the station is reflected on the air. "Just listen to us sometime. It sounds like we're all having fun."

Joe Lepp is general manager, the sales department and equipment maintenance man. "And even part-time janitor," he adds.

Getting back to diversified music:

Williams signs the station on the air at 9 a.m. He plays background music for the housewife at work, or for the businessman in his shop. His show features beautiful strings, with just enough beat to keep listeners awake. Added are choral groups and an occasional old favorite.

"We have news headlines on the hour, and weather on the half hour until 5 in the afternoon," says Williams.

#### News Summary

Noon is the time of a 20-minute summary of international, state and local news — plus a complete weather summary. "Small Talk," with June Heisler, is broadcast at 12:20. June offers tips to the homemaker, feature stories and anecdotes.

At 12:30, listeners hear WCBW's "Regional Farm Report," with stock prices, poultry reports and comments from Monroe County farm and home advisers.

kovic, the Six Fat Dutchmen and scores of other polka favorites are heard daily at 5 p.m. on "Polka Time." This show has been on the air since the station opened and has a waiting list of potential sponsors.

Six o'clock is the time for another summary of news, sports, and weather with such features as city council reports from area communities.

Then either Garry Koesterer or Neal Kassabaum, a broadcasting major at Southern Illinois University, Edwardsville, is host on "Jetstream."

#### Up-Tempo Music

"Jetstream" is predominately up-tempo in music with many new releases and listener requests," says Kassabaum. "Of course we play some standards, too."

On Thursday and Friday nights, WCBW broadcasts a program that is almost the only one of its kind still in the St. Louis area. "The Sweet Beat of Jazz," on the air at 10 p.m., has a loyal following. "I usually run it," says Manager Lepp. "This is my kind of music, and, with everything else to do around here, it's my only chance to play records on my own station."

Weekends provide more variety. "Nashville Sounds" is broadcast at 1 p.m. "Teen Tempos" is at 4 p.m. and the "Saturday Night Dance Party" at 9. A regular feature of the dance party program is remote broadcasts from Turner Hall in Columbia. This is another broadcast bordering on the unique for the St. Louis area.

#### Sunday Programs

On Sundays WCBW broadcasts services from the Lutheran and United Church of Christ in Columbia and the "German Music Parade."

From 2 p.m. until 6, Tony Mayer is host for a program of traditional German march and polka music. Current European hits are added. Tony averages 50 requests a program and has had over 100 on such special days as Christmas or Mother's Day.

"It's fantastic," he says, "the phone hardly stops ringing during our four hours on the air. Most of the people call long distance from St. Louis."

The future holds the possibility of stereo broadcasts, expanded broadcast hours, and greater signal strength. "And, of course, whatever our listeners want to hear," Lepp said.

#### FM For Autos

Many automobile owners are recognizing the special advantages of FM, which is static-free and generally guarantees better tone, a radio manufacturing ex-

## Pointers For Clear Reception

KDNA, one of the newest FM stations, has listed a number of guidelines and technical hints that will enable a properly installed FM radio to "bring in fantastically clear reception up to 200 miles."

"Although FM will bring you sounds as clearly as if you were inside the broadcast studio, you must use the same techniques for long-distance FM reception that you would employ for television reception," Jeremy T. Lansman, general manager and technical director of KDNA, explained.

"If you have a TV antenna on the roof, you can probably hook it up to your FM for some surprising results. If you are more interested in quality stereo or mono reception, here are some suggestions to improve your sound by eliminating the following problems, or probable causes."

**Hiss, fading, difficult tuning:** A hissing sound between stations on the dial is normal; however, if there is hissing when one is tuned as closely as possible to a station, if the sound keeps fading, or if the station is difficult to find in the first place, the problem is probably weak signal. This is especially evident if the station is far away — 25 miles or more. Almost any kind of antenna improvement will reduce these symptoms.

**Fuzzy, scratchy or distorted sound:** A crash on every high note or sibilance: Loss of stereo separation: Any one or more of these symptoms probably indicates multipath reception, the same problem that causes "ghosts" on television. Your radio receives the signal once directly, then again a few microseconds later, reflected from a nearby mountain, building, powerline, or sometimes airplanes. The rabbit-ear type of indoor antenna may help eliminate this, but if the problem is severe, it can be reduced only by a directional outdoor antenna.

