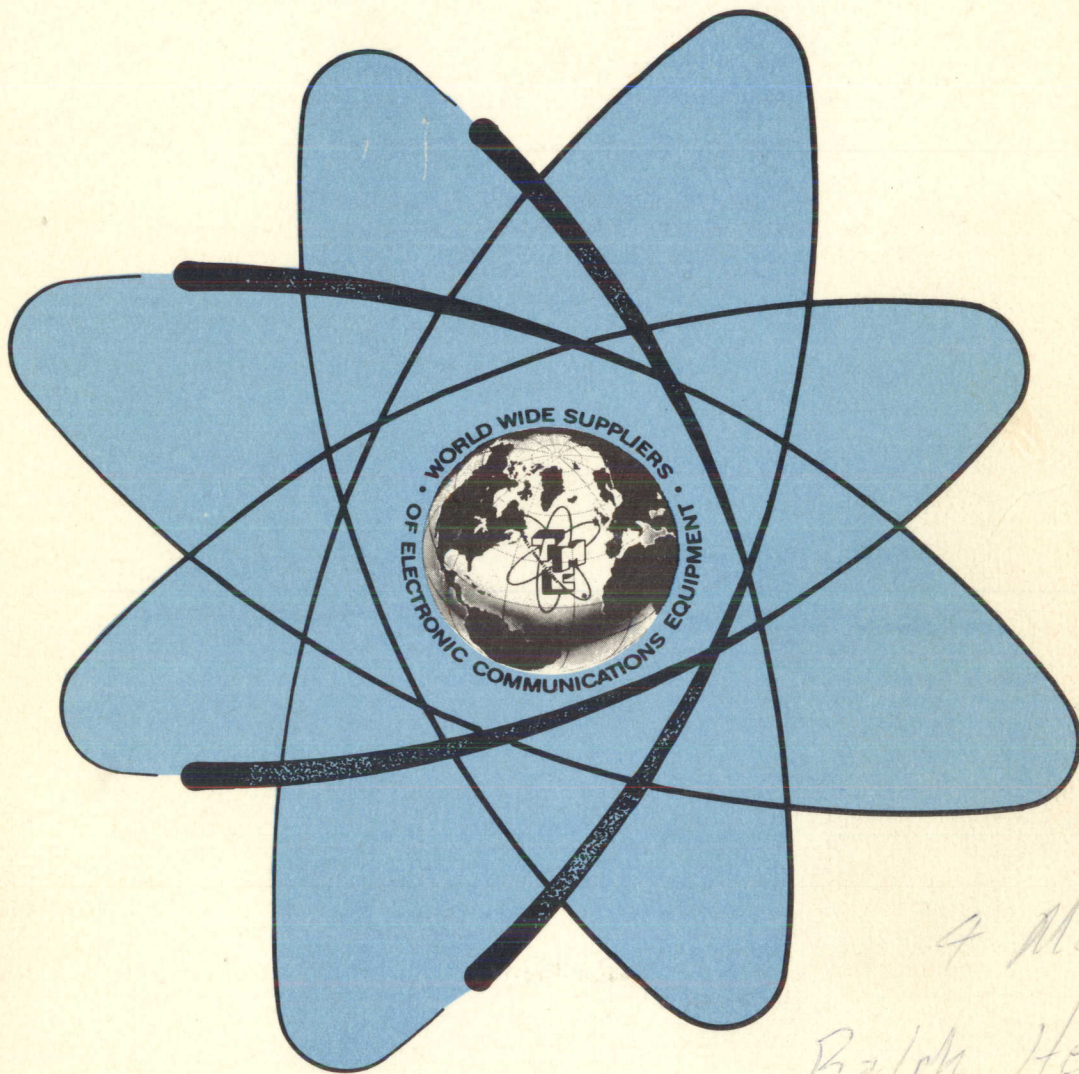


# THE TECHNICAL MATERIEL CORPORATION



*4 Mar 79  
Ralph Henninger  
Personel Capt.*

## PRICE LIST

Professional Communications for over 20 Years

OCTOBER 1973

TMC EQUIPMENT PRICE SCHEDULE

AMENDMENT NO. 3

The following equipment price schedule amendments are effective on receipt and should be entered into the price schedule.

PAGE 63

| <u>NEW</u> | <u>OLD</u>   | <u>FROM</u> | <u>TO</u> |
|------------|--------------|-------------|-----------|
| RAC26(50)  | RAC7         | 284.00      | 359.00    |
| RAC26(70)  | RAC20,30A,32 | 284.00      | 436.00    |
| RAC27(70)  | RAC1,RAC30   | 284.00      | 359.00    |
| RAC30B(50) | RAC11        | 284.00      | 359.00    |
| RAC50(50)  | RAC9         | 284.00      | 359.00    |
| RAC50(70)  | RAC13        | 284.00      | 359.00    |
| RAC60(50)  | RAC7A        | 284.00      | 359.00    |
| RAC60(70)  | RAC24        | 284.00      | 359.00    |
| RAC80(50)  | RAC12        | 284.00      | 359.00    |

TMC Equipment Price Schedule  
Amendment No. 2

June 1973

The following equipment price schedule amendments are effective on receipt and should be entered into the price schedule.

- Page II Paragraph "Spare Parts" 4th Line  
Correct "eqipment" to read "equipment"
- Page IV Paragraph 3 5th Line  
correct "Al" to read All
- Page IV Paragraph 7 correct all to read:  
7. No Bid Bond, Performance Guarantees, Penalty Charges or any Supply Condition will be accepted as TMC responsibility without prior agreement in writing by TMC.
- Page 4 Selected Accessories  
Correct price of VTA2A \$305.00 to read \$321.00.
- Page 5 Selected Accessories  
Correct price VTA-3 \$821.00 to read \$1,195.00.
- Page 10 Second Paragraph  
Correct Synthesized DDRR-1oK to read DDRR-10K  
Technical Manual 07.6010-1K to read 07.6010-1/K
- Page 12 Second Paragraph  
Correct price of VRA6 \$411.00 to read \$416.00  
After CSS-2A  
Correct "one part in 109" to read "one part in 10<sup>9</sup>"
- Page 15 DDR()-10K Accessories  
Correct price of AMC-8 \$900.00 to read \$807.00
- Page 17 DDR()-10L Accessories  
Correct price of AMC-8 \$900.00 to read \$807.00
- Page 19 DDR()-10M Accessories  
Correct price of AMC-8 \$900.00 to read \$807.00
- Page 20 DRA-1  
Correct sentence "The DAC couplers are used and  
Towers are not included" to read  
"The DAC couplers are used. Towers are not included."
- DRA-2  
Correct sentence "It uses the DAC series of couplers  
and is not included with the mounting poles" To  
read "The DRA-2 uses the DAC Series of couplers.

Page 20 "Con't".  
 "It does not include the mounting poles."

Page 22 GPR 110 second paragraph  
Type 2625 amend to read  
 Type 2625 Synthesized ISB, Two 6KHz Sidebands.

Accessories  
 Correct price of AMC-8 \$900.00 to read \$807.00

Page 25 Selected Accessories  
 Correct price of TER-3.5K \$674.00 to read \$732.00.

Page 26 GPT-1K second sentence  
 Correct "mobild" to read "mobile"

Page 29 Selected Accessories  
 Correct price VTA-3 \$821.00 to read \$1,195.00.

Page 33 Lastline  
 Correct "Tecenical" to read "Technical"

Page 35 HFLA-1K First Paragraph  
 Correct sentence "Complete transmitter design can be provided at extra cost given the exciter parameters" to read "Complete transmitter design can be met, at extra cost, providing exciter parameters are specified."

Page 35 HFL-5K Second Line  
 After "HFL.10K linear amplifier" add "(see next page)."

Page 36 HFLA-10K last sentence  
 Correct sentence "Complete transmitter design can be provided at extra cost" to read "Complete transmitter design can be met, at extra cost".

Page 37 HFT-KE/8  
Type 6221/6261 correct to read  
 "Type 6221 ISB/FSK/FAX (F1/F4). Two 3KHz Sidebands."  
 "Type 6261 ISB/FSK/FAX (F1/F4). Two 6KHz Sidebands."

Page 39 Selected TX Accessories  
ATS-3 after "system" add "(Manual)".

Page 51 HFTR-10K Fourth Line  
 after ON/OFF insert a comma (,)

Page 54 LPF-1K/fo Second Line  
 Correct "transmittting" to read "transmitting".  
 LPF-1K/fo Last line  
 Correct "1KW Loss Pass etc" to read "1KW Low Pass etc".  
 LPF-10K First Line  
 Correct "(Fixed) Loss Pass etc" to read "(Fixed) Low Pass etc."

Page 56 MCT.10K Fourth Line  
Correct "MVW mode" to read " MCW mode".

Page 58 MCT-400 Third Line  
Correct aus to read and.

Page 60 MFT-10KL Same Line  
Correct (MD) to read (MF).

Page 61 MSR-9 Fifth Line  
Correct "improve's" to read "improves"

Page 62 RMX-1 Second Line  
Correct "form" to read "from".

Page 64 SBE Fourth Line  
Correct "using" to read "when used".

Page 66 SBGR-4 Fifth Line  
Delete "See Section A-6".

Page 70 Option 230 Second Line  
Delete "Section A-7 for".

Page 72 SWR-1K Line seven  
Delete "See Section A-7".

SWR-3K Line Five  
Delete "See Section A-7".

Page 75 TIS-3D Correct \$1,532.00 to read \$1,531.00

Page 76 Primary Power Rating  
Correct "10-40 unit DC (Basic Model TM-125 only)" to read " 12 volt DC (Basic Model TM-125 only.)"

Page 77 2054-2 Correct \$1,511.00 to read \$1,611.00

Page 79 TMX-1 Line two  
Correct "6MHz" to read "6KHz".

TMC EQUIPMENT PRICE SCHEDULE

March 1973

ADDENDUM #1

The following equipment price schedule is effective as of this date. Where the equipment is listed in the price list, the price shall be amended accordingly. Where the equipment has not been previously listed, space permitting, the equipment, description and price should be entered alphabetically.

|          |   |           |
|----------|---|-----------|
| LMC-8    | Receiving Antenna Multicoupler<br>8 outputs, low frequency.<br>Filter extra   | \$ 715.00 |
|          | FX10022 Low Pass Filter   | 37.00     |
| LPA-400M | Linear Power Amplifier 1.6 - 26 Mhz<br>400 watt PEP 200 Watt AVG 100 mW input | 2,500.00  |
| STR-5    | Fixed Frequency Receivers   |           |
|          | Model STR5-A AM only  | 889.00    |
|          | Model STR5-U Upper Sideband   | 997.00    |
|          | Model STR5-L Lower Sideband   | 997.00    |
|          | Model STR5-UL Independant Sideband  | 1,283.00  |
|          | Model STR5-AU AM and Upper Sideband   | 1,240.00  |
|          | Model STR5-AL AM and Lower Sideband   | 1,240.00  |

Technical Specifications as per Bulletin 103014B  
Accessories and Options for STR-5 Series.

|                          |   |        |
|--------------------------|---|--------|
|                          | Channel Crystal                                       | 12.00  |
| TTRR( )D                 | RF Module 2-16 Mhz                                    | 217.00 |
| Kit 10033                | Screwdriver Clarifier Control                         | 14.00  |
| Kit 10038                | IF Output amplifier for use<br>with CODAN             | 24.00  |
| Kit 10040                | Squelch Modification                                  | 39.00  |
| Kit 10041                | Special AGC Generator                                 | 59.00  |
| A10674                   | DC Adaptor + 12 volts                                 | 13.00  |
| DC Model of<br>any STR-5 | For + 12 volt only<br>deduct \$75.00 from unit price. |        |

TRS-400MR

Transmitter Receiver System.  
Transmitter 1.6 Mhz - 26 Mhz. Receiver  
15 Khz to 30 Mhz. Synthesized 100 Hz steps. *11,345 1-500*  
CW, AME, SSB. Solid state except for  
final amplifier ~~9,500.00~~ *10,435 6-2000*

Technical Specification per Bulletin 101050-1

VMC-8 VHF Antenna Multicoupler  
connects 8 VHF receivers to a common  
antenna. Frequency range 20 Mhz -  
200 Mhz specific bandwidth determined  
by filter selection 972.00

Technical Specification per Bulletin 104033A

PAL-500 Linear Power Amplifier  
Provides 500 watts PEP 300 watts AVG  
output over frequency range 2.0 to 32 Mcs.  
with appropriate exciter, AM, AME, CW,  
MCW, SSB, ISB, DSB, FSK or  
Pulse Operation 3,872.00

Technical Specification per Bulletin 102037.



# TMC INTERNATIONAL

THE INTERNATIONAL MARKETING DIVISION OF TMC SYSTEMS AG

MAILING ADDRESS: R.R. No. 5, Ottawa, Ontario, Canada K1G 3N3

## TMC EQUIPMENT PRICE SCHEDULE

OFFICES  
RIVER AND LIMESBANK ROADS  
UPLANDS AIRPORT  
Phone: AREA CODE 613 - 822-0244  
TELEGRAPHIC ADDRESS: TEPEI-OTTAWA  
TELEX 013-446

The attached book is TMC's price schedule for standard products. Care must be taken in reading the instruction and using the information presented. There are certain areas which are particularly important:

I. The systems "integration" cost is universally applied to all non-standard products. It is included if the system or product is not listed in the schedule or in the case of multiple standard products, the system designed has not been duplicated before. If any questions arise, TMC International should be consulted.

II. The percentage costs of spare parts are approximations based on history. Special customer requirements will usually increase these estimated costs.

III. Until such time as TMC's products become "fixed" most will have associated options. These options should be listed separately under the model number to insure that the customer gets what he has ordered.

This price schedule is a confidential document and is issued on a limited distribution within TMC and to authorised distributors of TMC. Its contents must not be divulged to outside organisations. A great deal of damage can be done to TMC and its distributors by unauthorised disclosure of its contents. TMC reserves the right to recall this document at any time.

Any comments or suggestions for improvement of this price schedule will be most welcome.

February 1973

H. Hargreaves  
Vice-President,  
Director of International  
Marketing  
TMC Systems & Power Corp.  
Springfield, Va.

HH: jh  
The Technical Materiel Corp.  
Mamaroneck, N.Y.

TMC (Canada) Ltd.  
Ottawa, Ont.

TMC Systems (Ariz.) Inc.  
Tempe, Arizona

TMC Systems & Power Corp.  
Springfield, Va.

TMC Systems AG  
Luzern, Switzerland





CONTENTS OF PRICE LIST

INSTRUCTIONS ON USING THE PRICE LIST

TERMS AND CONDITIONS OF SALE

TMC WARRANTY

ALPHABETICAL INDEX BY EQUIPMENT BRIEF DESCRIPTION

ALPHABETICAL INDEX BY EQUIPMENT TYPE LETTERS

## USING THE PRICE LIST

The price list is constructed by alphabetical list of Equipment in sequence of type letters. Immediately following the brief description of the equipment or system are options and accessories (as applicable to the major component or system) with their prices. Use of the Description Index will assist in deriving the type letter and page of the equipment as well as its page.

The equipments listed in the Price List and General Catalogue are standard TMC Products. Each has a number of standard options which change or expand the capabilities of the equipment. These options are priced as additional costs to the list price of the standard product. They do not reflect the actual value of the option itself which may be higher. Technical information on both products and options is available in the Technical Bulletins.

### SYSTEMS COST

Whenever fewer than five identical systems are developed using standard products and options, the customer will be charged for the cost of cables, (commercial) systems manuals, blank panels, and minor engineering. This charge for systems "integration" is ten (10) per cent of the total equipment list price before discounts or commissions are taken. This cabling or customizing is required.

### SPARE PARTS

TMC maintains complete spares support on all items of equipment manufactured in the last seven years. The cost of spare parts, exclusive of modules (major assemblies), is estimated below as a percentage of the total equipment list price. Recommended spare parts usually include electrical components only.

- 3% Tubes, fuses, lamps and selected solid state devices in support of the equipment under normal conditions for a period of 60 days.
- 7% One year spare parts including tubes, fuses, lamps and selected solid state devices.
- 10% Two year spare parts. This spare parts package is largely determined by the type of service and environment the equipment is operating in. The more severe the conditions, the higher the cost of spares.

Modules: - Individually priced modules, including complete PC cards, tuning assemblies, etc., are available as spares for equipment users requiring immediate on-site maintenance and minimum down-time. Rework or repair of faulty modules is available from the factory - See Servicing and Repair.

Information on spare parts and actual prices is available from Spares Provisioning, TMC/New York.

## INSTALLATION AND FACTORY SUPPORT

TMC maintains a highly skilled group of engineers and factory personnel prepared to react to customers' requirements at all technical levels on a world-wide basis. The following services are available from TMC at the rate of \$195.00 per man-day for field engineers and \$150.00 per man-day for technicians, plus travel to/from the customer's location.

### Pre-Installation Phase, including

Site Survey  
System Design  
Equipment Planning  
Installation Drawings  
System Test Plans  
Installation and check out of all TMC equipment including other manufacturer's equipment furnished by TMC as part of a system.  
Proof of Performance Testing  
Turn-key Projects.

### Post-Installation Phase, including

Operation and Maintenance  
On Site Training  
Special on Site Testing for FCC station licenses, RFI measurements, etc.

### Factory Support

Factory repair of TMC equipment is available at the rate of \$20.00 per hour plus the cost of parts (not covered under TMC Warranty) and shipping charges.

## TRAINING

A complete program of instruction in the installation, operation, theory of operation, alignment, calibration, maintenance, troubleshooting and repair of TMC equipment is conducted periodically for the benefit of equipment users. Special courses on systems containing other manufacturers' equipment may be scheduled.

The training program caters to the requirements of the customer and may encompass a simple course in communication theory (CW, MCW, FSK, FAX, AM, AME, SSB, DSB, ISB, and FM) or a more complex course on equipment and systems using modern teaching techniques.

Courses on standard TMC equipment can be scheduled at any time provided the equipment is available for training. The classes are generally split 50/50 between classroom and laboratory with trainee practice in all areas of instruction. A minimum of three (3) and a maximum of eight (8) trainees are recommended for a class. Larger classes may be conducted with additional equipment in order to give the trainees the desired work experience. Training materials consisting of servicing block diagrams, alignment procedures, troubleshooting aids, schematics and trainee notebooks are given to each trainee for his retention.

Trainee progress reports are sent to the parent agency if desired. A certificate of satisfactory completion is given to each trainee upon completion of a course. Training facilities may be visited at any time. Course outlines, scheduling and costs are available from the Training School, TMC/New York.

#### TERMS AND CONDITIONS OF SALE

The following terms and conditions of sale are applicable to all transactions.

1. Quotations are valid for the period stated in the offer calculated from the date of the quotation. The offer is subject to confirmation thereafter. Any term or condition which changes or adds to any standard term and condition will not become a part of the offer unless stated in writing and signed by an officer of TMC.
2. The prices furnished in connection with the quotation cover only the products specified, the costs of commercial packing and the inspection and acceptance at the factory. The prices do not include sales, use, excise or similar taxes which will be the obligation of the Buyer to pay at the time of shipment. Special packing to Buyer specifications will be quoted as an extra item. Installation, spare parts, training, and associated systems integration costs will be quoted as extra items.
3. Deliveries quoted are in days after receipt of the order. Delivery dates are approximate and are based on receipt of all necessary information from the Buyer. Delivery will be f.o.b. Mamaroneck, New York (The Factory), unless another point of shipment is specified. All risk of loss or damage to the equipment from and after the delivery of the equipment to the carrier at the point of shipment will be assumed by the Buyer. Shipment will be made the most economical way unless otherwise specified in the quotation.
4. Minimum order: <sup>36</sup>~~25~~ \$30.00 (U.S.) plus transportation.
5. TMC may change at liberty the design of equipment or parts without notice for reasons of improvement in performance, simplification in design, availability of materials, etc., but not to the extent that the performance of the equipment is materially affected.
6. Copies of each applicable manual will be furnished with each set of equipment. Standard TMC manuals are provided. Additional manuals and manuals meeting special requirements will be furnished at additional cost.
7. No bid bonds, Performance Guarantees, Penalty <sup>charges</sup> clauses or any supply condition will be accepted as TMC responsibility without prior agreement in writing by TMC.
8. Prior to delivery, the order may be cancelled upon payment to TMC of such cancellation charges as TMC may determine at its discretion. These charges include expenses and commitments already incurred and a reasonable allowance for pro-rated expenses and profits according to accepted accounting principles and practices.

9. TMC has the right to cancel any order placed or to refuse shipment of equipment for the failure of the Buyer to meet promptly payments due TMC or of the Buyer to meet any requirements previously agreed between the Buyer and TMC.

10. NO PERSON, INCLUDING ANY DEALER, AGENT, OR REPRESENTATIVE OF TMC IS AUTHORIZED TO MODIFY THE STATED TMC WARRANTY (ATTACHED) OR TO MAKE ADDITIONAL WARRANTIES.



# THE TECHNICAL MATERIEL CORPORATION

C O M M U N I C A T I O N S   E N G I N E E R S

700 FENIMORE ROAD

MAMARONECK, N. Y.

## W a r r a n t y

The Technical Materiel Corporation, hereinafter referred to as TMC, warrants the equipment (except electron tubes,\* fuses, lamps, batteries and articles made of glass or other fragile or other expendable materials) purchased hereunder to be free from defect in materials and workmanship under normal use and service, when used for the purposes for which the same is designed, for a period of one year from the date of delivery F.O.B. factory. TMC further warrants that the equipment will perform in a manner equal to or better than published technical specifications as amended by any additions or corrections thereto accompanying the formal equipment offer.

TMC will replace or repair any such defective items, F.O.B. factory, which may fail within the stated warranty period, PROVIDED:

1. That any claim of defect under this warranty is made within sixty (60) days after discovery thereof and that inspection by TMC, if required, indicates the validity of such claim to TMC's satisfaction.
2. That the defect is not the result of damage incurred in shipment from or to the factory.
3. That the equipment has not been altered in any way either as to design or use whether by replacement parts not supplied or approved by TMC, or otherwise.
4. That any equipment or accessories furnished but not manufactured by TMC, or not of TMC design shall be subject only to such adjustments as TMC may obtain from the supplier thereof.

Electron tubes\*furnished by TMC, but manufactured by others, bear only the warranty given by such other manufacturers. Electron tube warranty claims should be made directly to the manufacturer of such tubes.

TMC's obligation under this warranty is limited to the repair or replacement of defective parts with the exceptions noted above.

At TMC's option any defective part or equipment which fails within the warranty period shall be returned to TMC's factory for inspection, properly packed with shipping charges prepaid. No parts or equipment shall be returned to TMC, unless a return authorization is issued by TMC.

No warranties, express or implied, other than those specifically set forth herein shall be applicable to any equipment manufactured or furnished by TMC and the foregoing warranty shall constitute the Buyers sole right and remedy. In no event does TMC assume any liability for consequential damages, or for loss, damage or expense directly or indirectly arising from the use of TMC Products, or any inability to use them either separately or in combination with other equipment or materials or from any other cause.

\*Electron tubes also include semi-conductor devices.

### *PROCEDURE FOR RETURN OF MATERIAL OR EQUIPMENT*

Should it be necessary to return equipment or material for repair or replacement, whether within warranty or otherwise, a return authorization must be obtained from TMC prior to shipment. The request for return authorization should include the following information:

1. Model Number of Equipment.
2. Serial Number of Equipment.
3. TMC Part Number.
4. Nature of defect or cause of failure.
5. The contract or purchase order under which equipment was delivered.

### *PROCEDURE FOR ORDERING REPLACEMENT PARTS*

When ordering replacement parts, the following information must be included in the order as applicable:

1. Quantity Required.
2. TMC Part Number.
3. Equipment in which used by TMC or Military Model Number.
4. Brief Description of the Item.
5. The *Crystal Frequency* if the order includes crystals.

### *PROCEDURE IN THE EVENT OF DAMAGE INCURRED IN SHIPMENT*

TMC's Warranty specifically excludes damage incurred in shipment to or from the factory. In the event equipment is received in damaged condition, the carrier should be notified immediately. Claims for such damage should be filed with the carrier involved and not with TMC.

All correspondence pertaining to Warranty Claims, return, repair, or replacement and all material or equipment returned for repair or replacement, within Warranty or otherwise, should be addressed as follows:

THE TECHNICAL MATERIEL CORPORATION  
Engineering Services Department  
700 Fenimore Road  
Mamaroneck, New York



ALPHABETICAL INDEX

BY

EQUIPMENT BRIEF DESCRIPTION

|                 |                                   |                     |       |
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|                 | PEP Linear Power                  | LPA                 | 54    |
|                 | <i>General Purpose</i>            | PAL <sup>52.6</sup> |       |
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|                 | Dipole Transmitting               | DTA                 | 20    |
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|                 | Distribution Unit (15-2000KHz)    | LFD                 | 53    |
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| COUPLERS        | Dipole Receiving Antenna          | DAC                 | 13    |
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|                 | Non-Diversity HF/SSB Receiving  | ATS | 4-5   |
|                 | Non-Diversity HF/SSB Receiving  | DDR | 14-19 |
|                 | Transmitting Receiving          | TRS | 12    |
| TRANSCEIVERS    | Channel Sideband                | TM  | 76-78 |
| TRANSMITTERS    | Channelized Medium Frequency    |     |       |
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|                 | HF/SSB                          | GPT | 23-33 |
|                 | Medium Frequency                | MFT | 60    |
|                 | PEP/AVG, HF/SSB                 | HFT | 37-51 |
| TUNER           | Channelized Antenna             | MAT | 56    |

ALPHABETICAL INDEX BY TYPE

| <u>TYPE</u> | <u>DISCRIPTION</u>                       | <u>PAGE</u> |
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| ADC -       | Multi-channel Remote Control System      | 1           |
| AMC -       | Receiving Antenna Multicoupler           | 1-3         |
| ATS -       | Transmitter Antenna Tuning System        | 4-5         |
| BR -        | Radio Frequency Impedance Bridge         | 6           |
| BSP -       | Bridging Speaker (4") Monitor Panels     | 6           |
| CAB -       | Equipment Cabinets                       | 7           |
| CDN -       | Carrier-Operated Anti-Noise Device       | 7           |
| CFA -       | Frequency Shift Teletype Converter       | 8           |
| CON -       | Low-Profile Equipment Operating Systems  | 9           |
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| DDR -       | Non-Diversity HF/SSB Receiving Systems   | 14-19       |
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| GPR -       | General Purpose Communications Receiving | 22          |
| GPT -       | HF/SSB Transmitters                      | 23-33       |
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| HFL -       | Broadbanded HF Linear Amplifier          | 35-36       |
| HFT -       | PEP/AVG, HF/SSB Transmitters             | 37-51       |
| HLC -       | Receiving Antenna Coupler                | 52          |
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| LFS -       | Frequency Synthesized Exciter            | 53          |
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|       |  |       |
|-------|--|-------|
| LPA - | PEP Linear Power Amplifier                       | 54    |
| LPF - | Low Pass RF Output filter                        | 54-55 |
| LSP - | Loudspeaker Monitor Panels                       | 55    |
| MAT - | Channelized Antenna Tuner                        | 56    |
| MCT - | Channelized Medium Frequency CW/MCW Transmitters | 56-59 |
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| MSR - | Receiving Mode Selector                          | 61    |
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| SBE - | General Purpose HF Exciter                       | 64    |
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| TRS - | Transmitter Receiver System                      |       |
| VRA - | Vertical Receiving Antenna                       | 82    |
| XFK - | Frequency Shift Exciter                          | 83    |

ATTACHMENT

EXAMPLE OF PRICING A SYSTEM

The requirement is for a 1 KW, Synthesized Remote Control Transmitter with CW, AM, AME, USB, Carrier FSK and audio FSK (AFSK) capability.

