

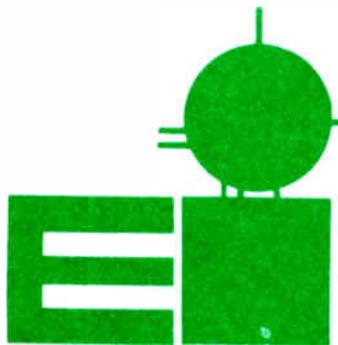
June 1983

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A MONTHLY NEWSLETTER FOR BROADCASTERS

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per copy

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AMPRO UPDATE

All efforts to get Ampro/Scully back into the broadcast market since closing down earlier this year have been unsuccessful.

According to reports, the company had filed for reorganization under Chapter 11 of the Federal Bankruptcy Act in January, but was closed by American Bank and Trust, a major creditor.

Since then, the NCI Corporation headed by Jack Neff and Pat Gallagher was appointed by the Court and American Bank and Trust to sell the company, however, due to the economy or other reasons no potential buyers have been reported. According to Jack Neff, Ampro Company assets considered in excess of 2.2 million dollars, include not only all equipment in the pad locked premises, but all rights to engineering drawings and data used in the the manufacture of Ampro and Scully Equipment. Until such time as a buyer for the company is found to again provide spare parts and support, Ampro/Scully Equipment owners have been left frustrated with their orphaned equipment.

One exception to this problem has been provided by Westek Audio, a major distributor and former exclusive representative for Ampro in the New York area. After being refused permission by the courts to purchase all remaining Ampro/Scully parts, Westek has proceeded to manufacture some exact replacement

(cont. on page 11)

Severe Weather Warning and Radio

The location was a small city in the South Central States. A severe weather watch had been issued twice during the week but only short periods of heavy rain had materialized. 8 p.m. Friday evening, the National Weather Service called the station with another severe weather watch. The local civil defense placed four radio cars out approximately two miles south and west of the city.



Two way contact was established and maintained with the local radio station as several heavy thunderstorms passed through during the night. The station, staying on high power, kept listeners informed as the storms approached and passed in the area.

Saturday...the severe weather watch still in effect throughout the day and night. Civil defense cars in position..the station staying on high power.

Sunday...the National Weather Service calls at 4 a.m. to cancel severe weather watch. Things are looking better on their radar.

Finally, the civil defense director calls in the watch cars and heads for home. The station passes the word to listeners and signs off.

5 a.m....the phone rings in the civil defense director's home..the National Weather Service Radar shows storm cells building and intensifying south and west of the city. Civil defense cars are called back into position. The station goes back on the air with severe weather watch announcements. Weather wire bell rings..possible tornado sighting 60 miles southwest of the city. No touchdown reported.

6 a.m.--Emergency call..civil defense car three miles south of
(cont. on page 9)

COMMON POINT READINGS

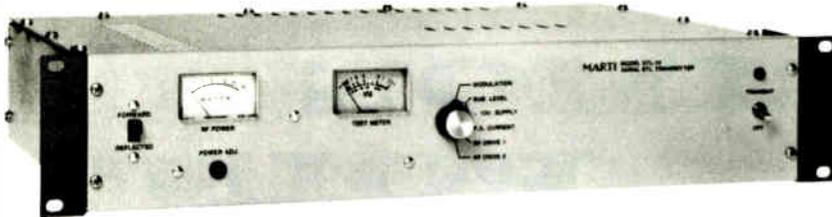
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MARTI

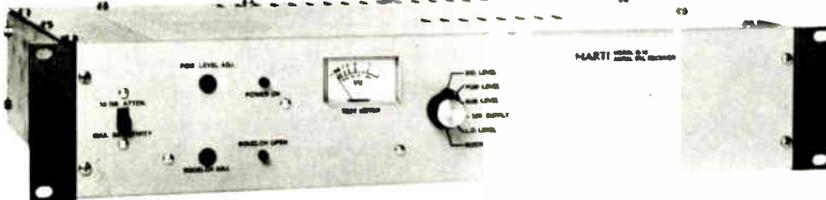
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Editor's Notebook

Panic affects different people different ways. I get stiff elbows. I always had stiff elbows..high school ice hockey..junior baseball..even back 8 years ago with the first issue of Common Point. When I was told earlier this year "we're going back with the Common Point"..I could feel the old elbows start to stiffen.

Experience helps though..and this time I knew exactly where to turn to get things going..and I think you'll be pleased. Our old regular feature writers, Mark Persons and John Shepler, are back..plus a new name to the ranks..Ed Duellman..chief engineer for the Seehafer Stations..a ham operator and writer of several articles for National Publications.



Ye Olde Editor

A wealth of experience is also in the line up of contributing writers. Included are Bill Spitzer of WLS Communications, Rapid City, N.D. ..Dave Metz of Metz Electronics from Muscatine, Iowa . . . Les

Childers of Ingstad Broadcasting, Pierre, S.D. . . Cliff Groth of Broadcast Electronics Services, Ft. Atkinson, WI . . John Battison, founder and first president of the SBE and director of engineering at WOSU, Ohio State University . . . George Riggins of Riggins Electronics, Los Angeles, CA . . Dick Tyner of Tyner Broadcast Services, Minn. . . . and Jim Lies of Booth Broadcasting. We also have an okay from Joe Tiernan at the NRBA for use of their material, so if you missed it the first time around, you get a second shot, and those who don't belong to the NRBA may see some real reasons to change your mind.

