AMATEUR TECHNICAL DATA and CATALOG

ANTENNAS and SYSTEMS

TOWERS and Rotated Tubular Masts

ve2eh april 1985

telrex

broad-band "BALUNS" and Antenna Components

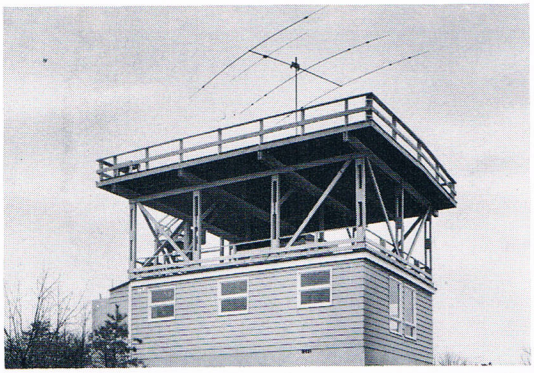
ROTATION and Indicator SYSTEMS

The Skill to Design...

The Facilities to Produce...

The Ability to Deliver...

TELREX LABORATORIES, ASBURY PARK, NEW JERSEY



The Telrex "Skytop" Laboratory is Completely Equipped for Development Work.

IN ORDER TO SELL A QUALITY PRODUCT CAPABLE OF WITHSTANDING THE WINDS, ICING, AND MOISTURE SO PREVALENT THROUGHOUT THE WORLD, TELREX HAS BEEN FORCED TO GO FACTORY DIRECT. THE FACT IS THAT A QUALITY AMATEUR RADIO ANTENNA MANUFACTURER CANNOT AFFORD TO PROVIDE DISTRIBUTORS WITH THE NECESSARY 50 TO 60 PERCENT DISCOUNT AND REMAIN VIABLE.

Telrex Laboratories is ideally located along the North New Jersey Coast where it maintains three major coordinated units so necessary for the research and development of antennas and allied components. The heart of this operation is the main plant consisting of two major buildings that house all design and production facilities and a centralized laboratory, known as Laboratory No. 1. Laboratories No. 2 and No. 3 are situated away from the main plant forming a triangulated situated system for testing, measuring, field and "air" performance, stress, strain and weathering studies.

All facilities are fully equipped and constantly augmented with the latest systems and equipment required for progressive improvement to make development more practical.

STEP UP TO TELREX

Professionally Engineered Antenna Systems

"BEAMED-POWER" --- "BALANCED-PATTERN" --- ARRAYS

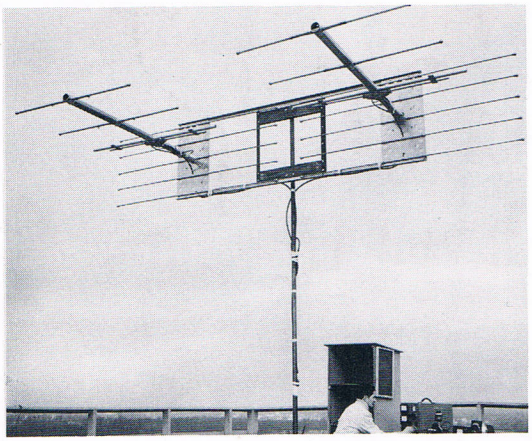
LABORATORY TUNED, MATCHED, & CALIBRATED TO ASSURE PROPER AND EXACT ASSEMBLY

ALL "BALUN" FED TELREX ARRAYS ARE "BALUN" SUPPLIED

The loose-leaf data sheets, contained herein, illustrate a few of the more popular Telrex Antennas and equipment. The Telrex record of supplying the communication needs of leading firms and agencies, and propagation laboratories, for over four decades attests to the high regard and esteem enjoyed by Telrex, the company where performance, quality, and service are paramount.

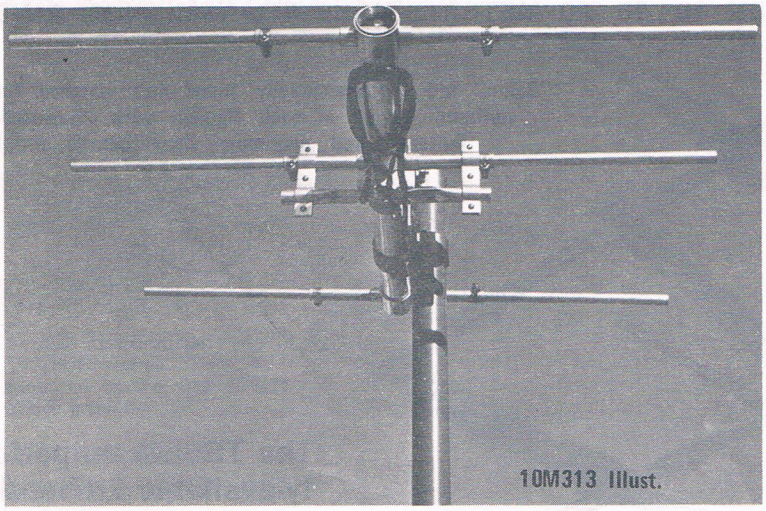
All antennas, even multi-element arrays as low as 2 mhz are developed full-size at frequency (not from high frequency models) at our specially designed antenna laboratory building, situated on a noise-free non-contaminated site. Specially designed hydraulic lifting rotatable masts and other special devices, plus near and far-field target ranges, make our antenna evaluations thorough, practical, and authentic. This full-size antenna development work makes possible the extra performance, perfect match and calibrated accuracy of TELREX Arrays.

Why not contact Telrex Engineering with your next requirement? Your problem and needs will be a welcome challenge to us. We feel sure that you will find TELREX suggestions and equipment practical and to the point.



"Checking Out" a Communication Custom Array Built by Telrex for Armed Forces Use in Alaska

Table of Contents:



TELREX 10 METER "MONARCH" ARRAYS
Optimum spaced for optimum results.
"Balun" fed for Balanced Pattern

Telrex 10 Meter "Balun" fed "Monarch" Arrays are professionally engineered, custom machined, then precision tuned, matched and calibrated for easy fool-proof assembly at your site, to our specifications - when mounted in the clear a minimum of 36 ft. above ground.

Telrex 10 Meter Arrays employ state of the art materials including micarta insulation, heavy-wall taper swaged reinforced thru boom dural element, and extra heavy wall sectional and specially reinforced aluminum boom, with boom struts and turn buckles, stainless steel electrical hardware and an exclusive custom designed heavy-duty cadmimum plated steel tiltable, gusset plate mounting.

Note: Telrex Models 10M313 and 10M523 do not employ boom struts.

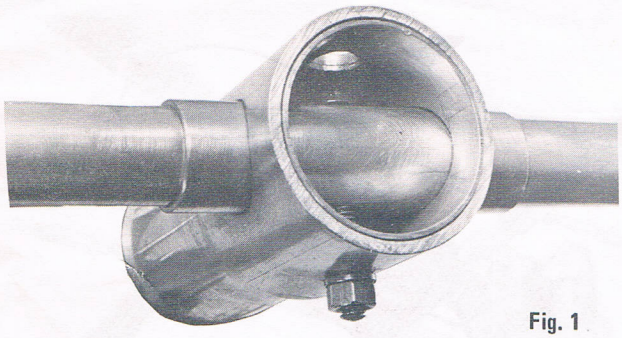


Fig. 1

Figure 1. Illustrating a 10 Meter Element driven thru the boom and reinforced with an outer sleeve. The heavy wall large diameter boom is also reinforced to create a rugged element captivation at the area of greatest stress.

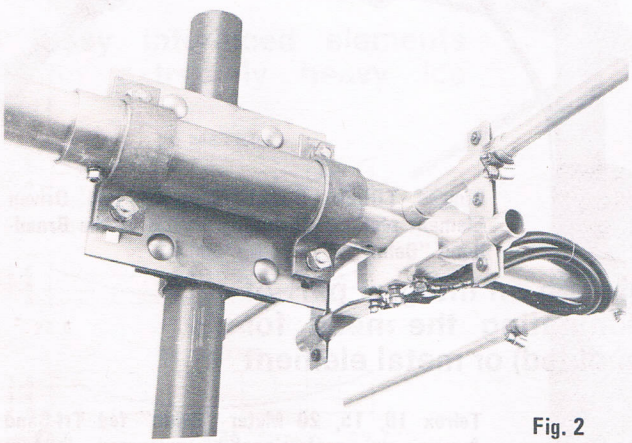
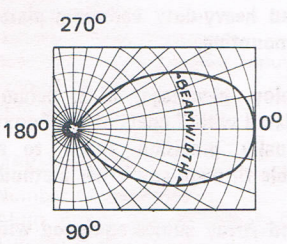


Fig. 2

Figure No. 1 Illustrating a heavy duty gusset mounting plate with gusset straps, Driven Element Assembly (T-Matched) and coaxial "Balun"

Ruggedizing the gusset mounting assembly provides a secure trouble free boom to mast mounting arrangement which disperses stress throughout a greater surface area.

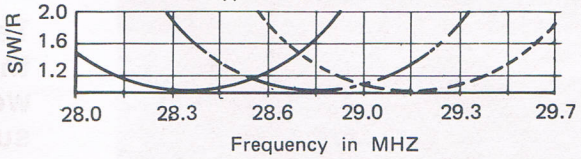


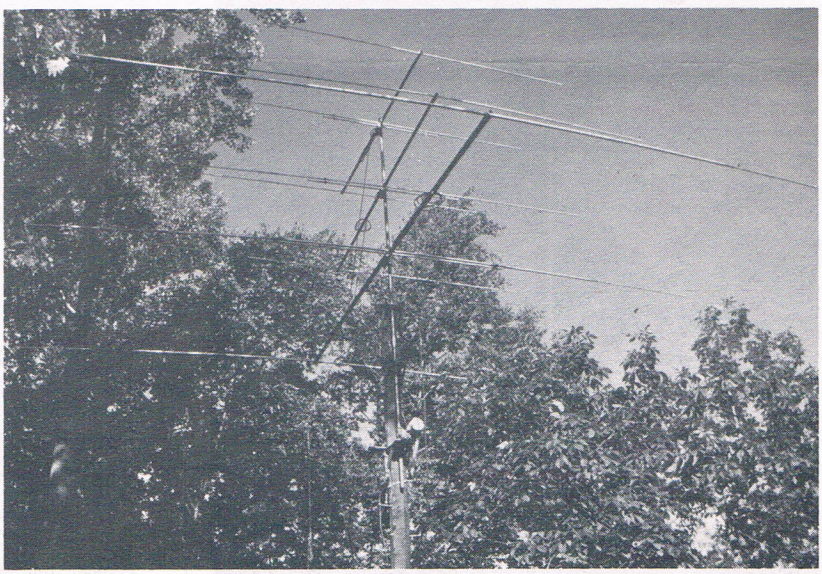
Typical pattern configuration when a 10 Meter Array is mounted in the clear, at 18 ft. above ground. Half power beamwidth illustrated is 60°.