**Static sounds or popping noises:** These occur most frequently in fringe areas, distant from the station one is trying to receive. If they are intermittent, they are probably caused by the electrical systems of passing automobiles or trucks. This is usually called ignition noise.

They may be caused also by any nearby electrical apparatus. One should try to place his antenna as far from automobile traffic as possible. If the antenna is directional, it should be pointed away from traffic.

**Interference from other stations:** There are three general types of interference:

(1) **Cochannel interference** occurs in fringe areas and is caused by another station broadcasting on the same frequency as the one for which a reception is sought. In addition to simultaneous reception of the two broadcasts, this kind of interference often produces a wiggly squeal.

A directional antenna can help eliminate this, but if the unwanted station is strong and the desired station weak, one should be sure to use a co-ax lead.

(2) **Adjacent channel interference** is caused by a strong station broadcasting on a nearby frequency; again, a directional antenna can improve selective reception.

(3) **Cross modulation** is caused by a strong signal transmitted from a source in close to one's receiver. This may be an FM broadcast, aircraft transmission or ham radio. It may be distinguished from cochannel interference or adjacent channel interference by the fact that the unwanted signal interferes with more than one station on the dial.

If the cross modulation is caused by something other than

an FM broadcast, the most effective and least costly solution is a filter that connects to the antenna terminals of the radio. However, if the problem is caused by another FM transmitter, a better radio probably is needed. The most expensive radios may be within a few blocks of five or six full-power FM stations and still receive signals from distances up to 150 miles.

Most of the problems described above can be corrected by adjusting the antenna or by getting a new one. If one has no antenna at present, he should look for two screws on the back panel of his radio. They will be set about a quarter of an inch apart and will have no evident function.

Portables or very inexpensive table radios may lack them. If this is the case, persons with reception problems should start thinking about obtaining a new radio. If you find them, however, you will probably be able to improve reception by attaching some form of antenna.

A summary of available antennas follows:

**Di-pole antenna:** The simplest kind is made of flexible twin-lead and is very inexpensive. Many persons tack this type of antenna somewhere along the wall or baseboard, making sure it is not too near any metal fixture. The main disadvantage is that once installed, it is hard to move. The television rabbit ear is better because it can be readjusted. The rabbit ear is usually most effective for FM reception when extended to the maximum length and when the ears are horizontal. It usually costs about \$2 at radio supply houses. There are more expensive ones but these should not be purchased unless they are returnable.

**Standard television antenna:**

This often works for FM with good results. If it seems to be satisfactory and if one plans to use the same antenna for television reception, he should get a two-set antenna coupler to keep the FM set from interfering with the operation of the television.

**Yaggi or paralog:** This kind of antenna has more than one cross bar on the main boom. The greater the number of cross bars, the stronger the signal reception. Like the television antenna, the yaggi should be placed so that the cross bars are perpendicular to the direction from which the desired signal is being transmitted. This is an excellent form of antenna, which (when connected to a good receiver) has been known to bring in a good stereo signal from distances up to 300 miles.

It helps to reduce every kind of reception problem except cross-modulation. It can be placed in the attic or on the roof but should not have a lead into the radio of more than 100 feet unless a preamplifier is used. A preamp increases the power of the signal before it reaches the radio itself. A preamp should be connected as close to the antenna as possible so that a strong signal will go down the lead. For multipath problems, a preamp can be very helpful. Alternatively, one should use a co-ax lead, which is a form of well-insulated cable that helps to screen out reception of stray unwanted signals.

**Turnstile:** This is a multidirectional antenna with two cross bars perpendicular to each other on the main boom. It should not be used except in flat areas where the stations come from many directions and there are no multipath problems.

In some areas, one may want to listen at different times to

## Receiver Sales Rise To 17,000,000

Sales of FM-equipped receivers climbed sharply from 1,000,000 units in 1960 to 17,000,000 in 1968, as their share of the radio market moved from 4 up 37 per cent, the Chase Manhattan Bank reported.