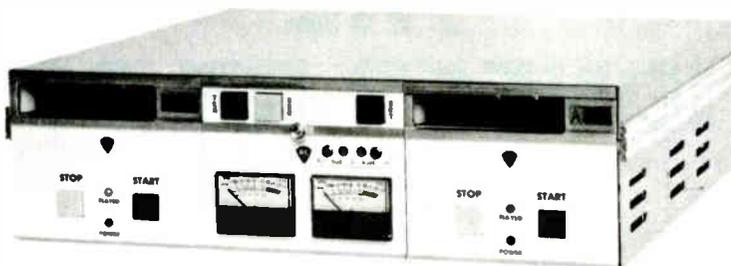
Radar & PSA Adaptor . . two articles you'll find interesting this time around. Be sure to fill out and return your acknowledgement cards with your reaction and ideas.

SCA . . are you putting yours to work? Let's hear from you.

AM vs FM..latest word puts FM in the lead and pulling away. True..false?? Will AM stereo help??

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**OBTAINING LOW POWER FOR
PRE-SUNRISE AUTHORITY**

by David L. Metz

Looking through the Broadcasting Year Book there are some 800 A.M. stations that live by the sun and die by the sun. Those stations, listed as D250 to D10,000 have for years stood in the shadow of other stations that due to frequency, assignment and power, prior application and foreign treaty, have first claim to their frequency, and are protected from co-channel interference.

Some stations have been able to side step the problem with Directional antennas and lower power during those early morning hours, but this has not been the answer for hundreds of stations who have not been able to lower their power enough due to transmitter design.

For many years the Daytime Broadcaster has been able to live with this handicap, but with the constantly increasing pressure on the dollar in our economy, more time is now needed to get the job done.

With the FCC now granting increasing numbers of PSA's (Pre-Sunrise Authorities), the AM engineer is presented with an interesting set of problems. Presented here are some of the possible solutions and the one I chose for station KWPC, and the rationale behind it.

First off, the PSA is a real money maker for the Daytime AM. It allows the Daytimer on the air at 6:00 local time year around. That gives KWPC an additional hour and a half air time in December for instance just when we need it most. If that doesn't get the sales staff drooling at a Daytimer, I don't know what will. But! You don't get something for nothing. You still have to give sky wave protection to the other stations on your frequency just as you do now. That means you station has to operate at very low power. In our case, that's 7½ watts!

Now what could you possibly do with 7½ watts you ask? If you check the books and calculate the coverage curves it would seem you couldn't transmit past you tower dog house door, but wait, the real world is not that bad.

Tests with ordinary table and car radios have proven that 7½ watts will give usable coverage over our city of

(cont. on page 6)

Shepler Says.



by John Q. Shepler
Technical Consultant

REJUVENATE YOUR AM TRANSMITTER

AM transmitters tend to be hardy beasts that can run for months without attention. You are probably tempted to leave well enough alone except for that uneasy feeling that maybe your transmitter isn't performing as well as it could. Here are a few hints on how to tell when your AM transmitter is sick and what to do to rejuvenate it.

Audio problems usually come on gradually so that you may not be conscious of the deterioration until you are forced to change tubes. All tubes gradually lose emission and today's high performance audio processors work your modulators hard. As the modulators age, they start having trouble keeping up with high modulation levels. Remember, most tube-type transmitters were designed to handle an average modulation level of 30% or so. Today we expect averages of 80 to 90%. After 6 months or a year, the modulators may be beat. You may still be able to maintain modulation by cranking up the input level, but you'll lose on quality.

The most common audio effect is an increase in distortion, especially IM distortion. Your audio will sound less and less distinct. IM distortion is most noticeable on music that contains many instruments. A solo vocal or a piece with just a piano may sound ok. However, when you play something that contains several voices, piano, guitars, and drums, the distortion may make it impossible to pick out individual instruments.

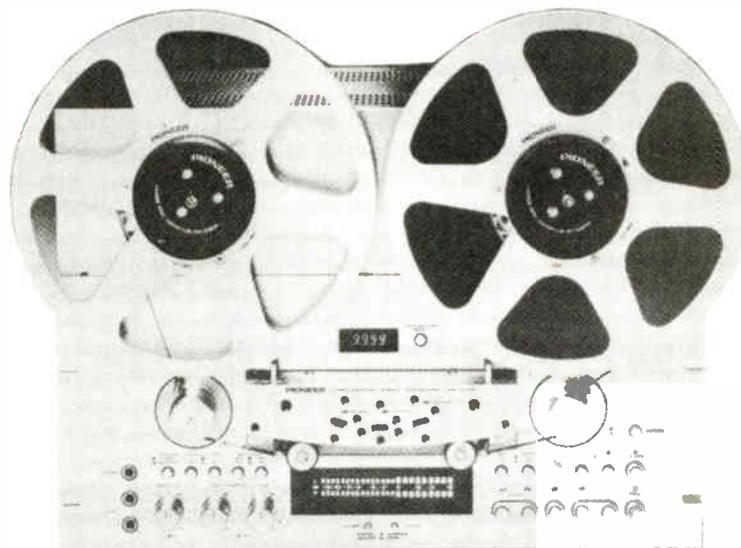
Transmitters that are designed around tubes and modulation transformers may have 5% or more IM distortion even when they are running well.

(cont. on page 8)

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4½ MIN.	6.39	2.00	4.39
5½ MIN.	6.65	2.00	4.65
7½ MIN.	7.07	2.00	5.07
10½ MIN.	7.73	2.00	5.73



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LOW POWER FOR PRE-SUNRISE

(cont. from page 3)

license. Listeners as far away as ten miles report the signal is listenable with some minor sky wave interference. Listeners in the city itself (we are located on the north edge of a city of 25,000) report very little if any difference between our PSA and daytime signal. Since its possible technically, and desirable for sales, how do you, the engineer, get the station on the air at 6:00 A.M. with that tiny amount of power? Keep in mind you want the following things:

1. You want to use the existing transmitter.
2. You want the transmitter to operate into the same load all of the time so it does not have to be retuned at power change time.
3. You don't want to adjust the modulation or have the air sound

change when you change power.