Please Note! All Telrex 10 Meter Arrays are "Balun" fed for "Balanced-Pattern" and maximum Signal to Noise, Signal to Interference Ratio!

ELECTRICAL	10M313	10M523	10M636
Gain in DB reference 1/2 wave dipole	10 dbd	13 dbd	14.6 dbd
F/B Ratio	24 db	24 db	24 db
V/S/W/R at Resonant Point	1.2/1	1.2/1	1.2/1
Impedance Bandwidth (2/1 VSWR)	3%	3%	3%
Maximum Power Input	2 KWP	3 KWP	8 KWP
Nominal Input Impedance	52 ohm	52 ohm	52 ohm
Beamwidth to 1/2 power point	58°	48°	44°
Number of Elements	3	5	6
MECHANICAL			
Alum. Boom: Diameter and approx. length	2.5,2"x14'	3.5,3"x23'	3.5,3"x36'
Longest Element Length (approx.)	18'-0"	18'-0"	18'-0"
Turning Radius (approx.)	12'-0"	17'-0"	20'-0"
Wind Surface Area (approx.)	2.8 sq. ft.	4.5 sq. ft.	6.0 sq. ft.
Wind Load at 100 mph (approx.)	82 lbs.	138 lbs.	170 lbs.
Net Weight (approx.)	21.5 lbs.	64 lbs.	85 lbs.
Approx shipping weight (domestic pack)	28 lbs.	81 lbs.	127 lbs.

Typical S/W/R Curve

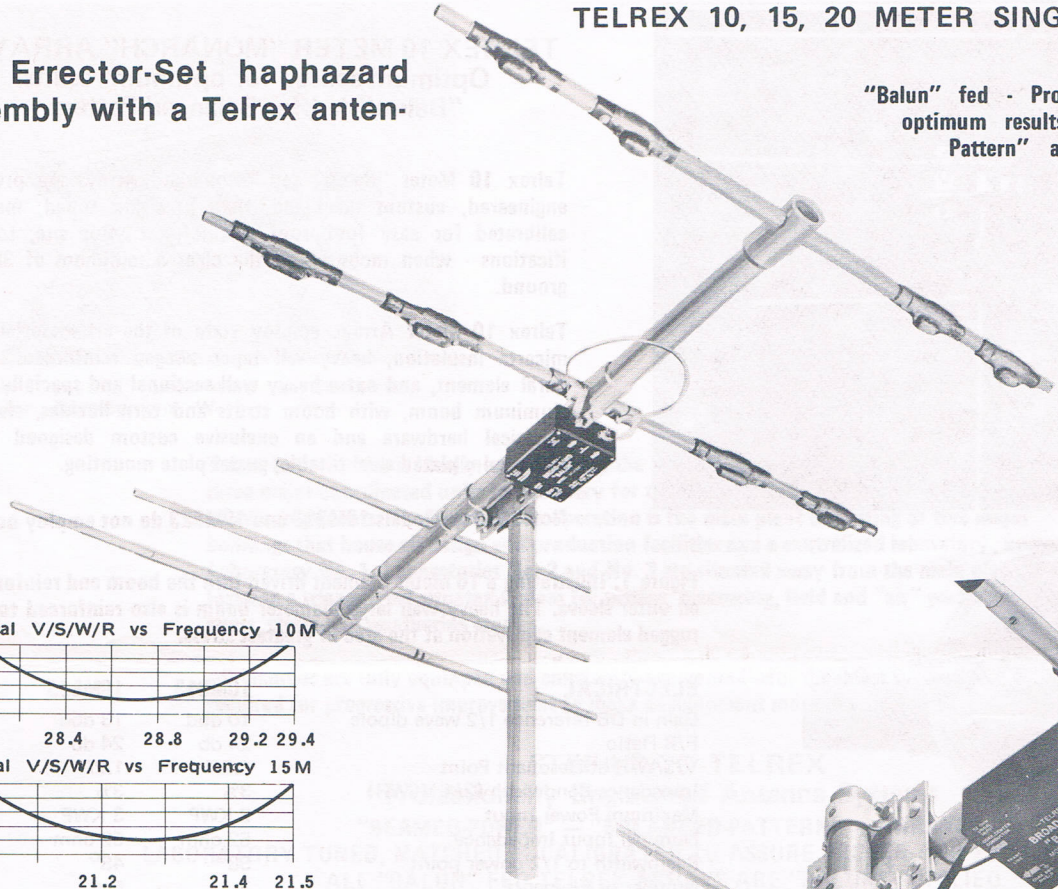




Telrex 10, 15, 20 Meter 3 element Array Utility-Pole Installation. "Looks good in any neighborhood!"

No Errector-Set haphazard assembly with a Telrex antenna!

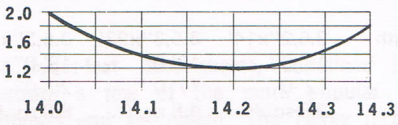
"Balun" fed - Professionally tuned and matched for optimum results at each element with "Balanced-Pattern" and maximum signal-to-noise ratio!



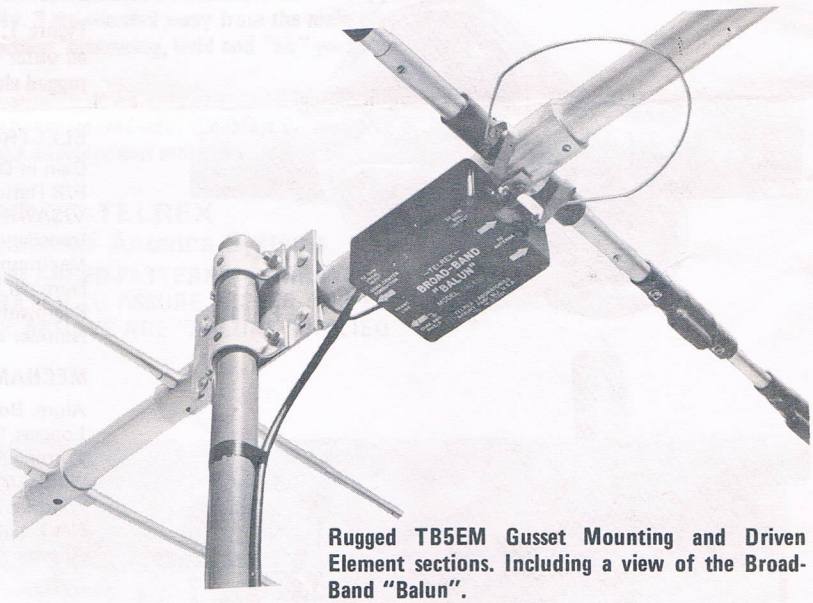
Typical V/S/W/R vs Frequency 10M

Typical V/S/W/R vs Frequency 15M

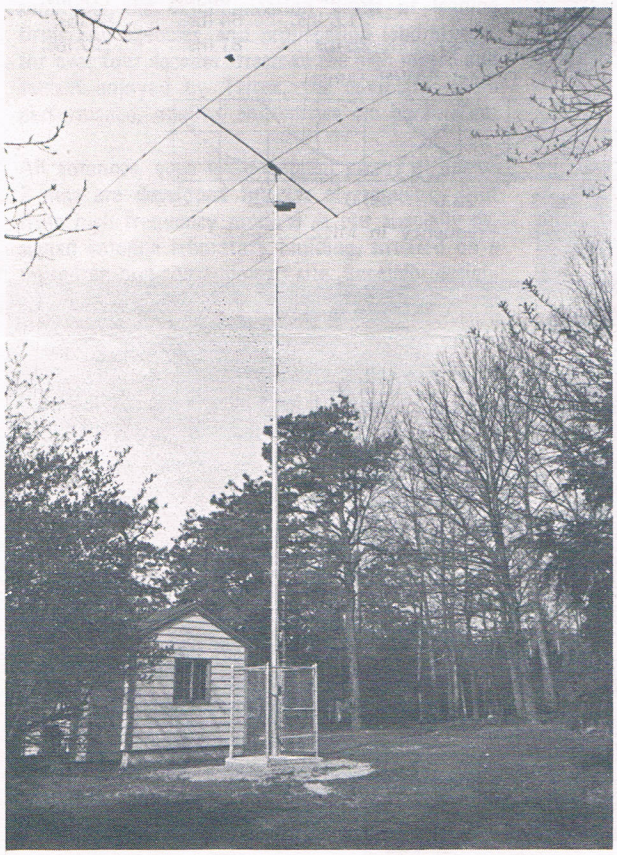
Typical V/S/W/R vs Frequency 20M



The TB6EM outperfo ly-available Tri-bands considerable margin



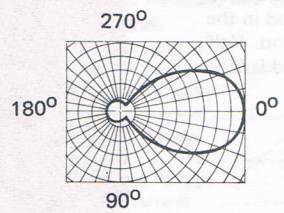
Rugged TB5EM Gusset Mounting and Driven Element sections. Including a view of the Broad-Band "Balun".



Mr. Bowman Graton, A.I.A. - K1KHC - Duxbury, Mass. Sez: "Beautiful - and works" - Better than it looks!

Telrex elements are an integral part of the boom, eliminating the need for weak plastic (molded) or metal element supports.

High impact Epoxy encapsulated traps mounted to rugged taper swaged Driven Element.



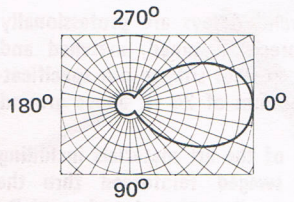
Typical measured pattern and V/S/W/R when TB5EM is mounted in the clear, 34 ft. above the ground.

