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Sparta Expands Acquires Bauer Transmitters

New Console Series Heads New Product Introduction

Sparta has made numerous changes and innovations on a wide area of broadcast equipment for the *70s. In addition to improved models, they are introducing several completely new products to their professional equipment. Not only have these changes been thoroughly designed and checked for longer life and more reliability, Sparta also added their usual "human factor" engineering into each product. "Human Factor" means each unit is carefully designed with the ultimate operator in mind. The easier it is for the DJ or production man to run the equipment, the more efficient he becomes, and the better he sounds.

Small details, from Sparta's new push-button system on consoles, to the motor switch on the turntable can make a big difference in any stations operation.

Details about new Sparta products are on the following pages:

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Going over the development of new sales material incorporating the Bauer transmitter line into the Sparta marketing plan are William J. Overhauser, president of Sparta, Paul Gregg newly appointed Transmitter Products Manager and Jack Lawson, Marketing Manager.

Broadcasters can now outfit a complete station with all needed equipment, including financing, with just one phone call says William Overhauser, President of Sparta Electronic Corporation.

"Our acquisition of the Bauer transmitting products, along with our affiliation with Jampro Antenna Company and Vega Electronics Corporation, now enables Sparta to supply any broadcast need, including audio equipment, transmitters and antennas," Overhauser said.

Sparta, Jampro and Vega are all subsidiaries of Computer Equipment Corporation of South El Monte, California.

Overhauser, the founder of Sparta, stated, "We have long been interested in acquiring a full line of top quality transmitters and now with the purchase of Bauer, one of the industry's leaders in this field, we have filled our need." "Under our new marketing plan, Sparta sales personnel and representatives will handle sales and service for the complete line, including Bauer transmitters", he added.

Sparta Electronic Corporation has announced the acquisition of the Bauer Broadcast Products Division of Granger Associates of Palo Alto, California.

According to William J. Overhauser, President of Sparta, the Bauer operation has been moved into newly expanded facilities at the Sparta plant in Sacramento, California.

Sparta is a leading international manufacturer of professional audio equipment. The 10-year-old Bauer company manufactures AM and FM transmitters and has been instrumental in many design innovations in that field. There are currently over 700 Bauer transmitters in operation throughout the world.

Fritz Bauer, co-founder of the original Bauer firm and a pioneer in the design of broadcast transmitters, will continue in his present capacity of consultant to the new firm. Paul Gregg, also a co-founder of Bauer, has been named product manager of the new Sparta transmitting products division and will integrate the Bauer marketing and sales plans into existing Sparta programs.

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Key Person At Sparta

Paul Gregg, Sparta's new Product Manager for Bauer Transmitting Products has a long record. No, not the kind of record that first comes to mind. Paul has a record of over 29 years of experience in broadcast engineering, design, sales and manufacturing administration. You'd be hard pressed to find a man with more technical and practical knowledge about the transmitter field.

He started his broadcast career at radio KWLM, Willmar, Minnesota after graduating from the Northwestern Radio and Television Institute in Minnesota. He then was an engineer at KFBB in Great Falls, Montana, then started a long association with Warner Brother's broadcast division on the West Coast. This association began at KLS in Oakland, was interrupted for four years while he taught at the Air Force Radar School in Boca Raton, Florida, and then continued with a chief engineer's job at Warner Brother's KWBR in Oakland. He then built KGSF FM in San Francisco before moving into a field engineer's position with Gates Radio covering Northern California and Oregon.

In 1960, Paul joined with Fritz Bauer in the formation of Bauer Electronic Corporation where he served as Vice President and Sales Manager. Paul came to Sacramento and joined Sparta after the Bauer acquisition. He is in charge of sales, research and development and product planning of transmitters. Paul is a member of IEEE, AES and has written many magazine articles on product usage and equipment design, the latest appearing in BM/E on Stripline transmitters. Paul is the man to call at Sparta for all the latest information on transmitters.

Parent Company Has Record '69... Improved '70

Computer Equipment Corporation, Sparta Electronic's parent company, enjoyed a record year in 1969, according to Hugh P. Moore, CEC President. Based in El Monte, California, CEC has 14 operating divisions and subsidiaries and has divided operations into four major groups; Communications Electronics, Computer Equipment and Peripheral Products, Architectural Products and Marketing and Distribution.



Phil Gundy and Hugh Moore, C.E.C. officers, discuss the acquisition of Bauer Transmitter Products.

According to Moore, the Communication Electronics Division, which includes Sparta, has unlimited potential because of the tremendous strides in development of new products and means of communication. He also cited the aquisistion of the Bauer transmitter line as a major step in obtaining a larger share of the broadcast equipment sales market for Sparta.

The development of the Communications Electronics Division is under the direction of Philip L. Gundy, Executive Vice President of CEC.