4. You still want to be able to use your existing standby transmitter.

5. You want the power change done automatically so the operator doesn't forget and leave you on low power all day!

6. You have to be able to adjust the power output of the transmitters to low power output without changing its normal output settings.

7. You have to be able to monitor the power output and accurately measure this small amount of power. So lets get to work. Your first idea was to buy a college carrier current transmitter, but you just found out it won't interface with your remote controls, and beside the FCC takes a dim view of a transmitter without meters that hangs on a nail. So you take a fresh look at old thunder lizard, your faithful tube type AM transmitter that has served you so well all these years. It's got its

advantages. It's on the air, you're audio processing is all set up for it, the remote control works, and since it has no resale value your not afraid to drill holes in it.

Even with lower power available through surgery, things can get complicated. If you choose to modify the transmitters with two outputs each, an antenna, a dummy load, and some kind of power measuring device to switch all about every time you change power. Faced with this mess I decided to make things a little simpler, and designed and built the PSA Adaptor. I put the power divider switching relays, timers, and power meter all in one box. This way no modifications needed to be made to the transmitter.

The PSA Adaptor has a large inductor connected as a power divider. Adjustment is very easy and

(cont. on page 14)

New Solid-State Tower Flashers Offer Economy and High Reliability

Since it was first introduced in the early 1970's the SSAC "B-KON-FLASH" has shown a steady increase in popularity with commercial broadcasters. More dependable than the old mechanical flashers which many times size up when the temperature falls during the winter months, the SSAC "B-KON-FLASH" has been a proven performer, operating without problems at temperatures from -40 degrees to +150 degrees.

Not only is the price of the "B-KON-FLASH" much less than the old mechanical flashers, it is very popular because it increases lamp life by up to 10 times, because of the units zero switching voltage. The highest inrush current occurs at the peak of the voltage sine wave in a lamp load circuit. If switching occurs at any other phase of the voltage sine wave, the peak current through the bulb is less than the worst case.

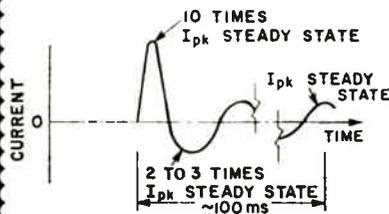


Figure 1. Inrush current at peak voltage point.

Quoting from an article that first appeared in the June 1975 issue of "Antennas and Towers" . . . "typically, the maximum inrush current can be ten times as great as the steady-state peak current while the peak inrush current with zero voltage switching can be approximately five times

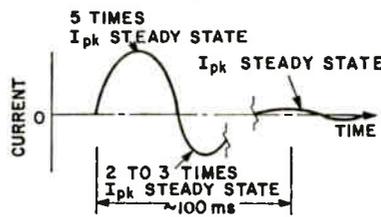
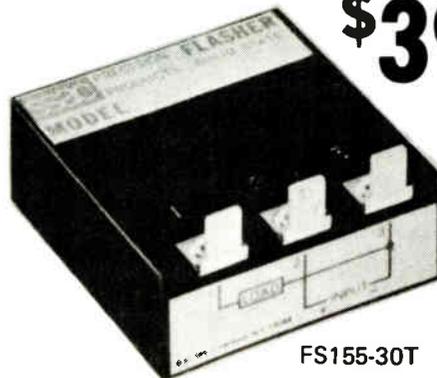


Figure 2. Inrush current at zero-voltage point.

as great as the steady state peak current as shown in Fig. 1 & 2. Zero voltage switching of a lamp allows for a soft "turn on" that reduces the initial peak of inrush current by half, and greatly increases lamp life."



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Crosstalk. . .



by ED
DUELLMAN

First things first--I would like to welcome Common Point back on the scene. This magazine seems to be mostly in the hands of the engineering department and that to me seems to be the last outpost of any substantial group of jolly old souls, but even this area is being infiltrated by bands of noisy people who seem to be catering to malcontents. Good! Matter of fact, everytime someone comes on about having no axes to grind, I run for the quiet confines of the "back room".

I don't know about you but I have a few nicks in the edge that need a bit of grinding. I am not happy with people that say they represent me and claim to be looking at the world through rose colored 4-400's. Most people I have talked with are upset with one thing or another in the business - maybe it's the loud mouth DJ that blew away that new mike that is supposed to 'take it all', maybe that new piece of equipment that was touted to be the last word and turned out to be a pretty face and impressive array of knobs and switches.

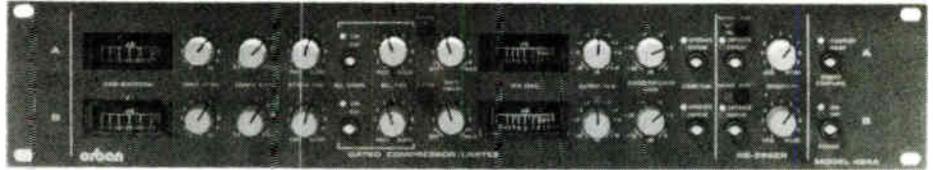
So, fellow grouches, here we are with a place of our own. From time to time, we will needle a few manufacturers, and to generally take a few whacks at people and things that bug us. I'm not afraid to yank the tails of a few sacred cows. There is no monopoly on this, mind you. If you have a thorn in your tail about something, pass it along to be included in our rantings.