The system price is developed in the following manner:-

| PAGE | TYPE       | DESCRIPTION   | PRICE               |
|------|------------|---|---------------------|
| 46   | HFTR-1KJ   | Automated/Remote Controlled Synthesized, 1000 WATT HF/SSB Transmitter | \$ 23,495.00        |
| 46   | TIS-3D     | AFSK(A7J) Audio Tone Keyer  | \$ 1,531.00         |
| 11   | COP-20/201 | R/C System controlling one Transmitter at one site                    | \$ 24,500.00        |
| 11   | RTMU-41A   | Memory Unit (M/C)   | <u>\$ 6,705.00</u>  |
|      |            | TOTAL EQUIPMENT LIST  | \$ 56,231.00        |
|      |            | 10% System Cost   | <u>\$ 5,623.00</u>  |
|      |            | SUBTOTAL LIST PRICE   | \$ 61,854.00        |
|      |            | Spares  | ----                |
|      |            | Servicing Technical Manuals   | ----                |
|      |            | Installation  | ----                |
|      |            | Special Requirements  | ----                |
|      |            | TOTAL LIST PRICE  | <u>\$XXX,XXX.XX</u> |

## Equipment

ADC-30

AMC-8

## ADC-30 Series Multi-Channel Remote Control Systems

The ADC-30 series are used to remotely control multi-channel or channelized transmitters and receivers of TMC design. The basic system consists of a programmer/readback (P/R) unit and a decoder unit enabling complete control of one type of equipment. The system can be hardware/multi-pair remote or hardware/tone remote.

Includes: One P/R unit and one decoder unit

Single phase primary power: 115volts, 50/60Hz  
230volts, 50/60Hz available on request

## Multi-Channel Receiver Remote Control Systems

Technical specifications per Bulletin 6015-1

Two copies of Technical Manual 06.6015-1

|          |  |    |          |
|----------|--|----|----------|
| ADC-30   | Hardware/Multi-Pair <u>Receiver Control System</u> | \$ | 3,353.00 |
| ADC-30.1 | Hardware/Audio-Tone <u>Receiver Control System</u> | \$ | 4,716.00 |

## Multi-Channel Transmitter Remote Control Systems

Technical specifications per Bulletin 6015-2

Two copies of Technical Manual 06.6015-2

|          |   |    |          |
|----------|---|----|----------|
| ADC-35   | Hardware/Multi-Pair <u>Transmitter Control System</u> | \$ | 3,621.00 |
| ADC-35.1 | Hardware/Audio-Tone <u>Receiver Control System</u>    | \$ | 4,821.00 |

## Selected Accessories:

|              |   |    |               |
|--------------|---|----|---------------|
| CA7110-3/1-L | Multi-Pair <u>Control Cable</u> , L feet                                    | \$ | 11.80/<br>ft. |
| KT6015-1/1   | <u>Kit</u> providing switching of P/R to control ten equipments (tone only) | \$ | 408.00        |
| RTTD-6       | Equipment (tone) <u>decoder unit</u>  | \$ | 2,300.00      |

## AMC-8

Eight Output Receiving Antenna Multicoupler

The AMC-8 is used to coupler one antenna to eight communication receivers. An input bandpass filter is provided for suppressing out-of-band signals.

Includes: Technical specifications per Bulletin 104030

Single phase primary power: 115volts, 50/60Hz  
230volts, 50/60Hz

Two copies of Technical Manual 06.4030-1

|         |  |    |        |
|---------|--|----|--------|
| AMC-8.1 | Eight-Output Receiving <u>Multicoupler</u> | \$ | 766.00 |
|---------|--|----|--------|

## Equipment

AMC-21B

AMC-22

'AMC-21B Modular Output Receiving Antenna Multicouplers

The AMC-21B is used to couple one antenna to four, eight, twelve, or sixteen communications receivers depending on the number of output modules used. Up to three types of input filter can be provided internally for suppressing out-of-band signals.

Includes: Technical specifications per Bulletin 104030  
Single phase primary power: 115volts,50/60Hz  
or 230volts,50/60Hz

Two copies of Technical Manual 10.104030

|           |  |    |        |
|-----------|--|----|--------|
| AMC21-4F2 | Four Output with Broadcast stop filter | \$ | 584.00 |
| AMC21-4F4 | Four Output with 2MHz Low Pass filter  | \$ | 584.00 |
| AMC21-4F3 | Four Output with 2MHz High Pass Filter | \$ | 584.00 |

|             |   |    |        |
|-------------|---|----|--------|
| AMC21-4F234 | AMC-21.5B/4 Four Output with three filters listed above | \$ | 662.00 |
|-------------|---|----|--------|

|           |   |    |        |
|-----------|---|----|--------|
| AMC21-8F2 | Eight Output with Broadcast stop filter | \$ | 669.00 |
| AMC21-8F4 | Eight Output with 2MHz Low Pass filter  | \$ | 669.00 |
| AMC21-8F3 | Eight Output with 2MHz High Pass Filter | \$ | 669.00 |

|             |  |    |        |
|-------------|--|----|--------|
| AMC21-8F234 | Eight Output with three filters listed above | \$ | 747.00 |
|-------------|--|----|--------|

|            |  |    |        |
|------------|--|----|--------|
| AMC21-12F2 | Twelve Output with Broadcast stop filter | \$ | 754.00 |
| AMC21-12F4 | Twelve Output with 2MHz Low Pass Filter  | \$ | 754.00 |
| AMC21-12F3 | Twelve Output with 2MHz High Pass Filter | \$ | 754.00 |

|              |   |    |        |
|--------------|---|----|--------|
| AMC21-12F234 | Twelve Output with three filters listed above | \$ | 832.00 |
|--------------|---|----|--------|

|            |  |    |        |
|------------|--|----|--------|
| AMC21-16F2 | Sixteen Output with Broadcast stop Filters | \$ | 840.00 |
| AMC21-16F4 | Sixteen Output with 2MHz Low Pass Filter   | \$ | 840.00 |
| AMC21-16F3 | Sixteen Output with 2MHz High Pass filter  | \$ | 840.00 |

|              |  |    |        |
|--------------|--|----|--------|
| AMC21-16F234 | Sixteen Output with Three Filters listed above | \$ | 918.00 |
|--------------|--|----|--------|

AMC-22 Eight Output Receiving Antenna Multicoupler

The AMC-22 is identical to the AMC-8 and performs the same function. However, the input filter used is of the AMC-21 type and replaces the Military type in the AMC-8.

Includes: Technical specifications per Bulletin 104030  
Single phase primary power: 115volts,50/60Hz  
or 230volts,50/60

Two copies of Technical Manual 10.104030

|          |  |    |        |
|----------|--|----|--------|
| AMC-22.1 | Eight Output Receiving <u>Multicoupler</u><br>(F2 or F3 or F4) | \$ | 715.00 |
|----------|--|----|--------|

Equipment

AMC-23

AMC-32

AMC-23      Eight Output Receiving Antenna Multicoupler

The AMC-23 is used to couple one antenna to eight communications receivers. It can be used in confined locations without upsetting the placement already installed due to its compact size. Filters can be provided as options.

Includes: Technical specifications per Bulletin 4030-7  
 Single phase primary power: 115volts,50/60Hz  
 Two copies of Technical Manual 06.4030-7

|          |   |    |        |
|----------|---|----|--------|
| AMC-23F2 | Eight Output with Broadcast Stop Filter | \$ | 405.00 |
| AMC-23F4 | Eight Output with 2MHz Low Pass Filter  | \$ | 405.00 |
| AMC-23F3 | Eight Output with 2MHz High Pass Filter | \$ | 405.00 |

## Selected Accessories:

|            |                                      |    |       |
|------------|--------------------------------------|----|-------|
| AX4030-7/1 | <u>Bracket</u> for 19" rack mounting | \$ | 10.00 |
|------------|--------------------------------------|----|-------|

AMC-32      Thirty-Two Output Receiving Antenna Multicoupler

The AMC-32 is used to couple one antenna to thirty-two communications receivers.

Includes: Technical specifications per Bulletin 104030  
 Single phase primary power: 115volts,50/60Hz  
 and 230volts,50/60  
 Two copies of Technical Manual 10.104030

|        |                   |    |          |
|--------|-------------------|----|----------|
| AMC-32 | Thirty-Two Output | \$ | 1,331.00 |
|--------|-------------------|----|----------|

|                        |                       |    |        |
|------------------------|-----------------------|----|--------|
| Optional <u>filter</u> | FX10018 or<br>FX10034 | \$ | 102.00 |
|------------------------|-----------------------|----|--------|



## EQUIPMENT

ATS-2A

ATS-3

## ATS-2A 1,000-Watt Transmitter Antenna Tuning System

The ATS-2A matches the output of an HF transmitter to a suitable antenna system. The system consists of 1) a tuning unit located at the base of the antenna; 2) a monitor/control (M/C) unit located at the transmitter; and 3) a directional coupler. The matching is accomplished by adjusting the tuning elements with remotely controlled motors. All tuning operations are performed manually with the aid of a VSWR meter (direct-reading).

Includes: Technical specifications per Bulletin 2055-1  
 Single phase primary power; 115 volts, 50/60 Hz 230 volts available on request.  
 Two copies of Technical Manual 06.2055-1  
 50-foot coaxial RF antenna cable with connectors  
 50-foot multi-pair control cable with connectors.

ATS-2A(50) 50-Ohm (Manual) Antenna Tuning System-- \$2,574.00 ?  
 ATS-2A(70) 70-Ohm (Manual) Antenna Tuning System-- \$2,574.00 ?

## Selected Accessories:

|   |                     |
|---|---------------------|
| CA7110-2/1-L--Coaxial RF antenna cable, L feet    | \$1.30/ft           |
| CA7110-3/2-L--Multi-Pair Control Cable, L feet    | \$2.00/ft           |
| CAB-1--Desk-Top Cabinet for M/C unit              | \$42.00             |
| TRL-10--Coaxial Transmit/Receive Relay            | \$128.00            |
| VTA-2A-- Stainless Steel 35-foot Vertical Antenna | <del>\$301.00</del> |

## ATS-3 1,000-Watt Transmitter Antenna Tuning System

The ATS-3 matches the output of an HF transmitter to a suitable antenna system. The tuning system can be provided with manual control of all function from the monitor/control (M/C) unit, or with completely automated control of all operations. Interface circuits, however, are required when this system is used with transmitter not of TMC design.

Includes: Technical specifications per Bulletin 2055-1A  
 Single phase primary power: 115 volts, 50/60Hz 230 volts, 50/60 Hz available on request.

Two copies of Technical Manual 06.2055-1A

50-foot coaxial HF antenna cable with connectors  
50-foot multi-pair control cable with connectors

ATS-3(50) 50-ohm (manual) Antenna Tuning System \$3,347.00

ATSA-3(50) 50-ohm (Automated) Antenna Tuning System \$4,042.00

Selected Accessories:

|              |   |           |
|--------------|---|-----------|
| CA7110-2/2-L | Coaxial RF antenna <u>cable</u> , L feet                            | \$1.89/ft |
| CA7110-3/3-L | Multi-Pair Control <u>Cable</u> , L feet                            | \$5.47/ft |
| AC-1000      | External loading <u>coil</u> for operation in<br>1.5 to 2 MHz range | \$937.00  |
| TRL-10       | Coaxial Transmit/Receiver <u>Relay</u>                              | \$128.00  |
| VTA-3        | Fiberglass 35-foot Vertical <u>Antenna</u>                          | \$821.00  |

*(Reference Price \$5 57.50)*

*\$1195.-*

## Equipment

BR-1  
BSP-()  
BSP-7

## BR-1 Radio Frequency Impedance Bridge

The BR-1 is a hand-held device designed to measure the input impedance of an antenna system for optimum matching between transmitter and antenna.

Includes: Technical specifications per Bulletin 2065-1  
One copy of Operator's Technical Manual 07.2065-1

BR-1 RF impedance Bridge \$ 68.95

## BSP-() Series: Bridging Speaker (4") Monitor Panels

The BSP series are designed specifically for monitoring the output of communication receivers located several miles from a receiver site. Amplifiers are provided to improve audio quality for each of the channels monitored.

Includes: Technical specifications per Bulletin 4005-4  
Single phase primary power: 115volts, 50/60Hz  
230volts, 50/60Hz available on request  
Two copies of Technical Manual 06.4005-4

BSP-1D Single-Channel Monitor Panel \$ 437.00

BSP-2D Two-Channel Monitor Panel \$ <sup>589.00</sup> 595.00

BSP-3D Three-Channel Monitor Panel \$ 747.00

BSP-7 Series: Bridging Speaker (3") Monitor Panels

The BSP-7 features individual squelch circuits for each channel and designed to monitor receiver audio output from remote sites. Amplifiers are provided for each channel to improve the overall audio quality

Includes: Technical specifications per Bulletin 104051  
Primary power: 12volts DC  
Two copies of Technical Manual 06.4005-3A

BSP-7/1 Single Channel Monitor Panel \$ 149.00

BSP-7/2 Two channel Monitor Panel \$ 214.00

BSP-7/3 Three-channel Monitor Panel \$ 277.00

BSP-7/4 Four Channel Monitor Panel \$ 341.00

## EQUIPMENT

CAB-()  
CDN-3

## CAB-() Series: Operating Equipment Cabinets

The CAB series are constructed of 1/16-inch steel and are designed to enclose any equipment mounted on a 19-inch front panel. Blue-grey textured vinyl paint is used on the cabinets as the outside/inside finish.

Includes: Technical specifications per Bulletin 7100-3

|          |   |           |
|----------|---|-----------|
| CAB-1    | Desk-type <u>cabinet</u> , 8 3/4-inch space   | \$ 42.00  |
| CAB-2    | Desk-type <u>cabinet</u> , 10 1/2-inch space  | \$ 66.00  |
| CAB-20   | Bench-type <u>cabinet</u> , 24 1/2-inch space | \$ 232.00 |
| CAB-20.1 | Model CAB-20 with <u>AC power Strip</u>       | \$ 258.00 |
| CAB-40   | Floor-type <u>cabinet</u> , 45 1/2-inch space | \$ 674.00 |
| CAB-40.1 | Model CAB-40 with AC power strip and panel    | \$ 768.00 |
| CAB-40.2 | Model CAB-40.1 with 450 CFM intake fan        | \$ 905.00 |
| CAB-50   | Floor-type <u>cabinet</u> , 57 3/4-inch space | \$ 705.00 |
| CAB-50.1 | Model CAB-50 with AC power Strip and panel    | \$ 789.00 |
| CAB-50.2 | Model CAB-50.1 with 450 CFM intake fan        | \$ 937.00 |
| CAB-60   | Floor-types <u>cabinet</u> , 70-inch space    | \$ 768.00 |
| CAB-60.1 | Model CAB-60 with AC power strip and panel    | \$ 853.00 |
| CAB-60.2 | Model CAB-60.1 with 450 CFM intake fan        | \$ 995.00 |

## Selected Accessories:

|  |  |           |
|--|--|-----------|
| Corner Base-Mounted <u>Shocks</u> (Set of 4) |  |           |
| SHK-1/20                                     | Maximum equipment weight: 200 lbs          | \$ 47.00  |
| SHK-1/60                                     | Maximum equipment weight: 600 lbs          | \$ 100.00 |
| SHK-1/100                                    | Maximum equipment weight: 1000 lbs         | \$ 142.00 |
| Top Rear-Corner Shocks (Set of 2)            |  |           |
| SHK-10                                       | Used to <u>sy</u> abilize lateral movement | \$ 23.00  |

CDN-3 Carrier-Operated Anti-Noise Device (CODAN)

The CDN-3 is used to sample the IF of receivers and activate the receiver if the AM voice is of telephone quality. Standard receiver IF's include 100,250,455 and 1750 KHz.

Includes: Technical specifications per Bulletin 4060  
 Single phase primary power: 115 volts, 50/60 Hz  
 230 volts, 50/60 Hz available on request  
 Two copies of Technical Manual 06.4060.

|             |  |             |
|-------------|--|-------------|
| CDN-3(100)  | <u>CODAN Unit</u> , 100 KHz Receiver IF  | \$ 1,505.00 |
| CDN-3(250)  | <u>CODAN Unit</u> , 250 KHz Receiver IF  | \$ 1,505.00 |
| CDN-3(455)  | <u>CODAN Unit</u> , 455 KHz Receiver IF  | \$ 1,505.00 |
| CDN-3(1750) | <u>CODAN Unit</u> , 1750 KHz Receiver IF | \$ 1,505.00 |

## EQUIPMENT

CFA-2  
CFA-3CFA-2 Frequency Shift Teletype Converter (Two Channel) *(Diversity)*

The CFA-2 provides audio to DC conversion of frequency shifted teletype signals detected by a receiver. The unit includes an internal loop battery supply which provides sufficient current for driving teletype output devices. Two channels of frequency shifted signals can be accommodated. Audio input filters are available as options.

Includes: Technical specifications per Bulletin 4005-1  
Single phase primary power: 115 volts, 50/60Hz  
230 volts, 50/60 Hz available on request.  
Two copies of Technical Manual 06.4005-1

|         |  |             |
|---------|--|-------------|
| CFA-2   | <u>Frequency Shift Converter</u>         | \$ 1,621.00 |
| CFA-2.1 | Model CFA-2 with 2000Hz Center Frequency |             |
|         | Filter                                   | \$ 1,853.00 |
| CFA-2.2 | Model CFA-2 with 2550Hz Center Frequency |             |
|         | Filter                                   | \$ 1,853.00 |

## CFA-3 Frequency Shift Teletype Converter (One-Channel)

The CFA-3 performs the same function as the CFA-2 but for only one audio channel. The internal loop battery supply is included and input filters are available as options.

Includes Technical specifications per Bulletin 4005-7  
Single phase primary power: 115 volts, 50/60Hz  
230 volts, 50/60Hz available on request  
Two copies of Technical Manual 06.4005-7.

|         |   |           |
|---------|---|-----------|
| CFA-3   | <u>Frequency Shift Converter</u>          | \$ 682.00 |
| CFA-3.1 | Model CFA-3 with 2000Hz Center Frequency  |           |
|         | Filter                                    | \$ 914.00 |
| CFA-3.2 | Model CFA-3 with 2550 Hz Center Frequency |           |
|         | Filter                                    | \$ 914.00 |

## EQUIPMENT

CON-1  
CON-2

## CON-1 Series: Low-Profile Equipment Operating Consoles

The CON-1 series are rugged operating consoles constructed of 1/16-inch steel and designed for mounting any equipment on 19-inch front panels. White formica is used on the operating table and console top with the cabinets painted blue-grey textured vinyl.

Includes: Technical specifications per Bulletins 7100-1

|           |  |            |
|-----------|--|------------|
| CON-1/1   | Single-section Console                         | \$ 516.00  |
| CON-1.1/1 | Model CON-1/1 with AC power strip "            | \$ 547.00  |
| CON-1/2   | Two-Section Console                            | \$ 989.00  |
| CON-1.1/2 | Model CON-1/2 with AC power strip(2)           | \$1,005.00 |
| CON-1/3   | Three-Section Console                          | \$1,474.00 |
| CON-1.1/3 | Model CON-1/3 with AC power strip(3)           | \$1,584.00 |
| CON-1.1/4 | Four-Section Console with AC power<br>strip(4) | \$2,047.00 |
| CON-1.1/5 | Five Section Console with AC power<br>strip(5) | \$2,442.00 |

## Selected Accessories:

Corner Base-Mounted Shocks (Set of 4)

|           |                                      |           |
|-----------|--------------------------------------|-----------|
| SHK-1/20  | Maximum equipment weight: 200 lbs "  | \$ 47.00  |
| SHK-1/60  | Maximum equipment weight: 600 lbs "  | \$ 100.00 |
| SHK-1/100 | Maximum equipment weight: 1000 lbs " | \$ 142.00 |

Top Rear-Corner Shocks (Set of 2)

|          |  |                  |
|----------|--|------------------|
| SHK-10   | Used to stabilize lateral movement           | \$ 23.00         |
| ABI-7100 | Recessed florescent lighting in con-<br>sole | \$ 30.00/Section |
| APP-7100 | Auxilliary AC power panel                    | \$ 55.00/Section |
| TW-7100  | Typewriter well, 4X19-inches                 | \$ 25.00         |

## CON-2 Series Operating Consoles

The CON-2 series of consoles are identical to the CON-1 series with the addition of a 21-inch vertical section for mounting additional equipment. The CON-2 is reinforced and is finished in a blue-grey textured vinyl paint. Includes: Technical specifications per Bulletin 7100-1

|           |   |             |
|-----------|---|-------------|
| CON-2.1/1 | Single Section Console with AC power<br>strip   | \$ 1,163.00 |
| CON-2.1/2 | Two Section Console with AC power<br>strip(2)   | \$ 2,026.00 |
| CON-2.1/3 | Three Section Console with AC power<br>strip(3) | \$ 3,006.00 |
| CON-2.1/4 | Four Section Console with AC power<br>strip(4)  | \$ 3,968.00 |

## Selected Accessories:

Corner Base-Mounted Shocks (Set of 4)

|           |                                    |           |
|-----------|------------------------------------|-----------|
| SHK-2/60  | Maximum equipment weight: 600 lbs  | \$ 137.00 |
| SHK-2/100 | Maximum equipment weight: 1000 lbs | \$ 189.00 |
| SHK-2/150 | Maximum equipment weight: 1500 lbs | \$ 247.00 |

Top Rear-Corner Shocks (Set of 2)

|          |   |                  |
|----------|---|------------------|
| SHK-11   | Used to stabilize lateral movement      | \$ 72.00         |
| ABI-7100 | Recessed florescent lighting in console | \$ 30.00/Section |

## COP-20/25 Series: Synthesizer Remote Control Systems

The COP-() systems are used to remotely control all functions of up to fifty single synthesized receivers or fifty synthesized transmitters. The basic control systems consists of 1) a push-button digital programmer (P/C); 2) a readback indicator (R/I) for status indication of each equipment controlled. The entire system can be overridden locally. The only constraints on the system are as follows:

1. For each site, equipment must be located within 250 feet of one other; and
2. For each site, one memory unit (RTMU) must be used for every ten equipments controlled.

Includes: Fully wired equipment console for P/C and R/I.  
Single phase primary power: 115 volts, 50/60Hz  
230 volts, 50/60 Hz available on request.

<sup>10K</sup>  
Synthesized DDDR-10K Receiver Remote Control System  
Technical specifications per Bulletin 6010-1  
Two copies of Operator's Technical Manual 07.6010-1K

|            |  |             |
|------------|--|-------------|
| COP-20.1-1 | <u>R/C System</u> controlling one receiver at one site   | \$24,500.00 |
| COP-20.105 | <u>R/C System</u> controlling five receivers at one site | \$47,595.00 |
| COP-20.110 | <u>R/C System</u> controlling ten receivers at one site  | \$76,463.00 |

## Selected Accessories:

|             |  |             |
|-------------|--|-------------|
| 08.6010-1/K | (2) Servicing Technical <u>Manuals</u> | \$ 185.00   |
| RTMU-41     | <u>Memory Unit</u> (M/C)               | \$ 4,653.00 |

## Synthesized DDDR-10K Receiver Remote Control Systems

Technical specifications per Bulletin 6010-1  
Two Copies of Operator's Technical Manual 07.6010-1/L

|            |  |              |
|------------|--|--------------|
| COP-20.201 | <u>R/C System</u> controlling one receiver at one site   | \$ 30,274.00 |
| COP-20.205 | <u>R/C System</u> controlling five receivers at one site | \$ 76,463.00 |

## Selected Accessories:

|             |  |             |
|-------------|--|-------------|
| 08.6010-1/L | (2) Servicing Technical <u>Manuals</u> | \$ 194.00   |
| RTMU-42     | <u>Memory Unit</u> (M/C)               | \$ 6,705.00 |

## Synthesized DDDR-10M Receiver Remote Control Systems

Technical specifications per Bulletin 6010-1  
Two copies of Operator's Technical Manual 07.6010-1/M

|            |  |              |
|------------|--|--------------|
| COP-20.301 | <u>R/C/ System</u> controlling one receiver at one site  | \$ 30,274.00 |
| COP-20.305 | <u>R/C System</u> controlling five receivers at one site | \$ 76,463.00 |

## Selected Accessories:

|             |  |             |
|-------------|--|-------------|
| 08.6010-1/M | (2) Servicing Technical <u>Manuals</u> | \$ 194.00   |
| RTMU-42     | <u>Memory Unit</u> (M/C)               | \$ 6,705.00 |

(Continued Next Page)

## EQUIPMENT

COP-20/25  
COP-35

## COP-20/25 Series: Synthesizer Remote Control Systems (Continued)

Synthesized GPTR-()K Transmitter Remote Control System  
 Technical specifications per Bulletin 6010-2  
 Two copies of Operator's Technical Manual 07.6010-2/G

COP-25.101 R/C System controlling one transmitter at one  
 site \$ 24,500.00  
 COP-25.105 R/C System controlling five transmitters at one  
 site. \$ 47,595.00  
 COP-25.110 R/C System controlling ten transmitters at one  
 site. \$ 76,463.00

## Selected Accessories:

08.6010-2/G (2) Servicing Technical Manuals \$ 160.00  
 RTMU-41A Memory Unit (M/C) \$ 6,705.00

## Synthesized HFTR-()K Transmitter Remote Control Systems

Technical specifications per Bulletin 6010-2  
 Two copies of Operator's Technical Manual 07.6010-2/H

COP-25.201 R/C System controlling one transmitter at one  
 site. \$ 24,500.00  
 COP-25.205 R/C System controlling five transmitters at one  
 site. \$ 47,595.00  
 COP-25.210 R/C System controlling ten transmitters at one  
 site. \$ 76,463.00

## Selected Accessories:

08.6010-2/H (2) Servicing Technical Manuals \$ 160.00  
 RTMU-41A Memory Unit (M/C) \$ 6,705.00

## COP-35

Series: Synthesized Transmitter Remote Control Systems  
 The COP-35 series are used to control all functions of a  
 synthesized transmitter from a remote location. It is  
 a one-for-one device in that it uses one programmer/  
 readback unit (P/R) and one equipment decoder unit (D/C).  
 The interface between the two units is audio tone requiring  
 a single telephone pair. An application kit can be provided  
 as an option for switching the P/R output to up to ten  
 telephone pairs.

Includes: Equipment consolette for P/R unit  
 Technical specifications per Bulletin 6010-3  
 Single phase primary power: 115 volts, 50/60Hz  
 230 volts, 50/60 Hz available on request  
 Two copies of Technical Manual 06.6010-3.

COP-35.101 Hard/Audio-tone Transmitter Control System  
 \$ 6,779.00

## Selected Accessories:

KT6010-3/1 Kit providing switching of P/R unit for  
 control of several transmitters \$ 408.00  
Equipment (tone) decoder unit (D/C) \$ 3,837.00



## EQUIPMENT

COR-4B  
CSS-2A

## COR-4B Coastal Harbor (CODAN) Receiving Systems

The COR-4B series are coastal/harbor communication systems used when telephone-grade quality voice is essential. The systems are fixed channel receiving units capable of discriminating between AM and SSB signals and activating the audio only when the received signals are of the highest quality. Test oscillators and distribution units included.

