

ITEM #6

This information will be provided under separate cover.

ITEM #7

Western Pacific Broadcasting, Inc. made no payments  
as specified in item #7.

ITEM #8

This information will be provided under separate cover.

ITEM #9

This information will be provided under separate cover.

ITEM #10

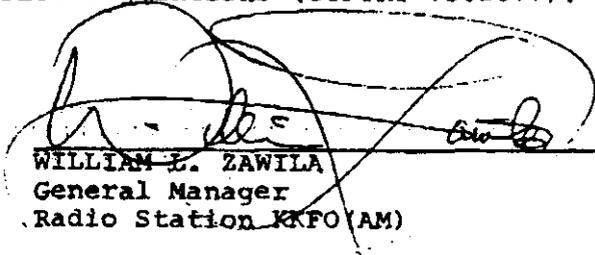
Attached is a copy of the designation of Chief Operator for KKFO(AM). This designation contains an acknowledgment that the Chief Operator was aware of this designation and the attendant duties and responsibilities.

# Radio Station KKFO

12550 Brookhurst Street - Suite A  
Garden Grove, CA 92640  
714/636-5040

Re: DESIGNATION OF CHIEF OPERATOR

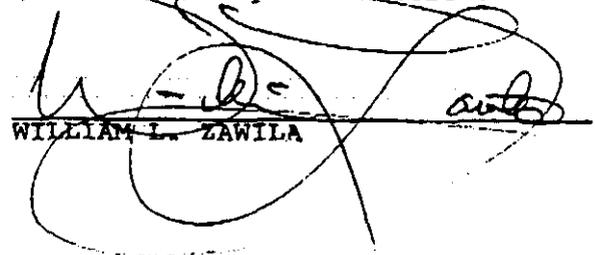
This will serve as notice that William L. Zawila has been designated as the Chief Operator for Radio Station KKFO(AM). This designation is made pursuant to the requirements of Federal Communications Commission regulations (C.F.R. 73.1870).



WILLIAM L. ZAWILA  
General Manager  
Radio Station KKFO(AM)

**Acknowledgment:**

I, WILLIAM L. ZAWILA, acknowledge that I was aware of this designation and the attendant duties and responsibilities.



WILLIAM L. ZAWILA

AM 1470 COALINGA, CA

ITEM #11

This information will be provided under separate cover.

ITEM #12

The KKFO(AM) public inspection file was maintained at the main studio at 152 E. Elm Street, Coalinga, California, for many years until the station was evicted from its transmitter site in 1995. Thereafter, the public inspection file was maintained at the main studio at the STA transmitter location and a duplicate copy of the public inspection file was maintained at 12550 Brookhurst Street, Suite A, Garden Grove, California.

The main studio for KKFO(AM) was maintained at 152 E. Elm Street, Coalinga, California, for many years until the station was evicted from its transmitter site. Thereafter, the main studio was maintained at the STA transmitter site for KKFO(AM).

Charles Davenport was the lessor at 152 E. Elm Street, Coalinga, California, now deceased. Henry Cole provided the STA location for KKFO(AM), location unknown. Willard Pool was the landlord at 12550 Brookhurst Street, Suite A, Garden Grove, California, available at the same address.

ITEM #13

The KKFO(AM) STA equipment is located at 12550 Brookhurst Street, Suite A, Garden Grove, California. The landlord of the premises is Willard Pool, same address, telephone number (714) 636-5040.

ITEM #14

The STA equipment used by KKFO(AM) is located at the main studio where the equipment is under constant surveillance by the operator who is in the same room with the equipment. The equipment is constantly monitored on an hourly basis or more frequently regarding operating power and modulation levels to be sure that all equipment is operating properly. In the event that any variance occurs in equipment performance, the operator is immediately available to take all necessary corrective action to bring equipment back into compliance with proper operating parameters.

ITEM #15

The STA equipment is inspected on a daily basis to be sure that it is operating within proper parameters. Indicating instruments are calibrated on a daily basis to be sure that they are operating properly. STA equipment is located in the same room with the operator who constantly monitors the equipment to be sure that it is operating within proper parameters.

