

# The SPARTAN

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SPARTA ELECTRONIC CORPORATION

A Division of Computer Equipment Corporation

5851 Florin-Perkins Road

SACRAMENTO, CA 95828

## Sparta's New Manufacturing Annex Provides Needed Space For Growth

As this article is being read, the machine shop, cabinetry shop, paint and turntable assembly departments will be moving into quarters in Sparta's new manufacturing annex.

Fronting on Florin-Perkins Road, just across the street from the entrance to the main building, the new structure boasts nearly 20,000 square feet of space which is vitally needed due to the growth of the corporation.

Space in the main building, formerly occupied by the departments mentioned above, is sorely needed to accommodate the Transmitter Division whose gains the last year have been phenomenal.

Considerable change also has taken

place in the headquarters structure, based on anticipated future needs.

New R & D labs and offices for both audio and transmitter products have been finished; new and more efficient groupings of tape cartridge repair and other facilities have been carried out. Plans have been firmed up for other moves following occupancy of the new annex.

The accompanying photos at right show the rapid progress of construction once the effects of extraordinarily heavy rains in Sacramento last winter permitted.

Visitors are always welcome at Sparta and even if you have already seen our facilities, next time you come, we'll have something new to show you!

## Sparta Gives Fast Assist In Station Fire

Early on the morning of May 21, Dan Barnett was eating breakfast at his home in Paradise, CA., a Sierra Nevada foothill town southeast of Chico with a population of less than 10,000. Dan is manager of KEWQ.

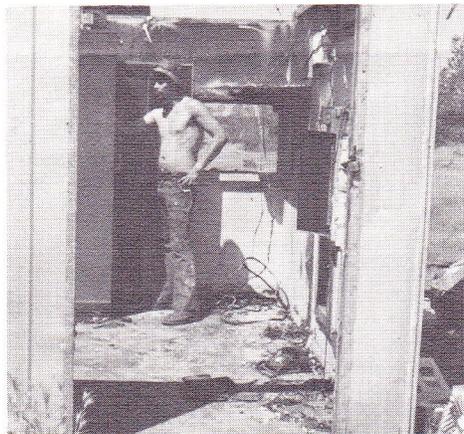
The telephone rang. Dan answered it to hear the morning man at KEWQ report: "Dan, the transmitter's on fire!" After three repeats of the message, Dan took him seriously.

The aging 1 kw AM transmitter had gone off the air, which in itself was not too unusual. The morning man calmly called the chief engineer to report it.

Twenty minutes later, when the FM transmitter also went off, the morning man was startled enough to glance over to the transmitter building; flames were visible already burning through the roof. He called

the fire department and Dan, in that order.

When Barnett was interviewed later by fellow radio/TV crews from Chico, they

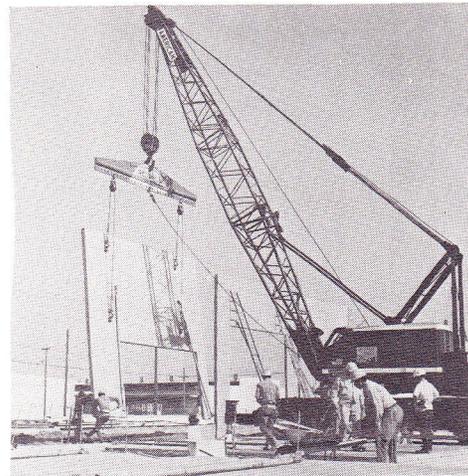


**RIGO FELIX**, chief engineer of KEWQ, surveys fire and water damage the morning of the fire. Both KEWQ transmitters were total losses but the site now boasts a new building and equipment. —KEWQ Photo

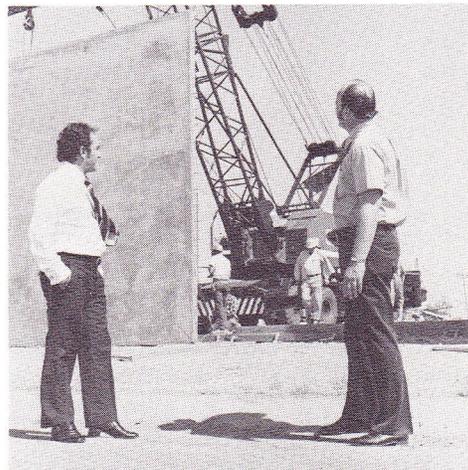
asked how long KEWQ would be off the air . . . one week? . . . two weeks? . . .