Must be ranting time again. The good old spring book. How can I tell? Listen across the dial -- more contests than the proverbial liver pills. Crank up the old proccesser, be the loudest thing this side of Radio Moscow...The poor listeners have to ingest all that trash. Sometimes I

(cont. on page 10)

THE ORBAN 424A

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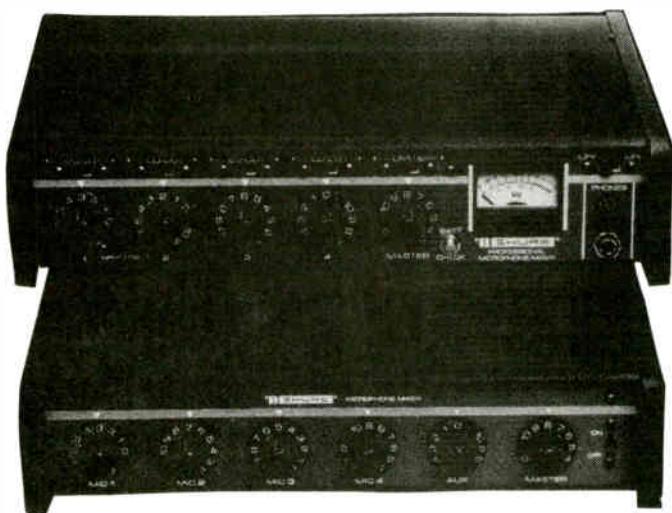
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SHEPLER SAYS . . .

(cont. from page 4)

This is one reason that FM has so much more clarity than AM.

You can really help the sound of your station with a new set of modulators and a PA tube. The PA works with the modulators to produce complete RF signal. If the PA is weak, you will lose efficiency, modulation level and clarity.

After you change tubes, adjust the hum balance control for least signal noise. Then adjust the modulator balance controls for lowest distortion at 1kHz. If you have an IM analyzer, tune for lowest IM distortion.

This is also a good time to run some quick audio tests. Sweep an audio oscillator from 20 to 20K Hz and see where your response rolls off. A flat response up to 10 or 12 kHz is important for a crisp sound. It's also a good idea to measure the distortion at high levels and low frequencies. The harmonics from distorted 100 Hz sine waves will spread throughout the audio range and destroy an otherwise clean signal.

Before you button up the AM transmitter for the next few months, be sure to blow out as much dust as possible and record all meter readings and control positions. If the transmitter suddenly quits it's hard to remember what those meters should normally read.

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The multi-format magnetic tape eraser



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WIVI Radio...A Station in Paradise

Of all the stations reported on here in the Common Point newsletter, perhaps one of the most unique facilities are those of WIVI Radio located at St. Croix, U.S. Virgin Islands. Located at "the mill", WIVI moved to this location this past year with new equipment. What is unique is that, built in the early 1700's, WIVI is probably the oldest facility under the U.S. flag from a structural standpoint.

The mill was part of a sugar plantation constructed about 1720. The mill, actually a windmill to power sugar cane grinders within the mill, was originally owned by a titled Dane, and was a working plantation until 1847 emancipation.



THE MILL

Sold later to an American, it passed through several ownerships before FM99 purchased the property in 1981. The general manager's office is in the base of the centuries old sugar mill, at the center of the 3 acre property. A conference room is located on the mill's second floor. The studio control room facilities are in a separate 1700's building. The colonial kitchen has been retained for the staff's convenience, and an outdoor employee lounge is within



GEN. MGR. BILL SHAW

sight and sound of the Caribbean Sea. From the general offices there is a spectacular view of Christiansted town and Buck Island National Park to the east, and St. Croix's green rolling mountains to the south and west.

From it's studio, the WIVI signal goes by STL to the top of St. Croix's Blue Mountain where it can be heard as far away as Puerto Rico and



FLAVIA LOGIE - NEWS



MUSIC - DR. TOM PLANT

Antiqua. WIVI is staffed by a cosmopolitan crew, the office manager from Antiqua, the traffic manager a



OPERATION MGR. JOE HANN

native of St. Croix, a news director born in Trinidad and raised in Grenada, and an upstate New York operations manager. Broadcasting in



GEN. ADMINISTRATIVE OFFICE

English, the sales staff can serve clients in Spanish, French and Dutch, or English if they prefer.

Virgin Islands license plates carry the slogan "American Paradise". WIVI, then is truly a station in paradise.

Ed Note..When I accused Bill of bragging, he closed his covering letter on WIVI by stating.."It comes to this, some people cut grass and shovel snow depending on the time of year. We cut grass all year long".

SEVERE WEATHER

(cont. from page 1)

city..tornado sighted.. in air. Confirmed by second car. Tornado warning broadcast immediately. National Weather Service informed. Three long minutes later they confirm tornado on radar..weather wire warning sent. Local civil defense car side tracks tornado continuing emergency warning. Announcer at station relays warning to listeners giving location of tornado as it approaches. All listeners urged to take immediate shelter.

6:20 a.m.--Tornado passes over city..no touch down..gale force winds..heavy rain. Major damage as some store windows explode into street area..trees down throughout city..power out in some areas.

6:30 a.m.--Wind slackens..shifts to west..light drizzle. Two tornado touch downs reported in farm area northeast of city.

6:45 a.m.--Cloud cover higher. Rain stops National Weather Service calls. Tornado warning cancelled

This is the actual weekend story of a station 18 years ago. The major weakness in the civil defense arrangement was the inability of the weather service radar to provide actual tornado location fast enough.

The same situation was experienced at another station 7 years ago. This time the tornado did hit the city causing several million dollars damage. Fortunately nobody was killed or injured.