"Total radio sales are expected to advance at about 5 per cent yearly to more than 65,000,000 units, of which 80 per cent or more than 50,000,000 will be FM-equipped, in 1975," the report said.

several stations that are transmitting from the same general direction. In this case, an omnidirectional antenna will not help much unless it is larger than average.

## KRCH

### URGES:

*"Resolve for 1970; put an F.M. radio in your car... It cost so little to hear our BIG pleasures."*

# K-SHE/95

*most music in st. louis*

**REAL  
ROCK  
RADIO**

**24 HOURS  
A DAY!**

*Stereo*



# Expanded FM Natural Disaster Warning Sought

Sun., Nov. 30, 1969 5 GA  
ST. LOUIS POST-DISPATCH

As part of a recommended improvement in the Government's communications system for dissemination of disaster warnings to the public, the National Disaster Warning (NADWARN) System has proposed an expansion in the number of cities where continuous VHF-FM radio transmissions of weather news on broadcast from Weather Bureau stations operating on the frequency of 162.55 MHz.

Weather Bureau VHF-FM stations are located in St. Louis, Boston, New York, Atlantic City, Washington, Norfolk, Charleston, S.C.; Jacksonville, Tampa, New Orleans, Lake

Charles, La.; Galveston, Corpus Christi, Los Angeles, San Francisco, Seattle, Honolulu, and Kansas City. New London, Conn., is expected to be operational soon. Most of the stations transmit continuously 24 hours daily.

In a survey and analysis of the nation's natural disaster warning capabilities, a special group of representatives of six federal agencies concerned with the detection, prediction and warning of natural disasters and with preparedness and relief measures proposed the NADWARN System. It was designed to reduce appreciably the loss of life and property

damage from natural disasters. These agencies are Environment Science Services Administration (including Weather Bureau), Coast Guard, Army Corps of Engineers, Federal Communications Commission, Office of Civil Defense and Office of Emergency Planning.

"No state in the United States is immune from natural disasters. Tornadoes, hurricanes, floods, seiches, seismic sea waves, blizzards, forest fires, earthquakes, severe local storms and other hazardous weather conditions take a heavy annual toll of lives, inflict incalculable human misery and cause billions of dollars in economic losses," a NADWARN source reported.

In recent years, it was stated, the steady growth of population and property values has greatly increased the potential for loss of life and loss or damage to property from natural disasters.

Because of this, as resources permit, the Government hopes to extend weather transmission service facilities to cities of 100,000 population or greater where there is an office of ESSA. This network would reach across the United States and would provide continuous area coverage along the Great Lakes, the Atlantic, Gulf and Pacific coasts.

The chief purpose of these continuous radio transmissions is the prompt and authentic dissemination by the Weather Bureau of emergency warnings of tornadoes, hurricanes, floods and other severe local weather conditions. They are directed generally to the public and to boatmen and specifically to news media, hospitals, schools and key civic and municipal offices responsible for relaying the information under their preparedness programs.

Secondly, the broadcasts

bring also to the communities they serve the benefits of complete routine weather information continuously up to 24 hours a day. Stations located along the Great Lakes and the Atlantic, Gulf and Pacific coasts transmit weather information, forecasts and warnings of use to small boat owners and other marine interests. This includes

radar information, where available, weather reports, temperatures, observations of wind, visibility and sea and lake conditions.

Both the routine and emergency weather news broadcasts are of interest to everyone. This includes a broad spectrum of special groups and institutions: hospitals, schools, local officials

concerned with public safety, health and transportation, truckers, fruit growers, farmers, fishermen, hunters, boat owners, producers of outdoor sporting events, etc.

In order to make this important environmental service available to the public, Zenith Radio Corp. has developed a battery-powered FM-AM transistor radio that, in addition to tuning FM and AM broadcasts of music, news, sports and other broadcast entertainment, provides static-free FM reception of the continuous transmissions of weather information, forecasts and warnings on the special fixed frequency of 162.55 MHz (megacycles).