INSTALLATION MANUAL FOR THE  
CAPITANCE TERMINATED SHORT VERTICAL RADIATOR

CTSVR 1470MC

JANUARY 23, 1997

Uni-Hat Engineering and Marketing Group  
3816 Royal Lane Suite 100  
Dallas, Texas 75229  
214-352-4623  
(Patent Pending)

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## CTSVR SPECIFICATION

### CAPACITANCE TERMINATED SHORT VERTICAL RADIATOR (Proprietary Design Patent Pending)

**Fundamental Frequency 1.470 Mhz**  
**Compact 37 ft. Tall .. Low Profile**  
**Top Loaded .. Highly Efficient**  
**Heavy Duty Construction**  
**Stainless Steel Hardware**  
**Single 50 Ohm Feed Line**  
**Low Acquisition Cost**

The CTSVR has a ground foot print of 725 sq. ft. when equipped with a non-metallic 4 guy - 3 level system to achieve 1.470 Mhz operation. The RF ground system required is an 8' ground rod at the base of the CTSVR with 36 radials 79' long for most applications. Excellent band width is accomplished with the proprietary easily tuned matching system at ground level. CTSVR tuning is accomplished by varying the length of a coaxial tuning stub (input capacitor). Adjustment of the fundamental operating frequency (1.470 Mhz) may be moved by +/- 75Khz by trimming the tuning stub length to the desired operating frequency.

Easily configured for use in a multi-element phased array offering a low profile installation with excellent bandwidth and directivity.

#### Performance and Specifications Data:

Power Rating: .....	1.0 KW-CW
Band Width (VSWR 2:1): .....	50 Khz
Feed Point Impedance: .....	50 Ohm
Recommended Feed Line: .....	RG213/U
Ground Rod: .....	8'
Number of Radials: .....	36 minimum
Radial Length: .....	79'
Height: .....	37'
Mast: .....	Galvanized Steel (push up)
Top Hat: .....	21' Dia. Aluminum/#14 Copperweld Wire
Foot Print w/4 Guy System: ..	725 sq. ft.
Guy System: .....	12 Non-Metallic
Surface Area: .....	Approx. 14 sq. ft.
Wind Rating: .....	90 Mph Gust peak (four guy system)
Est. Shipping Weight: .....	105 lbs.
Unit Shipping Dimensions: ..	120"x12"x12"
Price Quote .....	\$699.00 USD
Availability .....	Three weeks from receipt of order

(Shipping cost not included in quote)

## PARTS LIST

PART DESCRIPTION	PN	QTY
TOP HAT EXTENDER ROD ASSEMBLY	UH100	1 ✓
RADIAL EXTENDER TUBE W/STIFFNER	UH1001	4 ✓
RADIAL ARM	UH1003	8 ✓
SKIRT SPREADER ROD	UH3001	2 ✓
#8 HOSE CLAMP	UH5708	8
#24 HOSE CLAMP	UH5724	6
#32 HOSE CLAMP	UH5732	3
# 10-24 X 1" SS METAL SCREW	10241SS	8
# 10 SS WASHER	10SSWA	27
# 10-24 SS NYLOCK NUT	1024NYLSS	14
# 10 X 1/2" SS SHEET METAL SCREW	10012SS	8
12' # 14 COPPERWELD WIRE SK/1L	UH1006	1 ✓
69' 6" # 14 COPPERWELD WIRE OL	UH1005	1 ✓
37' 6" # 14 COPPERWELD WIRE SK	UH1004	4 ✓
# 10 STUD # 14 WIRE LUGS	UH1010	20
5/16-18 X 1 3/4" SS BOLT	51618134SS	2
5/16-18 NYLOCK NUT	51618NYLSS	2
5/16 SS WASHER	51618SSWA	4
# 1/4-20 X 1" SS BOLT	14201SS	1
# 1/4" SS WASHER	14SSWA	2
# 1/4-20 NYLOCK NUT	1420NYLSS	2
# 10 X 3/4" SS SHEET METAL SCREW	1034SS	16
# 10 X 2 1/2" SS SHEET METAL SCREW	10250SS	1
# 10 X 1 1/4" SS SHEET METAL SCREW	10114SS	2
# 10-24 X 2 1/2" SS METAL SCREW	1024250SS	1
# 12 X 3/4" SS SHEET METAL SCREW	1234SS	2
✓ COAXIAL TUNING STUB "Ca"	UH3003/	1 ✓
INSULATOR ASSEMBLY	UH300	1 ✓
COIL ASSEMBLY W/GND AND MAST JUMPER	UH3000	1 ✓
10" MAST JUMPER	UH3007	2 ✓
7" MAST JUMPER	UH3008	2 ✓
GROUND MOUNT KIT W/ PLATE AND STAKE	UHGTMB	1 ✓
# 12 X 1/2" SS SHEET METAL SCREW	1212SS	2
GALVANIZED STEEL 1 1/2" X 1 1/2" "L" BRACKET	UHMS3000	1
TELESCOPING MAST ASSEMBLY	UH30	1 ✓
MAST COTTER PIN	UH30CP	2
COAXIAL TUNING STUB END CAP	UH4000	1
TIE WRAP (BLACK)	UH4001	7
INSTALLATION MANUAL	UH9147	1 ✓