Includes: Fully wired CAB-60 equipment cabinet  
 Technical specifications per Bulletin 3019B  
 Single phase primary power: 115 volts, 50/60Hz  
 230 volts, 50/60Hz available on request.  
 Two copies of Technical Manual 07.3019B

|          |  |              |
|----------|--|--------------|
| COR-4B/1 | Single-Channel <u>CODAN Receiving System</u> | \$ 4,342.00  |
| COR-4B/2 | Two-Channel <u>CODAN Receiving System</u>    | \$ 8,337.00  |
| COR-4B/3 | Three-Channel <u>CODAN Receiving System</u>  | \$ 12,232.00 |
| COR-4B/4 | Four-Channel <u>CODAN Receiving System</u>   | \$ 16,331.00 |

## Selected Accessories:

|          |  |           |
|----------|--|-----------|
| 08.3019B | (2) Servicing Technical <u>Manuals</u>       | \$ 99.00  |
| BSP-1D   | Single channel <u>monitor panel</u>          | \$ 437.00 |
| BSP-1(4) | <u>DC battery power source</u> (4-hour life) | \$ 389.00 |
| TOC-7    | COR-4B/2 fiberglass <u>operating case</u>    | \$ 468.00 |
| VRA-6    | Stainless 18-foot vertical <u>antenna</u>    | \$ 411.00 |

Integrated Receiving System: Bulletin 3520  
 SYM 3520 COR-4B Receiving Systems See SYM3520 price:

## CSS-2A

Primary Frequency Standard  
 The CSS-2A provides a stabilized output of one part in <sup>10<sup>9</sup></sup>~~10<sup>8</sup>~~ per day at frequencies of 100KHz, 1MHz and 10MHz. Used for both transmitters and receivers.

Includes: Technical specifications per Bulletin 6020-3  
 Single phase primary power: 115 volts, 50/60Hz  
 230 volts, 50/60 Hz available on request  
 Two copies of Technical Manual 06.6020-3

|        |                                   |             |
|--------|-----------------------------------|-------------|
| CSS-2A | Primary <u>Frequency Standard</u> | \$ 5,143.00 |
|--------|-----------------------------------|-------------|

## Selected Accessories:

|          |  |           |
|----------|--|-----------|
| BPS-2(4) | <u>DC battery power source</u> (4-hour life) | \$ 668.00 |
|----------|--|-----------|

## EQUIPMENT

DAC-()

DAC-() Series: Dipole Receiving Antenna Couplers

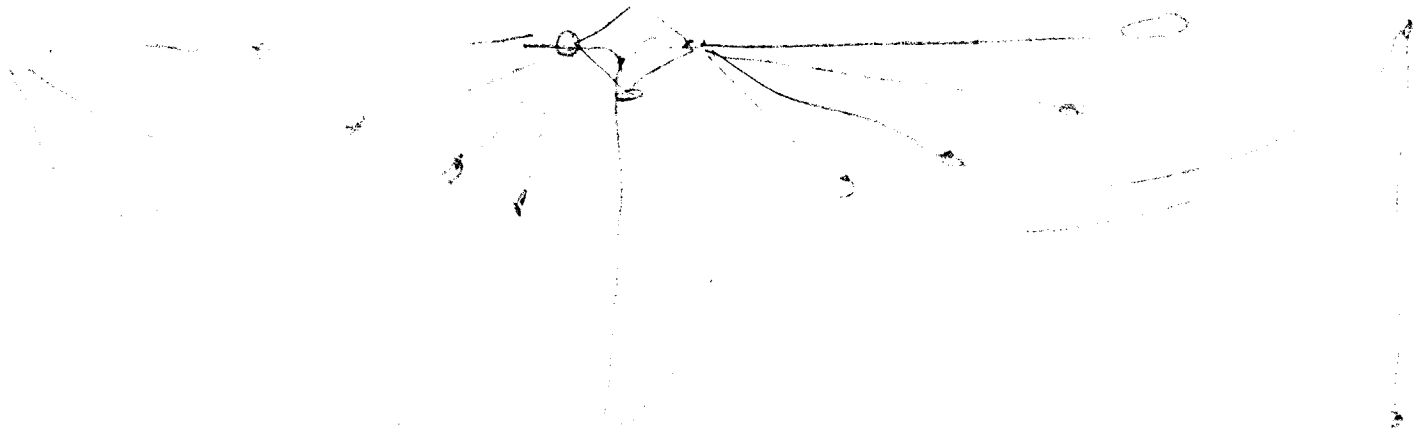
The DAC series of antenna couplers provided the proper match between a dipole or endfed antenna and the input of a multicoupler or receiver. The coupler container is constructed of rugged fiberglass with three eyelet mounting rings.

Includes: Technical specifications per Bulletin 4035-3  
Two copies of Technical Manual 06.4035-3

|        |   |    |        |
|--------|---|----|--------|
| DAC-1  | 70/70-ohm Coupler with N-Type <u>Connector</u>    | \$ | 145.00 |
| DAC-4  | 300/70-ohm Coupler with BNC-Type <u>Connector</u> | \$ | 174.00 |
| DAC-5  | 70/70-ohm Coupler with UHF-Type <u>Connector</u>  | \$ | 189.00 |
| DAC-6  | 70/50-ohm Coupler with N-Type <u>Connector</u>    | \$ | 153.00 |
| DAC-9  | 475/50-ohm Coupler with N-Type <u>Connector</u>   | \$ | 153.00 |
| DAC-11 | Long Wire (End Fed) <u>Coupler</u>                | \$ | 111.00 |
| DAC-14 | 200/50-ohm <u>Coupler</u> with PL259              | \$ | 163.00 |

## Selected Accessories:

|            |   |    |       |
|------------|---|----|-------|
| KT4035-3/1 | <u>Kit</u> for mounting DAC to telephone pole | \$ | 46.00 |
|------------|---|----|-------|



## EQUIPMENT

DDR()-10K

DDR()-10K Series: Non-Diversity HF/ISB Receiving Systems

The DDR()-10K synthesized receivers are non-diversity systems consisting of three basic units: an RF tuner an audio demultiplexer; and a frequency synthesizer. AFC (automated frequency control) is provided with each of the three models which make up the DDR()-10K Series:

Model DDR-10K Requires front panel selection of all functions including frequency, by the operator. Tuning is accomplished manually by the operator.

Model DDRA-10K Requires front panel selection of all functions including frequency, by the operator. Tuning is accomplished automatically once the frequency has been selected. The system consists of five units.

Model DDDR-10K Basically an automated system with all circuits that are necessary for complete remote control. The remote control system, however, is NOT included due to the many possible applications. Recommended remote control system TMC Model COP-20.

Includes: Track slides as required for receiver units  
 Technical specifications per Bulletin 3005-3  
 Audio bandwidth each sideband:  
 250-3040 Hz (CCIR) or  
 250-6080 Hz (CCIR)  
 Single phase primary power: 115 volts, 50/60 Hz  
 230 volts, 50/60 Hz available on request.

DDR-10K Non-diversity HF/ISB Receiving Systems

Fully wired CAB-40 equipment cabinet

Two copies of Operator's Technical Manual 07.3005-3/0

|         |           |                                   |              |
|---------|-----------|-----------------------------------|--------------|
| DDR-10K | Type 2220 | ISB (A3B), Two 3KHz sidebands     | \$ 26,695.00 |
|         | Type 2221 | Type 2220 with Matched Equalizers | \$ 27,168.00 |
|         | Type 2620 | ISB (A3B), Two 6KHz sideband      | \$ 26,695.00 |
|         | Type 2621 | Type 2620 with Matched Equalizers | \$ 27,168.00 |
|         | Type 4220 | ISB (A9B), Four 3KHz sidebands    | \$ 28,379.00 |
|         | Type 4221 | Type 4220 with Matched Equalizers | \$ 28,853.00 |

## Selected Accessories:

|             |  |           |
|-------------|--|-----------|
| 08.3005-3/0 | (2) Servicing Technical <u>Manuals</u> | \$ 130.00 |
|-------------|--|-----------|

(Continued Next Page)

## EQUIPMENT

DDR()-10K

DDR()-10K Series: Non-diversity HF/ISB Receiving Systems (Continued)

DDRA-10K Automated Non-Diversity HF/ISB Receiving Systems  
Fully Wired CAB-50 equipment cabinet  
Two copies of Operator's Technical Manual 07.3005-3/1

|          |           |                                   |              |
|----------|-----------|-----------------------------------|--------------|
| DDRA-10K | Type 2220 | ISB(A3B), Two 3KHz sidebands      | \$ 37,270.00 |
|          | Type 2221 | Type 2220 with Matched Equalizers | \$ 37,600.00 |
|          | Type 2620 | ISB(A3B), Two 6KHz sidebands      | \$ 37,126.00 |
|          | Type 2621 | Type 2620 with Matched Equalizers | \$ 37,600.00 |
|          | Type 4220 | ISB(A9B), Four 3KHz sidebands     | \$ 38,832.00 |
|          | Type 4221 | Type 4220 with Matched Equalizers | \$ 39,411.00 |

## Selected Accessories:

|             |  |           |
|-------------|--|-----------|
| 08.3005-3/1 | (2) Servicing Technical <u>Manuals</u> | \$ 163.00 |
|-------------|--|-----------|

DDRR-10K Automated/Remote Non-Diversity HF/ISB Receiving Systems  
Fully Wired CAB-50 equipment cabinet  
Two copies of Operator's Technical Manual 07.3005-3/2

|          |           |                                   |              |
|----------|-----------|-----------------------------------|--------------|
| DDRR-10K | Type 2220 | ISB(A3B), Two 3KHz sidebands      | \$ 30,447.00 |
|          | Type 2221 | Type 2220 with Matched Equalizers | \$ 31,026.00 |
|          | Type 2620 | ISB(A3B), Two 6KHz sidebands      | \$ 30,447.00 |
|          | Type 2621 | Type 2620 with Matched Equalizers | \$ 31,026.00 |
|          | Type 4220 | ISB(A9B), Four 3KHz sidebands     | \$ 32,132.00 |
|          | Type 4221 | Type 4220 with Matched Equalizers | \$ 32,711.00 |

## Selected Accessories:

|             |  |           |
|-------------|--|-----------|
| 08.3005-3/2 | (2) Servicing Technical <u>Manuals</u> | \$ 179.00 |
|-------------|--|-----------|

## Selected DDR()-10K Accessories:

|          |  |                          |
|----------|--|--------------------------|
| AMC-8    | Eight-output Antenna <u>Multicouplers</u>  | \$ <sup>807</sup> 900.00 |
| BSP-2D   | Two Channel Monitor <u>Speaker Panel</u>   | \$ 595.00                |
| CFA-2    | Frequency Shift <u>Teletype Converter</u>  | \$ 1,621.00              |
| DRA-1    | Dipole Receiving <u>Antenna 2-16 MHz</u>   | \$ 853.00                |
| LPF-2/20 | 20-Channel Antenna <u>Input Filter</u>     | \$ 3,332.00              |
| VRA-11   | Fiberglass 35-foot <u>Vertical Antenna</u> | \$ 1,195.00              |

Integrated Receiving Systems: Bulletin 3550

SYM 3550 DDR()-10K Receiving Systems

See SYM3550 prices

## EQUIPMENT

DDRR()-10L

DDR()-10L Series: Space Diversity HF/ISB Receiving Systems

The DDR()-10L synthesized receivers are similar to the DDR()-10K systems but are capable of dual space diversity operation. Two RF tuners and two Audio demultiplexers are used with one frequency synthesizer. AFC is provided with each of the three models which make up the DDR()-10L Series.

- Model DDR-10L Requires front panel selection of all functions, including frequency, by the operator. Tuning is accomplished manually by the operator
- Model DDRA-10L Requires front panel selection of all functions, including frequency, by the operator. Tuning of both RF tuners is accomplished automatically once frequency has been selected. The system consists of eight units.
- Model DDDR-10L Basically an automated system with all circuits that are necessary for complete remote control. The remote control system, however, is NOT included due to the many possible applications.  
Recommended remote control system: TMC Model COP-20

Includes: Track slides as required for receiver units  
 Technical specifications per Bulletin 3015-1  
 Audio bandwidth each sideband:  
 250-3040 Hz (CCIR) or  
 250-6080 Hz (CCIR)  
 Single phase primary power: 115 volts, 50/60 Hz  
 230 volts, 50/60 Hz available on request.

## DDR-10L Space Diversity HF/ISB Receiving System

Fully wired CAB-60 equipment cabinet

Two copies of Operator's Technical Manual 07.3015-1/0

|         |           |                                   |              |
|---------|-----------|-----------------------------------|--------------|
| DDR-10L | Type 2220 | ISB(A3B), Two 3KHz sidebands      | \$ 46,158.00 |
|         | Type 2221 | Type 2220 with Matched Equalizers | \$ 47,105.00 |
|         | Type 2620 | ISB(A3B), Two 6KHz sidebands      | \$ 46,158.00 |
|         | Type 2621 | Type 2620 with Matched Equalizers | \$ 47,105.00 |
|         | Type 4220 | ISB(A9B), Four 3KHz sidebands     | \$ 49,516.00 |
|         | Type 4221 | Type 4220 with Matched Equalizers | \$ 50,463.00 |

## Selected Accessories:

|             |  |           |
|-------------|--|-----------|
| 08.3015-1/0 | (2) Servicing Technical <u>Manuals</u> | \$ 174.00 |
|-------------|--|-----------|

(Continued Next Page)

## EQUIPMENT

DDR()-10L

DDR()-10L Series: Space Diversity HF/ISB Receiving Systems (Continued)

DDRA-10L Automated Space Diversity HF/ISB Receiving Systems  
Fully wired CAB-6 equipment cabinet  
Two copies of Operator's Technical Manual 07.3015-1/1

|          |           |                                   |              |
|----------|-----------|-----------------------------------|--------------|
| DDRA-10L | Type 2220 | ISB(A3B) Two 3KHz sidebands       | \$ 72,889.00 |
|          | Type 2221 | Type 2220 with Matched Equalizers | \$ 73,837.00 |
|          | Type 2620 | ISB(A3B), Two 6KHz sidebands      | \$ 72,995.00 |
|          | Type 2621 | Type 2620 with Matched Equalizers | \$ 74,047.00 |
|          | Type 4220 | ISB(A9B) Four 3KHz sidebands      | \$ 76,247.00 |
|          | Type 4221 | Type 4220 with Matched Equalizers | \$ 78,142.00 |

## Selected Accessories:

|             |  |           |
|-------------|--|-----------|
| 08.3015-1/1 | (2) Servicing Technical <u>Manuals</u> | \$ 189.00 |
|-------------|--|-----------|

DDRR-10L Automated/Remote Space Diversity HF/ISB Receiving Systems  
Fully wired CAB-60 equipment cabinet  
Two copies of Operator's Technical Manual 07.3015-1/2

|          |           |                                   |              |
|----------|-----------|-----------------------------------|--------------|
| DDRR-10L | Type 2220 | ISB(A3B), Two 3KHz sidebands      | \$ 53,326.00 |
|          | Type 2221 | Type 2220 with Matched Equalizers | \$ 54,274.00 |
|          | Type 2620 | ISB(A3B), Two 6KHz sidebands      | \$ 53,432.00 |
|          | Type 2621 | Type 2620 with Matched Equalizers | \$ 54,484.00 |
|          | Type 4220 | ISB(A9B), Four 3KHz sidebands     | \$ 56,684.00 |
|          | Type 4221 | Type 4220 with Matched Equalizers | \$ 58,579.00 |

## Selected Accessories:

|             |  |           |
|-------------|--|-----------|
| 08.3015-1/2 | (2) Servicing Technical <u>Manuals</u> | \$ 195.00 |
|-------------|--|-----------|

## Selected DDR()-10L Accessories:

|          |  |  |
|----------|--|--|
| AMC-8    | Eight-Output Antenna <u>Multicoupler</u>     | \$ <del>900.00</del> <sup>827.00</sup> |
| BSP-2D   | Two-Channel Monitor <u>Speaker Panel</u>     | \$ 595.00                              |
| CFA-2    | Two-Channel <u>Frequency Shift Converter</u> | \$ 1,621.00                            |
| LPF-2/20 | 20-Channel Antenna <u>Coupler</u>            | \$ 3,332.00                            |
| RAC-7    | Rhombic Antenna <u>Coupler</u>               | \$ 284.00                              |
| VRA-11   | 35-foot Fiberglass Vertical <u>Antenna</u>   | \$ 1,195.00                            |

Integrated Receiving Systems:  
SYM 3551

Bulletin 3551

DDR()-10L Receiving Systems SEE SYM3551 pri

## EQUIPMENT

DDR()-10M

DDR()-10M Series: Frequency Diversity HF/ISB Receiving Systems

The DDR()-10M synthesized receivers are similar to the DDR()-10M but are capable of dual frequency diversity operation. Two RF tuners, two audio demulticouplers, and two frequency synthesizers are used for one complete system. AFC is provided with each of the three model make up the DDR()-10M Series.

Model DDR-10M Requires front panel selection of all functions, including frequency, by the operator. Tuning is accomplished manually by the operator.

Model DDRA-10M Requires front panel selection of all functions, including frequency, by the operator. Tuning of both RF tuners to their respective frequency synthesizers is accomplished automatically once the frequencies have been selected. The system consists of nine units..

Model DDRR-10M Basically an automated system with all circuits that are necessary for complete remote control. The remote control system, however, is NOT included due to the many possible applications. Recommended remote control system: TMC Model COP-20.

Includes: Fully wired CAB-60 equipment cabinet  
Track slides as required for receiver units  
Technical specifications per Bulletin 3015-2  
Audio bandwidth each sideband:  
250-3040 Hz (CCIR) or  
250-6080 Hz (CCIR)  
Single phase primary power: 115 volts , 50/60 Hz  
230 volts, 50/60 Hz available on request.

|         |           |                                   |              |
|---------|-----------|-----------------------------------|--------------|
| DDR-10M | Type 2220 | ISB(A3B), Two 3KHz sidebands      | \$ 53,389.00 |
|         | Type 2221 | Type 2220 with Matched Equalizers | \$ 54,337.00 |
|         | Type 2620 | ISB(A3B), Two 6KHz sidebands      | \$ 53,389.00 |
|         | Type 2621 | Type 2620 with Matched Equalizers | \$ 54,547.00 |
|         | Type 4220 | ISB(A9B), Four 3KHz sidebands     | \$ 56,747.00 |
|         | Type 4221 | Type 4220 with Matched Equalizers | \$ 58,642.00 |

## Selected Accessories:

|             |  |           |
|-------------|--|-----------|
| 08.3015-1/0 | (2) Servicing Technical <u>Manuals</u> | \$ 179.00 |
|-------------|--|-----------|

(Continued Next Page)

## EQUIPMENT

DDR()-10M

DDR()-10M Automated Frequency Diversity HF/ISB Receiving Systems

DDRA-10M Automated Frequency Diversity HF/ISB Receiving Systems  
Two copies of Operators Technical Manual 07.3015-2/1

|          |           |                                   |              |
|----------|-----------|-----------------------------------|--------------|
| DDRA-10M | Type 2220 | ISB(A3B), Two 3KHz sidebands      | \$ 69,595.00 |
|          | Type 2221 | Type 2220 with Matched Equalizers | \$ 70,542.00 |
|          | Type 2620 | ISB(A3B), Two 6KHz sidebands      | \$ 69,595.00 |
|          | Type 2621 | Type 2620 with Matched Equalizers | \$ 70,753.00 |
|          | Type 4220 | ISB(A9B), Four 3KHz sidebands     | \$ 70,842.00 |
|          | Type 4221 | Type 4220 with Matched Equalizers | \$ 74,842.00 |

## Selected Accessories:

|             |                                 |           |
|-------------|---------------------------------|-----------|
| 08.3015-2/1 | (2) Servicing Technical Manuals | \$ 205.00 |
|-------------|---------------------------------|-----------|

DDRR-10M Automated/Remote Frequency Diversity HF/ISB Receiving Systems  
Two copies of Operator's Technical Manual 07.3015-2/2

|          |           |                                   |              |
|----------|-----------|-----------------------------------|--------------|
| DDRR-10M | Type 2220 | ISB(A3B), Two 3KHz sidebands      | \$ 62,789.00 |
|          | Type 2221 | Type 2220 with Matched Equalizers | \$ 63,737.00 |
|          | Type 2620 | ISB(A3B), Two 6KHz sidebands      | \$ 62,789.00 |
|          | Type 2621 | Type 2620 with Matched Equalizers | \$ 63,947.00 |
|          | Type 4220 | ISB(A9B), Four 3KHz sidebands     | \$ 66,147.00 |
|          | Type 4221 | Type 4220 with Matched Equalizers | \$ 68,042.00 |

## Selected Accessories:

|             |                                 |           |
|-------------|---------------------------------|-----------|
| 08.3015-2/2 | (2) Servicing Technical Manuals | \$ 205.00 |
|-------------|---------------------------------|-----------|

## Selected DDR()-10M Accessories:

|          |  |                                      |
|----------|--|--------------------------------------|
| AMC-8    | Eight-Output Antenna Multicoupler          | \$ <del>900</del> <sup>807</sup> .00 |
| BSP-2D   | Two-Channel Montior <u>Speaker Panel</u>   | \$ 595.00                            |
| CFA-2    | Frequency Shift <u>Teletype Converter</u>  | \$ 1,621.00                          |
| LPF-2/20 | 20-Channel Antenna Input <u>Filter</u>     | \$ 3,332.00                          |
| RAC-7    | Rhombic Antenna <u>Coupler</u>             | \$ 284.00                            |
| VRA-11   | Fiberglass 35-foot Vertical <u>Antenna</u> | \$ 1,195.00                          |

## Integrated Receiving Systems:

Bulletin 3552

SYM 3552

DDR()-10M Receiving Systems

See SYM3552 prices



## EQUIPMENT

DRA-1  
DRA-2

## DRA-1

Dipole Receiving Antennas (Less Towers)

The DRA-1 series of dipole receiving antennas are used in conjunction with HF receivers operating in the 2 to 30MHz range. The antennas are pre-assembled and cut to the proper "frequency" length. The DAC couplers are used, ~~and Towers~~ are not included.

Includes: Pre-assembled kit ready for installation  
Technical specifications per Bulletin 4046-1  
Two copies of Technical Manual 06.4046-1.

|           |                             |                |    |        |
|-----------|-----------------------------|----------------|----|--------|
| DRA-1(4)  | Operating Range: 2 to 4MHz  | <i>Antenna</i> | \$ | 663.00 |
| DRA-1(8)  | Operating Range: 2 to 8MHz  | "              | \$ | 784.00 |
| DRA-1(16) | Operating Range: 2 to 16MHz | "              | \$ | 853.00 |

## DRA-2

Dipole Receiving Antennas (Less Center Pole)

The DRA-2 series are commonly referred to as "drooping" dipoles since the coupler is supported by a single pole at the center and the elements radiate out to short poles at the outer ends. The antenna is simpler to install than the DRA-1. ~~It~~ uses the DAC series of couplers, ~~and is not included with~~ the mounting poles.

Includes: Pre-assembled kit ready for installation  
Technical specifications per Bulletin 4046-2  
Two copies of Technical Manual 06.4046-2

|           |                             |                |    |        |
|-----------|-----------------------------|----------------|----|--------|
| DRA-2(4)  | Operating Range: 2 to 4MHz  | <i>Antenna</i> | \$ | 638.00 |
| DRA-2(8)  | Operating Range: 2 to 8MHz  | "              | \$ | 768.00 |
| DRA-2(16) | Operating Range: 2 to 16MHz | "              | \$ | 836.00 |

## DTA-500

500-Watt Dipole Transmitting Antennas (Less Towers)

The DTA-500 dipole antennas are capable of handling up to 500 watts PEP in the HF spectrum. The antennas are cut to the specific operating frequencies of the transmitter and utilize the DTC series of antenna couplers. Towers are not included.

Includes: Pre-assembled kit ready for installation  
Technical specifications per Bulletin 2060-2  
Two copies of Technical Manual 06.2060-2

|                             |   |    |          |
|-----------------------------|---|----|----------|
| <i>Antenna</i> DTA-500/1(4) | Single Frequency Operation:4MHz Region      | \$ | 768.00   |
| DTA-500/1(8)                | Single Frequency Operation:8MHz Region      | \$ | 707.00   |
| DTA-500/1(16)               | Single Frequency Operation:16MHz Region     | \$ | 589.00   |
| DTA-500/2(8)                | Two Frequency Operation:4 to 8MHz Region    | \$ | 889.00   |
| DTA-500/2(16)               | Two Frequency Operation:4 to 16MHz Region   | \$ | 889.00   |
| DTA-500/3(8)                | Three Frequency Operation:4 to 8 MHz Region | \$ | 1,011.00 |
| DTA-500/3(16)               | Three Frequency Operation:4 to 16MHz Region | \$ | 1,005.00 |
| DTA-500/4(16)               | Four Frequency Operation:4 to 16MHz Region  | \$ | 1,268.00 |
| DTA-500/5(16)               | Five Frequency Operation:4 to 16MHz Region  | \$ | 1,484.00 |

## EQUIPMENT

DTC ()

DTC-() Series: 500-Watt Dipole Transmitting Couplers

The DTC couplers are used in transmitting dipole antennas to provide proper matching between the feed line to the antenna and the antenna elements. The coupler can feed from the center or either end of the antenna.

Includes: Technical specifications per Bulletin 2050-2  
Two copies of Technical Manual 06.2050-2

|        |  |    |        |
|--------|--|----|--------|
| DTC-10 | Dipole Transmitting Antenna <u>Coupler</u> | \$ | 126.00 |
|--------|--|----|--------|

|        |   |    |        |
|--------|---|----|--------|
| DTC-11 | End-fed Transmitting Antenna <u>Coupler</u> | \$ | 111.00 |
|--------|---|----|--------|

## Selected Accessories:

|            |   |    |       |
|------------|---|----|-------|
| KT2050-2/1 | <u>Kit</u> for mounting to telephone pole | \$ | 58.00 |
|------------|---|----|-------|

## EQUIPMENT

7205

GPR-110

GPR-110 General Purpose Communications Receivers, Solid State

The GPR-110 is the latest model of general purpose receivers. It is significantly improved over previous designs and includes such features as solid state circuits, digital readout, and optional frequency synthesis. The receiver is smaller, more compact, and capable of withstanding the effects of shock and vibration to a greater degree than previous models. Includes AFC, and CAB-2 equipment cabinet.

Technical specifications per Bulletin 3005-2

Supplied with: Audio bandwidths 250-3040Hz (CCIR) or 250-6080 Hz (CCIR) each sideband.  
Single phase primary power: 70 to 280 volts, 50/60Hz 10 to 40 volts DC (negative ground) available on request

Two copies of Operator's Technical Manual 07.3005-2

|         |           |  |             |
|---------|-----------|--|-------------|
| GPR-110 | Type 0206 | Non-synthesized USB, 3KHz sideband w/AFC         | \$ 3,989.00 |
|         | Type 0225 | Synthesized USB, 3KHz sideband                   | \$ 4,174.00 |
|         | Type 0226 | Type 0225 with AFC option                        | \$ 4,332.00 |
|         | Type 1206 | Non-synthesized USB/LSB, 3KHz sideband w/AFC     | \$ 4,181.00 |
|         | Type 1225 | Synthesized USB/LSB, 3KHz sidebands              | \$ 4,365.00 |
|         | Type 1226 | Type 1225 with AFC option                        | \$ 4,418.00 |
|         | Type 2225 | Synthesized ISB, Two 3KHz sidebands              | \$ 4,547.00 |
|         | Type 2226 | Type 2225 with AFC option                        | \$ 4,600.00 |
|         | Type 2625 | Synthesized ISB, Two <del>3</del> 3KHz sidebands | \$ 4,558.00 |
|         | Type 2626 | Type 2625 with AFC option                        | \$ 4,611.00 |

## Accessories:

|               |  |                             |
|---------------|--|-----------------------------|
| 08.3005-2     | Servicing Technical Manuals, 2 copies        | \$ 34.00                    |
| KT30.3005-2/1 | <u>Mounting kit for 19" equipment rack</u>   | \$ 71.00                    |
| AMC-8         | Eight-output antenna multicoupler            | \$ <del>900.00</del> 807.00 |
| CFA-2         | Two Channel <u>Frequency shift converter</u> | \$ 1,621.00                 |
| VRA-11        | 35-foot fiberglass <u>vertical antenna</u>   | \$ 1,195.00                 |

## Integrated Receiver Systems:

SYM 3510 GPR-110 Receiver Systems

SYM 3510 prices  
Bulletin 3510

## EQUIPMENT

7205 GPT-500

GPT-500 500-Watt PEP, HF/SSB Transmitters

The GPT-500 is a manually tuned HF transmitter capable of 500-watts PEP output. The transmitter consists of an exciter, linear amplifier (PAL-500) and power supply.