Sparta Gears For More Eastern Sales And Service

Plans for an eastern office with a sales and service center have been announced by Jack Lawson, SPARTA's General Sales and Marketing Manager. By the acquisition of BAUER transmitting products, Lawson stated, "SPARTA now has more responsibility than ever before to provide excellence of product and service to the Nation's broadcasters.

SPARTA East will be totally concerned with providing sales assistance and service to broadcasters in eastern seaboard and mideast states. These activities will be organized and coordinated through the eastern office by SPARTA sales representatives covering individual sales and servicing territories. Additional sales representatives are going to be added to cover those eastern areas that are now without local sales representation.

"Although we have put special emphasis in the manner in which we serve the eastern broadcaster from our West Coast factory office," Lawson stated, "the SPARTA East office will allow us to be far more efficient in equipment sales and servicing and wherever possible, equipment and spare parts shipments will be made from SPARTA East to eastern destinations". The following is the list of SPARTA sales representatives covering territories east of the Mississippi.

David Veldsma AUDIO DISTRIBUTORS, INC. 2342 Division Avenue, S. Grand Rapids, MI 49507 (616) 452-5495 (Michigan)

Bob Windsor CAROLINA RADIO SUPPLY 838 Huffman Street Greensboro, NC 27405 (919) 273-6358 (North Carolina)

Jess Swicegood P. O. Box 1741 Dothan, AL 36302 (205) 792-2161 (Alabama, Georgia, Florida)

Robert Halvorson P. O. Box 9975 Chevy Chase, MD 20015 (Maryland, West Virginia, Virginia, Delaware, District of Columbia) (301) 654-1680 Russ Sutton
CAROLINA RADIO SUPPLY
221 W. Washington St.
Greenville, SC 29602
(803) 232-6749
(South Carolina)

Herbert Arms
HARRISON RADIO CO.
Box 327
Corydon, IN 47112
(812) 738-3241
(Indiana, Kentucky, So. West Ohio)

Glenn Webster WEBSTER ENGINEERING CO., INC 1136 Gail Lane Dundee, IL 60118 (312) 428-5173 (Illinois, Wisconsin)



Loren Williams, Western Region Sales Manager, checks the latest order submitted by E.L. Robertson, Southwest Sales Engineer. The equipment is for KTEM in Temple, Texas. The southwest is a prime market for Sparta equipment.

The appointment of Loren Williams as Western Regional Sales Manager for SPARTA ELECTRONIC CORPORATION has been announced. SPARTA West includes all broadcasters west of the Mississippi plus Alaska and Hawaii. This broad area is divided into three territories each being covered by a factory

sales engineer working out of the SPARTA home office. Williams will be responsible for the sales activities of Northwest Sales Engineer, Don Lowery, Doug Laue in the Centralwest and E.L. "Robbie" Robertson in the Southwest.

Williams has been with SPARTA since 1965 when he started as Order Expediter.

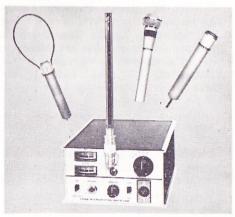
Vega And Jampro Divisions Help Sparta

Sparta's sister company, Jampro Antenna of Sacramento, manufacturers the world's only patented circularly polarized FM broadcast antenna. This antenna gives the FM broadcaster a more solid signal in fringe and hilly areas. And, it does this so well that we call it the "penetrator".

Whether your listeners use an outside antenna, a car radio with a whip, an antenna built into a portable, or just a wire, the penetrator gets your signal where you want it...right to their radio. And it gets it there with the cleanest stereo signal possible, thanks to Jampro's broad band - low VSWR design.



We are proud that a Jampro antenna is the final link in the SPARTA-VEGA-BAUER-JAMPRO quality broadcast chain. The penetrator delivers our clean sound to your maximum audience!



Vega Electronics in Santa Clara provides their Model 55 wire-less microphone and the 800 series reel-to-reel machines especially for broadcasters. The 800-1 provides 14 inch reel capability in a rack, custom, or portable configuration. Professional in all respects, the 800-1 sells for less than \$2,000.00.





SPARTA-MATION systems are designed to accept a station's present tape equipment. Here, Dave Evans loads a music tape on a Teac R-310 which connects to the system in the background.

New accessories to SPARTA's expanding line of SPARTA-MATION equipment have been added and will continue to be developed under the direction of Product Manager, Dave Evans. The first SPARTA-MATION systems incorporated the Model 726 Program Controller, which can sequence seven audio sources through 26 events. The new Model 1052 Program Controller will be available shortly and can accommodate ten audio sources through 52 events. This additional capacity will make it possible for many stations to select a one-hour segment as their format pattern. It also will be possible to divide the 52-event sequence into individual shorter segments, should the station desire a different format pattern between programming segments.