## SITE PREPARATION

The center of the CTSVR site location is where the 8' ground rod and ground mounting plate are to be located. Prepare the site by clearing an area from all foreign objects that may hinder the raising of the CTSVR center mast assembly. The center mast will be raised vertically and guyed off before the top hat assembly is put in place.

✓ Install an 8' ground rod first at the center of the site. Leave about 4" of ground rod above ground for termination purposes. Next, install the short 12" ground mounting stake and ground plate where the plate is butted up against the ground rod. This will keep the ground plate from moving when attached to the insulator assembly. When installing the short 12" stake, be careful not to deform the top of the stake. The base insulator assembly will slip over this portion of the stake later.

✓ After the short stake and ground plate are in position, be sure the 1/4-20 stainless steel ground bolt is between the stake and the ground rod. The stainless steel bolt will be the terminating point for the radial system, the CTSVR matching coil ground jumper and the earth ground rod. Mount the 1 1/2" "L" bracket to the ground mount plate using the two # 12 X 1/2" stainless steel sheet metal screws.

Note: The Ground Mount Kit (PN UHGTMB) is provided as a part of the CTSVR kit. The ground plate and stake will be of sufficient size to support the CTSVR in most locations and soil conditions. When your soil conditions are extremely wet or soft you may be required to fabricate a larger plate and stake if the one provided is not adequate.

## MAST INSTALLATION

✓ The telescoping mast assembly (PN UH30) comes retracted and has four sections 10' long. When extended, the mast is 35' long with a mast extender rod (PN UH100) added for a total length of 37'. The top hat radial arm assemblies attach to the top of the solid extender rod for top loading.

✓ First, you will have to attach the insulator assembly (PN UH300) to the mast while the mast is in the retracted position on the ground. There are two holes on the neck of the insulator assembly that will align with two holes on the lower mast section of the mast assembly. One #10-24 X 2 1/2" stainless steel screw, 1/4-20 nylock nut and washer will secure the insulator assembly to the mast. This nut and screw is also used to electrically connect the coil assembly jumper to the mast. You are now ready to raise the mast assembly into place.

## RAISING THE MAST ASSEMBLY

✓ Place the mast with the insulator assembly over the ground mount stake. Rotate the mast and insulator so that the "A" spreader rod hole

UH30 MASC  
ASSEMBLY  
(U SECTION)

#10-24 X 2 1/2" SS

UH300  
INSULATOR  
ASSEMBLY



RADIAL E GROUND  
TERMINAL  
1/4-20 SS

UH6TMB W/ STAKE

is in line with the stainless steel ground bolt on the ground mounting plate. This allows the braided mast ground lead to connect to the 1/4-20 terminal on the ground mount plate assembly.

The mast (not extended) and insulator is 13' 6" tall when stood on end. This will require a step ladder of at least 8' in height to erect the CTSVR to its full height of 37' 9". A typical 6' step ladder is not recommended to stand on while raising the CTSVR.

Without the top hat extender rod assembly attached to the mast, set the lower guys between the bottom mast section guy ring and the ground anchors taking up the slack in the lines. Tighten the lower guys after determining that the mast is perfectly straight and plumb to the ground. Connect a hose clamp (PN UH5732) around the insulator assembly and the 1 1/2" L" bracket (PN UHMS3000). This clamp helps prevent the CTSVR base from torquing in the wind.