Supplied with Fully wired CAB-30 equipment cabinet  
Track slides as required for transmitter units.  
Single phase primary power: 115volts,  
50/60 Hz 230 volts, 50/60 Hz available on request.

Single Channel 500-Watt HF/SSB Transmitters GPT-500D Series  
Technical specifications per Bulletin 1020-2  
Two copies of Technical Manual 06.1020-2D5  
Operating modes A2H/A2J/A3H/A3A/A3J.  
Audio bandwidth 300-3000Hz each sideband

|          |           |                                     |             |
|----------|-----------|-------------------------------------|-------------|
| GPT-500D | Type 5000 | One Channel USB, 3KHz sideband      | \$ 5,863.00 |
|          | Type 5100 | One Channel USB/LSB, 3KHz sidebands | \$ 6,100.00 |

## Accessory:

|  |           |                                  |           |
|--|-----------|----------------------------------|-----------|
|  | TTRT-( )D | RF <u>channel module</u> (spare) | \$ 253.00 |
|--|-----------|----------------------------------|-----------|

Multi-Channel 500-Watt HF/SSB Transmitter GPT-500E Series  
Technical specifications per Bulletin 1020-2  
Two copies of Technical Manual 06.1020-2E5  
Operating modes A2H/A2J/A3H/A3A/A3J/(A3B,A7J optional)  
Audio bandwidth 250-3040Hz (CCIR) or  
250-6080Hz (CCIR) each sideband

|            |  |                                 |             |
|------------|--|---------------------------------|-------------|
| GPT-500E/4 | <u>Four-Channel HF/SSB Transmitter</u> |                                 |             |
|            | Type 5020                              | USB, 3KHz sideband              | \$ 7,737.00 |
|            | Type 5220                              | ISB(A3B), Two 3KHz sidebands    | \$ 8,016.00 |
|            | Type 5221                              | Type 5220 with AFSK(A7J) option | \$ 8,211.00 |
|            | Type 5260                              | ISB(A3B) Two 6KHz sidebands     | \$ 8,026.00 |

|            |                                       |                                 |             |
|------------|---------------------------------------|---------------------------------|-------------|
| GPT-500E/6 | <u>Six-Channel HF/SSB Transmitter</u> |                                 |             |
|            | Type 5020                             | USB, 3KHz sideband              | \$ 7,926.00 |
|            | Type 5220                             | ISB(A3B), Two 3KHz sidebands    | \$ 8,205.00 |
|            | Type 5221                             | Type 5220 with AFSK(A7J) option | \$ 8,379.00 |
|            | Type 5260                             | ISB(A3B), Two 6KHz sidebands    | \$ 8,216.00 |

|            |   |                                 |             |
|------------|---|---------------------------------|-------------|
| GPT-500E/8 | <u>Eight-Channel HF/SSB Transmitter</u> |                                 |             |
|            | Type 5020                               | USB, 3KHz sideband              | \$ 8,095.00 |
|            | Type 5220                               | ISB(A3B), Two 3KHz sidebands    | \$ 8,374.00 |
|            | Type 5221                               | Type 5220 with AFSK(A7J) option | \$ 8,547.00 |
|            | Type 5260                               | ISB(A3B), Two 6KHz sidebands    | \$ 8,384.00 |

## EQUIPMENT

7205

GPT-500

GPT-500 500-Watt HF/SSB Transmitters (Continued)

Synthesized 500-Watt HF/SSB Transmitters  
 Technical specifications per Bulletin 1015-7  
 Two copies of Technical Manual 06.1015-7  
 Operating modes A1/A3/A3H/A3A/A3J/(A3B,F1,F4 optional)  
 Audio bandwidth 250-3040Hz (CCIR) or  
 250-6080 Hz (CCIR) each sideband.

|          |           |                               |    |           |
|----------|-----------|-------------------------------|----|-----------|
| GPT-500J | Type 3020 | USB, 3KHz sideband            | \$ | 12,337.00 |
|          | Type 3220 | ISB, Two 3KHz sidebands       | \$ | 12,642.00 |
|          | Type 3221 | Type 3220 with FSK/FAX option | \$ | 12,768.00 |
|          | Type 3260 | ISB, Two 6KHz sidebands       | \$ | 12,674.00 |
|          | Type 3261 | Type 3260 with FSK/FAX option | \$ | 12,789.00 |

## Integrated Transmitting Systems:

SYM 1505/0 GPT-500 Transmitter Systems

SYM 1505 prices  
Bulletin 1505

## Selected TX Accessories:

|           |   |    |          |
|-----------|---|----|----------|
| ATS-2A    | <u>Antenna Tuning system</u>                    | \$ | 2,574.00 |
| ATU-1K/8  | <u>Eight-channel antenna tuner</u>              | \$ | 1,611.00 |
| BR-1      | <u>RF impedance bridge</u>                      | \$ | 72.00    |
| DTA-500/5 | <u>Five-channel dipole antenna</u>              | \$ | 1,484.00 |
| DTC-10    | <u>Dipole antenna coupler</u>                   | \$ | 126.00   |
| KY-100    | <u>Telegraph key</u>                            | \$ | 19.00    |
| LPF-1K    | <u>External low pass output filter</u>          | \$ | 300.00   |
| MK-102    | <u>Desk-type PTT microphone</u>                 | \$ | 67.00    |
| SWR-1K    | <u>Standing wave ratio indicator</u>            | \$ | 553.00   |
| TFP-1K    | <u>External switchable harmonic filter</u>      | \$ | 1,242.00 |
| TIS-3D    | <u>External AFSK(A7J) tone keyer</u>            | \$ | 1,531.00 |
| TRC-500   | <u>Rhombic antenna coupler</u>                  | \$ | 547.00   |
| VTA-2A    | <u>35-foot stainless steel vertical antenna</u> | \$ | 321.00   |

EQUIPMENT 7205 GPT-750

GPT-750 750-1000-Watt General Purpose HF Transmitters

The GPT-750 transmitters are used for CW,FSK or SSB transmission. On CW or FSK, the transmitters are capable of 1000 watts average output; SSB at 750 watts PEP.

Supplied with Fully wired CAB-7 equipment cabinet  
Track slides as required for transmitter units  
Single phase primary power: 115 volts 50/60 Hz  
230 volts, 50/60 Hz available on request

GPT-750A2 General Purpose <sup>1000</sup> 100-Watt CW Transmitter \$ 9,726.00

Technical specifications per Bulletin 1007B-1  
Two copies of Technical Manual 06.1007B-1  
Operating modes A1/A2

GPT-750C2 General Purpose <sup>1000</sup> 100-Watt Frequency Shift Transmitter \$ 10,800.00

Technical specifications per Bulletin 1007B-2  
Two copies of Technical Manual 06.1007B-2  
Operating modes A1/F1/F4/

GPT-750F2 General Purpose 750-Watt HF/SSB Transmitter \$ 12,589.00

Technical specifications per Bulletin 1007B-3  
Two copies of Technical Manual 06.1007B-2  
Operating Modes A1/A2H/A3/A3H/A3A/A3J/A3B  
Audio bandwidth 250-3040Hz (CCIR) each sideband

Selected Accessories:

|  |                             |
|--|-----------------------------|
| ATS-2A <u>Antenna tuning system</u>                    | \$ 2,574.00                 |
| BR-1 RF impedance bridge                               | \$ 72.00                    |
| KY-100 <u>Telegraph Key</u>                            | \$ 19.00                    |
| LPF-1K Low pass output filter                          | \$ 300.00                   |
| MK-102 Desk-type PTT microphone                        | \$ 67.00                    |
| SWR-1K <u>Standing wave ratio indicator</u>            | \$ 553.00                   |
| TER-3.5K <u>Terminator/dummy load</u>                  | \$ <del>674.00</del> 732.00 |
| TRC-3.5K <u>Rhombic antenna coupler</u>                | \$ 821.00                   |
| VTA-2A 35-foot stainless steel vertical <u>antenna</u> | \$ 321.00                   |
| WT-1 RF output power <u>meter</u>                      | \$ 72.00                    |

Integrated Transmitting Systems:

SYM 1507/0 GPT-750 Transmitter System

SYM 1507 prices  
Bulletin 1507

## EQUIPMENT

7205 GPT-1K

GPT-1K 1000-Watt General Purpose HF/SSB Transmitters

The GPT-1K transmitters are compact and versatile, capable of both mobile and fixed station installation. Each transmitter consists of an exciter, final, and intermediate amplifier.

Supplied with Fully wired CAB-20 equipment cabinet  
Track slides as required for transmitter units  
Single phase primary power: 115 volts, 50/60 Hz  
230 volts, 50/60 Hz available on request

Single Channel 1000-Watt HF/SSB Transmitters GPT-1K Series

Technical specifications per Bulletin 1020-3

Two copies of Technical Manual 06.1020-3D5

Operating modes A2H/A2J/A3H/A3J

Audio bandwidth 300-3000Hz each sideband

|         |  |             |
|---------|--|-------------|
| GPT-1KD | Type 5000 One channel USB, 3KHz sideband     | \$ 4,489.00 |
|         | Type 5100 One channel USB/LSB, 3KHz sideband | \$ 4,753.00 |

## Accessories:

|  |   |           |
|--|---|-----------|
|  | TRRT-()D RF <u>channel module</u> (spare) | \$ 253.00 |
|--|---|-----------|

Multi-channel 1000-Watt HF/SSB Transmitters GPT-1KE Series

Technical specifications per Bulletin 1020-3

Two copies of Technical Manual 06.1020-3E5

Operating modes A2H/A2J/A3H/A3A/A3J/(A3B,A7J optional)

Audio bandwidth 250-3040Hz (CCIR) or  
each sideband 250-6080Hz (CCIR)

|           |  |             |
|-----------|--|-------------|
| GPT-1KE/4 | Four Channel HF/SSB <u>Transmitter</u>       |             |
|           | Type 5020 USB, 3KHz sideband                 | \$ 6,374.00 |
|           | Type 5220 ISB(A3B), Two 3KHz sidebands       | \$ 6,532.00 |
|           | Type 5221 Type 5220 with AFSK (A7J) optional | \$ 6,832.00 |
|           | Type 5260 ISB(A3B), Two 6KHz sidebands       | \$ 6,553.00 |

|           |   |             |
|-----------|---|-------------|
| GPT-1KE/6 | Six Channel HF/SSB <u>Transmitter</u>     |             |
|           | Type 5020 USB, 3KHz sideband              | \$ 6,542.00 |
|           | Type 5220 ISB(A3B), Two 3KHz sidebands    | \$ 6,700.00 |
|           | Type 5221 Type 5220 with AFSK(A7J) Option | \$ 7,000.00 |
|           | Type 5260 ISB(A3B), Two 6KHz sidebands    | \$ 6,721.00 |

|           |   |             |
|-----------|---|-------------|
| GPT-1KE/8 | Eight Channel HF/SSB <u>Transmitter</u>   |             |
|           | Type 5020 USB, 3KHz sideband              | \$ 6,711.00 |
|           | Type 5220 ISB(A3B), Two 3KHz sidebands    | \$ 6,868.00 |
|           | Type 5221 Type 5220 with AFSK(A7J) Option | \$ 7,168.00 |
|           | Type 5221 ISB(A3B), Two 6KHz sidebands    | \$ 6,889.00 |

| EQUIPMENT                               | 7205   | GPT-1K                           |
|---|--|----------------------------------|
| GPT-1K                                  | 1000-Watt General Purpose HF/SSB <u>Transmitters</u>   |                                  |
|   | Synthesized 100 <sup>0</sup> -Watt HF/SSB Transmitters<br>Technical specifications per Bulletin 1015-1<br>Two copies of Technical Manual 06.1015-1<br>Operating modes A1/A3/A3H/A3A/A3J/(A3B,F1,F4 optional)<br>Audio bandwidth each sideband: |                                  |
|   | 250-3040Hz (CCIR) or<br>300-2700Hz (FCC) or<br>250-6080Hz (CCIR)   |                                  |
| GPT-1KJ                                 | Type 2010 USB, 3KHz FCC sideband   | \$ 14,153.00                     |
|   | Type 2020 USB, 3KHz CCIR sideband  | \$ 14,153.00                     |
|   | Type 2220 ISB(A3B, Two 3KHz sidebands  | \$ 14,553.00                     |
|   | Type 2221 Type 2220 with FSK/FAX(F1/F4)  | \$ 14,679.00                     |
|   | Type 2260 ISB(A3B), Two 6KHz sidebands   | \$ 14,574.00                     |
|   | Type 2261 Type 2260 with FSK/FAX   | \$ 14,700.00                     |
| <b>Selected Accessories:</b>            |  |                                  |
|   | ATS-3 <u>Antenna tuning system</u> (Mean-1)  | \$ 3,347.00                      |
|   | ATU-1K/8 <u>Eight Channel antenna tuner</u>  | \$ 1,611.00                      |
|   | BR-1 RF impedance bridge   | \$ 72.00                         |
|   | KY-100 Telegraph key   | \$ 19.00                         |
|   | TFP-1K <u>Externalswitchable harmonic filter</u>   | \$ 1,242.00                      |
|   | TIS-3D <u>External AFSK(A7J) tone keyer</u>  | \$ 1,531.00                      |
|   | VTA-3 <u>35-foot fiberglass vertical antenna</u>   | \$ 1,195.00                      |
| <b>Integrated Transmitting Systems:</b> |  |                                  |
|   | SYM 1510/0 GPT-1K Transmitter Systems  | SYM 1510 prices<br>Bulletin 1510 |



## EQUIPMENT

7205 GPTA-1K

## GPTA-1K Automated 1000-Watts PEP, HF/SSB Transmitters

The GPTA-1K transmitters are automated versions of the GPT-1K series. Once the frequency or channel is selected at the front panel, the transmitter tunes automatically. Supplied with Fully wired CAB-40 equipment cabinet  
Track slides as required for transmitter units  
Single phase primary power: 115 volts, 50/60 Hz  
230 volts, 50/60 Hz available on request

## Multi-Channel 1000 Watt HF/SSB Automated Transmitters GPTS-1KE Series

Technical specifications per Bulletin 1020-3  
Two copies of Technical Manual 06.1020-3E5/1  
Operating modes A2H/A2J/A3H/A3A/A3J/(A3B,A7J optional)  
Audio bandwidth each sideband:  
300-2700Hz (FCC) USB only  
250-3040 Hz CCIR or  
250-6080Hz (CCIR)

## GPTA-1KE/4 Four Channel HF/SSB Transmitters

|           |                                  |             |
|-----------|----------------------------------|-------------|
| Type 5010 | USB, 3KHz FCC sidebands          | \$ 7,274.00 |
| Type 5020 | USB, 3KHz CCIR sideband          | \$ 7,274.00 |
| Type 5220 | ISB, Two 3KHz sidebands          | \$ 7,321.00 |
| Type 5221 | Type 5220 with AFSK (A7J) option | \$ 7,726.00 |
| Type 5260 | ISB, Two 6KHz sidebands          | \$ 7,737.00 |

## GPTA-1KE/8 Eight Channel HF/SSB Transmitter

|           |                                  |             |
|-----------|----------------------------------|-------------|
| Type 5010 | USB, 3KHz FCC sideband           | \$ 7,611.00 |
| Type 5020 | USB, 3KHz CCIR sideband          | \$ 7,611.00 |
| Type 5220 | ISB (A3B), Two 3KHz sidebands    | \$ 7,658.00 |
| Type 5221 | Type 5220 with AFSK (A7J) option | \$ 8,063.00 |
| Type 5260 | ISB, Two 6KHz sidebands          | \$ 7,674.00 |

## Synthesized 1000-watt HF/SSB Automated Transmitters GPTA-1KJ Series

Technical specifications per Bulletin 1020-3  
Two copies of Technical Manual 06.1020-3E5/1  
Operating modes A2H/A2J/A3H/A3A/A3J/(A3B,A7J optional)  
Audio bandwidth each sideband:  
300-2700Hz (FCC) USB only  
250-3040HZ (CCIR) or  
250-6080Hz (CCIR)

|          |           |                                       |              |
|----------|-----------|---------------------------------------|--------------|
| GPTA-1KJ | Type 2010 | USB, 3KHz FCC sideband                | \$ 15,221.00 |
|          | Type 2020 | USB, 3KHz CCIR sideband               | \$ 15,221.00 |
|          | Type 2220 | ISB (A3B), Two 3KHz sidebands         | \$ 15,621.00 |
|          | Type 2221 | Type 2220 with FSK/FAX (F1/F4) option | \$ 15,747.00 |

EQUIPMENT

7205

GPTA-1K

GPTA-1K Automated 1000-Watt PEP, HF/SSB Transmitters (Continued)

## Selected TX Accessories:

|          |   |                                 |
|----------|---|---------------------------------|
| ATSA-3   | <u>Automated antenna tuning system</u>      | \$ 4,042.00                     |
| ATU-1K/8 | Eight-channel <u>antenna tuner</u>          | \$ 1,611.00                     |
| BR-1     | RF <u>impedance bridge</u>                  | \$ 72.00                        |
| KY-100   | <u>Telegraph key</u>                        | \$ 19.00                        |
| TFPA-1K  | Automated switchable harmonic <u>filter</u> | \$ 1,400.00                     |
| TIS-3D   | External AFSK (A7J) <u>tone keyer</u>       | \$ 1,531.00                     |
| VTA-3    | 35-foot fiberglass vertical <u>antenna</u>  | \$ <del>821.00</del><br>1195.00 |

## Integrated Transmitting Systems:

SYM 1510/1 GPT-1K Transmitter Systems

SYM 1510 prices  
Bulletin 1510

GPT-10KL 10,000-Watt Peak Low Frequency Synthesized Transmitters.  
 The GPT-10KL is designed for low frequency operations in the 5 to 500 Khz frequency rang . A typical application is in coastal marine communications involving traffic handling or direction finding. The transmitter is completely self-contained in its own cabinet and can be wired for a number of primary power rating.

Supplied with Fully wired equipment cabinet  
 Track slides as required for transmitter units  
 Three phase primary power: 230 volts, 60 Hz (230/60)  
 195/50 or 195/60 available on request  
 210/50 or 210/60 available on request  
 220/50 or 220/60 available on request  
 230/50 available on request.

Synthesized 10,000-Watt LF/SSB Transmitters

Technical specifications per Bulletin 1017  
 Two copies of Operators Technical Manual 07.1017L2  
 Operating modes A1/A3/A3H/A3A/A3J/(A3B,F1,F4 optional)  
 Audio bandwidth each sideband:  
 250-3040Hz (CCIR) or  
 250-6080Hz (CCIR)

|           |           |                                  |              |
|-----------|-----------|----------------------------------|--------------|
| GPT-10KL2 | Type 2221 | ISB/FSK/FAX, Two 3 Khz sidebands | \$ 46,153.00 |
|           | Type 2261 | ISB/FSK/FAX, Two 6 Khz sidebands | \$ 46,153.00 |

Accessory:

|           |                                       |           |
|-----------|---------------------------------------|-----------|
| 08.1017L2 | Servicing Technical Manuals, 2 copies | \$ 181.00 |
|-----------|---------------------------------------|-----------|

Synthesized 10,000-Watt LF/SSB Transmitter (4-Channel ISB)

Technical specifications per Bulletin 1018  
 Two copies of Operator's Technical Manual 07.1017A4  
 Operating modes A1/A3/A3H/A3A/A3J/A9B  
 Audio bandwidth 250-3040 Hz each sideband

|            |           |                               |              |
|------------|-----------|-------------------------------|--------------|
| GPT-10KLA4 | Type 4420 | ISB(A9B), Four 3Khz sidebands | \$ 52,205.00 |
|------------|-----------|-------------------------------|--------------|

Accessory:

|           |                                       |           |
|-----------|---------------------------------------|-----------|
| 08.1017A4 | Servicing Technical Manuals, 2 copies | \$ 206.00 |
|-----------|---------------------------------------|-----------|

Selected TX accessories:

|           |  |             |
|-----------|--|-------------|
| 30.2100/1 | Kit providing external transformer for<br>380/50,380/60,440/50,440/60 primary power<br>operation | \$ 716.00   |
| TFP-10KL  | Switchable harmonic output <u>filter</u>   | \$ 3,805.00 |
| TIS-3D    | AFSK(A7J) audio <u>tone keyer</u>  | \$ 1,531.00 |

Integrated Transmitting Systems:

|           |                              |                                  |
|-----------|------------------------------|----------------------------------|
| SYM1541/0 | GPT-10KL Transmitter Systems | SYM1541, prices<br>Bulletin 1541 |
|-----------|------------------------------|----------------------------------|

| Equipment                                   | 7205  | GPT-40K   |
|---|---|---|
| GPT-40K                                     | 40,000-Watt PEP, HF/SSB Transmitters  |   |
|   | The GPT-40K Transmitters are self-contained units capable of 40,000 watts PEP output power in the HF frequency range. The transmitter can be furnished synthesized or multi-channel in several primary power ratings. |   |
|   | Supplied with   | Fully wired equipment cabinets(4)                             |
|   |   | Track slides as required for transmitter units                |
|   |   | Three phase primary power: 230volts, 60Hz (230/60)            |
|   |   | 195/50 or 195/60 available on request                         |
|   |   | 210/50 or 210/60 available on request                         |
|   |   | 220/50 or 220/60 available on request                         |
|   |   | 230/50 available on request                                   |
|   |   | 240/50 or 240/60 available on request                         |
|   |   | 250/50 or 250/60 available on request                         |
|   |   | 370/50 or 270/60 available on request (Requires 30.2100/2 Kit |
|   |   | 380/50 or 380/60 available on request (Requires 30.2100/2 Kit |
|   |   | 390/50 or 390/60 available on request (Requires 30.2100/2 Kit |
| Multi-Channel 40,00-Watt HF/SSB Transmitter |   | GPT-40KE Series   |
|   | Technical specifications per Buletin 1020-8   |   |
|   | Two copies of Operator's Techncial Manual 07.1020-8E6   |   |
|   | Operating modes A1/A3/A3H/A3A/A3J/A3B/F1/F4   |   |
|   | Audio bandwidth each sideband:  |   |
|   | 250-3040Hz (CCIR) or  |   |
|   | 250-6080Hz (CCIR)   |   |
| GPT-40KE/10                                 | Ten Channel 40,00-Watt HF/SSB Transmitters  |   |
|   | Type 6221   | ISB/FSK/FAX Two 3KHz sidebands \$ 76,926.00                   |
|   | Type 6261   | ISB/FSK/FAX Two 6KHz sidebands \$ 76,926.00                   |
| Accessory:                                  | 08.1020-8E6   | Servicing Technical <u>Manuals</u> , 2 copies \$ 284.00       |
| Synthesized 40,000-Watt HF/SSB Transmitter  |   | GPT-40KJ Series   |
|   | Technical specifications per Bulletin 1015-6  |   |
|   | Two copies of Operator's Technical Manual 07.1015-6J2   |   |
|   | Operating modes A1/A3/A3H/A3A/A3J/A3B/F1/F4   |   |
|   | Audio bandwidth each sideband:  |   |
|   | 250-3040Hz (CCIR) or  |   |
|   | 250-6080Hz (CCIR)   |   |
| GPT-40KJ                                    | Type 6221   | ISB/FSK/FAX, Two 3KHz sidebands \$ 78,811.00                  |
|   | Type 6261   | ISB/FSK/FAX, Two 6KHz sidebands \$ 78,811.00                  |
| Accessory:                                  | 08.1015-6J2   | Servicing Technical <u>Manuals</u> , 2 copies \$ 295.00       |

Continued on next page

|                          |   |              |
|--------------------------|---|--------------|
| Equipment                | 7205  | GPT-40K      |
| GPT-40K                  | 40,000-Watt PEP, HF/SSB Transmitter (Continued)                   |              |
|                          | Synthesized 40,000-Watt HF/SSB <u>Transmitter</u> (4-Channel ISB) |              |
|                          | Technical specifications per Bulletin 1015-6                      |              |
|                          | Two copies of Operator's Technical Manual 07.1015-6A4             |              |
|                          | Operating modes A1/A3H/A3A/A3J/A9B                                |              |
|                          | Audio bandwidth 250-3040Hz each sideband                          |              |
| GPT-40KA                 | Type 4420 ISB(A9B), Four 3KHz sidebands                           | \$ 84,189.00 |
| Accessory:               |   |              |
|                          | 08.1015-6A4 <u>Servicing Technical Manuals</u> , 2 copies         | \$ 326.00    |
| Selected TX Accessories: |   |              |
|                          | 30.2100/2 <u>Kit providing external auto-transformer</u>          |              |
|                          | for 370/50,370/60,380/50,380/60,390/50, or                        |              |
|                          | 390/60 power operation  | \$ 995.00    |
|                          | CSS-2A Primary 10 <sup>9</sup> <u>frequency standard</u>          | \$ 5,143.00  |
|                          | LPF-40K Low pass output <u>filter</u>                             | \$ 1,732.00  |
|                          | TER-100K Terminator/ <u>dummy load</u>                            | \$ 23,253.00 |
|                          | TFP-40K Switchable harmonic output <u>filter</u>                  | \$ 9,726.00  |
|                          | TIS-3D AFSK(A7J) <u>tone keyer</u>                                | \$ 1,531.00  |
|                          | SWR-60K Standing wave ratio <u>indicator</u>                      | \$ 1,274.00  |

Integrated Transmitting Systems:

|  |                                  |
|--|----------------------------------|
| SYM 1550/0 GPT-40K Transmitter Systems | SYM 1550 prices<br>Bulletin 1550 |
|--|----------------------------------|

|                                   |   |                 |                      |
|-----------------------------------|---|-----------------|----------------------|
| Equipment                         |   |                 | GPT-100K<br>GPT-200K |
| GPT-100K                          | 100,000-Watt Synthesized HF/SSB <u>Transmitter</u>  |                 |                      |
|                                   | <p>The GPT-100K Transmitter is completely self-contained and is capable of 100,000 watts PEP output power in the HF frequency range. The transmitter consists of eight units in a line driven by the Model MMX-2 exciter.</p> <p>Supplied with Fully wired equipment cabinets<br/> Tracks slides as required for transmitter units<br/> Operating modes A1/A3/A3H/A3A/A3J/A3B/F1/F4<br/> Operating bandwidth 250-3040Hz (CCIR) or<br/> 250-6080Hz (CCIR) each sideband<br/> Three phase primary power: 210volts, 60 Hz (210/60)<br/> 210/50 available on request<br/> 220/50 or 220/60 available on request<br/> 230/50 or 230/60 available on request<br/> 240/50 or 240/60 available on request<br/> 250/50 or 250/60 available on request</p> <p>Technical specifications per Bulletin 1015-7<br/> Two copies of Operator's Technical Manual 07.1015-7J2</p> |                 |                      |
| GPT-100KJ                         | Type 2221 ISB/FSK/FAX, Two 3KHz sidebands   | \$ 300,390.00   | est                  |
|                                   | Type 2261 ISB/FSK/FAX, Two 6KHz sidebands   | \$ 300,390.00   | est                  |
| Accessory:                        | 08.1015-7J2 Servicing Technical <u>Manuals</u> , 2 copies   | \$              | 716.00               |
| Intigrated Transmmitting Systems: |   |                 |                      |
|                                   | SYM 1555/0 GPT-100K Transmitter Systems   | SYM 1555 prices |                      |
|                                   |   | Bulletin 1555   |                      |
|                                   | SYM 1556/0 GPT-200K Transmitter Systems   | SYM 1556 prices |                      |
|                                   |   | Bulletin 1556   |                      |
| GPT-200K                          | 200,000-Watt Synthesized HF/SSB <u>Transmitter</u>  |                 |                      |
|                                   | <p>The GPT-200K is similar to the GPT-100K with the addition of one more power amplifier stage giving it a 200,000 watt PEP output capability.</p> <p>Supplied with Fully wired equipment cabinets<br/> Tracks slides as required for transmitter units<br/> Operating modes A1/A3/A3H/A3A/A3J/A3B/F1/F4<br/> Operating bandwidth each sideband:<br/> 250-3040Hz (CCIR) or<br/> 250-6080Hz (CCIR)<br/> Three phase primary power: 230volts, 60Hz (230/60)<br/> See GPT-100K for additional ratings<br/> Technical specifications per Bulletin 1015-8<br/> Two copies of Operator's Technical Manual 07.1015-8J2</p>   |                 |                      |
| GPT-200K                          | Type 2221 ISB/FSK/FAX, Two 3KHz sidebands   | \$ 363,525.00   | est                  |
|                                   | Type 2261 ISB/FSK/FAX, Two 6KHz sidebands   | \$ 363,525.00   | est                  |
|                                   | Type 4420 ISB(A9B), Four 3KHz sidebands   | \$ 366,525.00   | est                  |
| Accessory:                        | 08.1015-8J2 Servicing Technical <u>Manuals</u> , 2 copies   | \$              | 763.00               |

Equipment

7205

HFD.  
HFL

HFD-1 Antenna Distribution Unit (Front Panel Connectors)  
 The HFD-1 is used to passively couple one antenna to four receivers. The HFD series covers the 2 to 30 MHz range while the LFD series covers 15 to 2000KHz range. Technical specifications per Bulletin 4025-1  
 Two copies of Technical Manual 06.4025-1

|       |                                    |                      |    |        |
|-------|------------------------------------|----------------------|----|--------|
| HFD-1 | Type 0300 UHF <del>Connector</del> | <i>multi coupler</i> | \$ | 205.00 |
|       | Type 0400 QDM <del>Connector</del> |                      | \$ | 205.00 |
|       | Type 0500 QDS <del>Connector</del> |                      | \$ | 205.00 |

HFD-2 Antenna Distribution Unit (Rear Panel Connectors)

The HFD-2 is identical to the HFD-1 except connectors are mounted on rear chassis.

|       |                                    |                      |    |        |
|-------|------------------------------------|----------------------|----|--------|
| HFD-2 | Type 0100 N <del>Connector</del>   | <i>multi coupler</i> | \$ | 200.00 |
|       | Type 0200 BNC <del>Connector</del> |                      | \$ | 200.00 |
|       | Type 0600 C <del>Connector</del>   |                      | \$ | 200.00 |

HFL-100 100-Watt PEP Broadbanded HF linear Amplifier

The HFL-100 is broadbanded linear amplifier designed to interface 150 milliwatt RF exciters with linear amplifiers requiring 50 watts RF drive. The HFL-100 is also used as a final amplifier with antenna tuning and harmonic filter accessories.