ALL SPARTA-MATION program controllers can provide network joining using the exclusive Priority Interrupt feature. An accessory Digital Clock and Predetermining Fanel is available to select the exact second of network start and end times. Either back timed music or fade out techniques may be used. The clock and panel can be rack mounted or a table top cabinet (illustrated) is optional.

An inexpensive time announcer has also been developed. The Model TA 720 uses a single large size tape cartridge at a speed of 3 3/4 IPS. A pre-recorded standard time announce tape cartridge is also available. Should the system call upon the time announcer, at a time when the time announcer is automatically advancing itself, the program controller will immediately skip and progress to the next event.

The time announcer has an internal clock and is not dependent on any external timing source. The TA-720 costs about half as much as competitive units and mounts in the same rack mounted cabinet, with sliders, as the program controllers are housed in.

A 100-event memory almost twice as long as others, is featured in the new SPARTA-MATION Model RS-100B random select controller to be used in connection with the popular 24-cartridge storage playback devices. In addition to controlling the random playing of 24 cartridge trays, the RS-100B also has a 25th position which can be used to control the play of an additional 24 cartridge playback in sequential mode. Furthermore, still another 24 cartridge playback device can be controlled by the RS-100B with the addition of the Model RS-2B extender. This consists of 100, two-position subminiature toggle switches with each switch selecting between two random access reproducers for that particular event. Provision for skipping any of the 100 events of the RS-100B is also possible.

(Cont'd on Page 8)

New Advances In Sparta-Mation Systems & Devices



On-Location Sparta-Mation Demonstrations Are Given

spot showings to prospective cus-

tomers, as well as other equipment.

The new SPARTA motor van hit the trail this Spring throughout the Northwestern and mountain state areas of the United States. The very modern and self-contained van is completely equipped with a SPARTA-MATION system which may be demonstrated through local power or the van's own auxiliary generator.

Don Lowery, Northwest Sales Engineer, drove the van through a two-week tour of Oregon and Washington in May including the three-day Oregon Association of Broadcasters meeting in Bend, Oregon. Doug Laue, Sales Engineer for the Central/Western states, accompanied Don for the June Four-State Broadcaster meeting between Utah, Idaho, Montana and Wyoming which was held at Jackson Hole, Wyoming.

The van is also used to display other SPARTA audio and Bauer transmitter products. Even a Jampro Circularly Polarized antenna bay was displayed atop the van during the Four State meeting in Wyoming. Plans for the van to visit other areas of the US are being formulated. Broadcasters should make every opportunity to attend the SPARTA-MATION demonstration.



Sparta Plans Many Nev

New Turntable And Console Are Featured In Popular Studio Control & Remote Units



Everything is new with the "B" series Model AC-155 monaural and the stereo ASC-305. These very popular production and remote broadcast centers incorporate their respective new five mixer console, the new SPARTA GT Series turntable and the all-new TEP-3 Series equalized turntable preamplifier.

Although others have attempted to market copies of these two units, the SPARTA equipment still offers the most outstanding value at \$1325,00 monaural and \$1750,00 stereo. Many of these units have been installed in mobile vans both TV and radio as the main audio control center. A generous amount of audio input sources including two complete turntable systems are available through the five mixing channels. A varied combination of microphone or tape input can be used.

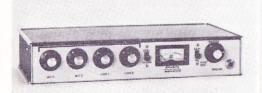
Several accessories which extend the capability of these units are available. A professional dynamic microphone with gooseneck attachment can be mounted directly to the cabinet for operator convenience.

A bench/lid combination is available for the purpose of seating convenience, equipment protection and security when the unit is not in use. A top mounted accessory shelf which bolts directly to the main cabinet provides a generous space to support tape equipment, records, or other devices to be used in the audio control function.



Turntable Pre Amplifier series out-performs competition.

The new Sparta pre-amplifiers are completely redesigned from the cabinet enclosure to the electronics. Advanced state-of-the-art engineering is reflected in the conservative specifications providing performance superior to competitive products. This year both the monaural and stereo units will feature internal self-contained power supply. Performance and durability of both the TEP-3M mono and TEP-3S stereo are boosted by utilizing integrated circuits and balanced differential output.





Two Audio Products scheduled for future release are designed for remote broadcasts. The "Mini-Mote" is a utility microphone/line amplifier with self controlled AC power supply applicable to single audio source remotes. The larger unit will incorporate four mixing channels for microphone or high-level and have its own battery as well as AC power.

Separate Cue & Monitor Amps In New Mono Mixer



"Never has so much been offered for so little," aptly describes the exceptional value in the new SPARTA Model A-15B five mixer monaural audio console. Improvements incorporated in the new "B" series include separate monitoring and cueing feature, and a monitor amplifier rated at 8 watts. The cue amplifier is rated at .5 watts.

The A-15B can be assigned to a variety of audio mixing chores accommodating up to 14 audio source inputs with any combination of high level or low level the end user may desire.