Telrex 10, 15, 20 Meter "Balun" fed Tri-Band Arrays are professionally engineered, custom machined, and precision tuned, matched and calibrated for easy fool-proof assembly at your site, to our specifications when mounted in the clear a minimum of 36 ft. above ground. Telrex Tri-Band Arrays employ state of the art materials including micarta insulation, heavy wall reinforced thru the boom dural elements; extra heavy-wall sectioned and specially reinforced aluminum boom, with stainless steel electrical hardware and exclusive custom designed heavy-duty cadmium plated steel gusset plate mounting.

Telrex traps employ hi-voltage, hi-Q, ceramic capacitors encapsulated with 7 coats of 3M Epoxy. They are individually precision tuned to an accuracy unattainable through any other method.

The Telrex Tri-Band Array comes equipped with a patented broad-band coaxial "Balun" (absolutely no ferrites) providing you with maximum coupling and "Balanced-Current" transfer to the Driven Element. Telrex uses optimum tuned separate reflectors to provide maximum gain and true F/B Tri-Band performance.

"TRI-BAND" ANTENNA SECTION



Typical measured pattern and V/S/W/R when TB6EM is mounted in the clear, 34 ft. above ground.

all commercial-Tri-banders by a

High impact Epoxy encapsulated Traps mounted to a rugged taper swaged Driven Element.

No injection molded low Q traps!

No lossy transposed Driven Element configurations!

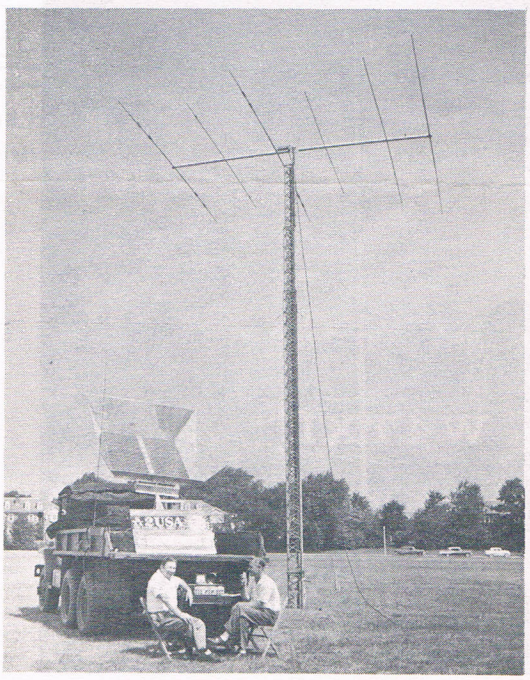
Rugged TB6EM Gusset Mounting and Driven Element sections. Including a view of the Broad-Band "Balun".

No lossy interlaced elements creating extremely heavy ice loads!

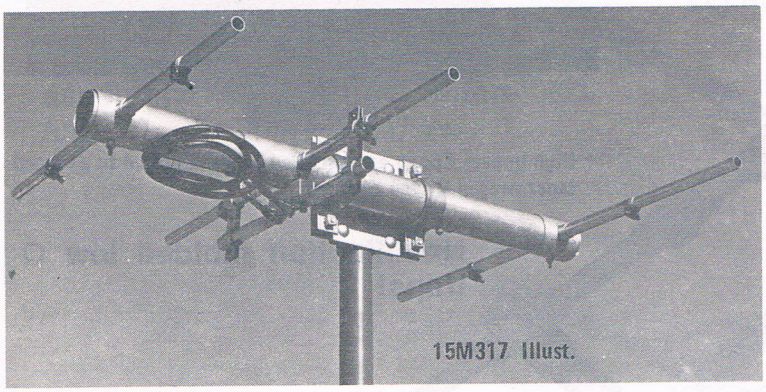
SPECIFICATIONS

ELECTRICAL	TB4EC	TB5EM	TB6EM
Gain in DB reference 1/2 wave dipole	5.5 dbd	8.5 dbd	10 dbd
Front to back ratio	14 db	28 db	30 db
V/S/W/R at resonant point	1.3/1	1.3/1	1.3/1
Maximum Power Input	2 KWP	4 KWP	5 KWP
Nominal Input Impedance	52 ohm	52 ohm	52 ohm
Beamwidth to 1/2 power Input	65° 3 bands	60° 3 bands	59° 3 bands
Frequency range	10, 15, 20	10, 15, 20	10, 15, 20
Side Nulls	35 db	35 db	35 db

MECHANICAL			
Number of Elements	Four	Five	Six
Alum. Boom: Dia. & Lgth. approx.	2,2.5" x 8 ft.	2,2.5" x 18 ft.	3,3.5" x 26 ft.
Turning Radius approx.	17 ft.	20 ft.	22 ft.
Wind Load at 100 mph (approx.)	116 lbs.	210 lbs.	300 lbs.
Wind Area	4 sq ft.	7 sq. ft.	10 sq. ft.
Longest Element	30 ft.	36 ft.	36 ft.
Net Weight (approx.)	30 lbs.	49 lbs.	85 lbs.
Shipping weight (domestic pack)	40 lbs.	60 lbs.	114 lbs.
Length of shipping carton	13 ft.	13 ft.	16 ft.



A proto-type TB6EM Tri-Band Array at Ft. Monmouth, N.J. testing World Wide performance with Solar powered Transciever. IGY year 1959.



15M317 Illust.

TELREX 15 METER "MONARCH" ARRAYS
Optimum spaced for optimum results
"Balun" fed for Balanced Pattern

Telrex 15 Meter "Balun" fed "Monarch" Arrays are professionally engineered, custom machined, then precision tuned, matched and calibrated for easy fool-proof assembly, at your site, to our specifications when mounted in the clear a minimum of 24 ft. above ground.

Telrex 15 Meter Arrays employ state of the art materials including micarta insulation heavy-wall taper swaged reinforced thru the boom dural elements and, extra heavy wall sectioned and specially reinforced aluminum boom, with boom struts and turn buckles, stainless steel electrical hardware and an exclusive custom designed heavy-duty cadmium plated steel tiltable, gusset plate mounting.

1. **Superior Element Captivation is provided by:**
   a. **Passing the element through the boom.**
   b. **Reinforcing the boom at the point of intersection with heavy couplers.**
   c. **Reinforcing the element at the point of intersection with sleeves and inserts.**

2. A ruggedized gusset mounting assembly provides a secure trouble free boom to mast mounting arrangement which disperses stress throughout a greater surface area.

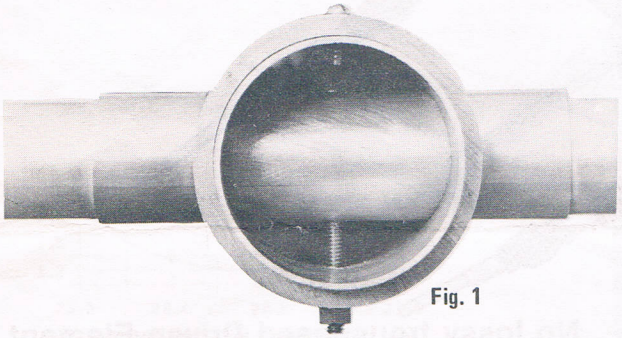


Fig. 1

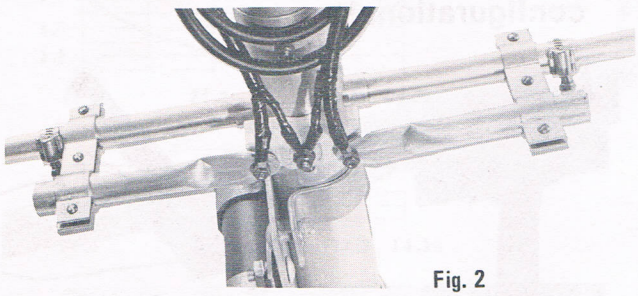
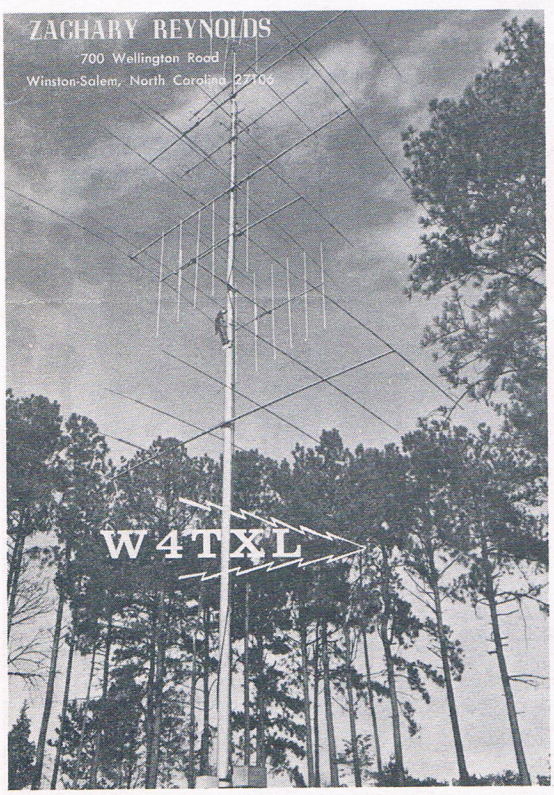


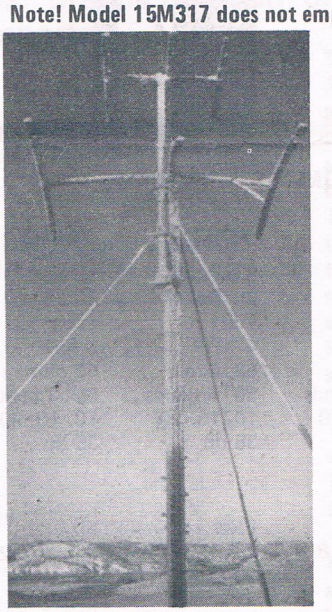
Fig. 2

ELECTRICAL	15M317	15M532	15M845
Gain in DB reference 1/2 wave dipole	10 dbd	13 dbd	15 dbd
F/B Ratio	28 db	28 db	28 db
V/S/W/R at Resonant Point	1.2/1	1.2/1	1.2/1
Impedance Bandwidth (2/1 VSWR)	3 %	3 %	3 %
Maximum Power Input	2 KWP	4 KWP	8 KWP
Nominal Input Impedance	52 ohm	52 ohm	52 ohm
Beamwidth to 1/2 Power Point	58°	48°	38°
Number of Elements	3	5	8
MECHANICAL			
Alum. Boom: Diameter and approx. length.	2.5,2"x17'	3.5,3"x32'	3.5,3"x45'
Longest Element Length (approx.)	24 ft.	24 ft.	24 ft.
Turning Radius (approx.)	15 ft.	19 ft.	29 ft.
Wind Surface Area (approx.)	3.6 sq. ft.	10 sq. ft.	14 sq. ft.
Wind Load at 100 mph (approx.)	118 lbs.	310 lbs.	450 lbs.
Net Weight (approx.)	37 lbs.	95 lbs.	140 lbs.
Approx. shipping weight (domestic pack)	52 lbs.	110 lbs.	165 lbs.