Technical specifications per Bulletin 2035-1  
 Two copies of Technical Manual 06.2035-1  
 Single phase primary power: 115 volts, 50/60Hz  
 230volts,50/60Hz available on request

|         |  |    |        |
|---------|--|----|--------|
| HFL-100 | 100-Watt Broadbanded <u>linear Amplifier</u> | \$ | 911.00 |
|---------|--|----|--------|

Accessory:

|  |  |    |        |
|--|--|----|--------|
|  | 30.2035-1/1 <u>Kit</u> for multi-channel operation in the<br>0.4 to 30 MHz frequency range | \$ | 353.00 |
|--|--|----|--------|

HFL 1000-Watt PEP/AVG, HF Linear Amplifier

The HFL-1K is capable of 1000 watts pep and average power output when driven by an exciter providing up to 150 milliwatts RF drive in the HF region. The linear consists of three basic units.

Supplied with Fully wired CAB-40 equipment cabinet  
 Track slides as required for transmitter units  
 Technical specifications per Bulletin 2035-3  
 Two copies of Technical Manual 06.2035-3  
 Single phase primary power: 230volts, 50/60Hz

|        |                                      |    |          |
|--------|--------------------------------------|----|----------|
| HFL-1K | 1000-Watt HF <u>Linear Amplifier</u> | \$ | 8,653.00 |
|--------|--------------------------------------|----|----------|

Accessory:

|  |  |    |        |
|--|--|----|--------|
|  | 30.2035-3/1 <u>Kit</u> providing 1.6-2MHz coverage | \$ | 821.00 |
|--|--|----|--------|

|              |  |                   |                    |
|--------------|--|-------------------|--------------------|
| Equipment    |  | 7205              | HFLA-1K<br>HFLA-5K |
| HFLA-1K      | Automated 1000-Watt PEP/AVG, HF Linear Amplifier<br>The HFLA-1K amplifier is identical to the HFL-1K with one added feature: all tuning is accomplished automatically. The amplifier must be driven by a suitable exciter providing frequency information to the bandswitch and at least 150 milliwatts RF drive. Complete transmitter design can be provided, at extra cost, given the exciter parameters. <i>210 specified</i><br>Supplied with Fully wired CAB-40 equipment cabinet<br>Track slides as required for transmitter units<br>Technical specifications per Bulletin 2035-3<br>Two copies of Technical Manual 06.2035-3/1<br>Single phase primary power: 230volts, 50/50Hz  |                   |                    |
| HFLA-1K      | Automated 1,000-Watt HF <u>Linear Amplifier</u>  | \$ 9,937.00       |                    |
| Accessory:   | 30.2035-3/1 <u>Kit</u> providing 1.6-2 MHz coverage  | \$ 821.00         |                    |
| HFL-5K       | 5,000-Watt PEP/AVG, HF Linear Amplifier<br>The HFL-5K is similar to the HFL-10K linear amplifier <i>(see next page)</i> but provides only 5,000 wats PEP and average power output<br>The Linear amplifier is completely self-contained with provision for a 5½-inch, 19-inch rack mounted HF exciter in the center drawer.<br>Supplied with Fully wired equipment cabinet<br>Track slides as required for transmitter units<br>Technical specifications per Bulletin 2035-5<br>Two copies of Technical Manual 07.2035-5 (Operator's<br>Three phase primary power: 230volts, 60Hz (230/60)<br>210/50 or 210/60 available on request<br>220/50 or 220/60 available on request<br>230/50 available on request<br>240/50 or 240/60 available on request<br>250/50 or 250/60 available on request |                   |                    |
| HFL-5K       | 5,000-Watt HF <u>Linear Amplifier</u>  | \$ 21,184.00      |                    |
| Accessories: | 30.2035-5/1 <u>Kit</u> providing 1.6 to 2MHz coverage  | \$ 1,211.00       |                    |
|              | 30.2100/1 <u>Kit</u> providing external <u>auto-transformer</u> for 370/50, 370/60, 380/50, 370/60, 390/50, or 390/60 power operation  | \$ 716.00         |                    |
|              | 08.2035-5 <u>Servicing Technical Manuals</u> , 2 copies  | \$ 225.00         |                    |
| HFLA-5K      | Automated 5,000-Watt PEP/AVG, HF Linear Amplifier<br>The HFLA-5K tunes automatically to any frequency in the 2 to 30MHz range provided the exciter used supplies the necessary bandswitch and frequency information with at least 150 milliwatts RF drive.<br>Supplied with Fully wired equipment cabinet<br>Track slides as required for transmitter units<br>Two copies of Operator's Technical Manual 07.2035-5/<br>Three phase primary power: As specified for HFL-5K  |                   |                    |
| HFLA-5K      | Automated 5,000-Watt HF <u>Linear Amplifier</u>  | \$ 25,210.00      |                    |
| Accessory:   | 08.2035-5/1 <u>Servicing Technical Manuals</u> , 2 copies  | \$ 237.00         |                    |
|              | 30.2035-5/1 and 30.2100/1 Kits   | See HFL-5K prices |                    |



Equipment 7205 HFL-10K

HFL-10K 10,000-Watt PEP/AVG, HF Linear Amplifier

The HFL-10K is capable of providing 10,000 watts PEP and average power output at any frequency in the 2 to 30 MHz range provided a suitable exciter, capable of at least 150 milliwatts RF drive is used. The amplifier is capable of containing a 5½X19-inch exciter unit in the center drawer.

Supplied with Fully wired equipment cabinet  
Track slides as required for transmitter units  
Technical specifications per Bulletin 2035-6  
Two copies of Operator's Technical Manual 07.2035-6  
Three phase primary power: 230volts, 50/60Hz (230/50/60)  
210/50/60 available on request  
220/50/60 available on request  
240/50/60 available on request  
250/50/60 available on request

HFL-10K 10,000-Watt HF Linear Amplifier \$ 23,642.00

Accessories:

30.2035-6/1 Kit providing 1.6 to 2 MHz coverage \$ 1,211.00  
30.2100/1 Kit providing external auto-transformer for 370,380, or 390, 50/60Hz primary power operation. \$ 716.00  
08.2035-6 Servicing Technical Manuals, 2 copies \$ 225.00

HFLA-10K Automated 10,000-Watt PEP/AVG, HF Linear Amplifier

The HFLA-10K version of the HFL-10K tunes automatically to any frequency in the 2 to 30 MHz provided bandswitch and frequency information is furnished by the compatible exciter used. Complete transmitter design can be ~~provided~~ at extra cost.

Supplied with Fully wired equipment cabinet  
Track slides as required for transmitter units  
Technical specifications per Bulletin 2035-6  
Two copies of Operator's Technical Manual 07.2035-6/  
Three phase primary power: See model HFL-10K

HFLA-10K Automated 10,000-Watt HF Linear Amplifier \$ 29,000.00

Accessories:

08.2035-6/1 Servicing Technical Manuals, 2 copies \$ 237.00  
30.2035-6/1 Kit providing 1.6 to 2MHz coverage \$ 1,211.00  
30.2100/1 Kit providing external auto-transformer for 370,380,390,50/60Hz primary power operation. \$ 716.00

Equipment 7205 HFT-1K

HFT-1K 1,000-Watt PEP/AVG, HF/SSB Transmitters

The HFT-1K series of transmitters are capable of 1,000 watts PEP and average power output in the 2 to 30MHz range. Available in multi-channel or synthesized models, the transmitters offer a wide range of features designed to reduce the operator's workload and improve overall reliability. The transmitters consist of an exciter, low voltage power supply, high voltage power supply, and final amplifier.

Supplied with Fully wired CAB-40 equipment cabinet

Track slides as required for transmitter units

Single phase primary power: 230volts, 50/50Hz

Multi-channel 1000-Watt HF/SSB transmitters HFT-1KE Series

Technical specifications per Bulletin 1020-4

Two copies of Operator's Technical Manual 07.1020-4E

Operating modes A1/A3/A3H/A3A/A3J/(A3B, A7J, F1, F4, optional)

Audio bandwidth each sideband:

300-2700Hz (FCC) USB only

250-3040Hz (CCIR) or

250-6080Hz (CCIR)

|           |  |              |
|-----------|--|--------------|
| HFT-1KE/4 | Four-Channel HF/SSB Transmitters             |              |
|           | Type 5020 USB, 3KHz sideband CCIR            | \$ 12,447.00 |
|           | Type 5220 ISB(A3B), Two 3KHz sidebands       | \$ 12,600.00 |
|           | Type 5221 Type 5220 with AFSK(A7J) option    | \$ 12,900.00 |
|           | Type 5260 ISB(A3B), Two 6KHz sidebands       | \$ 12,600.00 |
|           | Type 5261 Type 5260 with AFSK(A7J) option    | \$ 12,911.00 |
|           | Type 6010 USB, 3KHz FCC sideband             | \$ 14,958.00 |
|           | Type 6221 ISB(A3B)/FSK/FAX Two 3KHz sideband | \$ 15,484.00 |
|           | Type 6261 ISB/FSK/FAX, Two 6KHz sidebands    | \$ 15,489.00 |
| HFT-KE/8  | Eight-Channel HF/SSB Transmitters            |              |
|           | Type 5020 USB, 3KHz CCIR sideband            | \$ 12,774.00 |
|           | Type 5220 ISB(A3B), Two 3KHz sidebands       | \$ 12,937.00 |
|           | Type 5221 Type 5220 with AFSK(A7J) option    | \$ 13,237.00 |
|           | Type 5260 ISB(A3B), Two 6KHz sidebands       | \$ 12,937.00 |
|           | Type 5261 Type 5260 with AFSK(A7J) option    | \$ 13,237.00 |
|           | Type 6010 USB, 3KHz FCC sideband             | \$ 15,842.00 |
|           | Type 6221 ISB/FSK/FAX(F1/F4), 3KHz sidebands | \$ 16,368.00 |
|           | Type 6261 ISB/FSK/FAX(F1/F4), 6KHz sidebands | \$ 16,379.00 |

Continued on the next page.

|   |   |                                 |                |
|---|---|---------------------------------|----------------|
| Equipment   |   | 7205                            | HFT-1K         |
| HFT-1K  | 1,000-Watt PEP/AVG, HF/SSB Transmitters (Continued)       |                                 |                |
|   | HFT-1KE/10 Ten Channel HF/SSB Transmitters                |                                 |                |
|   | Type 6010   | USB, 3KHz FCC sideband          | \$ 16,284.00   |
|   | Type 6020   | USB, 3KHz CCIR sideband         | \$ 16,284.00   |
|   | Type 6220   | ISB(A3B), Two 3KHz sidebands    | \$ 16,684.00   |
|   | Type 6221   | Type 6220 with FSK/FAX (F1/F4)  | \$ 16,811.00   |
|   | Type 6260   | ISB(A3B), Two 6KHz sidebands    | \$ 16,695.00   |
|   | Type 6261   | Type 6260 with FSK/FAX (F1/F4)  | \$ 16,821.00   |
| Accessory:  | 08.1020-4E Servicing Technical <u>Manuals</u> 2 copies    |                                 |                |
|   |   |                                 | \$ 105.00      |
| Synthesized 100-Watt HF/SSB <u>Transmitters</u>                 |   |                                 | HFT-1KJ Series |
|   | Technical specifications per Bulletin 1015-2              |                                 |                |
|   | Two copies of Operator's Technical Manuals 07.1015-2J2    |                                 |                |
|   | Operating modes A1/A3/A3H/A3A/A3J/ (A3B, F1, F4 optional) |                                 |                |
|   | Audio bandwidth each sideband:                            |                                 |                |
|   | 300-2700Hz (FCC) USB only                                 |                                 |                |
|   | 250-3040Hz (CCIR) or                                      |                                 |                |
|   | 250-6080Hz (CCIR)   |                                 |                |
| HFT-1KJ   | Type 2010   | USB, 3KHz FCC sideband          | \$ 19,532.00   |
|   | Type 2020   | USB, 3KHz CCIR sidebands        | \$ 19,532.00   |
|   | Type 2220   | ISB(A3B), Two 3KHz sidebands    | \$ 19,932.00   |
|   | Type 2221   | Type 2220 with FSK/FAX (F1/F4)  | \$ 20,058.00   |
|   | Type 2260   | ISB(A3B), Two 6KHz sidebands    | \$ 19,963.00   |
|   | Type 2261   | Type 2260 with FSK/FAX (F1, F4) | \$ 20,068.00   |
| Accessory:  | 08.1015-2J2 Servicing Technical <u>Manuals</u> , 2 copies |                                 |                |
|   |   |                                 | \$ 111.00      |
| Synthesized 1000-Watt HF/SSB <u>Transmitter</u> (4 Channel ISB) |   |                                 |                |
|   | Technical specifications per Bulletin 1015-2A4            |                                 |                |
|   | Two copies of Operator's Technical Manual 07.1015-2A4     |                                 |                |
|   | Operating modes A1/A3H/A3A/A3J/A9B                        |                                 |                |
|   | Audio bandwidth 250-3-4 Hz each sideband.                 |                                 |                |
| HFT-1KA   | Type 4420   | ISB(A9B), Four 3KHz sidebands   | \$ 23,758.00   |
| Accessory:  | 08.1015-2A4 Servicing Technical <u>Manuals</u> , 2 copies |                                 |                |
|   |   |                                 | \$ 126.00      |

Continued on the next page.

Equipment

7205

HFT-1K

HFT-1K 1,000-Watt PEP/AVG, HF/SSB Transmitters (Continued)

## Selected TX Accessories:

|             |  |    |          |
|-------------|--|----|----------|
| 30.2035-3/1 | <u>Kit providing 1.6 to 2MHz coverage</u>  | \$ | 821.00   |
| BR-1        | RF impedance <u>bridge</u>                 | \$ | 72.00    |
| ATS-3       | Antenna tuning system ( <i>Manual</i> )    | \$ | 3,347.00 |
| KY-100      | Telegraph <u>key</u>                       | \$ | 19.00    |
| LPF-1K      | Low pass output <u>filter</u>              | \$ | 300.00   |
| MK-102      | Desk-type PTT <u>microphone</u>            | \$ | 67.00    |
| TFP-1K      | Switchable harmonic output <u>filter</u>   | \$ | 1,242.00 |
| TIS-3D      | AFSK(A7J) audio <u>tone keyer</u>          | \$ | 1,531.00 |
| TER-3.5K    | Terminator/ <u>dummy load</u>              | \$ | 674.00   |
| TRC-3.5K    | Rhombic antenna <u>coupler</u>             | \$ | 821.00   |
| VTA-3       | 35-foot fiberglass vertical <u>antenna</u> | \$ | 1,195.00 |
| WT-1        | RF output power <u>meter</u> (hand-held)   | \$ | 72.00    |

## Integrated Transmitting system:

SYM 1515/0 HFT-1K Transmitter Systems

SYM 1515 prices  
Bulletin 1515

Equipment

7205

HFTA-1K

HFTA-1K Automated 1,000-Watt PEP/AVG, HF/SSB Transmitters

The HFTA-1K Transmitters are designed to tune automatically into an antenna system or a 50-ohm load once frequency has been set up on the front panel by the operator. The tuning sequence is completed in less than 10 seconds under normal operating conditions. The transmitters consist of the HFT-1K units and a servo/control drawer.

Supplied with Fully wired CAB-40 equipment cabinet  
Track slides as required for transmitters units  
Single phase primary power: 230volts, 50/60Hz

Automated Multi-Channel 1000-Watt HF/SSB Transmitter HFTA-1KE Series

Technical specifications per Bulletin 1020-4

Two copies of Operator's Technical Manual 07.1020-4E6/1

Operating modes A1/A3/A3H/A3A/A3J/(A3B,F1,F4 optional)

Audio bandwidth each sideband:

300-2700Hz (FCC) USB only

250-3040Hz (CCIR) or

250-6080Hz (CCIR)

HFTA-1KE/4 Four Channel HF/SSB Transmitters

Type 6010 USB, 3KHz FCC sideband \$ 17,074.00

Type 6020 USB, 3KHz CCIR sideband \$ 17,074.00

Type 6220 ISB(A3B), Two 3KHz sidebands \$ 17,474.00

Type 6221 Type 6220 with FSK/FAX(F1/F4) \$ 17,874.00

Type 6261 ISB/FSK/FAX, Two 6KHz sidebands \$ 17,895.00

HFTA-1KE/10 Ten Channel HF/SSB Transmitters

Type 6010 USB, 3KHz FCC sideband \$ 18,400.00

Type 6020 USB, 3KHz CCIR sideband \$ 18,400.00

Type 6220 ISB(A3B), Two 3KHz sidebands \$ 18,800.00

Type 6221 Type 6220 with FSK/FAX (F1/F4) \$ 19,200.00

Type 6261 ISB/FSK/FAX, Two 6KHz sidebands \$ 19,221.00

Accessory:

08.1020-4E6/1 Servicing Technical Manuals 2 copies

\$ 152.00

|   |      |                 |
|---|------|-----------------|
| Equipment   | 7205 | HFTA-1K         |
| Automated Synthesized 1000-Watt HF/SSB Transmitters |      | HFTA-1KJ Series |

Technical specifications per Bulletin 1015-2  
 Two copies of Operator's Technical Manual 07.1015-2J2/1  
 Operating modes A1/A3/A3H/A3A/A3J/(A3B,F1,F4 optional)  
 Audio bandwidth each sideband:  
 300-2700Hz (FCC) USB only  
 250-3040Hz (CCIR) or  
 250-6080Hz (CCIR)

HFTA-1K Automated 1,000-Watt PEP/AVG, HF/SSB Transmitters (Continued)

|           |                                 |              |
|-----------|---------------------------------|--------------|
| HFTA-1KJ  |                                 |              |
| Type 2010 | USB, 3KHz FCC sideband          | \$ 21,689.00 |
| Type 2020 | USB, 3KHz CCIR sidebands        | \$ 21,689.00 |
| Type 2220 | ISB(A3B), Two 3KHz sidebands    | \$ 22,089.00 |
| Type 2221 | Type 2220 with FSK/FAX (F1,F4)  | \$ 22,216.00 |
| Type 2261 | ISB/FSK/FAX, Two 6KHz sidebands | \$ 21,074.00 |

Accessory:

|               |   |           |
|---------------|---|-----------|
| 08.1015-2J2/1 | <u>Servicing Technical Manuals</u> , 2 copies |           |
|               |   | \$ 164.00 |

Automated Synthesized 1000-Watt HF/SSB Transmitter (4-Channel ISB)  
 Technical specifications per Bulletin 1015-2  
 Two copies of Operator's Technical Manual 07.1015-2A4/1  
 Operating modes A1/A3H/A3A/A3J/A9B  
 Audio bandwidth 250-3040Hz each sideband.

|          |   |              |
|----------|---|--------------|
| HFTA-1KA | Type 4420 ISB(A9B), Four 3KHz sidebands | \$ 25,916.00 |
|----------|---|--------------|

Accessory:

|               |   |           |
|---------------|---|-----------|
| 08.1015-2A4/1 | <u>Servicing Technical Manuals</u> 2 copies |           |
|               |   | \$ 168.00 |

Selected TX Accessories:

|             |   |             |
|-------------|---|-------------|
| 30.2035-3/1 | <u>Kit providing 1.6 to 2MHz coverage</u>   | \$ 821.00   |
| ATSA-3      | <u>Automated antenna tuning system</u>      | \$ 4,042.00 |
| BR-1        | <u>RF impedance bridge</u>                  | \$ 72.00    |
| KY-100      | <u>Telegraph Key</u>                        | \$ 19.00    |
| LPF-1K      | <u>Low pass output filter</u>               | \$ 300.00   |
| MK-102      | <u>Desk-top PTT microphone</u>              | \$ 67.00    |
| TER-3.5K    | <u>Terminator/dummy load</u>                | \$ 674.00   |
| TFPA-1K     | <u>Automated switchable harmonic filter</u> | \$ 1,400.00 |
| TIS-3D      | <u>AFSK(A7J) audio tone keyer</u>           | \$ 1,531.00 |
| TRC-3.5K    | <u>Rhombic antenna coupler</u>              | \$ 821.00   |
| VTA-3       | <u>35-foot fiberglass vertical antenna</u>  | \$ 1,195.00 |
| WT-1        | <u>RF output power meter</u>                | \$ 72.00    |

Integrated Transmitting Systems:

|            |                            |                                  |
|------------|----------------------------|----------------------------------|
| SYM 1515/1 | HFT-1K Transmitter Systems | SYM 1515 prices<br>Bulletin 1515 |
|------------|----------------------------|----------------------------------|

|             |   |                                  |
|-------------|---|----------------------------------|
| Equipment   | 7205  | HFTR-1K                          |
| HFTR-1K     | Automated/Remote 1000-Watt PEP/AVG, HF/SSB Transmitters   |                                  |
|             | <p>The HFTR-1K Transmitters are basically automated units with interface circuits added for remote control of all functions. The actual control systems, however, are NOT included with the transmitters because of the variety of applications possible using this series. Certain remote control systems, however, are recommended as indicated below. Complete systems can be found under SYM 1515/2</p> <p>Supplied with Fully wired CAB-40 equipment cabinet<br/>Track slides as required for transmitter units<br/>Single phase primary power: 230volts 50/60Hz</p> |                                  |
|             | Automated/Remote Multi-channel 1000-Watt HF/SSB Transmitters  |                                  |
|             | Technical specifications per Bulletin 1020-4  |                                  |
|             | Two copies of Operator's Technical Manual 07.1020/4/2   |                                  |
| HFTR-1KE/4  | Four-Channel 1000-Watt HF/SSB Transmitters  |                                  |
|             | All types listed under Model HFTA-1KE/4   | \$ 18,158.00                     |
| HFTR-1KE/10 | Ten-Channel 1000Watt HF/SSB Transmitters  |                                  |
|             | All types listed under Model HFTA-1KE/10  | \$ 19,421.00                     |
| Accessory:  |   |                                  |
|             | 08.1020-4/2 Servicing Technical <u>Manuals</u> copies   | \$ 156.00                        |
|             | ADC-3 Multi-channel remote control systems  | See ADC-3 prices                 |
|             | See also HFTA-1K Selected Accessories   |                                  |
|             | Automated/Remote Synthesized 1000-Watt HF/SSB <u>Transmitters</u>   |                                  |
|             | Technical specifications per Bulletin 1015-2  |                                  |
|             | Two copies of Operator's Technical Manual 07.1015-2J2/2   |                                  |
| HFTR-1KJ    | All types listed under Model HFTA-1KJ   | \$ 23,495.00                     |
| Accessory:  |   |                                  |
|             | 08.1015-2J2/2 Servicing Technical <u>Manuals</u> , 2copies  | \$ 168.00                        |
|             | COP-2 Synthesized Remote Control Systems  | See COP-2 prices                 |
|             | See also HFTA-1K Selected Accessories   |                                  |
|             | Automated/Remote Synthesized 100-Watt HF/ISB <u>Transmitter</u> (4-Channel ISB)   |                                  |
|             | Technical specifications per Bulletin 1015-2  |                                  |
|             | Two copies of Operator's Technical Manual 07.1015-2A4/2   |                                  |
| HFTR-1KA    | All types listed under Model HFTA-1KA   | \$ 27,589.00                     |
| Accessory:  |   |                                  |
|             | 08.1015-2A4/2 Servicing Technical <u>Manuals</u> , 2copies  | \$ 174.00                        |
|             | COP-2 Synthesized remote control systems  | See COP-2 prices                 |
|             | See also HFTA-1K Selected Accessories   |                                  |
| Integrated  | Transmitting Systems:   |                                  |
|             | SYM 1515/2 HFT-1K Transmitter Systems   | SYM 1515 prices<br>Bulletin 1515 |

|   |   |   |              |
|---|---|---|--------------|
| Equipment   | 7205  | HFT-5K  |              |
| HFT-5K  | 5,000-Watt PEP/AVG, HF/SSB Transmitters   |   |              |
|   | The HFT-5K transmitters are physically the same size as the HFT-10K but are capable of only 5,000-watts PEP and average power output. The transmitters are completely self-contained with the exciter (driver) built in to the main frame assembly. |   |              |
|   | Supplied with Full/ wired equipment cabinet   |   |              |
|   | Track slides as required for transmitter units  |   |              |
|   | Three phase primary power: 230volts, 50/60Hz  |   |              |
|   | 210volts, 50/60Hz available on request  |   |              |
|   | 220volts, 50/60Hz available on request  |   |              |
|   | 240volts, 50/60Hz available on request  |   |              |
|   | 250volts, 50/60Hz available on request  |   |              |
| Multi-Channel 5,000-Watt HF/SSB Transmitters              | Technical specifications per Bulletin 1020-6  |   |              |
|   | Two copies of Operator's Technical Manual 07.1020-6   |   |              |
|   | Operating modes A1/A3/A3H/A3A/A3J/A3B/F1/F4   |   |              |
|   | Audio bandwidth each sideband:  |   |              |
|   | 250-3040Hz (CCIR) or  |   |              |
|   | 250-6080Hz (CCIR)   |   |              |
| HFT-5KE/10  | Ten Channel HF/SSB <u>Transmitter</u>   |   |              |
|   | Type 6221   | ISB/FSK/FAX, Two 3KHz sidebands               | \$ 33,332.00 |
|   | Type 6261   | ISB/FSK/FAX, Two 6KHz sidebands               | \$ 33,332.00 |
| Accessory:  | 08.1020-6   | <u>Servicing Technical Manuals</u> , 2 copies | \$ 278.00    |
| Synthesized 5,000-Watt HF/SSB <u>Transmitters</u>         | Technical specifications per Bulletin 1015-4  |   |              |
|   | Two copies of Operator's Technical Manual 07.1015-4J2   |   |              |
|   | Operating modes A1/A3/A3H/A3A/A3J/A3B/F1/F4   |   |              |
|   | Audio bandwidth each sideband:  |   |              |
|   | 250-3040Hz (CCIR) or  |   |              |
|   | 250-6080Hz (CCIR)   |   |              |
| HFT-5KJ   | Type 2221   | ISB/FSK/FAX, Two 3KHz sidebands               | \$ 35,547.00 |
|   | Type 2261   | ISB/FSK/FAX, Two 6KHz sidebands               | \$ 35,547.00 |
| Accessory:  | 08.1015-4J2   | <u>Servicing Technical Manuals</u> , 2 copies | \$ 284.00    |
| Synthesized 5,000-Watt HF/SSB Transmitter (4-Channel ISB) | Technical specifications per Bulletin 1015-4  |   |              |
|   | Two copies of Operator's Technical Manual 07.1015-4A4   |   |              |
|   | Operating modes A1/A3H/A3A/A3J/A9B  |   |              |
|   | Audio bandwidth 250-3040Hz each sideband  |   |              |
| HFT-5KA   | Type 4420   | ISB(A9B), Four 3KHz sidebands                 | \$ 38,437.00 |
| Accessory:  | 08.10154A4  | <u>Servicing Technical Manuals</u> , 2 copies | \$ 300.00    |