Stereo Mixer Still Most For The \$\$\$



Nine stereo audio sources may be selectively mixed to the five input channels of the new Model AS-30B. Although designed basically for stereo programming, it can also be operated in a monaural mode with the combined right and left channel appearing through one program amplifier output. The main microphone channel can be used with one microphone or two microphones feeding each program amplifier. Up to four microphone preamps can be used with two supplied as standard.

The new AS-30B will fit a variety of mixing requirements including automation systems, production and recording studios, remote broadcasts or main studio stereo audio control.

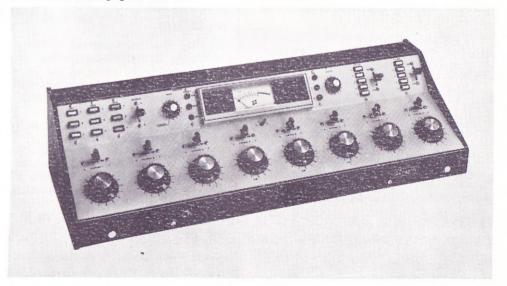
New Push Button Control

As the undisputed leaders in their class and undoubtedly one of the most popular audio console lines in the broadcast field, SPARTA consoles have undergone extensive re-designing for the 70's. The most obvious change is the new pushbutton controls for fast, more efficient operation.

An attractive and positive-locking pushbutton series has been substituted for many of the former lever switch functions. In addition, all "B" Series consoles feature a new, heavy-duty "ruggedized" cabinet, utilizing cast metal end plates and meter bezels for a functional new look with increased durability.

A new acrylic paint with a heavy orange-peel finish is more durable and easier to keep clean than before. Internally, the electronics have been modified to take advantage of the latest solid state component advancements including IC's.

An illustration and brief description of the new "B" Series SPARTA consoles is covered on this and other pages.



New A-20B provides similtaneous recording & "on air" functions.

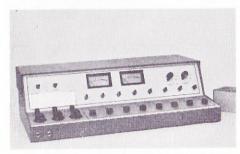
The dual capability of the new A=20B provides broadcaster with flexability and reliability unmatched by any competitive equipment. New low-noise circuit inovations offer low distortion, wider response and longer life. Two identical program amplifiers, one for the program bus and one for the audition bus can be used in a variety of mixing situations.

The VU indicator may be switched to indicate either program or audition amplifier outputs. The A=20B is an excellent television and radio main audio control or a full-facility production center. Self=contained, the 8-mixer board lends itself to installation in almost any facility.

v Models For The '70's

New Model Consoles Added At Lower Prices

Three new consoles have been added to the SPARTA family. They are the former BAUER Models 910D, 910S and 915. The same model numbers will be retained by SPARTA. All three consoles feature vertical slide attenuators, plug-in solid state electronic modules which are interchangeable in many functions. Special shielding and careful amplifier design to virtually eliminate RF interference, extreme accessibility is available through multiple hinged panel.



The SPARTA Model 910D easily handles two programs simultaneously through its dual program channel output. The unit measuring only 28" wide can control four microphones from three locations plus four turntables or tapes and eleven remote lines.

The SPARTA Model 910S stereo audio console has the same clean, uncluttered appearance as its dual channel counterpart. This eight mixer console accommodates a total of 19 stereo inputs. It also features a left plus right output for combined AM/FM operation.



The SPARTA Model 915 is less than 20° wide and accommodates 13 monaural inputs. Separate eight watt plug-in solid-state monitor and cue amplifiers are identical for emergency interchange. In addition, a switch permits emergency back-up by the monitor amplifier should the program amplifier fail. The vertical attenuators provide fast reading and fast adjustment for split second operation and quick cueing.

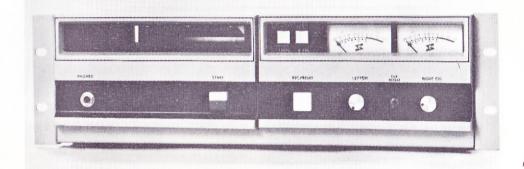
New lower prices were recently announced by SPARTA for their 900 Series consoles. The SPARTA Model 910S stereo formerly available through BAUER at \$3,950.00 is now \$3,150.00. The Model 910D dual program channel formerly \$2,950.00 has been reduced to \$2,650.00. The five mixing channel Model 915 monaural audio console is now selling at \$1,295.00. This is a reduction of over \$650.00 off the initial BAUER price.

The decision for the new lower prices was made after a test production run of the 900 Series, resulted in cost savings through SPARTA's established and efficient audio console production techniques. The consoles will carry the SPARTA logo and SPARTA equipment colors.

New Tape Cart Series Nears Completion

SPARTA displayed design models of their new Century 1000 Tape Cartridge Series at the 1970 NAB Exhibit in Chicago. According to latest reports, the new cartridge series will be available the first part of 1971.