The local station was still announcing severe weather watch five minutes after the tornado had come and gone. Phone lines were jammed. No tornado warning had been issued by the Weather Bureau.

Television has made major advances in the past few years in providing rapid information. Unfortunately, most people depend on their local radio for weather information.

Si-Tex Marine Electronics has now provided a solution to local radio for fast condition reports . . reports direct to the radio station.

See page 12 of this issue of Common Point for information on the Si-Tex/Korden CR 1011 Model 64 mile full color radar. Ideal for local civil defense/radio.

There are three eras in your life — your youth, your middle age, and "Gee, you're looking great!"

- Mueller Clipper

CROSSTALK
(cont. from page 7)

wonder if we, as broadcasters, are out to impress each other or gain an audience.

Got any complaints on those cordless telephones yet? The base transmits to the handset in the 49MHZ area and the handset transmits to the base on about 1700KHZ. They don't use those things with much success in our neighborhood. Talk about the East dumping garbage on the West. Have to get James Watt on that.

Got caught up in all the outer space stuff going on these days? I'm talking about all the programming via satellite. A lot of fancy hardware out there on the market to bring those signals in. As far as I know CBS, ABC, NBC, and RKO are going the digital route. Scientific Atlanta is the only one that is making the electronics package for those services at this time. You can use your own outside equipment; and if you plan to use the services of more than one bird, you might want to look into that Simulast multi-feed reflector. Will have to get up on that gizzmo and pass the info along in a future column - hear that Bud!

Just got our Scientific Atlanta earth station. I decided that this was a do-it-yourself project...I still can't stand up straight. The hole you need to dig for the base of the dish might look reasonable on paper, but try and dig it by hand, no way! I must give S. A. a pat on the back, they managed to get everything to fit. Not like the swing set you tried to put together for your kid last summer. The instructions in the book are not Heath Kit, but with careful study before wrench time, all goes smooth. So all you people that are with a network station, if you ordered your S. A. equipment or have all those boxes waiting to be opened, don't be afraid to get in and do it yourself. Find a place with a clear shot at the bird, check it out with a transit if need be, and dig in! Look at the good side. When you are done, you will have saved the "BIG KAHUNA" a few grand and maybe get the well deserved raise.

So that's -30- for this month. Let's get some input to this column and see if we can help keep this RAG alive. Besides fishing season will be opening and you have to wrap that catch in something.



PROFESSIONAL BROADCAST & AUDIO EQUIPMENT

Preamps



PHONO MATE

These professional phono pre-amps are designed for use with an outside power supply for economy in price and reduced hum and noise. All solid state with lots of headroom at +16 dBm. Straight RIAA equalization. RFI proofed against outside interference. Highest quality transformers for true line isolation. Easy-access cases. Phono-Mate is available in stereo or mono, balanced or unbalanced models. The accessory Phono-Mate 12 Watt power supply can power up to 4 phono-mate pre-amps. Frequency Response: 30-15,000 Hz +1 dB RIAA. Noise -68 dB below NAB standard. Distortion less than 15% THD at 0 dBm output into 600 ohms. Maximum Output +16 dBm at 1 KHz. Input Sensitivity -56.5 dB, at 1 KHz for 0 dBm output input impedance 47,000 ohms. Output Impedance 600 ohms—transformer models 1B, 2B, less than 20 ohms unbalanced models 1U, 2U. Power req. 27-39 Volts DC. Size 5 1/4 x 4 1/4 x 1 1/4 high. Weight 3 lbs. POWER SUPPLY input 117 Volts, 60 Hz, 12 Watts. Output 27-39 Volts DC, 250 MA. Same size as preamps.

PHONO-MATE 1U mono, unbalanced	\$ 96.00
PHONO-MATE 1B mono, balanced	\$113.00
PHONO-MATE 2U stereo, unbalanced	\$148.00
PHONO-MATE 2B stereo, balanced	\$177.00
PHONO-MATE 12 Watt POWER SUPPLY	\$ 58.00



Amplifiers

MA225

This small, all purpose, dual channel 25 Watt each amplifier has excellent channel separation which allows it to be used as 2 mono amps. Low distortion: 5%, 20 to 20,000 Hz. Frequency response: 20-20,000 Hz ± 5 dB. The MA225 is the accessory amp for the Studio-Master 5055 mixer. Weight 5.63lbs.

MONITOR / AMPLIFIER 225 \$252.00

Amplifiers



MM260

Here's an all purpose deluxe stereo amp for great performance and long life. 60 Watts RMS each channel. Low harmonic distortion: 1% 20 to 20,000 Hz. Hum & Noise level 92 dB below 60 Watts (-65 dBm). Channel separation 55 dB. Input impedance 100 k ohms unbalanced. Output impedance 8 ohms. Overload protected, balanced/unbalanced inputs without transformers. Rack mount, size 3 1/2 x 19 x 9 1/4. Power requirement: 180 Watts, 120/240 Volts, 50-60 Hz. Weight: 13 lbs.

MONITOR / MASTER 260 AMPLIFIER \$479.00



MA220

The MA220 is a small, moderately priced 20 Watt Stereo Monitor Amp that gives you versatility with separate level and tone controls for each channel. This allows you to route 2 mono programs through the amp and still have separate control of each channel. It works great as a high powered headset amp or moderate power speaker amp. Features: 2 inputs—balanced or unbalanced. 3 outputs: 20 Watts power per channel. Harmonic distortion less than 25%. Hum & noise: 75 dB below rated output. Frequency response: 22Hz to 21 KHz. Wt. 6 1/2 lbs.