(Continued on page 3)

## Construction Highlights



**FAST WORK . . .** on May 23, the pre-cast walls rose in less than one day (above).



**ALEJANDRO ZENDEJAS**, general manager, Esparta Mexicana offices, Mexico City, a recent visitor, (left above), looks over the project with **Bill Overhauser**, president of Sparta. **JUNE 11** (below) the roof was completed and interior finishing began. The forklift, and men indicate the scale of the new structure. —Sparta Photos



## Meet Our "Reps"



Lew Radford

## Lew Radford- Atlanta GA

Lewis C. (Lew) Radford is a Georgian for sure, having been born in Walton County some 50 years ago. He's now "preaching the Sparta gospel" throughout Georgia, Alabama and Mississippi from Atlanta headquarters under the firm name of Lew Radford and Associates.

Following graduation from Monroe High School, Monroe, GA, Radford received a degree in mechanical engineering from Georgia Tech.

Next came a three year stint in the U.S. Navy serving as a naval aviator with the rank of Lt. Cmdr. (jg).

Returning to civilian life he became successively associated with Allen B. Dumont Laboratories, Visual Electronics Corporation and Radio Corporation of America, selling equipment to new TV stations and holding positions as regional sales manager for each.

Radford and his wife, Peggy, are the parents of Peggy Anne, 22; Mary, 20; Kathryn, 18; Jack, 15; Lewis, 13 and Thomas, 11. The family home is at 3203 Lanier Drive, Atlanta, GA 30319.

Lew Radford and Associates may be reached at (404) 237-6097 . . . they'll always be glad to hear from you . . . and will serve you well!

# Summary of Re-Regulation Actions

by JAY W. WRIGHT  
Vice-President for Engineering  
King Broadcasting Company, Seattle, WN.

**EDITOR'S NOTE:** This material, reprinted by permission of the author, appeared as a portion of his presentation to a meeting of the Washington State Association of Broadcasters during May of this year.

The purpose of his tabulation is to outline the general nature and effect of the re-regulation actions already taken by the Commission. The reader should appreciate that no attempt is made to indicate all details and aspects, but only the central features.

### FCC's FIRST RE-REGULATION ORDER (Effective December 15, 1972)

Subject	Nature of the Change	Comments
1. Meter Readings (AM, FM, TV)	Log 3 hour intervals instead of 30 minutes	Simplifies operations, especially combo operations
2. Transmitting Inspection (AM, FM)	Inspection once a week, (etc.) instead of daily	Saves man hours especially at remote transmitters
3. Operating Log & Maintenance Log (AM, FM, TV)	Combined operating log and maintenance log permissible on same sheet instead of separate	Eliminates paperwork
4. Station Identification (AM, FM, TV)	Station identification hourly, as close to hour as feasible, at a natural break in program instead of 2 min. at hour and half hour for AM & FM	Program procedure simplified
5. Rebroadcast of Another Broadcast Station (AM, FM, TV)	No FCC notification required, only station to station consent	Cuts paperwork and lost time
6. Mechanical Reproduction (AM, FM, TV)	Daily announcements eliminated re taping of network and certain other material. Complex rules designed to avoid misleading the public are simplified	Programming procedures are simplified
7. Contracts (AM, FM, TV)	Copies of contracts with time brokers, SCA operations and time sales over 4 hours daily to same sponsor are no longer filed with Commission	Eliminates paperwork

### FCC's SECOND RE-REGULATION ORDER (Effective April 4, 1973)

Subject	Nature of the Change	Comments
1. Auxiliary Transmitter Testing and Logging (AM, FM, TV)	Tested when determined necessary by licensee instead of weekly specified times	Operations made more flexible and functional

(Continued on page 4)

*a little of . . .*

## EVERYTHING

An unusual stack of inquiries and equipment orders grace this desk as I write. The fact that makes them special is that they're all from the far corners of the world.

As Sparta stands on the eve of its 15th year in business, its staff is the largest ever and its fifth expansion is underway into a large manufacturing annex across the street.

When overseas business commitments are helping our growth to such an extent, it's a good thing to pause on Flag Day, Independence Day and during vacation trips throughout this wonderland, to be thankful and reflect on our blessings.

Nowhere in the world are more natural and man-made wonders to be seen, had and enjoyed than here and now. With good will we've worked wonders for 200 years, with faith we'll find wonders enough to work in the next 200.

We know that Sparta is going to be a hard working and hard playing part of it all, and hope that the Independence Day feeling is shared by all of you.

Happy vacationing . . .

**BILL OVERHAUSER**  
President  
Sparta Electronic Corporation

# KROQ Overcomes Many Obstacles

'Way back when rock 'n' roll was young ... 1956 to be exact ... the consultant firm of Hammett and Edison submitted their first plans for a clear channel 10 kw AM station in Burbank, CA.