**IMPORTANT:** If the mast is not plumb to the ground, the mast will bind when extending it to its full height.

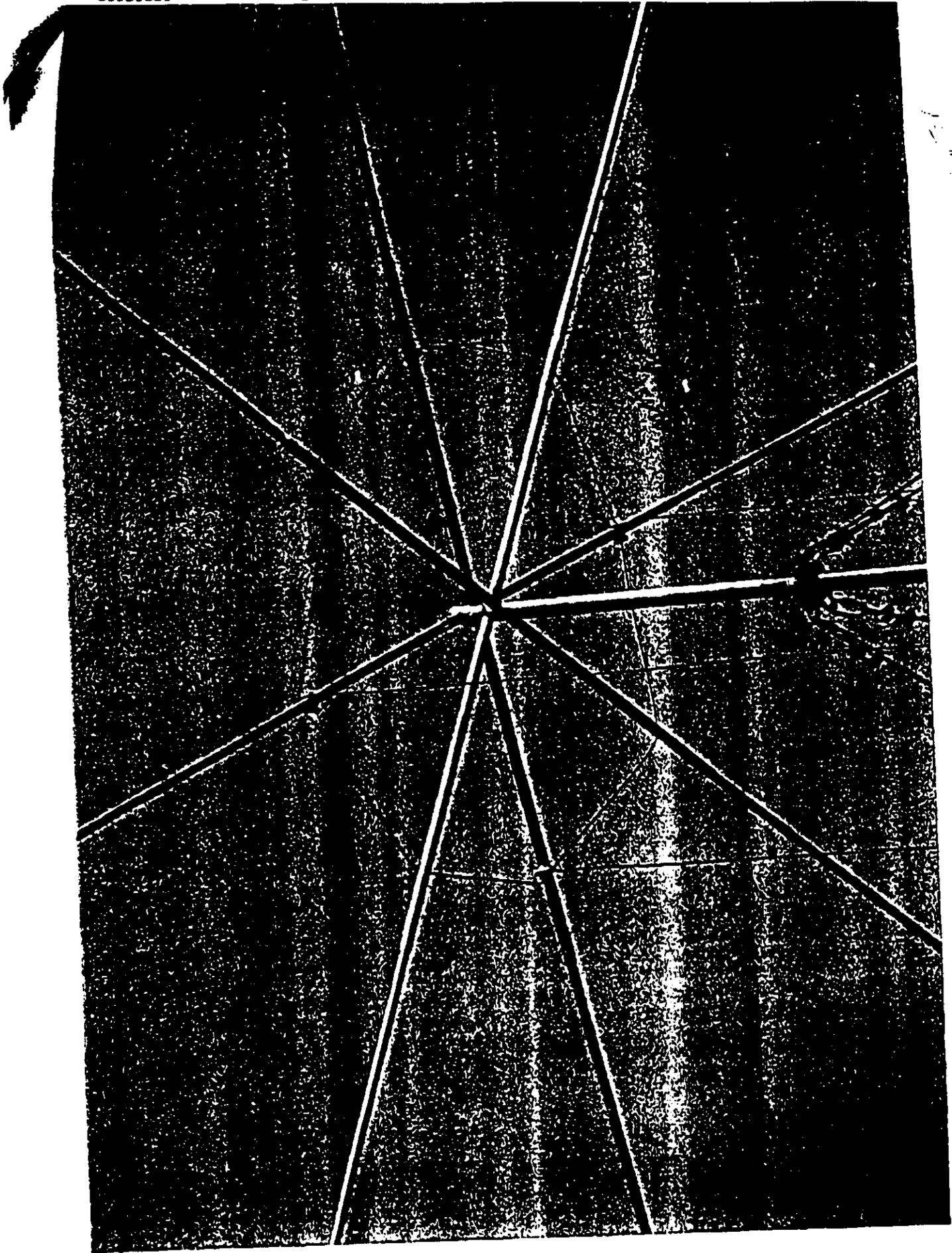
The telescoping mast has four locking clamps, two cotter pins and two 5/16-18 bolts, nylock nuts and washers that are required to fully erect and secure the mast at its intended height. The cotter pins are inserted into the mast index holes at the top of the each mast section where the mast sections mate. The middle and bottom locking clamps secure the mast sections together mechanically.

The top mast section of UH30 is drilled about 10" up from the bottom edge of the mast. A "red" vertical and horizontal mark is located about 14" from the bottom of the top mast section for hole alignment and height positioning. Pull the top mast section out of the section below until you see the horizontal red stripe around the mast. Rotate the top mast section until the vertical mark aligns with the mast hole below. Position the hole in the top mast section with the hole in the outer section and insert a 5/16-18 bolt (PN #51618134SS) with washer (PN #51618SSWA) and push thru the mast holes. Put another washer (PN #51618134SS) on the bolt and attach a 5/16-18 nylock nut (PN #51618NYLSS) and tighten securely.

**NOTE:** "DO NOT" raise the top mast section beyond the red horizontal mark. The red horizontal mark "determines" the resonant frequency of the CTSVR.