Continued on the next page



Equipment

7205

HFT-5K

HFT-5K 5,000-Watt PEP/AVG, HF/SSB Transmitters (Continued)

## Selected TX Accessories:

|             |  |             |
|-------------|--|-------------|
| 30.2035-5/1 | <u>Kit</u> providing 1.6 to 2 MHz coverage   | \$ 1,211.00 |
| 30.2100/1   | Kit providing external <u>auto-transformer</u><br>for 370, 380 or 390 volt, 50/60 Hz<br>primary power operation. | \$ 716.00   |
| LPF-10K     | Low pass output <u>filter</u>  | \$ 668.00   |
| TER-5K      | Terminator/ <u>dummy load</u>  | \$ 2,547.00 |
| TFP-10K     | Switchable harmonic output <u>filter</u>   | \$ 3,821.00 |
| TIS-3D      | External AFSK(A7J) <u>tone keyer</u>   | \$ 1,531.00 |
| TRC-5K      | Rhombic <u>antenna coupler</u>   | \$ 1,438.00 |

## Integrated Transmitting Systems:

SYM 1530/0 HFT-5K Transmitter Systems

See SYM 1530 price  
Bulletin 1530

| Equipment               | 7205   | HFTA-5K                                      |
|-------------------------|--|--|
| HFTA-5K                 | Automated 5,000-Watt PEP/AVG, HF/SSB Transmitters  |  |
|                         | The HFTA-5K are automated 5,000-Watt PEP/Average transmitters capable of tuning within 10 seconds once the exciter frequency is selected. The transmitters are completely self-contained in a cabinet identical to that of the HFT10K. A side rack is added for the HFTA-5KA or any other model having external transmitter accessories. |  |
|                         | Supplied with Fully wired equipment cabinet  |  |
|                         | Track slides as required for transmitters units  |  |
|                         | Three phase primary power: 230volts, 50/60 Hz  |  |
|                         | 210volts, 50/60Hz available on request   |  |
|                         | 220volts, 50/60Hz available on request   |  |
|                         | 240volts, 50/60Hz available on request   |  |
|                         | 250volts, 50/60 Hz available on request  |  |
| Automated Multi-Channel | 5,000-Watt HF/SSB Transmitters   |  |
|                         | Technical specifications per Bulletin 1020-6   |  |
|                         | Two copies of Operator's Technical Manual 07.1020-6/1  |  |
|                         | Operating modes A1/A3/A3H/A3A/A3J/A3B/F1/F4  |  |
|                         | Audio bandwidth each sideband:   |  |
|                         | 250-3040Hz (CCIR) or   |  |
|                         | 250-6080Hz (CCIR)  |  |
| HFTA-5KE/10             | Ten-Channel HF/SSB Transmitter   |  |
|                         | Type 6221  | ISB/FSK/FAX, Two 3KHz sidebands \$ 38,800.00 |
|                         | Type 6261  | ISB/FSK/FAX, Two 6KHz sidebands \$ 38,800.00 |
| Accessory:              | 08.1020-6/1 Servicing Technical Manuals, 2 copies \$ 305.00  |  |
| Automated Synthesized   | 5,000-Watt HF/SSB Transmitters   |  |
|                         | Technical specifications per Bulletin 1015-4   |  |
|                         | Two copies of Operator's Technical Manual 07.1015-4J2/1  |  |
|                         | Operating modes A1/A3/A3H/A3A/A3J/A3B/F1/F4  |  |
|                         | Audio bandwidth each sideband:   |  |
|                         | 250-3040Hz (CCIR) or   |  |
|                         | 250-6080Hz (CCIR)  |  |
| HFTA-5KJ                | Type 2221  | ISB/FSK/FAX, Two 3KHz sidebands \$ 39,200.00 |
|                         | Type 2261  | ISB/FSK/FAX, Two 6KHz sidebands \$ 39,200.00 |
| Accessory:              | 08.1015-4J2/1 Servicing Technical Manuals, 2 copies \$ 321.00  |  |
| Automated Synthesized   | 5,000-Watt HF/ISB Transmitter (4 Channel ISB)  |  |
|                         | Technical specifications per Bulletin 1015-4   |  |
|                         | Two copies of Operator's Technical Manual 07.1015-4A4/1  |  |
|                         | Operating modes A1/A3H/A3A/A3J/A9B   |  |
|                         | Audio bandwidth 250-3040Hz (CCIR) each sideband  |  |
| HFTA-5KA                | Type 4420  | ISB(A9B), Four 3KHz sidebands \$ 45,495.00   |
| Accessory:              | 08.1015-4A4/1 Servicing Technical Manuals, 2 copies \$ 337.00  |  |

Continued on the next page.

Equipment

7205

HFTA-5K

HFTA-5K Automated 5,000-Watt PEP/AVG, HF/SSB Transmitters

## Selected TX Accessories:

|   |    |          |
|---|----|----------|
| 30.2035-5/1 <u>Kit</u> providing 1.6 to 2MHz coverage   | \$ | 1,211.00 |
| 30.2100/1 <u>Kit</u> providing external <u>auto-transformer</u><br>for 370,380, or 390volt, 50/60 Hz<br>primary power operation | \$ | 716.00   |
| LPF-10K Low pass output <u>filter</u>   | \$ | 668.00   |
| TER-5K Terminator/ <u>dummy load</u>  | \$ | 2,547.00 |
| TFPA-10K Automated <u>switchable harmonic filter</u>  | \$ | 4,065.00 |
| TIS-3D External AFSK(A7J) <u>tone keyer</u>   | \$ | 1,531.00 |
| TRC-5K <u>Rhombic antenna coupler</u>   | \$ | 1,438.00 |

## Integrated Transmitting Systems:

SYM 1530/1 HFT-5K Transmitter Systems

See SYM 1530 prices  
Bulletin 1530

|   |   |              |
|---|---|--------------|
| Equipment                                     | 7205  | HFT-10K      |
| HFT-10K                                       | 10,000-Watt PEP/AVG, HF/SSB Transmitters  |              |
|   | The HFT-10K transmitters are completely self-contained units capable of 10,000-watts PEP and average power output. The exciter is contained in the center drawer which also houses the servo control circuits in the automated versions of the transmitter. |              |
|   | Supplied with Fully wired equipment cabinet   |              |
|   | Track slides as required for transmitter units  |              |
|   | Three phase primary power: 230volts, 50/60Hz  |              |
|   | 210volts, 50/60Hz available on request  |              |
|   | 220volts, 50/60Hz available on request  |              |
|   | 240volts, 50/60Hz available on request  |              |
|   | 250volts, 50/60Hz available on request  |              |
| Multi-Channel 10,000-Watt HF/SSB Transmitters |   |              |
|   | Technical specifications per Bulletin 1020-7  |              |
|   | Two copies of Operator's Technical Manual 07.1020-7   |              |
|   | Operating modes A1/A3/A3H/A3A/A3J/A3B/F1/F4   |              |
|   | Audio bandwidth each sideband:  |              |
|   | 250-3040Hz (CCIR) or  |              |
|   | 250-6080Hz (CCIR)   |              |
| HFT-10KE/10 Ten-Channel HF/SSB Transmitter    |   |              |
|   | Type 6221 ISB/FSK/FAX, Two 3KHz sidebands   | \$ 37,211.00 |
|   | Type 6261 ISB/FSK/FAX, Two 6KHz sidebands   | \$ 37,211.00 |
| Accessory:                                    | 08.1020-7 Servicing Technical <u>Manuals</u> , 2copies  | \$ 288.00    |
| Synthesized 10,000-Watt HF/SSB Transmitters   |   |              |
|   | Technical specifications per Bulletin 1015-5  |              |
|   | Two copies of Operator's Technical Manual 07.1015-5J2   |              |
|   | Operating modes A1/A3/A3H/A3A/A3J/A3B/F1/F4   |              |
|   | Audio bandwidth each sideband:  |              |
|   | 250-3040Hz (CCIR) or  |              |
|   | 250-6080Hz (CCIR)   |              |
| HFT-10KJ                                      | Type 2221 ISB/FSK/FAX Two 3KHz sidebands  | \$ 37,484.00 |
|   | Type 2261 ISB/FSK/FAX Two 6KHz sidebands  | \$ 37,484.00 |
| Accessory:                                    | 08.1015-5J2 Servicing Technical <u>Manuals</u> , 2 copies   | \$ 295.00    |
| Synthesized 10,000-Watt HF/SSB Transmitter    |   |              |
|   | Technical specifications per Bulletin 1015-5  |              |
|   | Two copies of Operator's Technical Manual 07.1015-5A4   |              |
|   | Operating modes A1/A3H/A3A/A3J/A9B  |              |
|   | Audio bandwidth each sideband: 250-3040Hz (CCIR)  |              |
| HFT-10KA                                      | Type 4420 ISB(A9B), Four 3KHz sidebands   | \$ 40,463.00 |
| Accessory:                                    | 08.1015-5A4 Servicing Technical <u>Manuals</u> 2 copies   | \$ 316.00    |

Continued on the next page

| Equipment                              | 7205  | HFT-10K                              |
|--|---|--------------------------------------|
| HFT-10K                                | 10,000-Watt PEP/AVG, HF/SSB Transmitters (continued)  |                                      |
| Selected TX Accessories:               |   |                                      |
| 30.2035-6/1                            | <u>Kit providing 1.6 to 2MHz coverage</u>   | \$ 1,211.00                          |
| 30.2100/1                              | <u>Kit providing external auto-transformer</u><br>for 370,380, or 390volt, 50/60Hz<br>primary power operation | \$ 716.00                            |
| LPF-10K                                | <u>Low pass output filter</u>   | \$ 668.00                            |
| TER-18K                                | <u>Terminator/dummy load</u>  | \$ 6,400.00                          |
| TFP-10K                                | <u>Switchable harmonic output filter</u>  | \$ 3,821.00                          |
| TIS-3D                                 | <u>External AFSK(A7J) tone kever</u>  | \$ 1,531.00                          |
| TRC-20K                                | <u>Rhombic antenna coupler</u>  | \$ 2,837.00                          |
| Integrated Transmitting Systems:       |   |                                      |
| SYM 1540/0 HFT-10K Transmitter Systems |   | See SYM 1540 prices<br>Bulletin 1540 |

| Equipment  | 7205   | HFTA-10K |
|--|--|----------|
| HFTA-10K   | Automated 10,000-Watt PEP/AVG, HF/SSB Transmitters<br>The HFTA-10K is an automated transmitter capable of 10,000 watts PEP and average power output in the 2 to 30 MHz range. The transmitter tunes in less than 10 seconds on command once the frequency has been selected on the exciter. The transmitter is self-contained and is the automated version of the HFT-10K<br>Supplied with Fully wired equipment cabinet<br>Track slides as required for transmitter units<br>Three phase primary power: 230volts, 50/60Hz<br>210volts, 50/60Hz available on request<br>220volts, 50/60Hz available on request<br>240volts, 50/60Hz available on request<br>250volts, 50/60Hz available on request |          |
| Automated Multi-Channel 10,000-Watt HF/SSB Transmitters              | Technical specifications per Bulletin 1020-7<br>Two copies of Operator's Technical Manual 07.1020-7/1<br>Operating modes A1/A3/A3H/A3A/A3J/A3B/F1/F4<br>Audio bandwidth each sideband:<br>250-3040Hz (CCIR) or<br>250-6080Hz (CCIR)  |          |
| HFTA-10KE/10   | <u>Ten Channel HF/SSB Transmitters</u><br>Type 6221 ISB/FSK/FAX Two 3KHz sidebands \$ 42,395.00<br>Type 6261 ISB/FSK/FAX Two 6KHz sidebands \$ 42,395.00   |          |
| Accessory:   | 08.1020-7/1 Servicing Technical <u>Manuals</u> , 2 Copies \$ 326.00  |          |
| Automated Synthesized 10,000-Watt HF/SSB Transmitters                | Technical specifications per Bulletin 1015-5<br>Two copies of Operator's Technical Manual 07.1015-5J2/1<br>Operating modes A1/A3/A3H/A3A/A3J/A3B/F1/F4<br>Audio bandwidth each sideband:<br>250-3040Hz (CCIR) or<br>250-6080Hz (CCIR)  |          |
| HFTa-10KJ  | Type 2221 ISB/FSK/FAX, Two 3KHz sidebands \$ 42,653.00<br>Type 2261 ISB/FSK/FAX Two 6KHz sidebands \$ 42,653.00  |          |
| Accessory:   | 08.1015-5J2/1 Servicing Technical <u>Manuals</u> , 2 copies \$ 347.00  |          |
| Automated Synthesized 10,000-Watt HF/SSB Transmitter (4 Channel ISB) | Technical specifications per Bulletin 1015-5<br>Two copies of Operator's Technical Manual 07.1015-5A4/1<br>Operating modes A1/A3H/A3A/A3J/A9B<br>Audio bandwidth 250-3040Hz (CCIR) each sideband   |          |
| HFTA-10KA  | Type 4420 ISB(A9B), Four 3KHz sidebands \$ 47,995.00   |          |
| Accessory:   | 08.1015-5A4/1 Servicing Technical <u>Manuals</u> , 2 copies \$ 374.00  |          |

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Equipment

7205

HFTA-10K

HFTA-10K Automated 10,000-Watt PEP/AVG, HF/SSB Transmitters (CONTINUED)

## Selected TX Accessories:

|             |  |             |
|-------------|--|-------------|
| 30.2035-6/1 | <u>Kit providing 1.6 to 2 MHz coverage</u>   | \$ 1,211.00 |
| 302100/1    | <u>Kit providing external auto-transformer for 370,380, or 390,50/60Hz primary power operation</u> | \$ 716.00   |
| LPF-10K     | <u>Low pass output filter</u>  | \$ 668.00   |
| TER-18K     | <u>Terminator/dummy load</u>   | \$ 6,400.00 |
| TFPA-10K    | <u>Automated switchable harmonic filter</u>  | \$ 4,065.00 |
| TIS-3D      | <u>External AFSK(A7J) tone keyer</u>   | \$ 1,531.00 |
| TRC-20K     | <u>Rhombic antenna coupler</u>   | \$ 2,837.00 |

## Integrated Transmitting Systems:

SYM 1540/1 HFT-10K Transmitter Systems

See SYM 1540 prices  
Bulletin 1540

| Equipment    | 7205  | HFTR-10K                            |
|--------------|---|-------------------------------------|
| HFTR-10K     | Automated/Remote 10,000-Watt PEP/AVG, HF/SSB Transmitters   |                                     |
|              | The HFTR-10K Transmitters are basically automated transmitters (HFTA-10K) with circuits added as interface for remote control of all functions including power ON/OFF, frequency selection, mode selection, transmitter re-cycle, and output power level. The actual remote control system, however, is NOT included with the transmitter due to the many possible combinations. TMC R/C systems are recommended below: |                                     |
|              | Supplied with Fully wired equipment cabinet   |                                     |
|              | Track slides as required for transmitter units  |                                     |
|              | Three phase primary power: 230volts, 50/60Hz  |                                     |
|              | See Model HFTA-10K for additional power ratings   |                                     |
|              | Automated/Remote Multi-Channel 10,000-Watt HF/SSB Transmitters  |                                     |
|              | Technical specifications per Bulletin 1020-7  |                                     |
|              | Two copies of Operator's Technical Manual 07.1020-7/2   |                                     |
| HFTR-10KE/10 | Ten Channel HF/SSB Transmitter  |                                     |
|              | All types listed under Model HFTA-10KE/10   | \$ 44,400.00                        |
| Accessories: |   |                                     |
|              | 08.1020-7/2 Servicing Technical <u>Manuals</u> , 2 copies   | \$ 341.00                           |
|              | ADC-3 Multi-channel remote control systems  | See ADC-3 prices                    |
|              | See also HFTA-10K Selected Accessories  |                                     |
|              | Automated/Remote Synthesized 10,000-Watt HF/SSB <u>Transmitters</u>   |                                     |
|              | Technical specifications per Bulletin 1015-5  |                                     |
|              | Two copies of Operator's Technical Manual 07.1015-5J2/2   |                                     |
| HFTR-10KJ    | All Types listed under Model HFTA-10KJ  | \$ 44,642.00                        |
| Accessories: |   |                                     |
|              | 08.1015-5J2/2 Servicing Technical <u>Manuals</u> , 2 copies   | \$ 371.00                           |
|              | COP-2 Synthesized remote control systems  | See COP-2 prices                    |
|              | See also HFTA-10K Selected Accessories  |                                     |
|              | Automated/Remote Synthesized 10,000-Watt HF/SSB <u>Transmitter</u> (4-Channel ISB)  |                                     |
|              | Technical specifications per Bulletin 1015-5  |                                     |
|              | Two copies of Operator's Technical Manual 07.1015-5A4/2   |                                     |
| HFTR-10KA    | Type listed under Model HFTA-10KA   | \$ 49,284.00                        |
| Accessories: |   |                                     |
|              | 08.1015-5A4/2 Servicing Technical <u>Manuals</u> , 2 copies   | \$ 400.00                           |
|              | COP-2 Synthesized remote control systems  | SEE COP-2 prices                    |
|              | See also HFTA-10K Selected Accessories  |                                     |
|              | Integrated Transmitting Systems:  |                                     |
|              | SYM 1540/2 HFT-10K Transmitter Systems  | See SYM 1540 price<br>Bulletin 1540 |



## Equipment

7205

HLC-1

HLC-1 Receiving Antenna Coupler, Combined HF/LF  
 The HLC-1 is designed to couple the high and low frequency inputs of an antenna to suitable receivers. The couplers are passive and are provided with a choice of connectors  
 Technical specifications per Bulletin 4035-4  
 Two copies of Technical Manuals 06.4035-4

HLC-1 HF/LF Antenna Coupler, 700/300/70B-ohm Input

|           |                                    |           |    |        |
|-----------|------------------------------------|-----------|----|--------|
| Type 01C7 | N Connector                        | AX259-1   | \$ | 453.00 |
| Type 02C7 | BNC Connector                      | AX284-1   | \$ | 453.00 |
| Type 03C7 | UHF Connector                      | AX281-1   | \$ | 453.00 |
| Type 05C7 | QDS Connector                      | AX289-1   | \$ | 453.00 |
| Type 06C7 | C Connector                        | AX286-1   | \$ | 453.00 |
| Type 07C7 | BN Connector                       | AX283-1   | \$ | 453.00 |
| Type 08C7 | HN Connector                       | AX285-1   | \$ | 453.00 |
| Type 09C7 | QDL Connector                      | AX273-1   | \$ | 453.00 |
| Type 20C7 | <u>Flange</u> for RG-85/U          | AX274-1   | \$ | 537.00 |
| Type 21C7 | 7/8" Styroflex <u>end seal</u>     | ES-ST7875 | \$ | 453.00 |
| Type 22C7 | 3-1/8" <u>adapter</u> to LC female |           | \$ | 547.00 |

HLC-3 Receiving Antenna Coupler, 600-ohm Balanced Input  
 Identical to the HLC-1 with input impedance 600-ohms balanced  
 HLC HF/LF Antennas Coupler, 600-ohm Balanced Input

|           |                                    |           |    |        |
|-----------|------------------------------------|-----------|----|--------|
| Type 01C6 | N Connector                        | AX259-1   | \$ | 453.00 |
| Type 02C6 | BNC Connector                      | AX284-1   | \$ | 453.00 |
| Type 03C6 | UHF Connector                      | AX281-1   | \$ | 453.00 |
| Type 05C6 | QDS Connector                      | AX289-1   | \$ | 453.00 |
| Type 06C6 | C Connector                        | AX286-1   | \$ | 453.00 |
| Type 07C6 | BN Connector                       | AX283-1   | \$ | 453.00 |
| Type 08C6 | HN Connector                       | AX285-1   | \$ | 453.00 |
| Type 09C6 | QDL Connector                      | AX273-1   | \$ | 453.00 |
| Type 20C6 | <u>Flange</u> for RG-85/U          | AX274-1   | \$ | 537.00 |
| Type 21C6 | 7/8" Styroflex <u>end seal</u>     | ES-ST7875 | \$ | 453.00 |
| Type 22C6 | 3-1/8" <u>adapter</u> to LC female |           | \$ | 547.00 |

|   |   |      |           |
|---|---|------|-----------|
| Equipment   |   | 7205 | LFD       |
| LFD-1   | <u>Antenna Distribution Unit (Front Panel Connectors)</u><br>The LFD-1 is used to passively couple one antenna to four receivers. The LFD series is the low frequency version of the HFD series and covers the 15 to 2000 KHz range.<br>Technical specifications per Bulletin 4025-1<br>Two copies of Technical Manual 06.4025-1  |      |           |
| LFD-1   | Type 0300 UHF Connector   | \$   | 263.00    |
|   | Type 0400 QDM Connector   | \$   | 263.00    |
|   | Type 0500 QDS Connector   | \$   | 263.00    |
| LFD-2   | <u>Antenna Distribution Unit (Rear Panel Connectors)</u><br>The LFD-2 is identical to the LFD-1 connectors mounted through the rear chassis.  |      |           |
| LFD-2   | Type 0100 N Connector   | \$   | 211.00    |
|   | Type 0200 BNC Connector   | \$   | 211.00    |
|   | Type 0600 C Connector   | \$   | 211.00    |
| LFE-2   | <u>Low/Medium Frequency Synthesized Exciter</u><br>The LFE-2 exciter provides up to 150 milliwatts of RF drive in the 10 to 2000KHz range at a frequency stability of one part in $10^8$ per day, synthesized in 100Hz steps. The exciter requires no tuning or peaking once frequency is selected. Modes available include CW, AM, AME, SSB, and two-channel ISB. Technical specifications per Bulletin 2030-5<br>Two copies of Technical Manual 06.2030-3<br>Single phase primary power: 115volts, 50/60Hz<br>230volts, 50/50Hz available on request<br>Operating modes A1/A3/A3H/A3A/A3J/(A3B optional)<br>Audio bandwidth each sideband:<br>250-3040Hz (CCIR) or<br>250-6080Hz (CCIR) |      |           |
| LFE-2   | Type 2020 USB, 3KHz CCIR  | \$   | 12,258.00 |
|   | Type 2220 ISB(A3B), Two 3KHz sidebands  | \$   | 12,653.00 |
|   | Type 2260 ISB(A3B), Two 6KHz sidebands  | \$   | 12,663.00 |
| Accessory:  | TIS-3D AFSK(A7J) <u>tone keyer</u>  | \$   | 1,531.00  |
| Note: Automated and automated/remote interface circuits can be provided On Request. |   |      |           |
| LMC-32  | <u>LF/MF Receiving Antenna Multicoupler</u><br>The LMC-32 is used to couple one antenna to up to 32 LF/MF communication receivers.<br>Technical specifications per Bulletin 10-4030<br>Two copies of Technical Manual 10-104030   |      |           |
| LMC-32  | Type 3200 Thirty-two output <u>Multicoupler</u>   | \$   | 1,331.00  |

| Equipment             | 7205   | LPA-1K                          |
|-----------------------|--|---------------------------------|
| LPA-1K                | 1,000-Watt PEP Linear Power Amplifier  | 77 <sup>7</sup> / <sub>16</sub> |
|                       | <p>The LPA-1K provides RF amplification of a 100-watt PEP input signal in the 1.6 to 18 MHz frequency range. The amplifier is capable of handling up to eight pre-set channels in this range to 1,000-watts PEP output.</p> <p>Technical specifications per Bulletin 102034-2A<br/>           Two copies of Technical Manual 06.2036-3<br/>           Single phase primary power: 115volts, 50/60Hz</p>  |                                 |
| LPA-1K                | Eight-Channel 1000-Watt Amplifier  | \$ 2,745.00                     |
| Selected Accessories: |  |                                 |
|                       | <u>KIT 10042</u> Slave switching for antenna system  | \$ 33.00                        |
|                       | <u>CAB 10001</u> Cabinet for LPA-1K  | \$ 64.00                        |
| LPAA-1K               | Automated 1,000-Watt PEP Linear Power Amplifier  |                                 |
|                       | <p>The LPAA-1K contains circuits designed to automatically switch channels when the exciter or drive unit channel select is advanced. This "slave" switching feature is available for most types of exciter units. However, the Technical Bulletin should be consulted to determine the exact requirements of the linear amplifier for proper, automatic switching.</p> <p>Technical specifications per Bulletin 2036-3<br/>           Two copies of Technical Manual 06.2036-3/1<br/>           Single phase primary power: 115volts, 50/60</p> |                                 |
| LPAA-1K               | Type 5008 Auto/Switch 8-Channel 1KW Amplifier  | \$ 2,821.00                     |
| LPF-1K/fo             | 1,000-Watt (Fixed) Low Pass RF Output Filter   |                                 |
|                       | <p>The LPF-1K is a transmitting output filter capable of handling 1,000-watts PEP and average output in the 2 to 30MHz frequency range. The symbol fo represents the cut-off frequency required for operation. Better than 25db attenuation is provided over that accomplished in the transmitter. N-type output connector.</p> <p>Technical specifications per Bulletin 2045-1<br/>           Two copies of Technical Manual 06.2045-1/1K</p>   |                                 |
| LPF-1K                | All type 1KW <del>Loss</del> <sup>Low</sup> Pass Output Filter   | \$ 300.00                       |
| LPF-10K               | 10,000-Watt (Fixed) <del>Loss</del> <sup>Low</sup> Pass RF Output Filter   |                                 |
|                       | <p>The LPF-10K is a transmitting output filter capable of handling 10,000-watts PEP and average output power in the 2 to 30 MHz range. The cut-off frequency is 30MHz with the operating passband 2 to 30MHz range. Fitted with 1-5/8" EIA flange.</p> <p>Technical specifications per Bulletin 2045-1<br/>           Two copies of Technical Manual 06.2045-1/10K</p>   |                                 |
| LPF-10K               | Type 0030 10KW Low Pass Output Filter  | \$ 668.00                       |
| LPF-40K               | 40,000-Watt (Fixed) Low Pass RF Output Filter  |                                 |
|                       | <p>The LPF-40K is a transmitting output filter capable of handling 40,000 watts PEP output power in the 2 to 30MHz range. The cut-off frequency is 30MHz with the operating passband 2 to 30MHz. Fitted with 3-1/8" EIA Flange.</p> <p>Technical specifications per Bulletin 2045-1<br/>           Two copies of Technical Manual 06.2045-1/40K</p>  |                                 |
| LPF-40K               | Type 0030 40KW Low Pass Output Filter  | \$ 1,732.00                     |

| Equipment | 7205   | LPF-2   |
|-----------|--|---|
| LPF-2/()  | <p>Low Pass Switchable Receiving Filters Tuned Channels<br/>           The LPF-2 switchable filters provide up to 30db attenuation of unwanted RF energy at the input of a receiver or receiving system. The filter is particularly useful when the receiving system is located in close proximity to a transmitting antenna. A sensing circuit is provided to remove the antenna from the receiver input when the RF energy exceeds a pre-determined level. Each section can be tuned to a specific center frequency in the 2 to 30MHz range. Once set, it attenuates RF energy 25db at 10% on either side of the channel center frequency. i/o impedance is nominally 50-ohms.<br/>           Technical specifications per Bulletin 4020-1<br/>           Two copies of Technical Manual 06.4020-1</p> |   |
| LPF-2/1   | Type 2001  | Single channel receiving <u>filter</u> \$ 199.00              |
|           | Type 2004  | Four channel switchable <u>receiving filter</u> \$ 781.00     |
|           | Type 2008  | Eight channel switchable receiving <u>filter</u> \$ 1,537.00  |
|           | Type 2010  | Ten channel switchable receiving <u>filter</u> \$ 1,874.00    |
|           | Type 2020  | Twenty-channel switchable receiving <u>filter</u> \$ 3,332.00 |
| LSP-()    | <p>Loudspeaker Monitor Panels<br/>           The LSP series of monitor loudspeaker panels are used with receivers or receiving systems where an audio output is required for operation. Each speaker is provided with a volume control. Up to three speakers can be mounted on a single panel.<br/>           Technical specifications per Bulletin 4005-4<br/>           Two copies of Technical Manual 06.4005-4</p>   |   |
| LSP-4     | Type 0401  | Single <u>speaker panel</u> \$ 89.00                          |
| LSP-6     | Type 0602  | Two- <u>speaker panel</u> \$ 137.00                           |
| LSP-8     | Type 0803  | Three- <u>speaker panel</u> \$ 194.00                         |