Note! Model 15M317 does not employ boom struts.

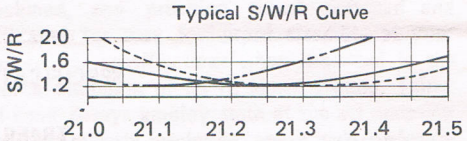


A "loaded" "Big-Bertha" (17DB10M)-(12DB11M) (16DB15M) (16DB20M) - (9DB40M) Also 6DB11M Omni At Top Of B.B.

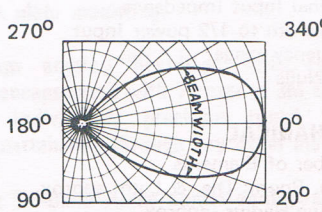


Telrex Performance and Durability!

Typical S/W/R Curve



Frequency in MHZ

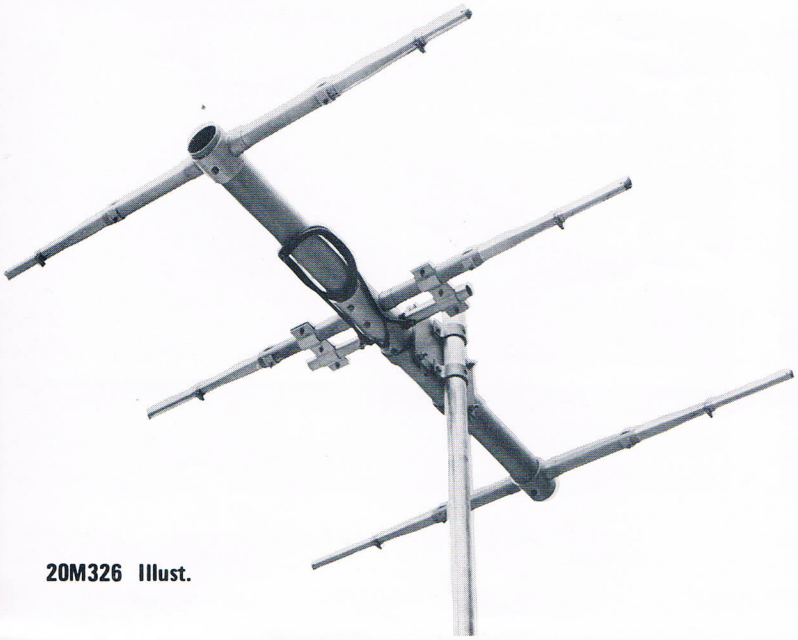


Typical pattern configuration when a 15 Meter Array is mounted in the clear, at 24 ft. above ground. Half power beamwidth illustrated is 58°.

TELREX 20 METER "MONARCH" ARRAYS
Optimum spaced for optimum results
"Balun" fed for Balanced Pattern

Telrex 20 Meter "Balun" fed "Monarch" Arrays are professionally engineered, custom machined, then precision tuned, matched and calibrated for easy fool-proof assembly, at your site, to our specifications --- when mounted in the clear a minimum of 36 ft. above ground.

Telrex 20 Meter Arrays employ state of the art materials including phenolic insulation, heavy-wall taper swaged reinforced thru boom dural elements, and extra heavy wall sectional and specially reinforced aluminum boom, with boom struts and turn buckles, stainless steel electrical hardware and an exclusive custom designed heavy-duty cadmium plated steel tiltable, gusset plate mounting.



20M326 Illust.

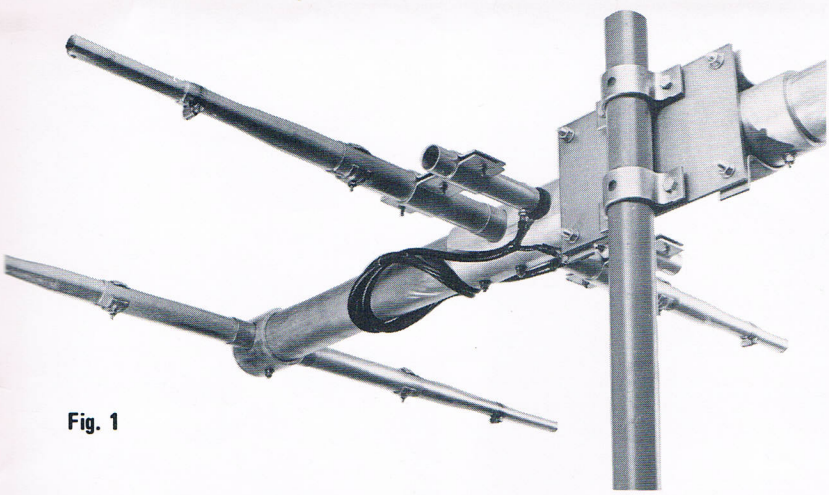
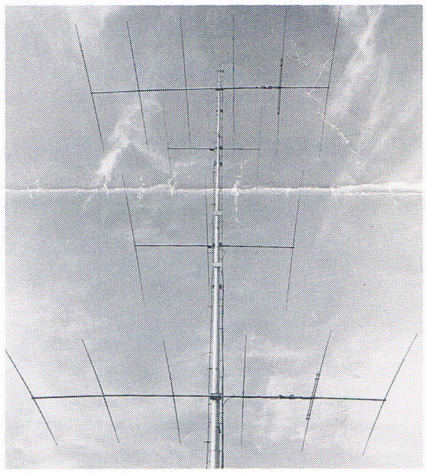
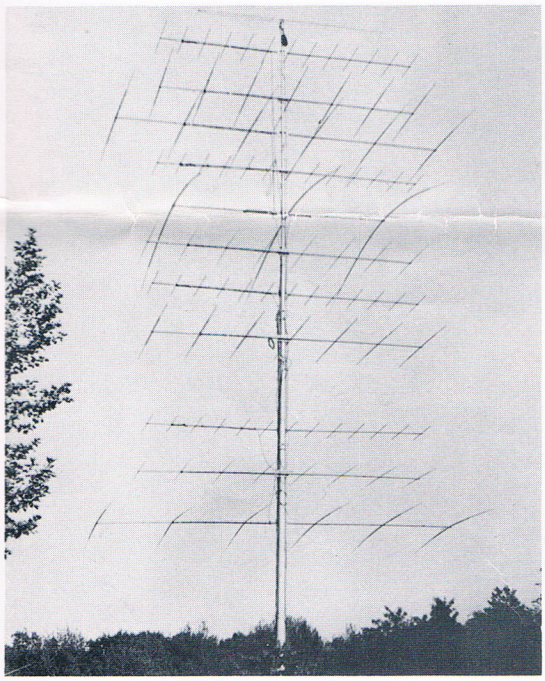


Fig. 1



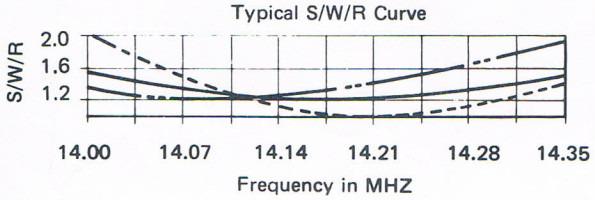
Phased 20M646's, a 20M317 (for change in radiation angle), and a 15M317 mounted to a rotatable "Big-Bertha". *Please refer to pricing sheet for additional information.

Figure 1. A 20M326 Driven Element Assembly, consisting of a coaxial "Balun" (for Beamed-Power, Balanced-Pattern), T-Match Assembly (for Optimum signal to noise ratio), taper swaged dural aluminum element (for minimal wind resistance).

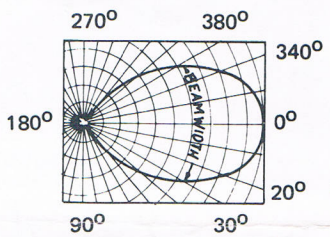


2 ea. 20M646's, 2 ea. 15M845's, 2 ea. 10M1044's 2 ea. 2M1528's, a 40M346, a 220M1520, and a 420M2116 mounted to a rotatable "Big-Bertha". * Please refer to pricing sheet for additional information.

Typical S/W/R Curve



Typical Radiation Pattern



1/2 Power Beamwidth 58°

SPECIFICATIONS

ELECTRICAL	20M326	20M536	20M646
Number of Elements	3	5	6
Gain reference 1/2 wave dipole	10.0 dbd	12.0 dbd	14.0 dbd
F/B Ratio	30 db	30 db	30 db
V/S/W/R at Resonant Point	1.2/1	1.2/1	1.2/1
Impedance Bandwidth (2/1 VSWR)	3%	3%	3%
Maximum Power Input	8 KWP	8 KWP	8 KWP
Nominal Input Impedance	52 ohm	52 ohm	52 ohm
Beamwidth to 1/2 Power Point	58°	50°	46°
MECHANICAL			
Boom length and diameter	3.5,3"x26'	3.5,3"x36'	3.5,3"x46'
Longest Element Length (approx.)	36'	36'	36'
Turning Radius (approx.)	24'	26'	29'
Wind Surface Area (approx.)	8.5 sq. ft.	13.5 sq. ft.	17 sq. ft.
Wind Load at 100 mph (approx.)	266 lbs.	430 lbs.	530 lbs.
Net Weight (approx.)	71 lbs.	113 lbs.	176 lbs.
Shipping Weight (approx.)	85 lbs.	168 lbs.	272 lbs.