## Questions and Answers

Q. What is Stereophonic FM broadcasting?

A. It is a system of broadcasting approved by the Federal Communications Commission that will enable an FM radio station to broadcast true stereophonic sound over the same frequency it now uses.

Stereo FM brings to FM radio the same depth, dimension and powerful illusion of presence at the actual performance, that many music lovers now enjoy with the stereophonic record players and tape playbacks at home. All the listener will have to do to get Stereo FM is tune in the station on his Stereo FM receiver to bring this new dimension in FM listening right into his home.

Q. How does an FM station broadcast stereo programs?

A. In Stereophonic, FM broadcasts the two separate stereo channels or sources of sound are woven together into one FM signal on a single FM station broadcasting frequency or channel. Stereo FM radios hear both the main channel and the stereophonic channel, and their highly sensitive circuits act as a traffic cop to route each stereo signal to the proper amplifier and speaker systems. As a Stereo FM listener, you hear the broadcast of both channels with full high fidelity plus the sepa-

ration, movement and color of music, with the effect that the orchestra is spread out before you.

Q. How does Stereo FM differ from stereo radio broadcasts on the air prior to FCC authorization of the new broadcast service?

A. Prior to FCC authorization of national broadcasting standards for Stereo FM, two radio or TV stations had to combine their facilities for a stereo broadcast.

One FM station, for example, broadcast the channel meant for your left ear and a second FM, or an AM, or TV station broadcast the sound meant for the right ear. This early method of supplying stereo over the air not only required two broadcasting stations but meant that those listeners tuned to just one of the two were getting only one-half of the broadcast. Because of this, station operators were forced to compromise and put on the air signals that were neither pure right channel nor pure left but somewhere in-between.

By contrast, the new Stereo FM broadcasts of stereophonic sound in full high fidelity, with each channel's response from 50 to 15,000 cycles per second.

## FM Radio Association Outlines 4 Objectives

The Greater St. Louis FM Radio Association was organized last September and now has among its membership the leading FM broadcast outlets in this area.

The purposes of the new organization are:

(1) To increase the service of the FM stations to the public.

(2) To focus on and make a greater awareness of the outstanding and diversified programming of the FM stations to the general public.

(3) To promote generally a wider listening audience and a growing commercial acceptance of the FM radio medium to sponsors.

(4) To recognize the increasing popularity of FM in car radios.

Elected as the first executive committee, to serve for one year, are: Richard Friedman, KRCH; Homer Griffith, WIL-FM and Chuck Norman, WGNU-FM. Sally Buck, KCFM,

has been chosen treasurer and Jack Samuel is public relations director and executive secretary. The association's office is in the Chase-Park Plaza Hotel.

FCC Commissioner Kenneth Cox, who was honored here recently by the Association, predicted "a solid future" for FM stations and praised their different service and better quality.

Following is a brief resume of each station's programming:

- KCFM — Good Music
- KDNA — Classical, Jazz, Folk, Rock
- KFUO-FM — Classical, Pop
- KMOX-FM — Good Music, Contemporary
- KRCH — Good Music
- KSHE — Progressive Rock
- WCBW — Good Music, Soft Rock
- WGNU-FM — Country western
- WIL-FM — Good Music
- WMRY-FM — Easy Listening Music

# 'Listened-to' People read the

# ST. LOUIS POST-DISPATCH

*(And they get the daily radio-TV listings in the Everyday Magazine when they want to listen.)*

To be "Listened-to" every day, phone 621-1111 for daily and Sunday home delivery.

## WCBW

**RECOMMENDS:**

*"An F.M. Car Radio for a Christmas Gift to enjoy our pleasant sound the year 'round".*





### In The Front Lines

Taped programs from KFUP broadcasts are mailed regularly to stations all over the globe and broadcast from 4000 cities and in the war zones. Pictured is a broadcast of one of the tapes at a front-line position in South Vietnam.

### AM-FM Bill Is Pending

Introduced by Senator Frank E. Moss (Dem.), Utah, and pending in Congress is a bill to require that radios be capable of receiving both AM and FM broadcasts.

Senator Moss said that "the practical effect of this bill would be to broaden materially the listening possibilities of radio, thus providing improved communications to the widest possible cross-section of the American public."