Place the top locking clamp down 7" from the top of the mast end. Place the top guy ring over the mast after the locking clamp is tightened and before the mast extender rod is installed. The position of the clamp at this location prevents the locking clamp from squeezing the top mast section so the 2' extender rod (PN #UH100) can be inserted into the mast without binding. Be sure this clamp is securely tightened before attaching the top guy lines.

Raise the CTSVR to its full height and loosely tie off the guy sets. Do



not tighten the guy sets at this time or you will have difficulty in raising the CTSVR to its full height with the top hat and extender rod attached.

**WARNING:** Always check the wind conditions before raising the CTSVR into position. If the wind is gusting, the mast will tend to bind making it difficult to raise the mast to its fully extended position and inserting the bottom mast locking pin in place (two persons are required for safety).

Lower the mast to its retracted position. Once the two top guy sets are in place you are ready to complete the assembly of the CTSVR.

#### TOP HAT ASSEMBLY

The next major step is construction of the top hat assembly. The top hat is comprised of a mast extender rod (PN UH100), four radial arm extender tubes with internal stiffeners (PN UH1001), eight 7' long radial arms (PN UH1003), 69'6" of # 14 copperweld wire for the outer loop with 9 #10 wire lugs and 12' of # 14 copperweld wire with 9 #10 wire lugs.

#### RADIAL ARM TO EXTENDER ROD MOUNT

✓ Insert and attach the (four) radial arm extender tubes into the extender rod (PN UH100) using the # 10 1/2" sheet metal screws provided. The two top extender tubes support the skirt wires which connect to the insulator spreader rods 37' below when the mast is fully extended. Make sure all holes on the ends of extender tubes are facing up for installation of the inner loop wire. Tighten the screws snugly (Do Not Over Tighten). Slip the (eight) 7' radial arms into the 3/4" radial arm extender tubes next.

✓ Fasten the radial arms to the 3/4" extender tubes with the # 10 3/4" sheet metal screws provided. Insert eight # 10-24 X 1" stainless steel screws, 10-24 nylock nuts, washers and #10 wire lugs on the ends of the 7' radial arms.

#### OUTER LOOP INSTALLATION

To prepare the outer loop (PN UH1005), you will insert the # 14 copperweld wire thru nine # 10 stud # 14 wire lugs. Solder a lug on the end of the outer loop wire first. This will be the end you start with when connecting the outer loop to the radial arm ends. Starting at the # 10-24 nylock nut and screw on the index radial arm end, connect the end of the outer loop wire with the solder lug to the radial arm. Do not tighten the nylock nut and screw at this time. Level the top hat parallel to the ground and stabilize the radial arm while stringing the outer loop wire to the next radial arm. Remove the 10-24 nylock nut and screw at each remaining arm end as you advance around the perimeter of the top hat. Pull the outer loop wire tight so that the radial arms become rigid. Solder the loop wire to each wire lug until the loop is completed.