Little did they believe at that time that it would be 11 years before approval would be granted but such was the case.

Not only FCC, but also FAA, requirements complicated the picture for Hammett and Edison and the Burbank Broadcasting Company.

The station finally became a reality in 1967 and now KROQ is pumping rock over Burbank, the San Fernando Valley and the Los Angeles basin on 1500 KHz from atop the Verdugo hills. The "horsepower" is provided by a Sparta Model 710 10 kw AM transmitter with a Sparta Model 701 1 kw for backup and a low power operation.

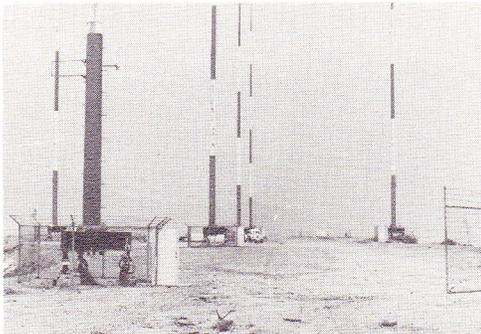
The frequency itself was painfully acquired and the KROQ transmitter site also proved to be at the low end of "marginal". The top of a mountain spur had to be completely leveled. The intricate pattern called for six masts. The stony, dry terrain necessitated a ground system three or four times normal. To top it off, the transmitter building had to meet the standards of an underground, Civil Defense-approved, "hardened site" bombproof bunker!

With these factors militating against achieving a signal of ANY useful kind from the site, KROQ and their consultants drew up specifications for their transmitter within very rigid limits.

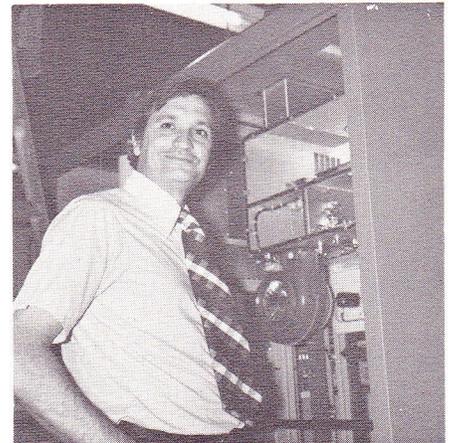
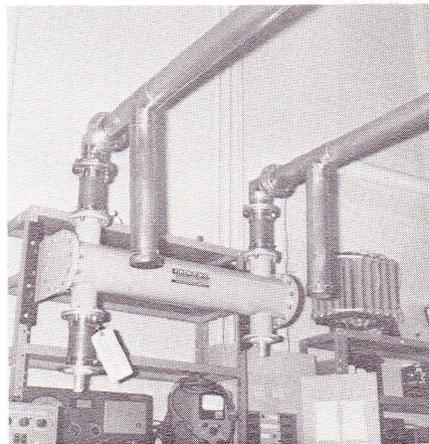
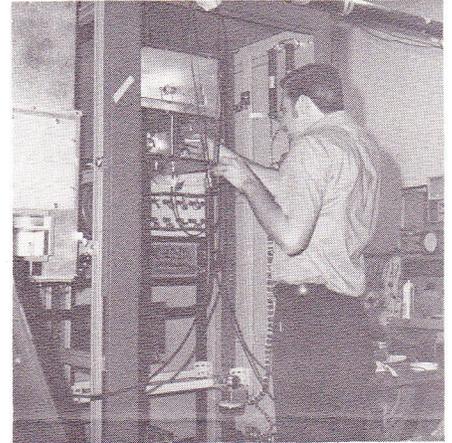
It is noteworthy that ONLY the Sparta Model 710 met the criteria and ONLY Sparta could deliver the special 125 percent positive modulation-capable equipment as specified.

Both transmitters were ready for KROQ 45 days after the order was received.