"It would not only provide greater programming service to the public at large, but it would also have the effect of improving the programming content of all radio broadcasting due to increased competition between stations."

"At present most sets are equipped to receive only AM broadcasts, and the people owning these sets are shut out from the vast world of FM broadcasting — a world which includes education as well as commercial programs. There are approximately 2100 FM stations on the air today, 325 of them noncommercial or educational stations. This FM world for broadcasting will become even more important as the Corporation for Public Broadcasting gets into full swing."

"There are presently about 4200 AM stations in the country, half of which are daylight stations only. Thus many rural areas lack local service at night. The net effect would

be to make more radio reception available to more people at all times.

"UHF television has already received support from similar legislation. One would expect the same advantages to accrue to the radio listener as to the television viewer. It is essential if equality is to be provided for FM radio."

Moss noted that it recently had been held that jointly owned AM-FM stations in communities of 100,000 population or over must program separately. This is done "to give the public a greater diversity and choice," he said. His bill would have the same result, he said.

A similar all-channel radio bill has been introduced in the House of Representatives and would require all radios sold in interstate commerce, or imported, to be capable of FM reception.

A radio industry expert declared that passage "would do for FM what the All-Channel Receiver Law of 1962 did for UHF television."

#### Perfected In '30s

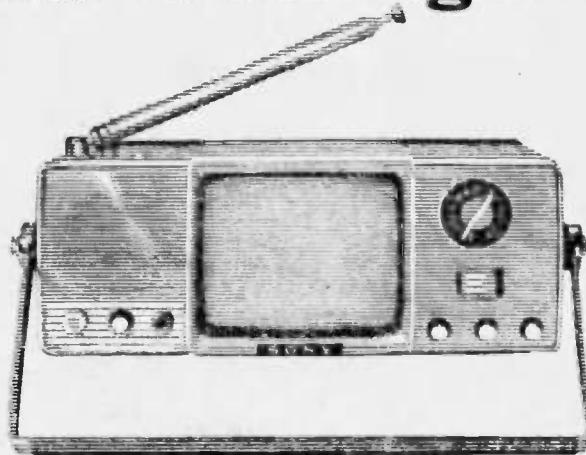
The principal of FM had been known for many years when it was perfected and implemented in the 1930s by Edwin Armstrong, a professor of electrical engineering at Columbia University.

## KSHE

#### COMMENTS:

"Progressive Rock is our Bag. It's the 'in' sound on your jalopy F.M."

## Sony's Stroll Along TV



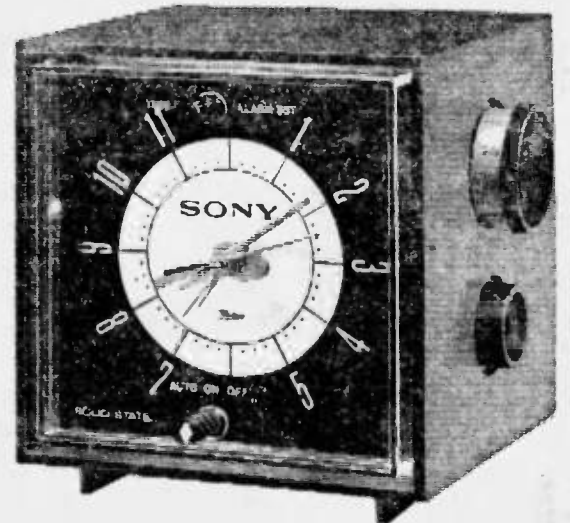
### 6 lb. go-anywhere set.

Yes, this is Sony's famous "Walkie Watchie" personal portable TV—the one you can enjoy while taking a stroll. 6 lbs. of joy styled in a fine looking cabinet. TV-400U has a 4-inch diagonal picture that pops on clear, sharp and instantly with Sony's advanced all solid state circuitry. There's front-mounted controls for easy operation and a front-mounted speaker for better sound. Operates on its own built-in battery, AC or 12v auto/boat battery with optional adaptor. Comes with front cover, AC cord, earphone and sun visor. A special accessory carrying strap with built-in antenna is available for walking and watching. Take a walk around our store with the Sony TV-400U today.