HOSE CLAMP UH3007  
JUMPER UH3007

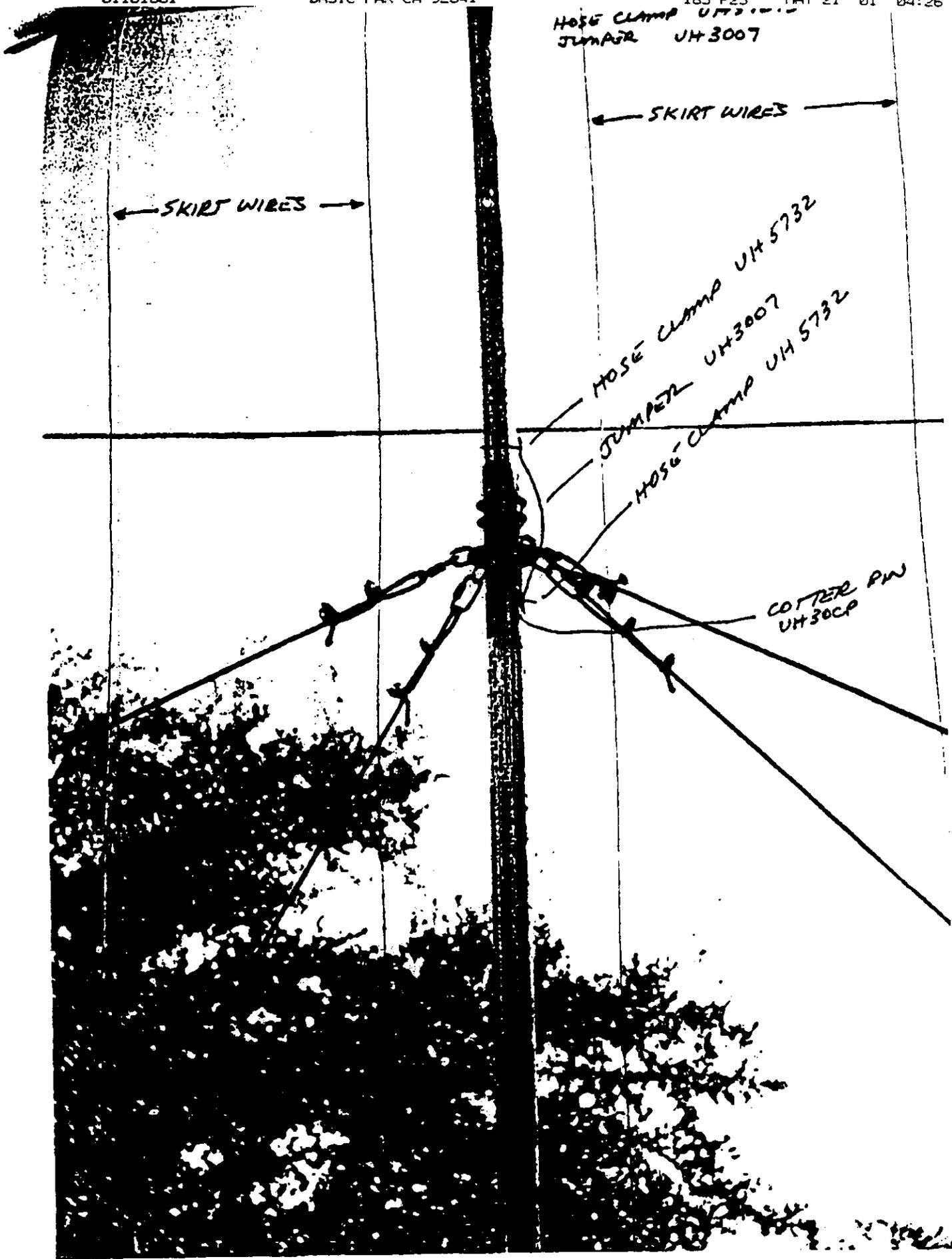
← SKIRT WIRES →

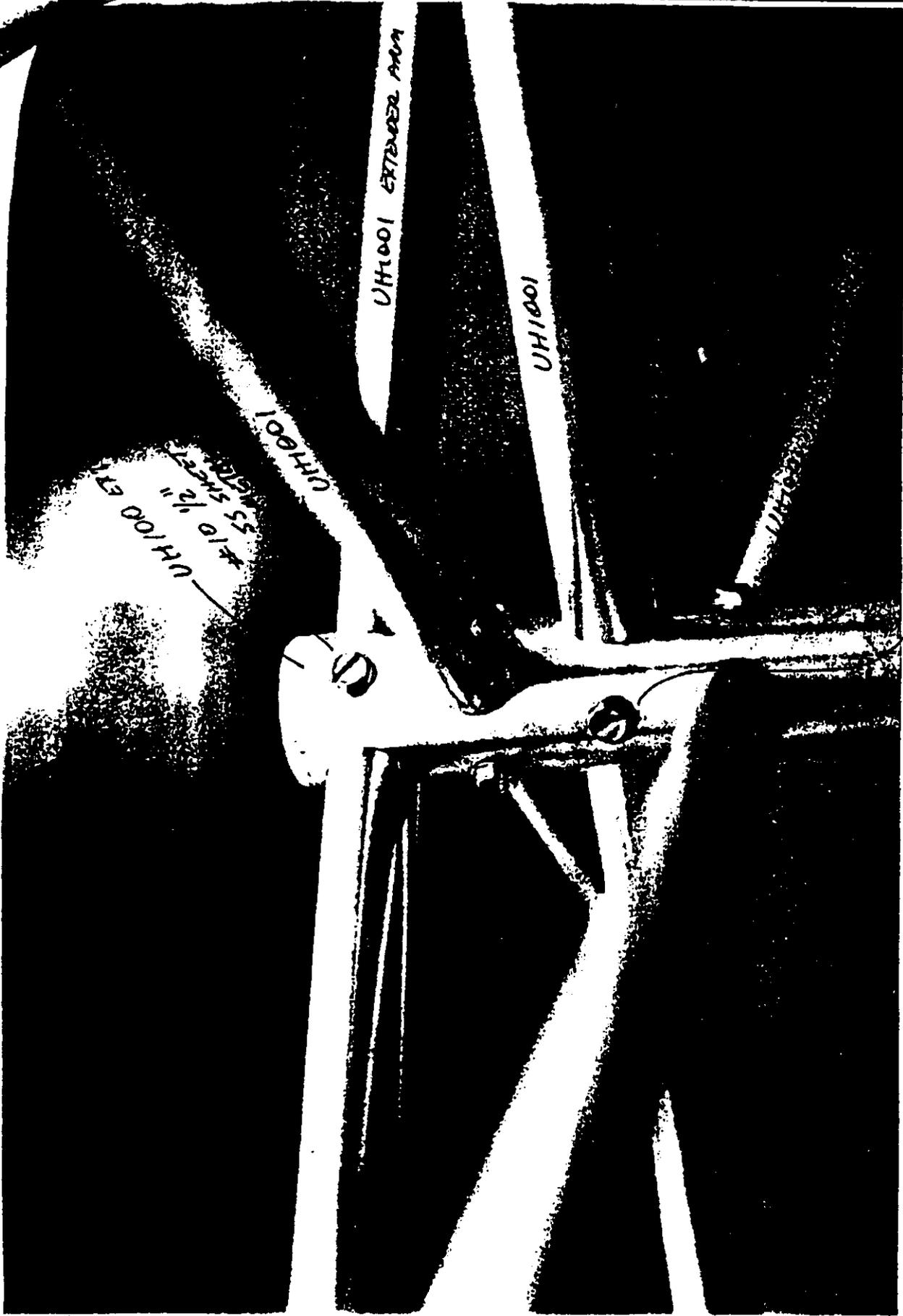
← SKIRT WIRES →

HOSE CLAMP UH5732  
JUMPER UH3007

HOSE CLAMP UH5732

COTTER PIN  
UH30CP





UH100 EXT  
 #10 1/2"  
 55 ANGLES

UH1001 EXTENDER ANA

UH1001

INSERT AND TIGHTEN ONE  
 EACH SIDE OF EXTENDER  
 ROD ASSEMBLY

**DO NOT BOW** the radial arms up for this procedure. They will remain rigid when in place with some downward drooping of the radial arms. Make sure all screws and nylock nuts are tightened for good electrical contact.

#### INNER LOOP INSTALLATION

To prepare the inner loop (PN UH1006), you will insert the 12' # 14 copperweld wire thru nine # 10 stud # 14 wire lugs. Solder a wire lug on the end of the loop wire first. This will be the end you start with when connecting the inner loop to the radial arm extender tubes. Starting at the index extender tube, connect the inner loop wire with the wire lug over the washer for each # 10 stainless steel sheet metal screw. Continue around the top hat until all four radial arm extender tubes are wired for eight connections.

**Note:** Tighten the sheet metal screws at this time being careful not to strip the aluminum rod.

Connect the remaining end of the inner loop wire from the seventh radial arm to the first index radial arm using the same procedure as the outer loop. Next, place a 3" hose clamp (PN UH5708) on the index extender tube between the inner loop wire and the mast extender rod. Place one on the opposite side in the same position. Drop down to the next extender tube and repeat the placement of the hose clamps. Do not tighten the hose clamps yet. This completes the assembly of the top hat.