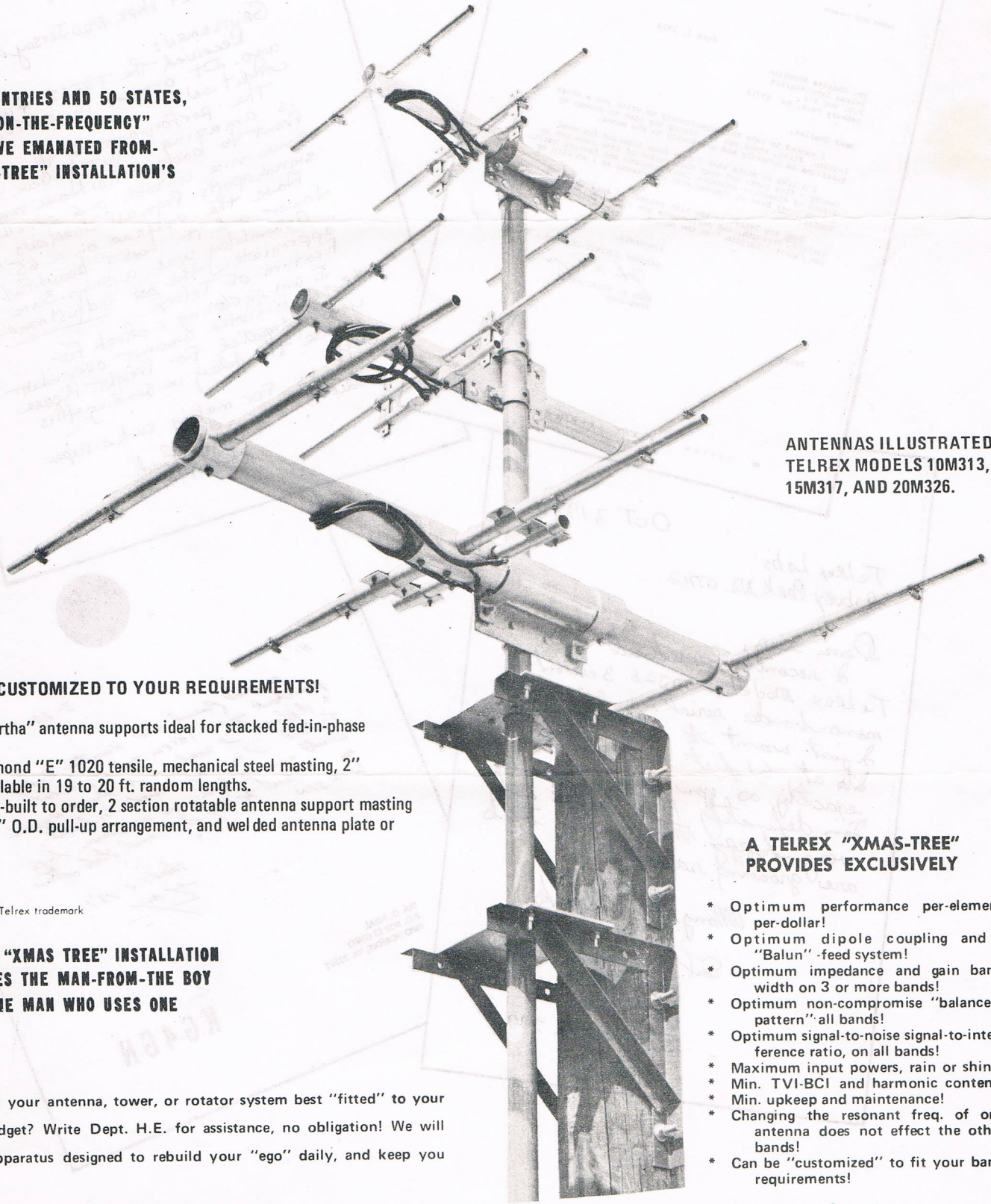
TELREX "XMAS-TREE"

The optimum performance

10, 15 & 20M "TRI-BAND"®

FOR THE MAN WHO NEVER SETTLES—
—FOR LESS THAN THE VERY BEST!

FROM 149 COUNTRIES AND 50 STATES, "TOP-MAN-ON-THE-FREQUENCY" REPORTS HAVE EMANATED FROM- TELREX "XMAS-TREE" INSTALLATION'S



ANTENNAS ILLUSTRATED: TELREX MODELS 10M313, 15M317, AND 20M326.

ALSO AVAILABLE CUSTOMIZED TO YOUR REQUIREMENTS!

Telrex Rotatable "Bertha" antenna supports ideal for stacked fed-in-phase arrays.
Special seamless, diamond "E" 1020 tensile, mechanical steel masting, 2" O.D. x .250 wall, available in 19 to 20 ft. random lengths.
Telrex special custom-built to order, 2 section rotatable antenna support masting with 3 " O.D. butt, 2" O.D. pull-up arrangement, and welded antenna plate or plates, etc.

"TRI-BAND" is a registered Telrex trademark

A TELREX "XMAS TREE" INSTALLATION SEPARATES THE MAN-FROM-THE BOY ASK THE MAN WHO USES ONE

Need help planning your antenna, tower, or rotator system best "fitted" to your site, band's, or budget? Write Dept. H.E. for assistance, no obligation! We will suggest the best apparatus designed to rebuild your "ego" daily, and keep you happy.

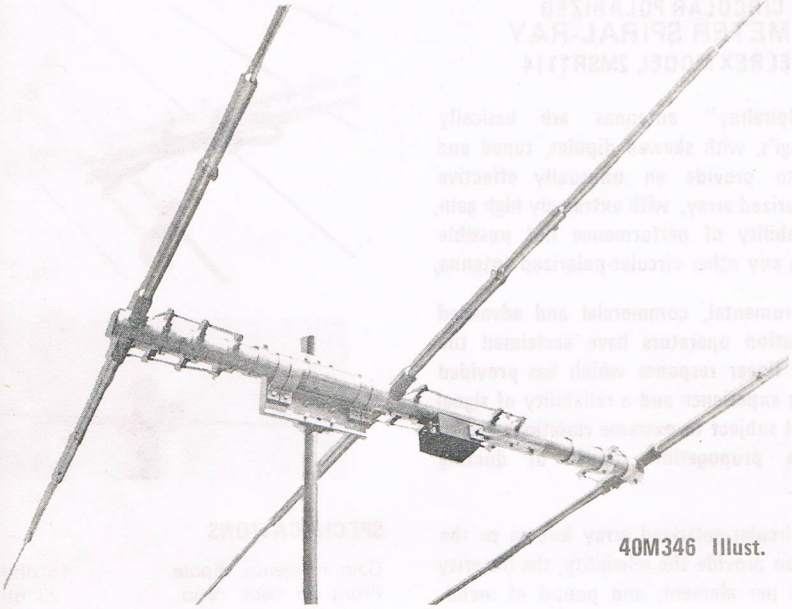
A TELREX "XMAS-TREE" PROVIDES EXCLUSIVELY

* Optimum performance per-element per-dollar!
* Optimum dipole coupling and "Balun" -feed system!
* Optimum impedance and gain band width on 3 or more bands!
* Optimum non-compromise "balanced-pattern" all bands!
* Optimum signal-to-noise signal-to-interference ratio, on all bands!
* Maximum input powers, rain or shine!
* Min. TVI-BCI and harmonic content!
* Min. upkeep and maintenance!
* Changing the resonant freq. of one antenna does not effect the other bands!
* Can be "customized" to fit your band requirements!

No other ... 3 band system, can provide, all these features!

A TELREX PRODUCT, PROVIDES THE MOST FOR YOUR MONEY

TELREX 40 METER "MONARCH" ARRAYS
Optimum spaced for optimum results
Worlds finest, most potent, 2 and 3 element 40 Meter Arrays.



40M346 Illust.

Telrex 40 Meter "Balun" fed "Monarch" Arrays are professionally engineered, custom machined then precision tuned, matched and calibrated for easy, fool-proof assembly, at your site, to our specifications, --- when mounted in the clear a minimum of 64 ft. above ground.

Telrex 40 Meter Arrays employ state of the art materials including glass Melamine insulation, heavy wall taper swaged reinforced thru the boom dural elements, and extra heavy-wall sectional and specially reinforced aluminum boom, with boom struts* and turnbuckles, stainless steel electrical hardware and an exclusive custom designed heavy-duty cadmium plated steel tiltable gusset plate mounting.

SPECIFICATIONS

ELECTRICAL	40M214	40M329	40M346
Number of Elements	2	3	3
Gain reference 1/2 wave dipole	5.6 dbd	8.3 dbd	9.0 dbd
F/B Ratio	17 db	30 db	30 db
V/S/W/R at Resonant Point	1.2/1	1.2/1	1.2/1
Impedance Bandwidth (2/1 VSWR)	4%	4%	4%
Maximum Power Input	4 KWP	4 KWP	4 KWP
Nominal Input Impedance	52 ohm	52 ohm	52 ohm
Beamwidth to 1/2 Power Point	66°	62°	59°
MECHANICAL			
Alum. Boom: length and diameter	3.5,3"x14'	3.5,3"x29'	3.5,3"x46'
Longest Element Length (approx.)	64'	64'	64'
Turning Radius (approx.)	34'	35'	40'
Wind Surface Area (approx.)	8.0 sq. ft.	12.6 sq. ft.	13.8 sq. ft.
Wind Load at 100 mph (approx.)	252 lbs.	406 lbs.	490 lbs.
Net Weight (approx.)	60 lbs.	110 lbs.	177 lbs.
Approx. Shipping Weight	90 lbs.	130 lbs.	222 lbs.