MA 220 MONITOR AMPLIFIER \$289.00

Multi-Purpose Preamps



MLD / 22

Designed as a dual channel preamp capable of driving a 600 Ohm line to +18 dBm, the MLD/22 is a multi-use workhorse! Use it balanced or unbalanced with adjustable gain levels. Use it as a stereo preamp, a line-to-line booster amp, unattended remote preamp, mic-to-line or line-to-line combiner, telephone line booster, for adding mics to non-preamplified mixers, and MDRE! The self-powered MLD/22 is a versatile dandy and economical. Wt. 2 lbs.

MLD/22 MIC-LINE DRIVER MULTI-PURPOSE PREAMP \$265.00

Distribution Amplifiers



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New! Enjoy simplified routing of multiple audio signals through the station inexpensively! Multi-Mate gives you stereo or mono with the same unit and no internal changes. RF proofed, spare IC. Desk top units with optional rack mount panel. Model 4428: 4 inputs—8 channels. Model 2418: 2 inputs—16 channels. Distortion less than .1% THD at 1 KHz. Frequency response: 20 Hz to 20 KHz ± 1 dB. Power Req.: 117 VAC, 50-60 Hz (234 Vac available), less than 20 VA. Size: 14 x 7 x 3" high. Weight: 6 lbs.

MULTI-MATE model 4428	\$446.00
MULTI-MATE model 2418	\$295.00
MULTI-MATE Rack Mount kit	\$ 19.00



MULTI-MATE 2418

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- PSA-5 for Stations with Power up to 5000 Watts...\$4495
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AMPRO
(cont. from page 1)

parts, according to Sherri Land, Spokesperson for Westek. The problems faced by Ampro Corporation extend far beyond a matter of bankruptcy. Just three months after closing in January, the U.S. Government filed a \$3 million fraud suit against Alex Meyer and his wife Sybil. The government suit is based in connection with a contract to build equipment for the National Weather Service.

According to reports, 205 units had been provided to the weather service under the contract at less than \$18,000 per unit. An additional 50 units ordered in the late 1970's were not provided by Ampro because of lack of agreement under a price adjustment clause. The government suit charges Ampro defrauded the government of some 1.49 million in advance payments and is seeking double that amount in damages plus interest and costs. In the suit, the government contended that Meyer and his wife transferred assets from Ampro to themselves and other companies in an attempt to prevent the government from recovering the money paid in advance for the National Weather Service Units.

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MONDAY MAY 2, 1983...

60 TORNADOS

NOW YOU CAN JOIN THE WARNING TEAM WITH YOUR

SI-TEX has developed the CR 1011 Color Radar System for the TV and Radio marketplace. This complete unit, designed to operate in the rugged marine environment, has obvious applications as a land based weather radar. The CR 1011 can define and display the intensity of frontal systems, severe weather or plain old rain, to assist your meteorologist and station personnel in identifying problem areas for your audience. The CR 1011 is currently being used by the U.S. Coast Guard and the Florida Department of Water Management to warn of oncoming severe weather. With 10 kilowatts of transmit power and the color display, your presentations are crisp clear. There are 8 ranges to 64 nautical miles to allow you to select the scale that best covers your area.

The Plot feature allows you to chart the relative distance, speed, direction and size of storms.

The Variable Bearing and Range Marker, as standard equipment, assists you in your calculations. The CR 1011 also has a variable warning zone that will trigger an alarm and alert you to any targets with red intensity that have intruded into your preset limits.

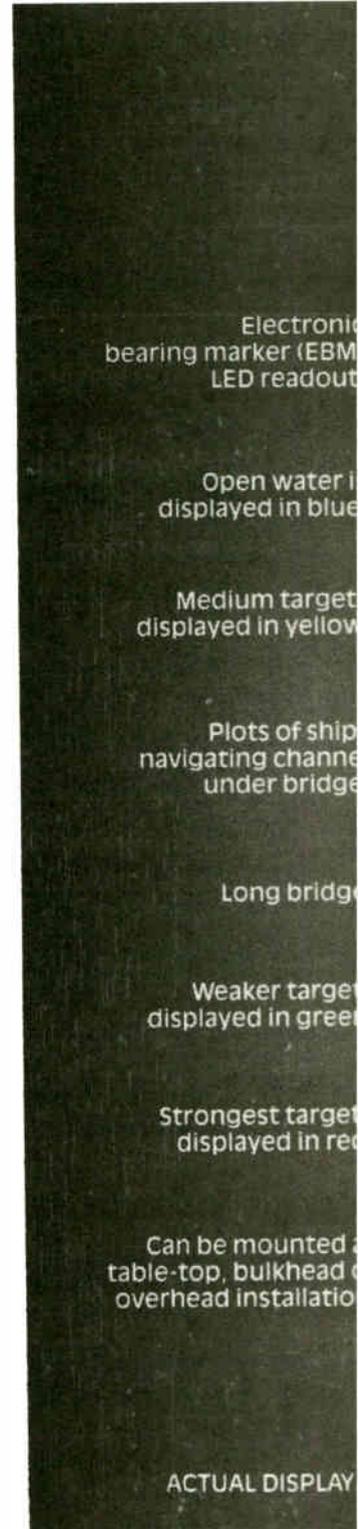
The ease of operation and the SI-TEX reliability factor make this system sensible and attractive to all stations, large and small.

The CR 1011 is supplied with 15 meters of interconnect cable between the antenna and display unit. Longer runs are available at additional cost.

Put a SI-TEX weather radar to work at your station. Fully sponsored weather reports take on real meaning. While others are passing along the weather bureau "Chance of Rain" ..you're telling your listeners exactly where that rain shower is..how heavy it is..how fast it's moving and in what direction. Listeners know your SI-TEX radar proximity alarm let you warn them when there isn't time for "one more hole at the golf course" .. when to delay that ball game and cover the infield" .. "When to get those small boats off the lake and head for the dock".