**TOUGH GOING** ... the spur of the mountain leveled (below), the six masts rise from a base that seemingly was "paved with copper". Photo at right, below, shows Russ Ladiolais, KROQ Chief Engineer, tending the Sparta transmitters. —Sparta Photos



## KBEY On Air With New X-mitters!



RADIO STATION KBEY, Kansas City, MO, is now operating with a brand new Sparta Model 640 40,000 watt FM transmitter to produce their 100,000 watt ERP. The transmitter left Sacramento June 18 en route to Kansas City with an on-air target date of July 1. Photo upper left shows Juan Gregorio, Sparta transmitter design engineer, (left) with Bob Dreher, field service engineer, discussing set up for the final testing at the factory. Bob will be on hand for the first airing of the KBEY signal. Upper right: Dick Noteman, Sparta transmitter production supervisor, puts finishing touches on the Model 640 driver cavity. Lower left: the very compact Jampro Combiner accepts the output of two Sparta Model 620A FM transmitters to produce the 40,000 watts of the 640 ... before the test loads and cooling apparatus were hooked up at the Sparta factory. Lower right: Juan Gregorio expresses satisfaction with the 640's performance. Just after this picture was taken, Jim Oliver, Jampro production manager, brought an antenna to Sparta's back door to "borrow" 40,000 watts of RF for a test. Such cooperation permits both companies to fully test equipment before the finished product reaches the customer. —Sparta Photos

### KEWQ FIRE

(Continued from page 1)

"No", he replied, "probably a couple of days."

At normal sign-on time Wednesday morning, May 23, Paradise listeners were properly surprised; KEWQ was back on the air in less than 48 hours and with a new sound that brought congratulations.

Sparta's "just right" service cut the revenue and listener loss of KEWQ to an absolute minimum!





Dick Johnson

## Johnson Paper Presented

Dick Johnson, Sparta transmitter products design engineer, presented an extremely helpful paper — "Retrofitting Older Transmitters With The New Generation Exciters" — at the mid-May meeting of the Society of Broadcast Engineers in Tucson, AZ.

This paper is divided into sections describing physical configuration considerations in mounting a new solid state exciter in an existing FM transmitter, the electrical considerations, and then describes step-by-step proof on the possible conversion with a handy compendium of problems to anticipate.

Regrettably, space does not permit Dick's paper to be presented in The Spartan. Engineers who desire a copy are invited to write the Transmitter Division of Sparta and request a copy. There is no charge for this service . . . and we'll even pay the postage!

## SUMMARY OF RE-REGULATION ACTIONS

(Continued from page 1)

Subject	Nature of the Change	Comments
2. Auxiliary Transmitter Operating Power (AM, FM)	Power allowed to equal 105% that of the main transmitter with certain provisos	This solves some administrative problems and allows power increase in some circumstances
3. Auxiliary Transmitter Operating Authority (FM, TV)	Aux. transmitter may be used for indefinite period, eliminating the previous 5 day limit without special authority	Eliminates paperwork and unnecessary explanations
4. Minimum Operating Power and Minimum Hours (AM, FM, TV)	Immediate notification not required if such problems develop. Written request to Commission is only required to obtain further authority beyond ten days. This request must be written no later than 10th day for such additional time as necessary	Eliminates paperwork and unnecessary explanations
5. Visibility of the Transmitter, Monitors and Meters (AM, FM)	The words "clearly visible" are deleted and Rules are clarified to require that meters be observable within 360° arc	Physical location of transmitters, monitors and remote controls more flexible
6. Requirements for Notification of Engineer in Charge of Radio District (AM, FM, TV)	Notification to FCC EIC office no longer required for defective instruments, problems with operating power or minimum schedule, departure from regular schedule, commencement of stereophonic broadcasting, transmission of point-to-point messages during emergency operation	Eliminates paperwork and unnecessary explanations
7. Temperature Variation of Crystals used in Transmitters (AM)	Specifications concerning crystal temperature variations are deleted	Removes a minor annoyance to operations
8. Circuit Diagram of Transmitter & Assoc. Equipment (FM, TV)	Circuit diagram of equipment need not be retained at transmitter as previously required	Removes a minor annoyance to operations
9. Equipment Performance Measurements---Filing Procedures (AM, FM)	Data on equipment performance plus description of instruments and procedure, signed by engineer making measurements may alternately be kept at the remote control point	Eliminate awkward requirement to have such data at transmitter
10. Spare Tower Lamps (AM, FM, TV)	No longer necessary to maintain a supply of spare lamps	Substitutes licensee judgment for FCC rules
11. Logging Requirement for Each Interruption of Carrier (AM, FM, TV)	Log entry no longer required for each interruption of carrier of insignificant duration	Simplifies logging
12. Contracts with Part-time First-Class Radiotelephone Operators (AM, FM)	Signed copies of such contracts need no longer be filed with Commission and Engineer in charge of radio district	Simplifies administration
13. Logging Requirements for Transmission Line Meters (FM, TV)	RF transmission line readings no longer logged under indirect power conditions	Clarifies rules for operation when power is determined by indirect method
14. Attended Operation of One-Hop Aural STL's, Aural Intercity Relays and TV STL's	Unattended transmitter operation for one-hop now permitted	Reduces manpower requirements in some cases

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