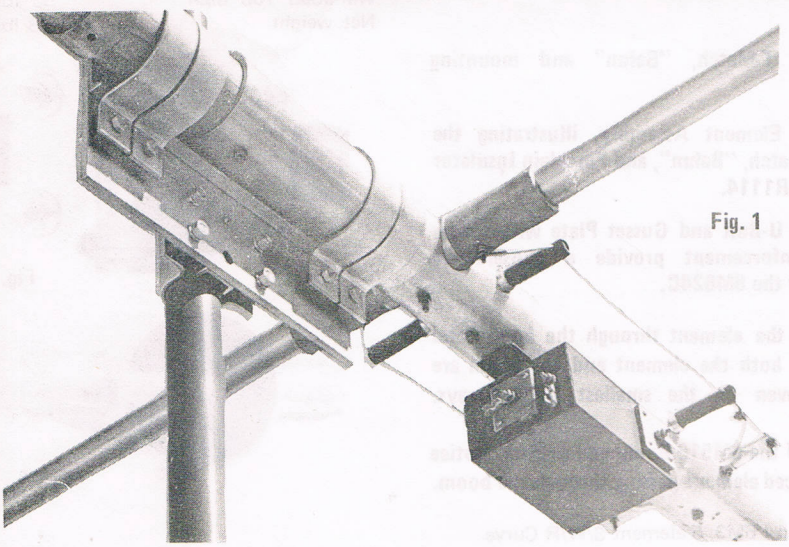


Fig. 1

Figure 1. Center section of a 40M346 revealing the intricate design and workmanship which comes only with pride. Pride in knowing it is the most durable, and best performing antenna of its kind.

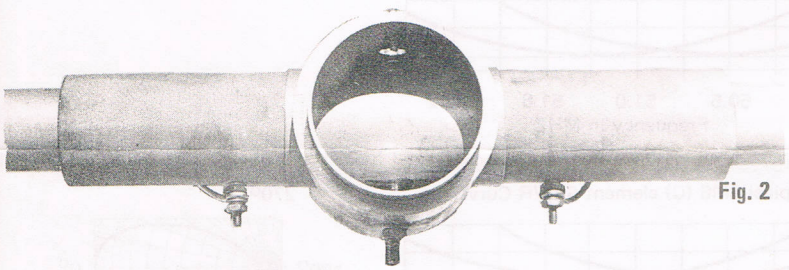
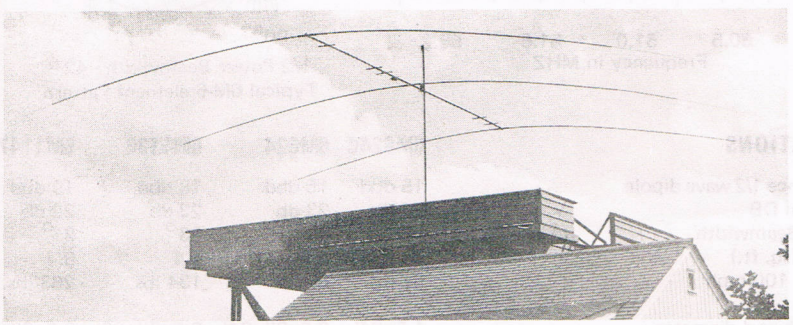
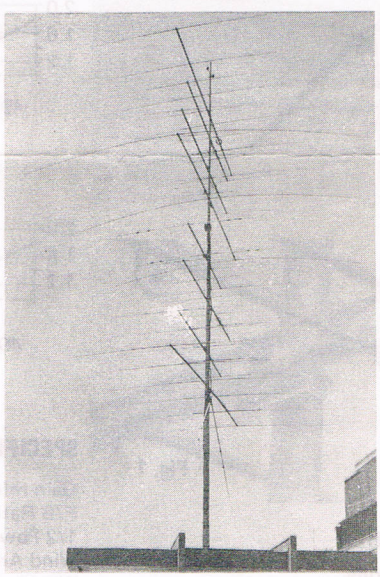


Fig. 2

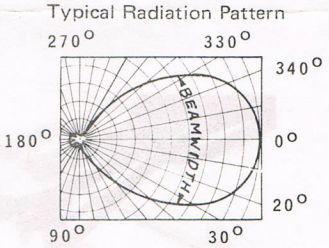
Figure 2. Melamine insulated (for high tensile strength) end element section captivated by a reinforced boom.



Telrex 40M346 installed at the Telrex "Sky-top" Lab Site.

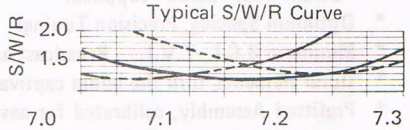


Typical Radiation Pattern



1/2 Power Beamwidth 66°

Typical S/W/R Curve



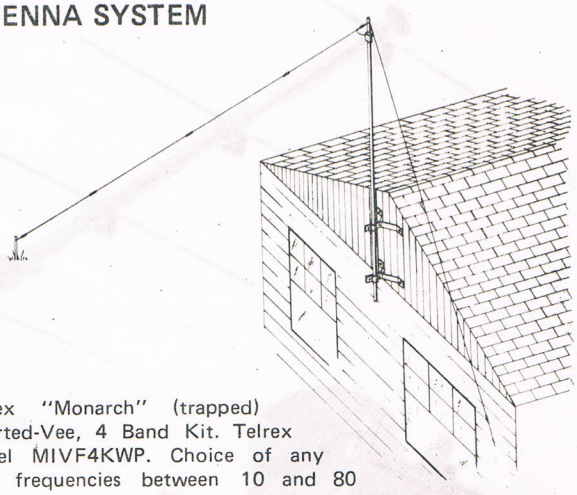
Frequency in MHZ

Please Note: The Telrex Model 40M214 does not require boom struts.

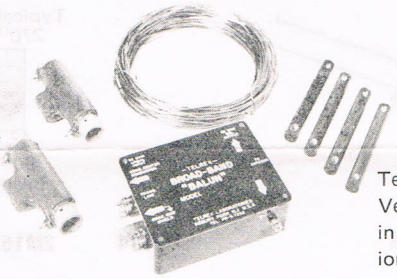
TELREX "BALUN" FED "INVERTED-VEE" ANTENNA KITS

THE IDEAL HI-PERFORMANCE, INEXPENSIVE AND PRACTICAL TO INSTALL LOW-FREQUENCY MONO OR MULTIPLE BAND, 52 OHM ANTENNA SYSTEM

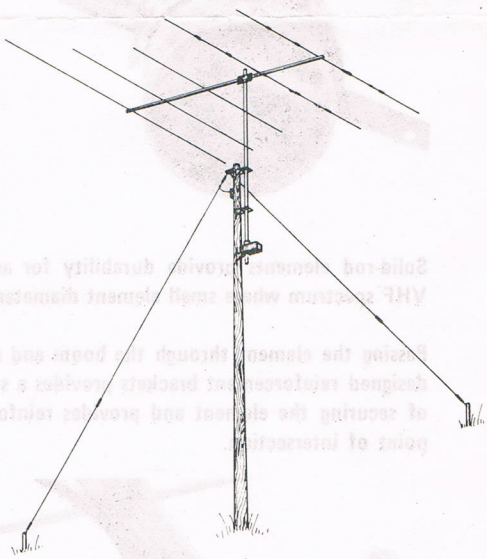
* **OPTIMUM, FULL-SIZE DOUBLET PERFORMANCE, INDEPENDENT OF GROUND CONDITIONS!**
* **"Balanced-Pattern", Low Radiation Angle, High Signal to Noise, and Signal to Interference Ratio!**
* **Minimal Support Costs, (Existing Tower, House, or Tree) and 2ea. -8ft. x 1" Pipe End Supports!**
* **Technican can resonate a Telrex "Inverted-Vee" to frequency, within the hour!**
* **Minimal S/W/R possible when installed and resonated to frequency as directed!**
* **Pattern is primarily low-angle omni-directional with approximately 6 db nulls at the ends!**
* **Complete simplified installation and resonating to frequency instructions supplied with each Kit!**

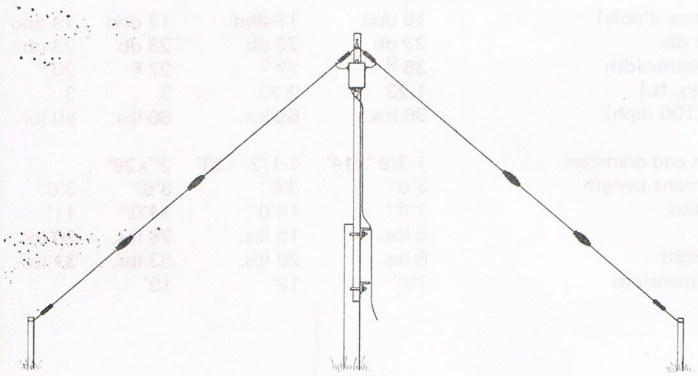


Telrex "Monarch" (trapped) Inverted-Vee, 4 Band Kit. Telrex Model MIVF4KWP. Choice of any four frequencies between 10 and 80 Meters.



Telrex 40 and 80 Meter Duo-Band "Inverted-Vee" kit Model MIVD4KWP. Also available in 20-40, 15-80, 10-80 Meter etc, combinations.





Telrex "Monarch" (trapped) "Inverted-Vee", "Tri-Band" Kit. Telrex Model MIVT4KWP. Choice of any three frequencies between 10 and 80 Meters.

FOR SHIPPING INFORMATION PLEASE REFER TO MAIL ORDER BLANK'.

Area requirements for Telrex "Inverted-Vee" kits are dependent upon the lowest frequency ordered. The following are approximate limitations per the lowest frequency: 80 meters-45 ft. apex/100 ft. base line., 40 meters-36 ft. apex, 90 ft. base line., 20 meters-20 ft. apex 75 ft. base line., 15 meters 18 ft. apex 20 ft. base line.

A Telrex Utility Pole Hdwe Kit TMPH10, a TB5EM and a (trapped) Duo-Band "Inverted-Vee" mounted to a 45 ft. stepped Utility Pole.

TELREX "BROAD-BAND" "BALUNS"

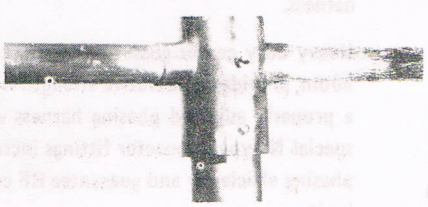
Model	Rating	Frequency Range	Unbalanced Input	Balanced Output
2K81B	2 KWP	3.5 to 30 Mhz	52 ohms	52 ohms
4K81B	4 KWP	3.5 to 30 Mhz	52 ohms	52 ohms

Telrex hi-efficiency encapsulated, Broad-Band "Baluns" (provided with all Telrex I.V. Kits, also sold separately), have no measurable insertion loss - (or ferrites) - Provide maximum coupling, and "Balanced-Current" transfer to the Driven Element.