MAT-10K Medium Frequency 10,000-Watt Multi-Channel Antenna Tuner

The MAT-10K matches the output of a 10KW MF Transmitter operating in the 400 to 525Khz range to a suitable antenna system. The multi-channel tuner can be pre-set to any one of five channels by simply changing taps on the final coil and adjusting the tune capacitor using a null meter. Once the proper channel is selected, the system will tune automatically. A cabinet is provided for housing the control and tuner elements.

Technical specifications per Bulletin 2055-5

Two copies of Technical Manual 06.2055-5

Single phase primary power: 115 volts, 50/60Hz

MAT-10K/1 Type 1001 Single channel antenna tuner \$ 4,326.00

MAT-10K/5 Type 1005 Five channel antenna tuner \$ 5,116.00

MATR-10K Automated/Remote 10,000-Watt Multi-Channel MF Antenna Tuner

The MATR-10K is identical to the MAT-10K with the additional provision for remote channel selection from the transmitter. The tuner select switch can be slaved directly to the transmitter channel select switch provided the proper information is supplied. Otherwise, the TCU-1/10K is required.

Fitted for a 7/8" EIA flange.

Technical specifications per Bulletin 2055-5

Two copies of Technical Manual 06.2055-5/2

Single phase primary power: 115 volts, 50/60Hz

MATR-10K/3

Type 1003 Three channel auto/remote antenna tuner \$ 4,932.00

MATR-10K/5

Type 1005 Five channel auto/remote antenna tuner \$ 5,253.00

Accessory:

TCU-1/10K Tuner control unit for remote channel selection independent of transmitter \$ 341.00

MCT-10K 10,000-Watt AVG Channelized Medium Frequency CW/MCW Transmitter

The MCT-10K is a medium frequency (400-525Khz) transmitter capable of 10KW average power output in the CW mode and 30KW peak in the ~~MVW~~<sup>MVW</sup> mode on up to five channels. The transmitter is self-contained in its own cabinet.

Supplied with Fully wired equipment cabinet

Track slides as required for transmitter units

Technical specifications per Bulletin 1026-3

Two copies of Operator's Technical Manual 07.1026-3

Operating modes A1/A2

Three phase primary power: 230 volts, 50Hz

210volts, 50 or 60 Hz available on request

220volts, 50 or 60 Hz available on request

230volts, 50 Hz available on request

240volts, 50 or 60 Hz available on request

250volts, 50 or 60 Hz available on request

MCT-10K/1 Type 1901 Singl channel CW/MCW Transmitter \$ 34,242.00

MCT-10K/5 Type 1905 Five channel CW/MCW Transmitter \$ 24,968.00

Accessory:

08.1026-3 Servicing Technical Manuals, 2 copies \$ 242.00  
 MAT-10K/5 Five channel MF antenna tuner \$ 5,116.00

Integrated Transmitting Systems:

SYM 1541/0 MCT-10K Transmitter System

SYM 1541 prices  
 Bulletin 1541

|                                  |   |                                  |
|----------------------------------|---|----------------------------------|
| Equipment                        | 7205  | MCT-400                          |
| MCT-400                          | 400-Watt Channelized Medium Frequency CW/MCW Transmitter  |                                  |
|                                  | <p>The MCT-400 is the 400-watt version of the MCT-50 transmitter <del>ans</del> is used as the main transmitter in marine installations. The transmitter consists of two units in a CAB-30. Technical specifications per Bulletin 1026-2<br/> Two copies of Technical Manual 06.1026-2<br/> Single phase primary power : 115volts, 50/60Hz<br/> Operating modes A1/A2 with 1000Hz modulation</p>  |                                  |
| MCT-400/4                        | Type 0900 Four channel <u>CW/MCW Transmitter</u>  | \$ 2,605.00                      |
| MCT-400/6                        | Type 0900 Six channel <u>CW/MCW Transmitter</u>   | \$ 2,737.00                      |
| Selected Accessories:            |   |                                  |
|                                  | 30.1026-2/1 <u>Kit providing automatic switch-over to battery primary power at 50 watts transmitter output if AC fails</u>  | \$ 160.00                        |
|                                  | BPS-1/4 <u>Battery power supply (4 hour life)</u>   | \$ 139.00                        |
|                                  | KY-100 <u>Telegraph key</u>   | \$ 15.00                         |
|                                  | MAT-400/6 <u>Six channel antenna tuner</u>  | \$ 495.00                        |
|                                  | TFP-400L <u>Harmonic output filter</u>  | \$ 442.00                        |
| Integrated Transmitting Systems: |   |                                  |
|                                  | SYM 1504/0 MCT-400 Transmitter System   | SYM 1504 prices<br>Bulletin 1504 |
| MCT-10K                          | 10,000-Watt AVG Channelized Medium Frequency CW/MCW Transmitter   |                                  |
|                                  | <p>The MCT-10K is a medium frequency (400-525KHz) transmitter capable of 10KW average power output in the CW mode and 30KW peak in the MCW mode on up to five channels. The transmitter is self-contained in its own cabinet.<br/> Supplied with Fully wired equipment cabinet<br/> Track slides as required for transmitter units<br/> Technical specifications per Bulletin 1026-3<br/> Two copies of Operator's Technical Manual 07.1026-3<br/> Operating modes A1/A2<br/> Three phase primary power: 230volts, 50Hz<br/> 210volts, 50 or 60 Hz available on request<br/> 220volts, 50 or 60 Hz available on request<br/> 230volts, 50 Hz available on request<br/> 240volts, 50 or 60 Hz available on request<br/> 250volts, 50 or 60 Hz available on request</p> |                                  |
| MCT-10K/1                        | Type 1901 Single channel <u>CW/MCW Transmitter</u>  | \$ 34,242.00                     |
| MCT-10K/5                        | Type 1905 Five channel <u>CW/MCW Transmitter</u>  | \$ 34,968.00                     |
| Accessory:                       |   |                                  |
|                                  | 08.1026-3 <u>Servicing Technical Manuals, 2 copies</u>  | \$ 242.00                        |
|                                  | Mat-10K/5 <u>Five channel MF antenna tuner</u>  | \$ 5,116.00                      |
| Integrated Transmitting Systems: |   |                                  |
|                                  | SYM 1541/0 MCT-10K Transmitter System   | SYM 1541 prices<br>Bulletin 1541 |

|                                  |  |   |                                  |
|----------------------------------|--|---|----------------------------------|
| Equipment                        | 7205   | MCTR-10K                                      |                                  |
| MCTR-10K                         | Automated/Remote 10,000-Watt Channelized CW/MCW (MF) Transmitter   |   |                                  |
|                                  | The MCTR-10K is identical to the MCT-10K with the addition of interface circuits for remote channel select and power ON/OFF. The actual remote control system however, is NOT included with the transmitter due to the variety of possible applications. |   |                                  |
|                                  | Supplied with Fully wired equipment cabinet  |   |                                  |
|                                  | Track slides as required for transmitter units   |   |                                  |
|                                  | Technical specifications per Bulletin 1026-3   |   |                                  |
|                                  | Two copies of Operator's Technical Manual 07.1026-3/2  |   |                                  |
|                                  | Three phase primary power:230volts,60Hz  |   |                                  |
|                                  | 210volts, 50 or 60 Hz available on request   |   |                                  |
|                                  | 220volts, 50 or 60Hz available on request  |   |                                  |
|                                  | 230volts, 50 Hz available on request   |   |                                  |
|                                  | 240volts, 50 or 60 Hz available on request   |   |                                  |
|                                  | 250volts, 50 or 60 Hz available on request   |   |                                  |
| MCTR-10K/5                       | Type 1905  | Auto/Remote 5-Channel <u>Transmitter</u>      | \$ 37,251.00                     |
| Selected Accessories:            |  |   |                                  |
|                                  | 08.1026-3/2  | <u>Servicing Technical Manuals</u> , 2 copies | \$ 300.00                        |
| ADC-3                            | Multi-channel remote control systems   | See ADC-3 prices                              |                                  |
|                                  | MAT-10K/5  | Five channel MF <u>antenna tuner</u>          | \$ 5,116.00                      |
| Integrated Transmitting Systems: |  |   |                                  |
|                                  | SYM 1541/2   | MCT-10K Transmitter Systems                   | SYM 1541 prices<br>Bulletin 1541 |
| MFE-1                            | Medium Frequency Multi-channel Exciter   |   |                                  |
|                                  | The MFE-1 is a ten channel MF exciter operating in the 400 to 525KHz range at 150 milliwatts RF output. The exciter requires no tuning once a channel is selected.   |   |                                  |
|                                  | Technical specifications per Bulletin 2031-3   |   |                                  |
|                                  | Two copies of Technical Manual 06.2031-3   |   |                                  |
|                                  | Single phase primary power : 115volts, 50/60Hz   |   |                                  |
|                                  | 230volts, 50/60Hz available on request   |   |                                  |
|                                  | Operating modes A1/A2/A2H/F1   |   |                                  |
| MFE-1/5                          | Type 1901  | Five channel <u>MF Exciter</u>                | \$ 6,326.00                      |
| MFE-1/10                         | Type 1901  | Ten channel <u>MF Exciter</u>                 | \$ 6,884.00                      |



| Equipment    | 7205  | MFT-10K      |
|--------------|---|--------------|
| MFT-10K      | 10,000-Watt Average CW/MCW/FSK Medium Frequency Transmitters<br>The MFT-10K transmitters are capable of 10,000-watts average power (CW) and 30,000 watts peak power (MCW) output on up to ten RF channels in the 400 to 535KHz range. The MFT-10K can be synthesized or supplied as a multi-channel transmitter. Supplied with Fully wired equipment cabinet<br>Track slides as required for transmitter units<br>Three phase primary power: 230volts, 60Hz<br>210volts, 50 or 60Hz available on request<br>220 volts, 50 or 60Hz available on request<br>230volts, 50Hz available on request<br>240volts, 50 or 60Hz available on request<br>250volts, 50 or 60Hz available on request |              |
|              | Multi-channel 10,000-Watt (MF) CW/MCW/FSK Transmitter<br>Technical specifications per Bulletin 1021<br>Two copies of Operator's Technical Manual 07.1021<br>Operating modes A1/A2/A2H/F1  |              |
| MFT-10KE/5   | Five channel (MF) <u>CW/MCW/FSK Transmitter</u>   | \$ 36,505.00 |
| MFT-10KE/10  | Ten channel (MF) <u>CW/MCW/FSK Transmitter</u>  | \$ 37,179.00 |
| Accessories: |   |              |
|              | 08.1021 Servicing Technical <u>Manuals</u> , 2 copies   | \$ 279.00    |
|              | MAT-10K/5 Five channel MF antenna tuner   | \$ 5,116.00  |
|              | Synthesized 10,000-Watt (MF) CW/MCW/FSK Transmitter<br>Technical specifications per Bulletin 1016-1<br>Two copies of Operator's Technical Manual 08.1016-1<br>Operating modes A1/A2/A2H/F1  |              |
| MFT-10KL     | Synthesized <sup>MF</sup> <del>(MF)</del> <u>CW/MCW/FSK Transmitters</u>  | \$ 39,589.00 |
| Accessory:   |   |              |
|              | 08.1016-1 Servicing Technical <u>Manuals</u> , 2 copies   | \$ 300.00    |
| MFTR-10K     | Automated/Remote 10,000-Watt Average CW/MCW/FSK (MF) Transmitters<br>The MFTR-10K is the remotely controlled version of the multi-channel MFT-10K described above. The remote control system, however, is NOT included due to the many possible applications of the transmitters<br>Supplied with Fully wired equipment cabinet<br>Track slides as required for transmitter units<br>Three phase primary power: 230volts, 60Hz<br>See MFT-10K for additional power ratings  |              |
|              | Multi-channel Auto/Remote 10,000-Watt MF Transmitter<br>Technical specifications per Bulletin 1021<br>Two copies of Operator's Technical Manual 07.1021/2<br>Operating modes A1/A2/A2H/F1   |              |
| MFTR-10KE/5  | Five channel <u>MF transmitter</u>  | \$ 37,311.00 |
| MFTR-10KE/10 | Ten channel <u>MF transmitter</u>   | \$ 37,984.00 |
| Accessory:   |   |              |
|              | 08.1021/2 Servicing Technical <u>Manuals</u> , 2 copies   | \$ 293.00    |

| Equipment           | 7205  | MMX                  |
|---------------------|---|----------------------|
| MMX-2A              | <u>High frequency Synthesized Exciter</u><br>The MMX-2A provides up to 150 milliwatts of RF drive in 100Hz synthesized steps at a frequency stability of one part in 10 <sup>8</sup> per day over the 1.6 to 30MHz operating range. The exciter is designed to drive any TMC transmitter; requires no tuning or peaking once frequency is selected; and is completely solid state.<br>Technical specifications per Bulletin 2030-1<br>Exciter operating modes A1/A3/A3H/A3A/A3J<br>Operating bandwidth power: 115 volts, 50/60Hz<br>230volts, 50/60Hz available on request<br>Two copies of Operator's Manual 07.2030-1 |                      |
| MMX-2A              | Type 2000   | \$ 11,495.00         |
|                     | USB Exciter using 3KHz FCC filters  | \$ 11,495.00         |
|                     | ISB Exciter using 3KHz CCIR Filters   | \$ 11,789.00         |
|                     | ISB/FSK/FAX Exciter w/Type CCIR Filters   | \$ 11,916.00         |
|                     | ISB Exciter using 6KHz CCIR Filters   | \$ 11,789.00         |
|                     | ISB/FSK/FAX Exciter w/type 6KHz CCIR Filters  | \$ 11,916.00         |
| MMX(A)-2A           | Internal Interface added for control of TMC automated transmitter functions   |                      |
|                     | USB Exciter using 3KHz FCC Filters  | \$ 12,347.00         |
|                     | ISB Exciter using 3KHz CCIR Filters   | \$ 12,642.00         |
|                     | ISB/FSK/FAX Exciter w/3KHz CCIR Filters   | \$ 12,768.00         |
|                     | ISB Exciter using 6KHz CCIR Filters   | \$ 12,642.00         |
|                     | ISB/FSK/FAX Exciter w/ 6KHz CCIR Filters  | \$ 12,768.00         |
| <b>Accessories:</b> |   |                      |
|                     | 08.2030-1 Servicing Technical Manual  | \$ 46.00             |
|                     | TFP-1K External 35db Harmonic Output Filter   | \$ 1,242.00          |
|                     | LPF-1K External 35db Low Pass Output Filter   | \$ 300.00            |
|                     | TIS-3D External AFSK(A7J) Keyer Unit  | \$ 1,531.00          |
|                     | MK-102 Desktype PTT Microphone  | \$ 67.00             |
|                     | KY-100 Standard Telegraph Key   | \$ 15.00             |
| MMX-3               | <u>High Frequency Synthesized Exciter</u><br>ISB Option for MMX-3   |                      |
|                     |   | \$ 8,947.00          |
|                     |   | \$ 526.00            |
| MSR-9               | <u>Receiving Mode Selector</u><br>The MSR-9 provides quality detection of upper or lower side signals using the 455KHz IF of a communications receiver not designed to detect this type intelligence. The unit also improves the quality of AM, CW, MCW and FSK signals. Technical specifications per Bulletin 4005-2<br>Single phase primary power: 115volts 50/60Hz<br>230volts, 50/60Hz available on request<br>Two copies of Technical Manual 07.4005-2   |                      |
| MSR-9               |   | \$ <del>795.00</del> |

Equipment

7205

RMX-1 Voice Frequency Demultiplexers

Provides two discrete 3KHz (375-3025Hz) Channels <sup>from</sup> one 6KHz (375-5915Hz) receiver channel. Handles normal telephone, facsimile, or 16-channel telegraph traffic.

\$ 2,184.00

Rack Space Required: 5½"

Bulletin # 4010

RMX-2 Voice Frequency Demultiplexer, Four-Channel  
 Provides four discrete 3KHz (375-3025Hz) channels from two 6KHz (375-5915Hz) receiver channels. Handles normal telephone facsimile or 16-channel telegraph traffic. \$ 4,342.00

|            |                       |        |         |    |     |
|------------|-----------------------|--------|---------|----|-----|
| Option 115 | Primary Power Rating: | 115VAC | 50/60Hz | 1Ø | N/C |
| Option 230 | Primary Power Rating: | 230VAC | 50/60Hz | 1Ø | N/C |

Ship 60-90 boxes

| NEW          | OLD          |  |           |
|--------------|--------------|--|-----------|
| RAC-26 (50)  | X RAC-7      | Rhombic <u>Antenna Coupler</u> , 50ohm Unbalanced to 600/200ohm Balanced | \$ 284.00 |
| RAC-26 (70)  | RAC-20,30A32 | Rhombic <u>Antenna Coupler</u> , 70ohm Unbalanced to 600/200ohm Balanced | \$ 284.00 |
| RAC-27 (70)  | RAC-1,30     | Rhombic <u>Antenna Coupler</u> , 70ohm Unbalanced to 700/200 Balanced    | \$ 284.00 |
| RAC-30B (50) | X RAC-11     | Rhombic <u>Antenna Coupler</u> , 50ohm Unbalanced to 300ohm Balanced     | \$ 284.00 |
| RAC-50 (50)  | RAC-9        | Rhombic <u>Antenna Coupler</u> , 50ohm Unbalanced to 500ohm Balanced     | \$ 284.00 |
| RAC-50 (70)  | RAC-13       | Rhombic <u>Antenna Coupler</u> , 70ohm Unbalanced to 500ohm Balanced     | \$ 284.00 |
| RAC-60 (50)  | X RAC-7A     | Rhombic <u>Antenna Coupler</u> , 50ohm Unbalanced to 600ohm balanced     | \$ 284.00 |
| RAC-60 (70)  | X RAC-24     | Rhombic <u>Antenna Coupler</u> , 50ohm Unbalanced to 600ohm Balanced     | \$ 284.00 |
| RAC-80 (50)  | RAC-12       | Rhombic <u>Antenna Coupler</u> , 50ohm Unbalanced to 800ohm Balanced     | \$ 284.00 |

Provides impedance matching of rhombic receiving antennas and coaxial transmission lines to radio receivers. Frequency range 2-30MHz unless otherwise specified on Technical Bulletin #4036.

#### OUTPUT RF TERMINALS

|       |               |  |          |
|-------|---------------|--|----------|
| /BN   | AX-283-1      | Type BN Connector                                  | N/C      |
| /BNC  | AX-284-1      | Type BNC Connector                                 | N/C      |
| /C    | AX-286-1      | Type C Connector                                   | N/C      |
| /HN   | AX-285-1      | Type HN Connector                                  | N/C      |
| /LC   | AX-287-1      | Type LC Connector                                  | N/C      |
|       | AX-287-5      | Type LC Connector, 70 ohm                          | N/C      |
| /N    | AX-259-1      | Type N Connector                                   | N/C      |
| /QDL  | AX-273-1      | Type QDL Connector                                 | N/C      |
| /QDS  | AX-289-1      | Type QDS Connector                                 | N/C      |
| /UHF  | AX-281-1      | Type UHF Connector                                 | N/C      |
| /UHFT | AX-282-1      | Type UHF Twin Connector                            | N/C      |
| /UHFL | AX-256-1      | Type UHF (L) Connector                             | N/C      |
| /ALC  | AX-276-1      | 3-1/8" <u>Adapter</u> Assembly, 50ohm to LC Female | \$ 37.00 |
|       | AX-277-1      | 3-1/8" <u>Adapter</u> Assembly, 70ohm to LC Female | \$ 37.00 |
| /ES   | ES-ST58757/8" | Styroflex <u>End Seal</u> , 50ohm                  | N/C      |
|       | ES-ST7875     | 7/8" Styroflex <u>End Seal</u> , 70ohm             | N/C      |
| /RG8  | AX-274-1      | <u>Flange</u> for RG 85/U Coaxial Cable            | \$ 26.00 |

NOTE: When ordering, specify model, unbalanced impedance, and output RF terminal, for example:

RAC-50 (70)/C

SBE      General Purpose HF Exciter

High Frequency (1.75-32 Mhz) Exciter operating in CW(A1) AM(A3), AME (A3H), USB(A3A,A3J), LSB and ISB(A3B) modes. Frequency stability of one part in  $10^6$  <sup>when used</sup> using in temperature controlled ovens. External VMO input is provided.

|        |                                   |             |
|--------|-----------------------------------|-------------|
| SBE-8  | Audio Bandwidth 3Khz (250-3040Hz) | \$ 5,604.00 |
| SBE-9  | Audio Bandwidth 7Khz (250-7500Hz) | \$ 5,678.00 |
| SBE-10 | Audio Bandwidth 6Khz (250-6080Hz) | \$ 5,678.00 |

Rack space required: 14" (including power supply)  
Bulletin 2021

Option 115  
Primary Power Rating: 115 VAC 50/60Hz 1Ø      N/C

Option 230  
Primary Power Rating: 230 VAC 50/60Hz 1Ø      N/C

NOTE:      When ordering, specify primary power option.

SME-5 Channelized high frequency ISB exciter used as a primary drive unit for TMC sideband transmitters. The exciter accommodate eight channels and is available in local control and remote or extended control models.

| Bulletin                                   |  | Unit Price  |
|--|--|-------------|
| 102033                                     | SME-5L eight channel <u>SSB</u> exciter for local control only; one channel provided.  | \$ 1,988.00 |
|  | SME-5R eight channel <u>SSB</u> exciter for remote or extended control, one channel provided.  | \$ 2,258.00 |
| Options and accessories for SME-5 (L or R) |  |             |
|  | Extra <u>RF</u> channels (less crystal)  | \$ 56.00    |
|  | Channel <u>crystals</u>  | \$ 11.00    |
|  | Band select <u>option</u> for channelized or automatic transmitter   | \$ 48.00    |
|  | <u>VOX/A-VOX</u> option  | \$ 48.00    |
|  | <u>FSK (F4)</u> option   | \$ 158.00   |
|  | <u>LSB (A3B)</u> option  | \$ 176.00   |
| A-10955                                    | <u>Extender card</u> (22 contacts)   | \$ 32.00    |
| AO-SCS-5                                   | <u>Remote control unit</u> for SME-5R - for full remote control including speech over one 600ohm telephone line. Speech bandwidth limited to 2100Hz. | \$ 6,550.00 |

SME-6

Channelized High Frequency ISB exciters used as primary RF drive unit for TMC sideband transmitters. The exciters operate in every mode normally encountered in the HF spectrum and are suitable for installation in any standard 19" equipment rack.