SI-TEX radar is easy to own through Electronic Industries. Normally priced at **\$8495.00** with full AC power supply...June and July orders qualify for a big **10% - \$849.50** discount..You pay just **\$7645.50**.

Perhaps better still..you can have your SI-TEX weather radar on an easy to handle 5 year lease, \$420.00 down with monthly payments of \$210.00. Your SI-TEX radar then goes to work, with local sponsors, paying for itself.



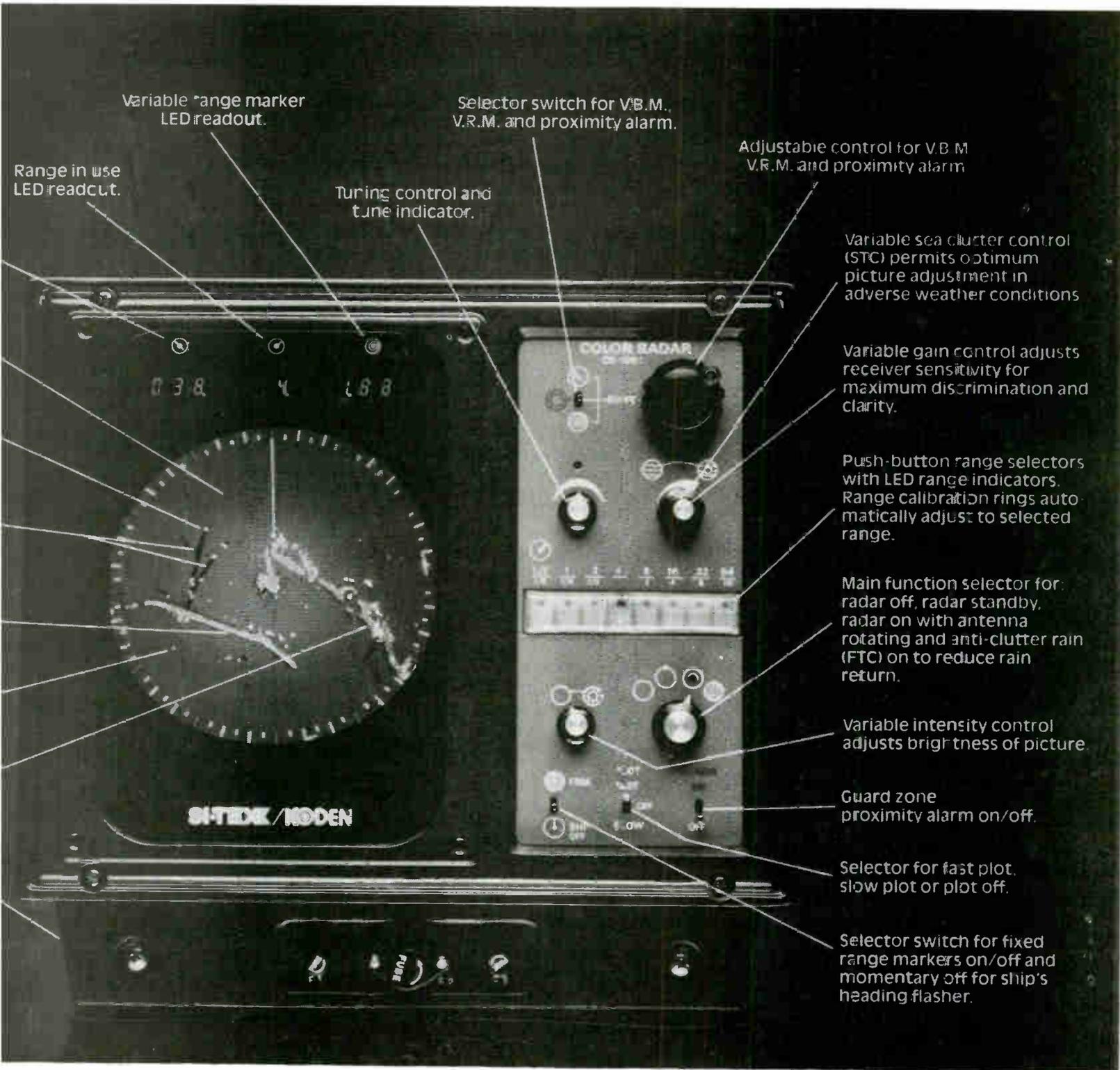
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rotating and anti-clutter rain
(FTC) on to reduce rain
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Variable intensity control
adjusts brightness of picture.

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proximity alarm on/off.

Selector for fast plot,
slow plot or plot off.

Selector switch for fixed
range markers on/off and
momentary off for ship's
heading flasher.

SI-TEX INCORPORATED
Oshkosh, WI 54901

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Common Point/June 1983
Page 13

LOW POWER FOR PRE-SUNRISE

(cont. from page 6)

positive. The desired amount of PSA power goes to the antenna and the rest goes to a dummy load.

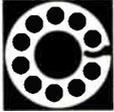
Additional circuit elements ensure that the dummy load looks just like the antenna. That means that since few if any transmitters have the luxury of looking into a 50 ohm resistive load, I add the necessary amount of reactance to make the load look like the normal antenna, and the transmitter does not have to be returned when changing power.