#### SKIRT WIRE INSTALLATION

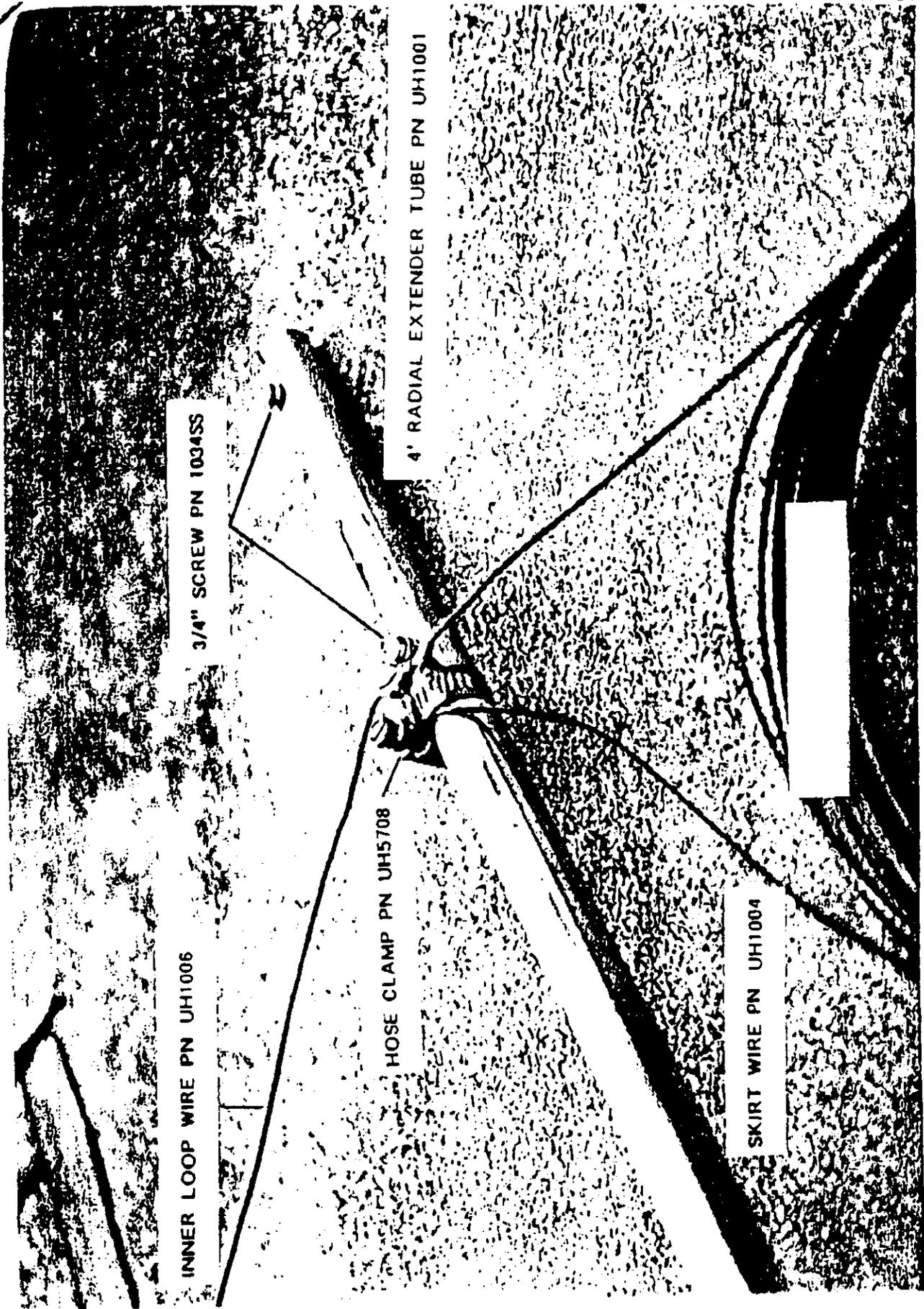
The skirt wires (PN UH1004) are tied into individual bundles. Leave them tied for now. Solder a # 10 stud # 14 wire lug on one end of each skirt wire. Take the four (37' 6") skirt wire bundles and feed one end of each under the hose clamps previously mounted. Connect the skirt wire ends with the wire lugs to the inner loop wire at the appropriate connect points beginning at the index radial arm. Tighten the hose clamps snugly being sure the skirt wire is at the bottom of the radial arm extender tube for proper strain relief. You are now ready to mount the top hat assembly to the mast assembly.

#### TOP HAT INSTALLATION

Move the top hat from the assembly area and raise the outer loop wire over the top of the mast assembly. Lay the top hat on the lower guys for support. Lift the top hat up and onto the mast inserting the two foot mast extender rod into the top mast section. Rotate the two foot mast extender rod so that the 5/8" hole lines up with those in the top mast section. Insert the 5/8-18 stainless steel bolt with a washer and insert into the mast hole. Then, put another washer on the bolt and tighten the nylock nut down firmly.

#### RAISING THE MAST AND TOP HAT

First, make sure the top and middle guy lines are free and clear of any



INNER LOOP WIRE PN UH1006

3/4" SCREW PN 1034SS

HOSE CLAMP PN UH5708

4' RADIAL EXTENDER TUBE PN UH1001

SKIRT WIRE PN UH1004

7' RADIAL ARM PN UH1003

OUTER LOOP WIRE PN UH1005

10-24 SCREW, WASHER & NYLOCK NUT

SOLDER JOINT

#14 WIRE LUG PN UH1010