Bulletin

Unit Prices

2030B-3 SMEM-6 Ten Channel ISB Exciter Four channels provided \$ 8,295.00

Standards Features (X) and Optional Features (O)

SME-6 Option Prices

SMER Series Provision for remote selection of channel and mode \$ 226.00

SMER Series Provision for remote selection of SSB line input \$ 121.00

SMER Series Provision for remote selection of ISB line input \$ 242.00

SMER Series Provision for remote selection of Channel, mode, carrier O \$ 484.00

SMER Series Provision for providing tuning data to linears O \$ 163.00

Additional Channel Capability

RF Channel Board-Up to ten total O \$ 442.00ea channel  
 Frequency Stability +/-10Hz, 0 to +500C X -----  
 Primary Power Ratings  
 115volts, AC,50/60Hz, single phase X -----  
 230volts, AC,50/60Hz, single phase X -----

## Operating Modes

CW A1 X -----  
 AM A3 X -----  
 AME A3H X -----  
 USB A3A,A3J X -----  
 LSB -----  
 ISB A3B O \$ 400.00  
 FSK/FAX F1/F4 O \$ 126.00

2025A AFSK/AFAX A7J using external Model TIS-3D O \$ 1,532.00

## Audio Bandwidths

250-3040Hz CCIR X -----  
 250-6080Hz CCIR O \$ 89.00ea sideband  
 Customer Specified O --Will advise

## Audio Accessories

VOX Operation *optional* X \$ 142.00  
 Desk-type Microphone, Model MK-102 O \$ 84.00  
 Standard Telegraph Key, Model KY-100 O \$ 15.00

Continued on the Next page.

| Bulletin   |  | SME-6 | Option Price  |
|------------|--|-------|---------------|
| 6015-2     | <u>Channelized Control System Model</u>        | 0     |               |
|            | ADC-3  |       | \$ 6,611.00   |
|            | <u>Remote Control Select Unit (With</u>        |       |               |
|            | in 200')                                       |       | \$ 211.00     |
|            | <u>Provision for automatic A3H on</u>          | 0     |               |
|            | 2182KHz  |       | \$ 300.00     |
| Mechanical | <u>Accessories</u>                             |       |               |
|            | <u>Fixed extension slides friction-</u>        | 0     |               |
|            | type   |       | \$ 32.00ea pr |
|            | <u>Tilt-lock extension slides, fric-</u>       |       |               |
|            | tion-type                                      | 0     | \$ 47.00ea pr |
| NOTE:      | For further suppression of unwanted            |       |               |
|            | RF signals external high-level RF              |       |               |
|            | filters are available                          |       |               |
|            | <u>Switchable harmonic filter Model TFP-1K</u> |       |               |
|            |  | 0     | \$ 1,242.00   |
|            | <u>Low Pass RF Filter Model LPFA-1K</u>        | 0     | \$ 300.00     |
|            | <u>Primary Power Rating</u>                    |       |               |
|            | 115volts AC, 50/60Hz single phase              | X     | -----         |
|            | 230voltsAC, 50/60Hz single phase               | 0     | -----         |



Synthesized Exciter HF/ISB

Equipment

7205

SBG-4

SBG-4 Four-Channel independent sideband exciter operating \$16,274.00  
 1.6 to 30MHz in the CW,AM,AME,USB,LSB and four channel  
 ISB mode. Stability one part in  $10^8$  per day with audio  
 bandwidths of each direct and translated (outboard)  
 channel 3KHz (250-3040Hz CCIR). Independent squelch  
 and channel priority controls. Suitable for rack  
 mounting and wired for 110VAC, 50/60Hz, single phase  
 operation.

Technical Bulletin 2039E-3 O:A: 1,2

Option 1 230VAC, 50/60Hz Single phase primary power option N/C

Option 2 Additional audio bandwidths to wst. specs on request

## Accessories

Model C55-2 Prim-----

Model TIS-3D-----

Model TFP-1K-----

Equipment

SBGM-4

SBGM-4 Synthesized HF Four-Channel ISB Exciter

High Frequency (1.6-29.9999MHz) Synthesized Exciter operating CW(A1), AM(A3H), USB(A3A,A3J), LSB, and four channel ISB modes with frequency stability one part in  $10^7$  over the temperature range 0 to +50°C. Audio bandwidth 3KHz (250-3040Hz) on each direct and translated (outboard) channel. Independent squelch and channel priority controls for each 3KHz channel. Operates with Linear amplifiers comparable to TMC Models HFLM or PALM.

\$18,184.00

Rack Space Required: 12½"

Bulletin #2043A

SBGA-4 Synthesized HF Four-Channel ISB Exciter, Automated

Identical to the SBGM-4 Exciter with provision for providing bandswitch and reference carrier information to an automated linear amplifier comparable to the TMC Model HFLA or PALA.

\$18,295.00

SBGR-4 Synthesized HF Four Channel ISB Exciter, Remote Controlled

Identical to the SBGA-4 Exciter with provision for remote control of (1) frequency select; (2) mode select; and (3) RF output level. Remote control System is not included ~~SEE SECTION A-6~~. Used in TMC HFTR Transmitters.

\$19,147.00

Option 11 Frequency stability one part in  $10^9$ . Uses TMC Model CSS-2 Frequency Standard.

\$ 5,143.00

Rack Space Required: 5½"

Bulletin #6020

Option 41 Switchable harmonic filter providing an additional 35db attenuation of all harmonics.

\$ 379.00

Option 42 Fixed roofing filter providing an additional 35db(min) attenuation of spurious commencing at 35MHz.

\$ 84.00

Equipment

STE-5

## STE-5 (U&amp;L) Single Channel HF Exciter

High frequency (2 - 32MHz) Exciter operating in CW(A1), AME(A3H), MCW(A2H), and SSB (A3A,A3J) modes with frequency stability +50Hz over the operating temperature range 0 to +50°C. Audio bandwidth 3KHz (300-3000Hz). One RF converter module is provided - tuned to the operating frequency. \$ 1,604.00

Upper or Lower sideband optional

Rack Space Required: 1-3/4"

Bulletin #2032A

|                               |    |        |
|-------------------------------|----|--------|
| Channel <u>Crystal</u>        | \$ | 12.00  |
| TTRT()D <u>Module 2-16MHz</u> | \$ | 202.00 |

|                  |  |           |
|------------------|--|-----------|
| <u>Option 20</u> | Operating modes CW, AME, MCW, and USB/LSB (selectable) |           |
|                  | STE-5 u/1  | \$ 139.00 |

|            |   |     |
|------------|---|-----|
| Option 115 | Primary power rating: 115VAC 50/60Hz 1Ø | N/C |
|------------|---|-----|

|            |   |     |
|------------|---|-----|
| Option 230 | Primary power rating: 230VAC 50/60Hz 1Ø | N/C |
|------------|---|-----|

See ~~Section A-7~~ for STE-5 Accessories.

Note: When ordering specify channel carrier frequency and primary power option.

Equipment

SPU-2

SPU-2 Speech Processing Unit

Improves voice quality of audio input as transmission circuits degrade and provides uniform power density in the transmitter intelligence. Used primarily with TMC Model GPT Transmitters equipped with STE, SBE, and SBG-1,2 or 3 Exciters

\$ 1,074.00

Option 115 Primary power rating: 115VAC 50/60Hz 1Ø

Option 230 Primary power rating: 230VAC 50/60Hz 1Ø

NOTE: When ordering specify primary power option.

## Equipment

SWR-1K

SWR-1K 1KW Standing Wave Ratio Indicator

Provides simultaneous indications of forward and reflected RF power with direct readings of the standing waves ratio for 1KW (AVG) rated transmitters. Broadbanded 2-32MHz operating range. Suitable for rack mounting. Cabinet is not provided - ~~See section A-7.~~

Rack Space Required: 7"

Bulletin #2060

|            |                             |    |        |
|------------|-----------------------------|----|--------|
| SWR-1K(50) | For 50 ohm unbalanced lines | \$ | 553.00 |
| SWR-1K(70) | For 70 ohm unbalanced lines | \$ | 553.00 |

## System Components:

|                     |   |    |        |
|---------------------|---|----|--------|
| SWR-1K-RM           | <u>Meter Panel</u> (not available separately) |    |        |
| SWR-1K-CU(50 or 70) | coupling Unit, UHF type connector             | \$ | 181.00 |
| SWR-1K-JB           | <u>Junction Box</u>                           | \$ | 63.00  |

SWR-3K 3KW Standing Wave Ratio Indicator

Similar to SWR-1K except designed for 3KW(AVG) rated transmitters. Broadbanded 2-30MHz operating range. Suitable for rack mounting. Cabinet is not included - ~~See Section A-7~~

|            |                             |    |        |
|------------|-----------------------------|----|--------|
| SWR-3K(50) | For 50 ohm unbalanced lines | \$ | 753.00 |
| SWR-3K(70) | For 70 ohm unbalanced lines | \$ | 753.00 |

## System Components:

|                     |   |    |        |
|---------------------|---|----|--------|
| SWR-3K-RM           | <u>Meter Panel</u>  | \$ | 226.00 |
| SWR-3K-CU(50 or 70) | <u>Coupling Unit</u> QDL type connector   | \$ | 463.00 |
| SWR-3K-JB           | <u>Junction Box</u>   | \$ | 63.00  |
| SWR-3K-PM           | <u>Portable Meter Unit</u> (Extra). Requires both coupling unit and junction box for operation. | \$ | 341.00 |

## Equipment

SWR-10K

SWR-10K 10KW Standing Wave Ratio Indicator

Similar to SWR-3K except designed for 10KW (AVG) rated Transmitters. Broadbanded 2-30MHz operating range. Suitable for rack mounting.

SWR-10K(50) For 50 ohm unbalanced lines \$ 1,463.00

## System Components:

|                |   |    |        |
|----------------|---|----|--------|
| SWR-10K-RM     | <u>Meter Panel</u>  | \$ | 578.00 |
| SWR-10K CU(50) | <u>Coupling Unit</u> , 1-5/8" EIA flange  | \$ | 785.00 |
| SWR-10K-PM     | <u>Portable Meter Unit</u> (Extra). Requires both coupling unit and junction box for operation. | \$ | 648.00 |

*Problem? because of  
special resistors?*

TER

## Equipment

|              |   |             |
|--------------|---|-------------|
| TER-18K      | <u>Antenna Terminator</u> , 18,000 Watts Average Capacity                 |             |
| TER-25K      | <u>Antenna Terminator</u> , 25,000 Watts Average Capacity                 |             |
|              | Standard 3-1/8" EIA flange mounting plate connector assembly is provided. |             |
| TER-18K(50)  | 50 ohm system, unbalanced, w/SWR Meter and Coupler                        | \$ 6,337.00 |
| TER-25K(50)  | 50 ohm system, unbalanced, w/SWR Meter and Coupler                        | \$ 6,705.00 |
| TER-10K(600) | 600 ohm system, balanced SWR Meter and Coupler<br>not available           | \$ 7,205.00 |
| TER-25K(600) | 600 ohm system, balanced, SWR Meter and Coupler<br>not available          | \$ 7,495.00 |

## Special Connector Assemblies:

|      |   |           |
|------|---|-----------|
| /3E5 | 3-1/8" to 1-5/8" <u>adapter</u> (50 ohm models) | \$ 142.00 |
| /3E7 | 3-1/8" to 1-5/8" <u>adapter</u> (70 ohm models) | \$ 742.00 |

|          |  |              |
|----------|--|--------------|
| TER-100K | <u>Antenna Terminator</u> , 100,000 Watts Average Capacity<br>Provided with 6-1/8" flange mounting plate connector assembly. | \$ 23,253.00 |
|----------|--|--------------|

NOTE: When ordering options, specify per example: TER-5K(50)/LC

TER-500 Antenna Terminator. 500 Watt Average Capacity

TER-3.5K Antenna Terminator, 3500 Watt Average Capacity

Provides resistive termination for off-the-air tuning of transmitters and for termination of various antenna types. Standard QDL mounting plate connector assembly is provided  
Bulletin #2051

|                       |                          |           |
|-----------------------|--------------------------|-----------|
| <u>TER-500</u> (70)   | 70 ohm system Unbalanced | \$ 459.00 |
| <u>TER-3.5K</u> (70)  | 70 ohm system unbalanced | \$ 732.00 |
| <u>TER-500</u> (600)  | 600 ohm system balanced  | \$ 459.00 |
| <u>TER-3.5K</u> (600) | 600 ohm system balanced  | \$ 732.00 |

## Special Connector Assemblies:

|      |   |          |
|------|---|----------|
| /UHF | <u>UHF Connector assembly</u> for TER-500             | \$ 11.00 |
| /HN  | <u>HN Connector assembly</u> for TER-500              | 11.00    |
| /C   | <u>C Connector assembly</u> for TER 500               | 11.00    |
| /QDS | <u>QDS Connector assembly</u> for TER -500            | 11.00    |
| /LC  | <u>LC Connector assembly</u> for TER-500 and TER-3.5K | 11.00    |

TER-5K Antenna Terminator, 5000Watts Average Capacity  
Standard 1-5/8"EIA flang mounting plate connector assembly is provided

|             |                           |             |
|-------------|---------------------------|-------------|
| TER-5K(50)  | 50 ohm system, unbalanced | \$ 2,779.00 |
| TER-5K(70)  | 70 ohm system, unbalanced | \$ 2,337.00 |
| TER-5K(600) | 600 ohm system, balanced  | \$ 2,337.00 |

## Special Connector Assemblies:

|      |   |          |
|------|---|----------|
| /QDL | <u>QDL Connector assembly</u> (50 and 70ohm models) | \$ 26.00 |
| /LC  | <u>LC Connector assembly</u> (50 and 70 ohm models) | \$ 26.00 |

Equipment

TIS-3D

Model TIS-3D

Audio Tone Keyer used in conjunction with all TMC  
sideband transmitters for providing CW(A1),FSK(A7J)  
and FAX(A7J) operating capability.

| Bulletin              | Basic Model - Suitable for standard<br>19" rack mounting | Unit Price                     |
|-----------------------|--|--------------------------------|
| 2025A                 | TIS-3D Audio Tone Keyer                                  | \$ <del>1,532.00</del><br>(53) |
| Optional Features     |  |                                |
| Primary Power Ratings |  |                                |
|                       | 115 volts, single phase, 50/60Hz                         | -----                          |
|                       | 230 volts, single phase, 50/60Hz                         | -----                          |



## Equipment

TM-125  
TM-350  
TM-1000

Eight Channel Sideband Transceivers operating CW, AME, and SSB in the 1.6 to 26MHz frequency range. As a system the transceivers can be equipped with auto-switching antenna tuners for operation into the VTA series of vertical antennas or the OTA series of dipole antennas.

| Bulletin | Basic Model-Manual Sections of Sidebands                                  | Unit Price  |
|----------|---|-------------|
| 5005-1   | TM-125-Eight channel 125 watt PEP <u>transceivers</u><br>4 chls provided  | \$ 2,063.00 |
| 5005-2   | TME-350 Eight Channel 350watt PEP <u>transceivers</u><br>4 chls provided  | \$ 2,989.00 |
| 5005-3   | TM-1000 Eight Channel 1000watt PEP <u>transceivers</u><br>4 chls provided | \$ 3,600.00 |

Standard Features (X) included in basic model  
Optional features (O) added to basic model

## Option Price

|  | TM<br>125 | TM<br>350 | TM<br>1000 |                          |
|--|-----------|-----------|------------|--------------------------|
| TMC Series Automatic switching of linear to proper channel       |           | O         | O          | \$ 389.00                |
| Provision for automated bridge tuning into antenna               |           |           | O          | \$ 489.00                |
| Tuning Control   |           |           |            |                          |
| TMC series Provision for <u>automated switching of ATV tuner</u> | O         |           |            | \$ 195.00                |
| Frequency Stability  |           |           |            |                          |
| One Part in 106/oC   | X         | X         | X          | \$-----                  |
| +/- 20Hz, 0 to +50oC   | O         | O         | O          | \$ 358.00                |
| Additional Channel Capability                                    |           |           |            |                          |
| HF <u>channel cards</u> -Up to four additional                   | O         | O         | O          | \$ 63.00 <i>ea. card</i> |
| Specify the assigned frequency when entering channel frequencies |           |           |            |                          |
| Transmit/Receive Operation                                       |           |           |            |                          |
| Simplex  | X         | X         | X          | \$-----                  |
| Half-duplex <i>optional</i>                                      | O         | O         | O          | \$ 258.00                |
| Primary Power Rating   |           |           |            |                          |
| <del>10-40 unit</del> DC (Basic model)                           |           |           |            |                          |
| TM-125 only)   | O         |           |            | \$-----                  |
| 115volt AC, 50/60Hz single phase                                 | X         | X         | X          | \$-----                  |
| 230volt AC, 50/60Hz single phase                                 | O         | O         | O          | \$-----                  |
| Accessories:   |           |           |            |                          |
| Equipment <u>Cabinet</u> , Desk top style, CAB-20                | X         | X         | X          | \$-----                  |

Continued on the next page

| Equipment  | TM<br>125 | TM<br>350 | TM<br>1000 | Option Price |
|--|-----------|-----------|------------|--------------|
| Equipment Cabinet Desk top style CAB-21                |           |           | X          | \$-----      |
| 2054-1 <u>Antenna tuning Unit, model</u><br>ATU-350    | 0         | 0         |            | \$ 595.00    |
| <u>Automated tuning Unit model</u><br>ATV1-350         | 0         | 0         |            | \$ 777.00    |
| 2054-2 <u>Antenna Tuning Unit Model</u><br>ATU-1K      | 0         | 0         | 0          | \$ 1,511.00  |
| <u>Automated Tuning Unit Model</u><br>ATVR-1K          |           |           | 0          | \$ 1,805.00  |
| 2060 <u>Vertical Transmitter Antenna</u><br>series VTA | 0         | 0         | 0          | \$ See VTA   |
| <u>Depole transmitting antenna</u><br>series DTA       | 0         | 0         | 0          | \$ " DTA     |
| <u>Desk type microphone model</u><br>MK-102            | 0         | 0         | 0          | \$ 84.00     |
| <u>Standard Telegraph key model</u><br>KY-100          | 0         | 0         | 0          | \$ 15.00     |
| <u>Mounting Brackets, Model</u><br>MBK-350             | 0         | 0         |            | \$ 32.00ea   |
| <u>Selective calling</u>                               | 0         | 0         | 0          | Will advise  |

Equipment

TMA-350

TMA-1K

High Level Power Amplifiers operating at 350watt and 1000watt PEP output levels respectively when driven by a suitable exciter providing between 30 and 50watts RF input. The linears operate in all modes normally encountered in the 1.6 to 25MHz range and are suitable for standard 19-inch rack mounting. Attractive table top cabinets are available for linears separated from the drivers.

| Bulletin | Basic Models | Manually tuned by front panel control               | Unit Price  |
|----------|--------------|---|-------------|
| 2034A-1  | TMA-350      | 350watt PEP Eight Channel <u>Linear Amplifier</u>   | \$ 926.00   |
| 2034A-2  | TMA-1K       | 1,000watt PEP Eight Channel <u>Linear Amplifier</u> | \$ 1,537.00 |

Standards Features (X) and Optional Features(O)

| Tuning Control  | TMA<br>350 | TMA<br>-1K |             |
|---|------------|------------|-------------|
| TMAC Series <u>Provision for automatic switching to one of eight pre-tuned channels</u> | O          |            | \$ 195.00   |
| TMAC Series <u>Provision for automatic bridge tuning to one of eight channels</u>       |            | O          | \$ 489.00   |
| TMAA Series <u>Provision for automated tuning to any RF drive</u>                       |            | O          | Will advise |
| Operating Frequency Range   |            |            |             |
| <u>Extension of range: 1.6 to 30MHz</u>   | O          | O          | \$ 111.00   |
| Output RF filters   |            |            |             |
| Switchable Harmonic <u>Filter</u> , Model TFP-1K  | O          | O          | \$ 1,242.00 |
| Automated Harmonic <u>Filter</u> , Model TFPA-1K  | O          | O          | \$ 1,400.00 |
| Low Pass RF <u>Transmitting Filter</u> , Model LPFA-1K                                  | O          | O          | \$ 300.00   |
| <u>Antenna Tuning System</u>  |            |            |             |
| 2053-1 Continuous Tuning 1KW PEP' Model ATS-2A  | O          | O          | \$ 2,574.00 |
| 2054-2 Eight Channel 1KW PEP' Model ATU-1K  | O          | O          | \$ 1,511.00 |
| 2054-1 Eight Channel 350Watt PEP, Model ATU-350   | O          |            | \$ 595.00   |
| <u>Accessories</u>  |            |            |             |
| 7103 Equipment <u>Cabinet</u> , Model CAB-20  | O          |            | \$ 58.00    |
| 7103 Equipment <u>Cabinet</u> , Model CAB-21  |            | O          | \$ 89.00    |
| Mounting <u>Brackets</u> , Model MBK-350  | O          |            | \$ 21.00    |
| <u>Primary Power Rating</u>   |            |            |             |
| 115 volts AC, 50/60Hz single Phase  | X          | X          | -----       |
| 230 volts AC, 50/60Hz single phase  | O          | O          | -----       |

NOTE: The TMA Series of linear amplifiers may be driven by an exciter providing between 100 and 150mw RF by using the Model HFL-100 Broadbanded Linear Amplifier described in Bulletin 2035-10

|  |   |  |           |
|--|---|--|-----------|
|  | O |  | \$ 700.00 |
|--|---|--|-----------|

Equipment

TMX

TMX-1 Voice Frequency Multiplexer

Tele-Signal

Provides one 6<sup>KHz</sup> (375-5915Hz) channel from two discrete 3KHz (375-3025Hz) inputs. Handles normal telephone, facsimile, or 16-channel telegraph traffic.

\$ 2,647.00

Rack Space Required: 5½" Bulletin #2027

TMX-2 Voice Frequency Multiplexer, Four-Channel

Tele-Signal

Provides two 6KHz (375-5915Hz) channels from four discrete 3KHz (375-3025Hz) inputs. Handles normal telephone facsimile or 16-channel telegraph traffic.

\$ 5,237.00

Option 115 Primary Power Rating: 115VAC 50/60Hz 1Ø N/C

Option 230 Primary Power Rating: 230VAC 50/60Hz 1Ø N/C

Equipment

TOC

TOC Transit Operating Case

Fiberglass reinforced carrying case designed for rugged field use.

\$ 1,079.00

Rack Space Available: 14"

Bulletin # 7003

## Equipment

## TRC

|             |  |             |
|-------------|--|-------------|
| TRC-20K     | Transmitting <u>Antenna Coupler, 20,000Watt Average</u><br>Standard 3-1/8 EIA Flange mounting plate connector<br>assembly is provided. |             |
| TRC-20K(50) | 50 ohm unbalanced to 600 ohm balanced  | \$ 2,837.00 |
| TRC-20K(70) | 70 ohm unbalanced to 600 ohm balanced  | \$ 2,837.00 |

## Special Connector Assemblies:

|      |   |           |
|------|---|-----------|
| /QDL | <u>QDL Connector Assembly</u> for Models TRC-3.5K<br>and TRC-5K   | \$ 42.00  |
| /LC  | <u>LC Connector Assembly</u> for Models TRC-3.5K<br>and TRC-5K    | \$ 42.00  |
| /3E5 | 3-1/8" to 1-5/8" <u>adapter</u> for Model TRC-20K(50)             | \$ 126.00 |
| /1EA | 1-5/8" EIA <u>flange connector assembly</u> for<br>Model TRC-3.5K | \$ 42.00  |

NOTE: When ordering options, specify per example: TRC-5K(50)/LC

## Equipment

TRC

TRC-100 Transmitting Antenna Coupler 100Watt AverageTRC-500 Transmitting Antenna Coupler 500Watt Average

Provides matching between 50 to 70 ohm unbalanced and 600 ohm balanced impedances. Standard RG-85/U coaxial mounting plate connector assembly is provided.  
Bulletin #2050

|                    |                                      |          |    |        |
|--------------------|--------------------------------------|----------|----|--------|
| <u>TRC-100(50)</u> | 50ohm unbalanced to 600 ohm balanced |          | \$ | 205.00 |
| <u>TRC-500(50)</u> | 50ohm unbalanced to 600 ohm balanced | 17/11/71 | \$ | 547.00 |
| <u>TRC-100(70)</u> | 70ohm unbalanced to 600 ohm balanced |          | \$ | 205.00 |
| <u>TRC-500(70)</u> | 70ohm unbalanced to 600 ohm balanced | 17/11/71 | \$ | 547.00 |

## Special Connector Assemblies:

|      |                        |  |    |       |
|------|------------------------|--|----|-------|
| /QDL | QDL Connector Assembly |  | \$ | 11.00 |
| /UHF | UHF Connector Assembly |  | \$ | 11.00 |
| /BNC | BNC Connector Assembly |  | \$ | 11.00 |
| /C   | C Connector Assembly   |  | \$ | 11.00 |
| /LC  | LC Connector Assembly  |  | \$ | 11.00 |
| /QDS | QDS Connecotr Assembly |  | \$ | 11.00 |
| / N  | N Connector Assembly   |  | \$ | 11.00 |

TRC-3.5K Transmitting Antenna Coupler, 1800 Watt Average

Standard RG-85/U coaxial mounting plate connector assembly is provided.

? TRC-3500

|                     |                                       |  |    |        |
|---------------------|---------------------------------------|--|----|--------|
| <u>TRC-3.5K(50)</u> | 50 ohm unbalanced to 600 ohm balanced |  | \$ | 821.00 |
| <u>TRC-3.5K(70)</u> | 70 ohm unbalanced to 600 ohm balanced |  | \$ | 821.00 |

TRC-3500TRC-5K Transmitting Antenna Coupler, 5000Watt Average

Standard 1-5/8" EIA flange mounting plate connector assembly is provided.

|                   |                                       |  |    |          |
|-------------------|---------------------------------------|--|----|----------|
| <u>TRC-5K(50)</u> | 50 ohm unbalanced to 600 ohm balanced |  | \$ | 1,438.00 |
| <u>TRC-5K(70)</u> | 70 ohm unbalanced to 600 ohm balanced |  | \$ | 1,438.00 |

TRS-400 VBS Syn Transmitter/Receiver 400 w

11,345 210d2

TTR-500 SSB Transmitter 120w PEP in wood grained cabinet

*Ship 60-90 days*

## Equipment

VRA()

VRA() Vertical Receiving Antenna

Bulletin # 4045

## 16-foot Fiberglass Whip

|       |            |    |        |
|-------|------------|----|--------|
| VRA-8 | 200-800KHz | \$ | 763.00 |
| VRA-9 | 2 - 32MHz  | \$ | 763.00 |

## 18-foot Aluminum Whip

|       |            |    |        |
|-------|------------|----|--------|
| VRA-5 | 200-800KHz | \$ | 416.00 |
| VRA-6 | 2 - 32KHz  | \$ | 416.00 |

## 32-foot Fiberglass Whip

|        |           |    |        |
|--------|-----------|----|--------|
| VRA-10 | 3 - 15MHz | \$ | 895.00 |
|--------|-----------|----|--------|

## 35-foot Whip

|        |            |             |    |          |
|--------|------------|-------------|----|----------|
| VRA-7  | Aluminum   | 3 - 15MHz   | \$ | 458.00   |
| VRA-11 | Fiberglass | 0.1 - 30MHz | \$ | 1,195.00 |
| VRA-12 | Fiberglass | 15 - 300KHz | \$ | 1,195.00 |

*Ship 120 days*

## Mounting plate Connector Assembly:

|      |                         |     |
|------|-------------------------|-----|
| /C   | Type C Connector        | N/C |
| /HN  | Type HN Connector       | N/C |
| /LC  | Type LC Connector       | N/C |
| /N   | Type N Connector        | N/C |
| /UHF | Type UHF Connector      | N/C |
| /ES  | Styroflex End Seal 7/8" | N/C |

NOTE: When ordering specify mounting plate connector assembly  
for example: VRA-6/N

Equipment

XFK-2

XFK-2 Frequency Shift Exciter

HF (1-6.9MHz Bandswitched) Exciter providing a means of shifting an RF carrier from linear to 1000Hz. Stability  $\pm$  10Hz over the temperature range 0 to +50oC.

\$ 1,979.00

Rack Space Required: 10 $\frac{1}{2}$ "

Bulletin #2020

Option 115 Primary Power Rating: 115VAC 50/60Hz 1Ø

N/C

Option 230 Primary Power Rating: 230VAC 50/60Hz 1Ø

N/C

NOTE: When ordering specify carrier operating frequencies and primary power option.