The design concept of the Century 1000 Series is quite simple in that there is a transport playback module and a record amplifier module of the same physical size. There are two cabinet enclosures that each of these modules can slide into. The dual cabinet enclosure will accept two playback modules side-by-side or one playback and one record amp module. The dual cabinet version may be table-top free-standing or be rack mounted in a standard 19" equipment rack. There is also a single cabinet enclosure to accept either a playback module or a record amp module. The single module would be used primarily for table-top free-standing installations.



The cabinet enclosures will have a locking feature whereby several may be stacked creating a multiple tape cartridge center of the user's choice in a minimum amount of space. SPARTA now has its very popular MC Series multi-playback system featuring four individual playback transports packaged in a single enclosure. The new Century 1000 Series does not restrict the user to four playback units only, but he may add a record amplifier module and delete a playback module as he chooses.

The new series tape cartridge systems will meet or exceed all NAB specifications and include all optional accessory features such as second and third auxiliary cue tones, provisions to accept end coder devices in connection with SPARTA-MATION systems, High speed cueing and program time delay.

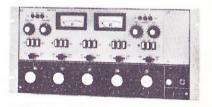
SPARTA currently offers several different models of tape cartridge systems to meet different function and installation requirements. The new Century 1000 Series however, will incorporate extreme versatility to meet all requirements.



Testing a newly developed circuit is Roger Odom, Engineering Manager for Sparta. Part of Odom's continuing product development program includes design parameters for practical maintenance and functional usage. Facing Odom is the new Century 1000 tape cartridge systems and the AS-30B audio console.

New Rack Mount Audio Console Fits TV, CCTV, CATV, Audio Mixing Requirements

A brand new addition to the SPARTA audio console line is the A-16R. This is a five mixing channel monaural audio console featuring a dual program output with independent VU metering. Its many features are designed primarily for the maximum convenience and flexibility to the audio requirements of television, CCTV, CATV, etc.. The rack mount construction of the A-16R requires only 8 3/4 proferack space or an optional custom cabinet is available for desk-top installation.



Model A-16R needs only 834" standard rack space.

Each of the five mixing channels has three inputs selected by push buttons for a total of fifteen inputs. Monitor and cue amplifiers are self-contained and separate with speakers furnished by the user. Source selection for both speaker and headphone monitoring is via three-station pushbutton with each station of each set allowing auxiliary input from the rear panel. Three muting relays are provided and activated from the channel selector switches of the first three mixers through the center station of the source selector switches.



New Dual Channel Mixer in optional custom cabinet.

Program levels are 20 dbm maximum providing 12 db of headroom at OVU. The A-16R audio console boasts an internal 10 watt monitor amplifier and a 0.5 watt cue. Crosstalk is well below the 65 db noise figure. The muting system includes a jumper board matrix to provide any combination of relay closures from any position of the first three selectors.

There is a removable accessory front panel in the upper right corner of the console which can be used to support a cue speaker or added switches and circuitry. Additionally, there is space available internally to add other circuitry within the limitations of the console's self-contained power supply.

New Turntable Features Are Designed For Fast Boardwork

Operator efficiency and convenience were strong considerations in SPARTA's design of their new GT Series turntable. High reliability, ruggedness and performance specifications prime importance to SPARTA design engineers.



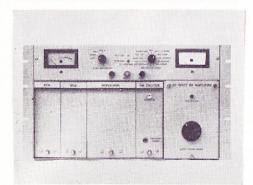
Among the operator convenience features, is the thoughtful position of the on and off switch. The location of the switch is such that a one-hand record cueing operation is possible. The forward position of the on/off switch is spring loaded so that the operator may accelerate the motor just for the moment of cueing. Moving the switch to the opposite position starts the turntable; the center position is "off".

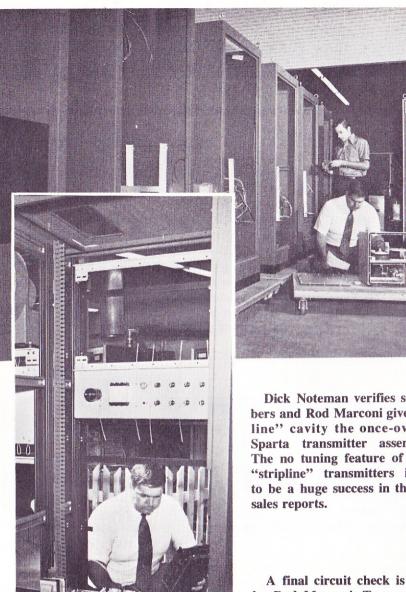
Cueing and programming electronics may be tied into these switch motions. As an example, the turntable electronics would always be in the cueing mode when the switch was in the center or forward When in the play mode position, the output would be transferred to the program input of the audio console. The two standard turntable speeds of 45 and 33 RPM are offered.