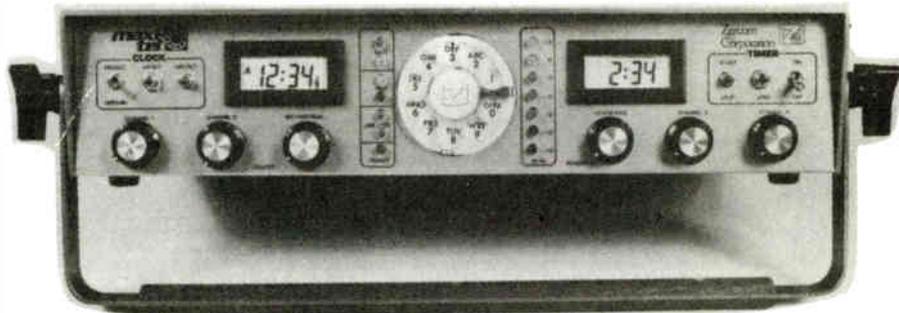
On the front of the PSA Adaptor are the power change clocks. These are LCD Clocks with back-up battery running in 24 hour time. Setting controls are behind a security panel. One clock sets the PSA Adaptor to low power at 5:59 a.m. the other makes the change to high power at the proper time. Indicator lamps, manual changeover buttons, and a clock defeat switch are provided.

Direct measurement of power at PSA levels could not be done with the standard R.F. amp meters at our stations is 2.07 amperes. At 7½ watts, the current is .360 amperes. Our remote and tower base meters aren't even calibrated below one amp. Note that the FCC requires your meters to read normally in the expanded upper part of the scale. KWPC's antenna tuner allows the insertion of a plug in R.F. ampmeter in series with the base of the tower and the existing remote amp meter pick-up coil. A phone call to Simpson and I soon had a 0 to 500 R.F. milliampmeter that would fit the antenna tuner meter plug. Since this meter can only be inserted temporarily, a R.F. directional ampmeter was built into the PSA Adaptor. The meter is read by means of a calibration chart prepared by using the plug in R.F. ampmeter at the tower. The operator is instructed to adjust the power divider to maintaining a constant reading on this meter. Since the remote pick-up at the tower still operates even at this level, it can still be used to drive the remote reading control R.F. ampmeter.

For KWPC the advent of PSA has increased our sales and brought back alot of listeners we used to lose every winter. The PSA Adaptor has made power change so easy that the operators often don't even know it's happening until they check the reading on the R.F. ampmeter!

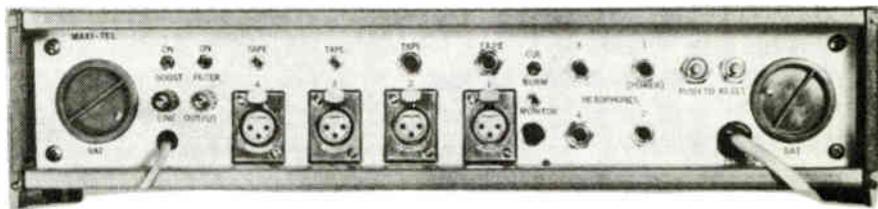
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PERSONS' POST SCRIPTS

by Mark
Persons

WELCOME BACK

It's good to see this rag back in circulation after a short hiatus. Bud Tedlie and crew at Electronic Industries should be given credit for putting together this monthly nationwide newsletter that has sparked so much interest.

CONVENTION

The National Association of Broadcasters' Convention in Las Vegas in April was tremendous as usual. I heard they had a record attendance again with the total number registered exceeding 40,000.

AM Stereo was big again this year. One product that will help get it into the marketplace is from Sansui. It is the model TU-S77XAM AM stereo FM Stereo receiver. All FOUR current AM Stereo modulation schemes can be decoded in this receiver. Further, the decoding is fully automatic. The receiver decides which stereo system it is listening to, decodes it, and turns on a light indicating the presence of AM Stereo. The Sansui receiver won't be available until September, but many orders were taken. The price is \$410.00, but the convention special price was \$348.50. It's my understanding a walkman receiver with similar capabilities will be available soon as well.

AM Stereo receivers, compatible with all stereo systems, appear to be the answer to the AM stereo dilemma. I wasn't about to buy a receiver dedicated to just one stereo system. However, I immediately signed up to purchase one that would handle all four.

Universal AM Stereo receivers have now cleared the way. Broadcasters need not worry about their system not being compatible with receivers. I predict that AM stereo will become the rule rather than the exception at AM stations within a few years. At that time, real comparisons can be made between the sound of all systems. A station manager may find the AM Stereo system at his station doesn't sound as good as one across town. He may elect to switch systems in much the same way that stations

change audio processors today. Listeners won't have to convert their receivers as the switching will be done automatically. The listener and station will benefit from the highest quality and most competitive sound.

Yes, AM Stereo is on its way. The big rush to get stereo generators into most AM stations isn't far in the future.

MERGER

It's very interesting to note that there is some talk about merging the NAB (National Association of Broadcasters) and the NRBA (National Radio Broadcasters Association). I, for one, would like to see this come to pass. However, as you may know, the NRBA is a radio only organization and the NAB is for both radio and television. The annual NAB conventions are huge. They are too large for all but a few cities. Merging the two organizations would make for one oversized convention.

May I suggest that this is the time

to merge the NAB and the NRBA, but then immediately split the organizations into radio and television. There could be the NARB (National Association of Radio Broadcasters) and the NATB (National Association of Television Broadcasters). Radio could have a convention in the Spring and television could have its convention in the Fall. Both would have a choice of more cities to convention in as each convention would be smaller and more manageable.

With separate radio and television organizations, there would be less chance for conflict of interest. Radio would be represented by one UNIFIED voice on Capitol Hill and Television would be represented by its organization.

Just because television was a technical offshoot of radio doesn't mean that both should share the same convention. It's time for a change that will benefit everyone concerned. How about it guys?

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