**\$160<sup>00</sup> SONY**



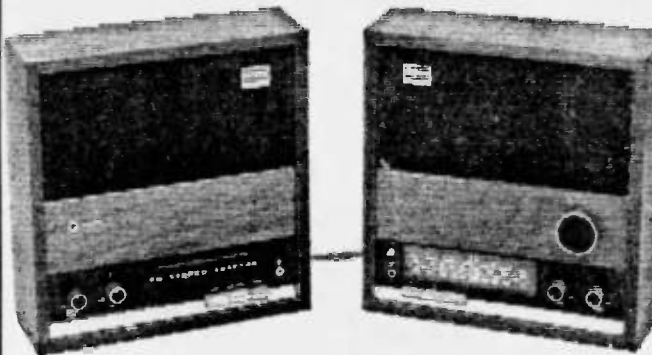
## Morning blues? Just set this Sony and awake to news.



A radio that pours out full, rich AM from a cube sound-chamber cabinet. And anything a big clock radio can do, Sony's 6RC-23 can do too—but in less than 5" x 5" of space. Front clock switch makes time-setting simple, and the large clock face is designed for easy-reading. Charming cube-shaped set comes in a walnut-looking finish that's very rich. But you don't have to be to buy it.

**\$20<sup>00</sup> SONY**

## Sony and Sony.



### Brilliant double play combination.

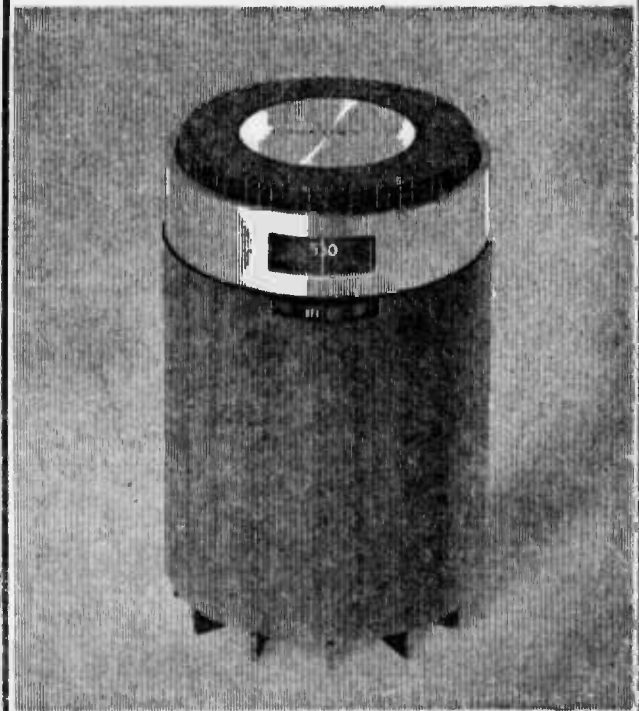
On your right: Sony's stunning 8F-48W FM/AM radio, a little powerhouse of lifelike sound. Its luxurious resonant hardwood cabinet (very modern) conceals solid state circuitry and a big, potent 5" front-mounted speaker. These too: operates on battery or AC, special flywheel tuning for easy station selection, AFC switch for more accurate, drift-free FM, Touch 'N Play switches for easy-on FM and AM, easy-to-read slide rule dial. On your left: Sony's optional STA-48 adaptor that transforms 8F-48W into full-bodied FM stereo. The STA-48 adaptor has its own plug, volume controls and stereo indicator light. Just plug it in to 8F-48W and double your listening pleasure.

**SONY**

**\$100<sup>00</sup>**

## The Tube

Look to Sony for the unique in radios. This new powerful all-transistor AM desk radio looks and plays great from any angle. Stands just under 5" and weighs only 12 ozs. Power supply: 3 standard batteries. The TR-1829 is designed in a rich simulated walnut finish with brushed chrome accents. Perfect for the home, office and as a gift.



### SONY'S Desk Radio in the round

**\$18<sup>00</sup>**

Bankmark



**Hi-Fi west, inc.**

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