The front mounted speed selector lever is extremely fast with an illuminated speed indicator. This lighted effect also serves as a reminder to place the turntable in a neutral position when closing the station for any period of time. Ample room has been given to the tonearm mounting area which will accommodate any professional 12" tonearm. The turntable covering material is thicker and much more durable than the cotton felt used on earlier and competitive tables.

The flat, lower silhouette design gives a modernistic appearance to any audio control room.

The turntable base is of a one-piece solid and ribbed casting. The massive motor mounting plate is isolated from the table base through rubber lord mounts. In addition, the motor mounting plate is counter balanced so that each rubber lord mount carries the same weight and consequently, will absorb all motor vibration which results in an extreme low rumble characteristic.



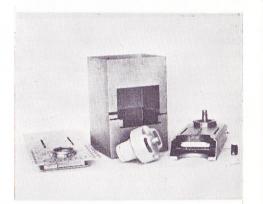


Dick Noteman verifies serial numbers and Rod Marconi gives a "stripline" cavity the once-over on the Sparta transmitter assembly line. The no tuning feature of the Bauer "stripline" transmitters is proving to be a huge success in the climbing

A final circuit check is conducted by Rod Marconi, Transmitter Foreman, on a Sparta model 620 Bauer transmitter before final exterior panel construction. This 20kw FM transmitter was sold to WAVA in Arlington, Virginia, at the recent NAB convention in Chicago.

"Stripline" **Stays Tuned**

Since the introduction of FM broadcasting in the 1940's, coaxial circuits have been used in high power final amplifier designs. Generally this is a good well-working design, but until now has lacked the mechanical simplicity that is important for more stability and ease of operation.



With the development of a stripline circuit into Bauer FM transmitters, Sparta offers the ultimate in stability and carefree maintenance and operation. You tune it once and it stays there! Basically, the stripline consists of two flat conductors separated by a dielectric. The broadband grounded grid amplifier assures optimum performance without the usual knob tweaking adjustments. The final amplifier has just 3 operating parts, the moving contacts are gone, there are no expensive to replace cavities and all front panel tuning controls have been eliminated.

Simplicity is the answer to stability and with Sparta's new stripline FM transmitters you get the ultimate in stability.

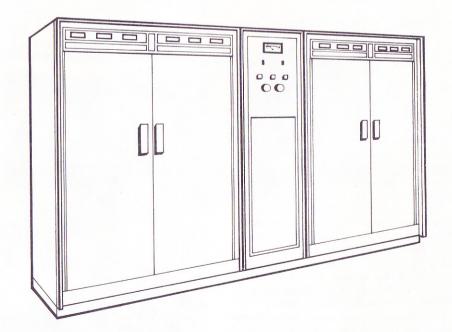
New Solid State FM **Exciter Gives Push Button Control Of** Multiple Programming

The Sparta solid-state FM exciter has amazing programming flexibility for its size. The basic nineteen-inch chassis includes: power supply, power amplifier, complete metering control circuitry, and the FM exciter module. Then, to meet individual broadcast needs, there are plug-in modules for monaural, stereo and two SCA service modules (41 and 67 KHz). Any of these can be added later as the broadcaster adds to his stations capability.

The entire exciter system is type-accepted by the FCC, and it meets or exceeds all CCIR, DOT as well as FCC specifications.

The Model 660 has complete flexibility of operation, push-button control gives the maximum possible number of broadcasting options, stereo and one SCA channel, mono and two SCA channels, mono or stereo alone, and mono and one SCA channel. If a station has background music service and would like to add a second SCA channel for specific time requirements - for example, news or educational broadcasting - simply plug in a second SCA module. Push either the left or right channel button ... and the stereo module will revert to monaural operation for as long as needed. Then push the stereo button to return to full stereophonic operation - and these facilities can be operated by remote control.

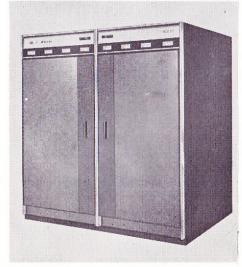
Two Transmitters **Combine Power**



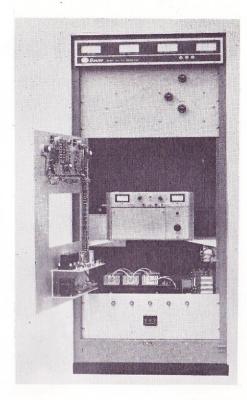
Earlier in the year, WRNG, Atlanta's all-news station, installed the first BAUER Model 725, 25,000 watt AM Transmitter. The construction permit for this daytime non-directional power increase on 680 KHz was granted in December. Ring Radio's new BAUER transmitter consists of two 12,5kw units and a ferrite combiner providing the full 25kw power output. WRNG's installation also includes a BAUER Model 707 1000/500 watt transmitter for pre-sunrise operation.