Telrex "Baluns" are carefully adjusted, for Optimum Performance, dependability, and "Balanced-Output" to assure a "Balanced-Pattern" and cold transmission line, so

necessary for optimum signal-to-noise, signal-to-interference pattern. It also minimizes T.V., and Broadcast interference while eliminating transmission line sensitivity, thus making possible accurate and repetitive resonant frequency and V/S/W/R measurements.

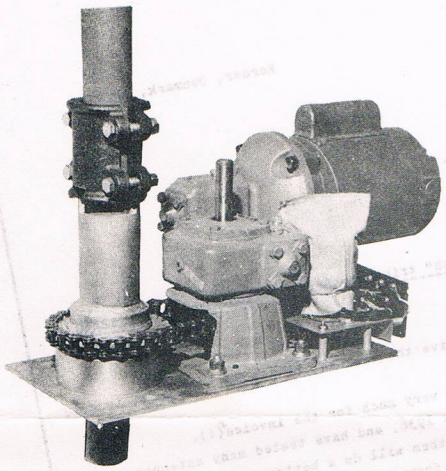
Telrex Broad-Band "Baluns" can be used with your beam, or doublet, to improve efficiency and "Pattern" potential.



YEAR AFTER YEAR, DECADE AFTER DECADE TELREX HAS AUGMENTED IT'S PROUD POSITION IN THE ANTENNA FIELD THROUGH SIGNIFICANT ENGINEERING ADVANCES AND CONTINUED SEARCH FOR PERFECTION, IN THE LITTLE THINGS AS WELL AS THE BIG!
THIS IN FACT IS THE BASIS FOR THE SUSTAINED HIGH VALUE OF TELREX ANTENNAS OVER THE YEARS OF OWNERSHIP!
INSTALL A TELREX ANTENNA, THE WISE INVESTMENT IN PERFORMANCE, RELIABILITY AND VALUE!

TELREX CUSTOM-BUILT, 3-STAGE REDUCTION ROTATOR-SELSYN-INDICATOR SYSTEMS

INCORPORATING A 2-STAGE WORM AND WORM WHEEL REDUCER, THE FINAL STAGE IS CHAIN-DRIVEN WITH FEED-THRU ANTENNA MAST CAPTIVATION. EVERY TELREX ROTATOR INCORPORATES AUTOMATIC ANTENNA LOCKING AND ELECTRICAL LIMIT OF ROTATION. BA...SERIES ROTATORS ARE ENCLOSED IN WEATHER PROOF METAL HOUSING, WITH SEALED OUTPUT DRIVE AND THERMOSTATICALLY CONTROLLED ELECTRIC HEATER.



MODEL A1312RISX

MODEL NUMBER	A1312RISX	A2140RISX	A3695RISX
ROTATING TORQUE (in. lbs.)	6,000	9,000	18,000
Output Shaft Travel (approx.)	380	380	380
Output Shaft R.P.M. (approx.)	.5 RPM	.5 RPM	.5 RPM
Antenna Mast Outer Diameter	2" O.D.	2" O.D.	3" O.D.
Drive Motor (110 VAC-60 cps)	1/3 H.P.	1/3 H.P.	1/3 H.P.
Operating Current (amps.)	3.5	4.2	6.6
Overall Dimensions (approx.)	W H L 9-1/2 x 9 x 19"	W H L 11 x 12 x 19"	W H L 11 x 13 x 26"
Net Weight (approx.)	52 lbs.	90 lbs.	125 lbs.
Shipping Weight (approx.)	88 lbs.	145 lbs.	165 lbs.

All 2" O.D. units are supplied with a Telrex maleable cast iron mast clamp.

All open units are supplied with canvas covers for the motor and selsyn unit.

12 conductor color coded control cable
Available at extra cost.

Special!

3 number 12, 4 number 14, 5 number 18, PVC Insulated carbon activated poly. jacket. Can be buried under ground.

MODEL NUMBER	BA2345RIHS	BA2899RIHS	BA3/2899RIHS
ROTATING TORQUE (in. lbs.)	9,000	12,000	18,000
Output Shaft Travel (approx.)	380	380	380
Output Shaft R.P.M. (approx.)	.5 RPM	.5 RPM	.5 RPM
Antenna Mast O.D.	2" O.D.	2" O.D.	3" O.D.
Drive Motor (110 VAC-60 cps)	1/3 hp	1/3 hp	1/3 hp
Operating Current (amps.)	6.6	6.6	6.6
Overall Dimensions (approx.)	W H L 11 x 12 x 25"	W H L 11 x 12 x 27"	W H L 11 x 12 x 27"
Net Weight (approx.)	125 lbs.	140 lbs.	145 lbs.
Shipping Weight (approx.)	159 lbs.	190 lbs.	195 lbs.

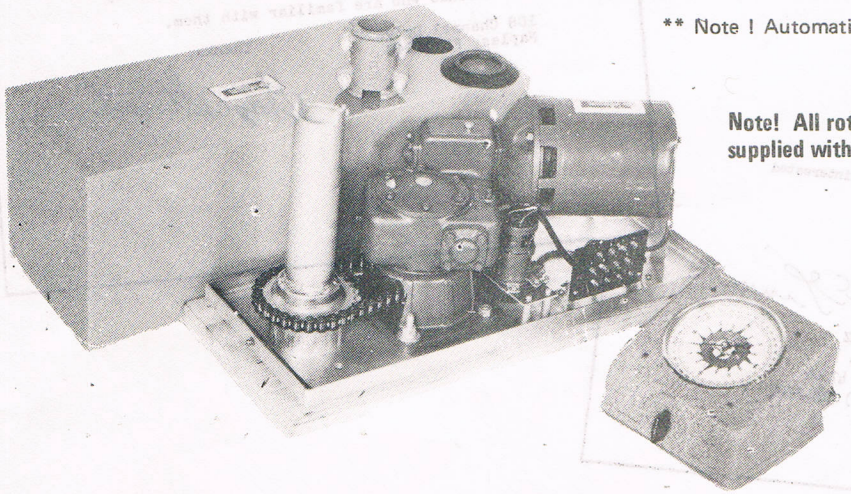
STANDARD INDICATOR CONSOLE

All 2" O.D. boxed units are supplied with a Telrex maleable cast iron mast clamp.

All boxed units are supplied with water sheds, and galvanized metal covers.

** Note ! Automatic electrical limit of rotation. (all models)

Note! All rotator consoles are now supplied with toggle switches.



MODEL BA2899RIHS

TELREX QUALITY PRODUCTS PRICE LIST

PERFORMANCE ! QUALITY !

UHF ARRAYS		VALUE	YOUR PRICE
420M1511		$208.00	$159.00
220M1520		$248.00	$191.00
2 METER ARRAYS			
2M814		$143.00	$110.00
2M1528C	1 KWP	$215.00	$165.00
2M1528		$344.00	$265.00
2MVS814		$293.00	$225.00
6 METER ARRAYS			
6M624C	1 KWP	$215.00	$165.00
6M624		$305.00	$235.00
6M1136		$500.00	$385.00
10 METER ARRAYS		VALUE	YOUR PRICE
10M313		$279.00	$215.00
10M523	4 KWP	$410.00	$315.00
10M636		$878.00	$675.00
15 METER ARRAYS			
15M317		$305.00	$235.00
15M532	4 KWP	$631.00	$485.00
15M845		$1268.00	$975.00
20 METER ARRAYS		VALUE	YOUR PRICE
20M326		$449.00	$345.00
20M536	4 KWP	$761.00	$585.00
20M646		$1294.00	$995.00
TRI-BAND ARRAYS			
+ TB4EC	1.5 KWP	$318.00	$245.00
+ TB5ES	LEGAL	$468.00	$359.00
TB5EM	4 KWP	$645.00	$495.00
TB6EM	4 KWP	$774.00	$595.00
DUO-BAND ARRAYS		VALUE	YOUR PRICE
DBM1015		$403.00	$310.00
SDBM30D	LEGAL	$644.00	$495.00
40 METER ARRAYS			
40M214		$865.00	$665.00
40M329		$1294.00	$995.00
40M346		$2210.00	$1700.00
4 BAND ARRAY			
ST4BM/3		$2544.00	$1995.00

INVERTED-VEE KITS	VALUE	YOUR PRICE
MIVD4KWP (2 band)	$136.00	$102.00
MIVT4 KWP (3 band)	$163.00	$128.00
MIVF4KWP (4 band)	$208.00	$165.00
MIVF4KWP/5 (5 band)	$228.00	$178.00

Above kits pertain to any frequencies between 10 and 80 Meters

	Gain	F/B	B/W	No. Elem.	Boom Lgth.
420M1511	17.2 dbd	24 db	27°	11	15 ft.
220M1520	17.2 dbd	24 db	27°	15	20 ft.

... NOTE ...

The following products are priced for sale with the purchase of Telrex antennas and or systems. Please refer to the "NET" price when purchasing them as a separate item!

OPEN ROTATORS	NET PRICE	YOUR PRICE
A1312RISX	$1287.00	$990.00
A2140RISX	$1450.00	$1100.00
A3695RISX	$2334.00	$1795.00

BOXED ROTATORS	NET PRICE	YOUR PRICE
BA2345RIHS	$1755.00	$1350.00
BA2899RIHS	$2145.00	$1650.00
BA3/2899RIHS	$2535.00	$1795.00

UTILITY POLE HARDWARE KITS		
TMPH10	$350.00	$205.00
XTMPH10	$513.00	$395.00

SUPPORT MASTING	NET PRICE	YOUR PRICE
2" x .250. x 20 ft. (approx.)	$295.00	$220.00
3" x .250. x 19 ft. (approx.)	$500.00	$385.00

3" x .250 x 19 ft. with extension. Price on request.

RG8A/U Price on request.

12 Conductor color coded control cable. Price on request.

Phasing harnesses. Price on request.