Broadcaster Calls Claims Of 20KW FM Conservative

KPNW, Eugene, Oregon added a full power 24-hour FM service to their 50kw AM facility in March with their installation of the first BAUER Model 620. The 620 features the BAUER "Stripline", known for its simplicity and stability.



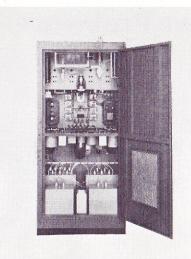
This has been borne out by a recent letter from Clayton F. Caughill, KPNW-FM Chief Engineer, to a potential transmitter purchaser when he wrote - "BAUER'S claim that once the transmitter was initially set up, it would require little adjustment, has proven, if anything, conservative. We have not had to touch a tuning control since we have been on the air. Maintenance has consisted of routine cleaning and inspection - that's all".



Class "A" FM'ers Reach Full Power Level On Only 3 Bays

BAUER has introduced a new "Strip-line" 2.5kw FM Transmitter - the Model 602. This model is unique in that its 2500 watt power output - 500 watts greater than other makes - allows most Class A FM broadcasters to reach full power level with only a three bay circularly polarized antenna. WYTM-FM in Fayette-ville, Tennessee and WDYX-FM in Buford, Georgia were the first two stations to install the new 602.

Latin Stations Use Special 3KW AM'er

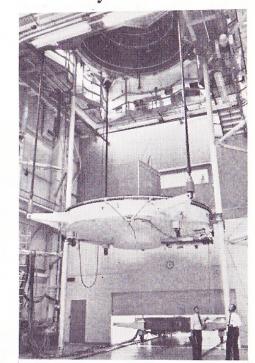


Something new in transmitter power was added to the BAUER line recently with the introduction of the FB-3B, a 3000 watt AM Transmitter. This model was developed at the request of several Latin American broadcasters where such a power is used. Because of tube selection, parts availability and cost, size and power requirements the FB-3B represents the best buy in watts per dollars.

Priced at only \$10,450.00, the BAUER 3kw AM Transmitter has already found a market in San Salvador and Guatemala. An additional feature is the use of enclosed high voltage components - the modulation transformer and reactor, plate transformer and filter are all in oil.

Though the 3000 watt power level is not used in the United States, interest has been shown in the use of two of these transmitters working through the new BAUER ferrite combiner for an output of 5000 watts. Such an arrangement provides a full-time but working standby.

20KW FM Works Like "Pie In The Sky"



Never before has a broadcast transmitter undergone such a testing program! The picture above shows the new Sparta Model 620, 20,000 watt Bauer FM transmitter being raised into an altitude simulation chamber. This device is a part of the HIVOS (High Vacuum Orbital Simulator) located at the Lockheed Missile and Space Company, Sunnyvale, California and is used to qualify space hardware in a simulated environment. Two of the nations most successful systems - Agena and Polaris - had to qualify in this facility first.

The 620 only flew to 10,000° (a mere flick of the switch for this machine) and it played well there without a murmur for 24 hours, an important feature when your transmitter site is in higher altitudes.

Company Consolidation Makes Lower Transmitter Prices Possible



Running an extensive final test before shipping a Sparta model 620 Bauer transmitter to KSJO in San Jose, California is Bob Dreher, Chief Transmitter Engineer. The model 620, a 20kw FM transmitter, features the new "stripline" concept for longer life and more reliability. Sparta has reduced prices across-the-board on all AM/FM transmitters. Every transmitter shows a reduction with the average throughout the line of 11%.

These price reductions were made possible by consolidating the Bauer Company's administration, marketing, service and manufacturing into Sparta's newly expanded facilities and operations.

Although some transmitter manufacturers recently raised prices, Sparta's long range planning and cost efficiency reports showed they could substantially reduce overhead with the consolidation, and make these savings reflect in the pricing schedule. No changes have been made in design, components or quality.

NEW TRANSMITTER PRICE LIST

FM MODELS	OLD PRICE	NEW PRICE
607A	\$ 7,250	\$ 6,525
602	9,950	8,450
603A-5	14,500	12,450
620	26,500	23,950
660	2,995	2,750
661	1,150	795
662	565	495
AM MODELS		
FB-3B	10,650	10,450
FB-5V	19,500	17,950
FB-10J	22,500	20,500
FB-15	27,500	23,950
725	63,500	59,500
707	6,550	5,895

Fritz Bauer, 48 Years of Transmitter Know How



Back in 1922, when the radio industry was just two years old, Fritz Bauer built his first transmitter. This year, 48 years later, Bauer is still developing new transmitting innovations. Many of the components and designs standard on today's transmitters are a result of a lifetime of work by Bauer. Bauer, a self taught man, came to this country from Germany and settled in the Midwest, where he was Chief Engineer for a group of stations in Missouri.

After serving in the Signal Corps during the war, he founded the Bauer Electronic Manufacturing Company and moved to California in 1955.

Bauer still maintains his own research and development facilities and the broadcast industry can undoubtably count on many new developments by this transmitter pioneer.

(Cont'd from Page 3)

Although the SPARTA-MATION system is tailored to individual station program requirements, SPARTA literature includes illustrations of several different sample systems to help the broadcaster visualize the tape devices he may use and what his system may look like.



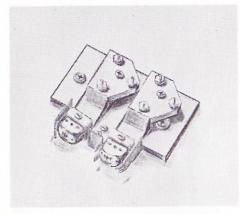
The SS-231 has generous unattended operation with plenty of music balance, time checks, local news and weather, program openers and more. Optional accessories may be added to expand its function including automatic restart, cartridge random select, slow speed logging, network join and remote control of the program controller.

The SS-231 can be obtained on an attractive lease cost of under \$9.00/day. For an investment of under \$12.00/day, lease cost, the SS-504 offers unlimited flexibility and challenge to the creative, imaginative broadcaster who wishes an all-cartridge system.



Evans concluded by saying, "..regardless of what SPARTA-MATION system is used, the monthly lease cost is most times much less than the salary of an additional man at the station. SPARTA-MATION systems then provide the broadcaster with a means to modernize his broadcasting methods assuring him of better program control, better program quality which all subsequently leads to bigger profits."

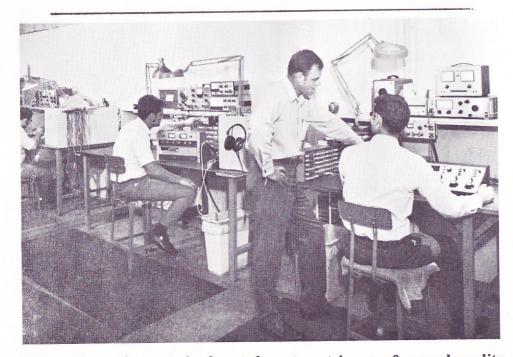
Die Cast Headmount Solves Many Cart Problems



Some changes are obvious when you see Sparta's new tape cartridge headmount, like the heavy duty construction and precision die cast and milled alloy components, but you'll have to look close to see the biggest feature of them all...it is called the "True Tangent" canted record head/mount. After exhaustive engineering tests we angled the record head a few degrees. "This may sound small," said Roger Odom, Sparta's Engineering Manager, "but the difference in reproduction is gigantic. The NAB specs call for the record head of tape equipment to be installed in such a position that its location is very close to the corner post of a M-300 tape cartridge and this has a definite effect on tape travel."

This closeness, combined with the effect produced by head penetration generally does not provide good tape-to-head contact. To make full contact and get the best reproduction possible, Sparta turned the record head slightly to meet the true angle of the tape as it comes off the corner post, greatly improving reproduction and high frequency response.

The New HM-2 headmount will retro-fit all Sparta cartridge equipment and with minor modifications will fit others as well. To improve horizontal tape travel the HM-2 incorporates a new one piece close tolerance triple tape guide. A positive head stop for proper head penetration is another new feature.



The audio equipment check-out department is one of several quality control stations under the responsibility of Jerry Feutz, Production Manager. Another QC station is located just ahead of the shipping department and assures Sparta customers that every precaution is being taken to deliver a top quality, trouble-free product for their use.

Sparta Goes Overseas



Fernando Perez, Sparta's International Marketing Manager, gives Fortuna Whittles complete information on Sparta's newest distributor in Bolivia. The international market has long been a mainstay in the Sparta sales program and with the development of a new 3000 watt AM transmitter, especially for export, international business is expected to climb during 1970.

Sparta's International Marketing Division has moved into the African market with the appointment of a distributor in Angola. The company is reviewing offers of representation from firms in Nigeria, Ghana and Mozambique. On the continent, a newly appointed firm in Spain is showing good sales gains and expects Portugal to become an important market in the near future. Fernando Perez, Sparta's International Marketing Manager, just completed a 2 month's sales trip through 8 Latin American countries and reports the acceptance of Sparta products is ever increasing.

Mexico remains as the leader in buying Sparta equipment. Several months ago, under a new marketing plan, sales to foreign countries was changed from a US based export company program to the appointment of foreign distributors backed by factory-direct service and shipping. The acquisition of Bauer products line with several transmitters designed exclusively for the export market should result in an upsurge in Sparta's world-wide sales.

New Tool To Align Tape Heads

Simple, one-piece construction highlights the features of a new accessory to the Sparta line. Alignment of tape cartridge heads has always been a problem. for broadcasters, our new AG-1 Head! Alignment gauge provides a quick means to adjust the tape head of a cartridge machine to correct height and close azimuth.



The head alignment gauge gives total compatability between playback and record machines and optically adjusts all heads to the same alignment. The final azimuth check should be done with the Sparta AL-1 alignment tape cartridge.

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