+ PLEASE NOTE: The ... TB5ES ... "Tri-Band" Array structure and performance is exactly the same as the TB5EM. The difference is the power rating only!

Model ST4BM/3 - 10, 15, 20, 40M - 4 Band Array ... Gain ... 10M/11 dbd, 15M/9 dbd, 20M/8 dbd, 40M/7.8 dbd 23 db f/b ratio, 62° beamwidth, 4 KWP rating, 12 sq. ft., 35 ft. turning radius. Note: Same mechanical construction as the popular ruggedized TB6EM.

BUY TELREX AND SAVE !

TELREX ... P.O. BOX 879 , ASBURY PARK, NEW JERSEY 07712

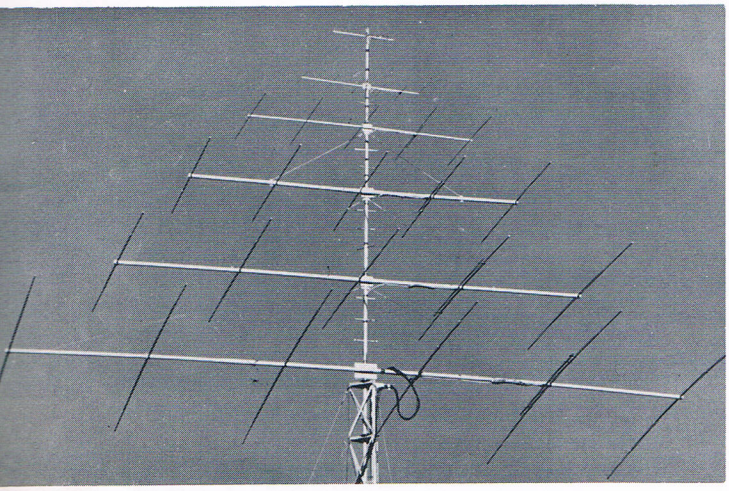
PHONE 201-775-7252

ALL PRICES ARE F.O.B. ASBURY PARK, NEW JERSEY

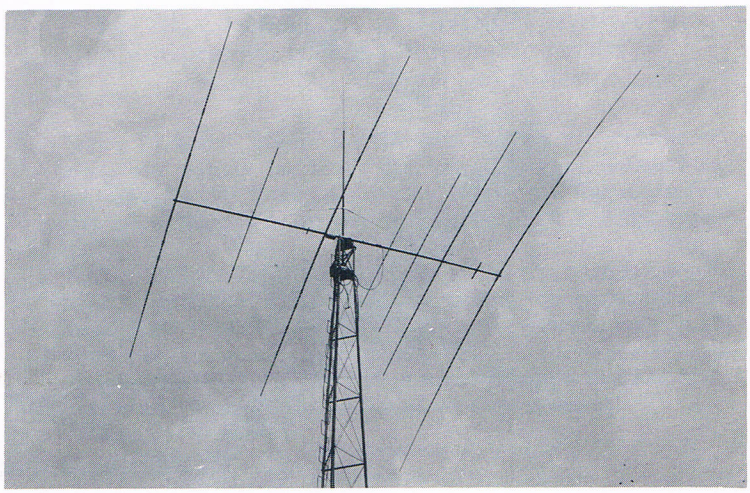
TELREX RESERVES THE RIGHT TO CHANGE SPECIFICATIONS

AND PRICES WITHOUT NOTICE

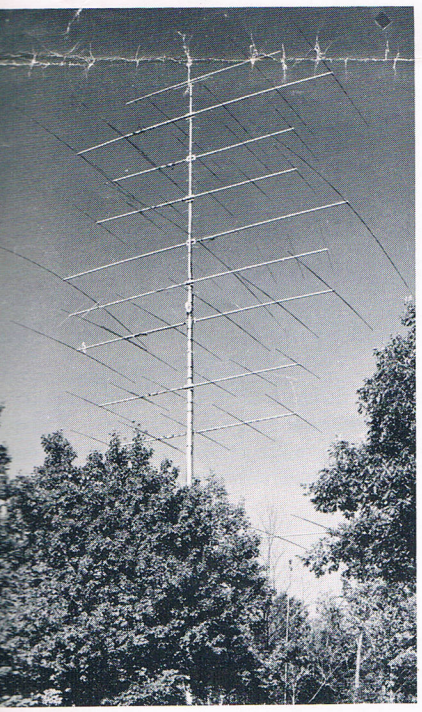
BUY QUALITY AND SAVE !



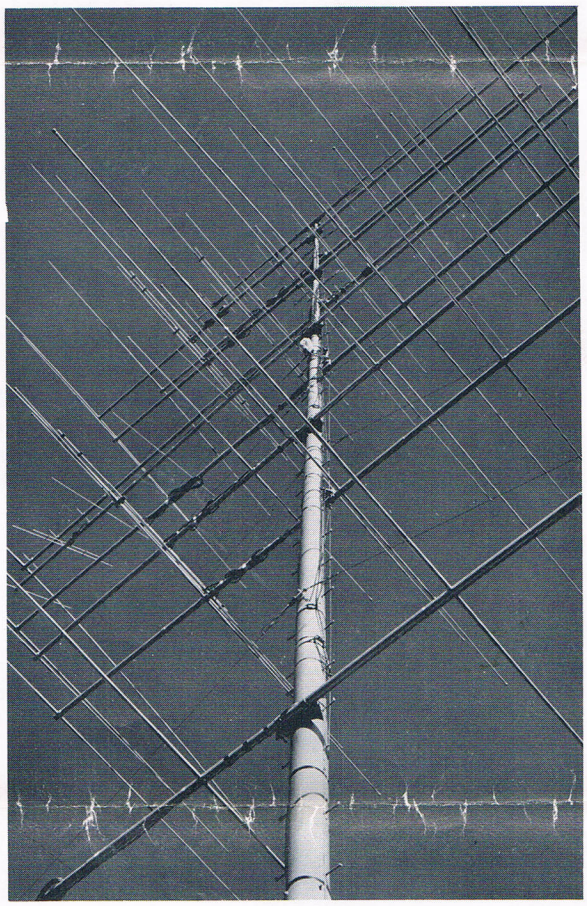
Don Copper W7SXP's 20M646, 15M532, 10M523, 6M516 & 2M609 rotated by a Telrex A3695RISX.



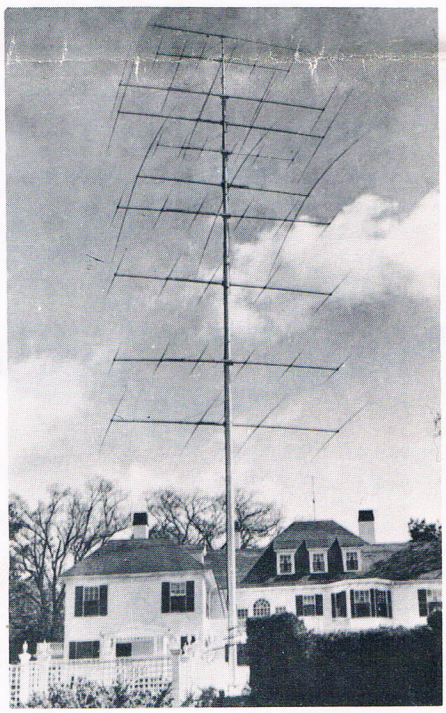
10, 15, 20, and 40 Meter, 4 Band Array, Telrex Model ST4BM/3 at 100 ft.



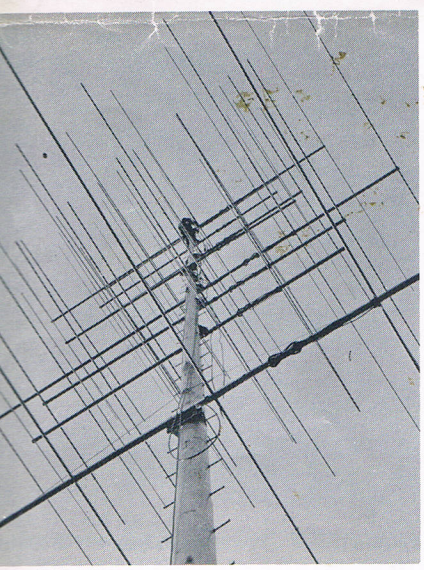
WONLY's "Big-Bertha" location - St Paul, Minn.



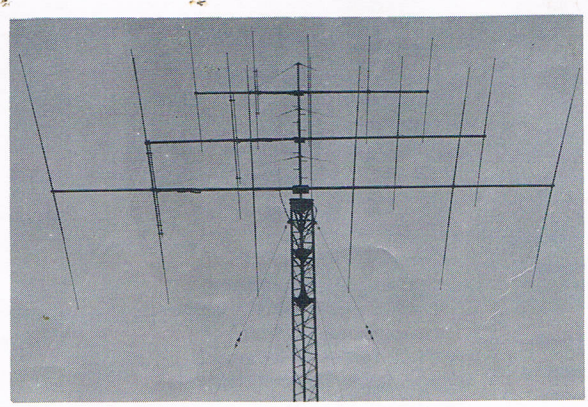
9K2AM'S "Big-Bertha" location Kuwait.



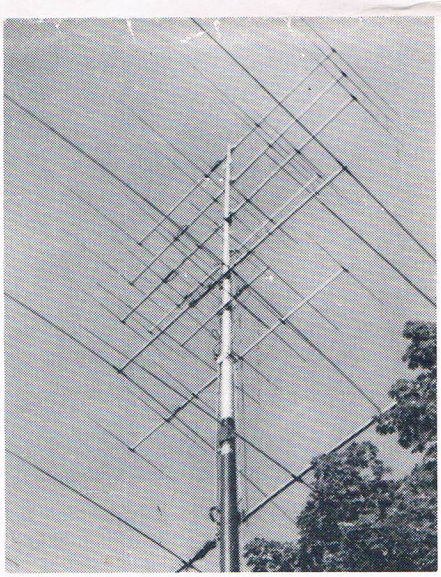
W1FZ's "Big-Bertha" location - New Hampshire.



I1RIF's "Big-Bertha" location Milan , Italy



Alvin Toro's KP4D's 20M646, 15M532, and 10M523.



K2GL's "Big-Bertha" location - New Jersey