
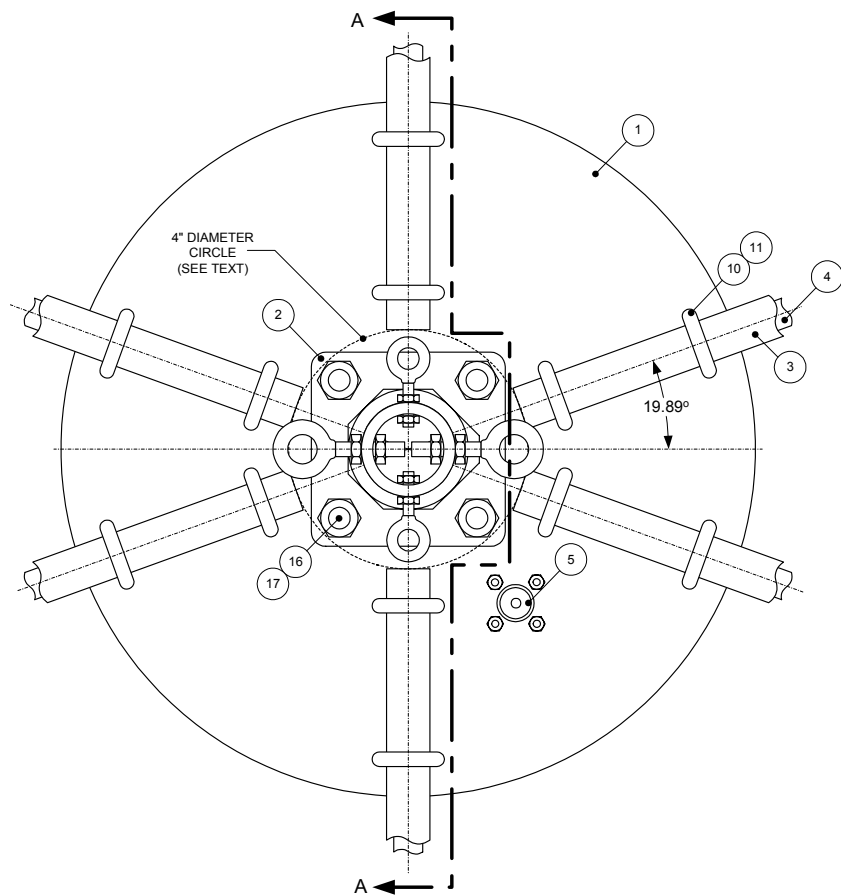
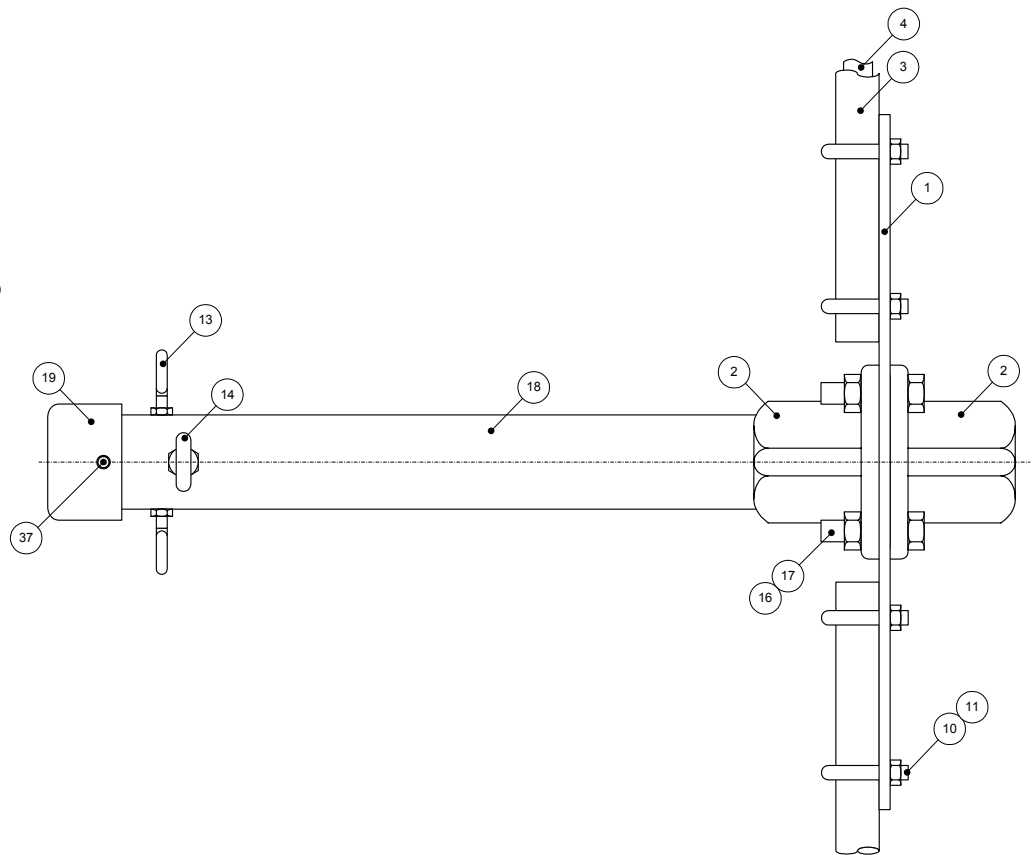



|                    |          |   |
|--------------------|----------|---|
| DESIGN: A.W. BAKER | 02/09/04 |  |
| TESTED: A.W. BAKER | 04/18/04 |   |
|                    |          | <b>DUAL-BAND WIRE BEAM</b><br><b>12/17 METER NESTED MOXON</b><br><b>ASSEMBLY</b>      |
|                    |          | SCALE: 0.05:1    SHEET 1 OF 5    REV. 0   |

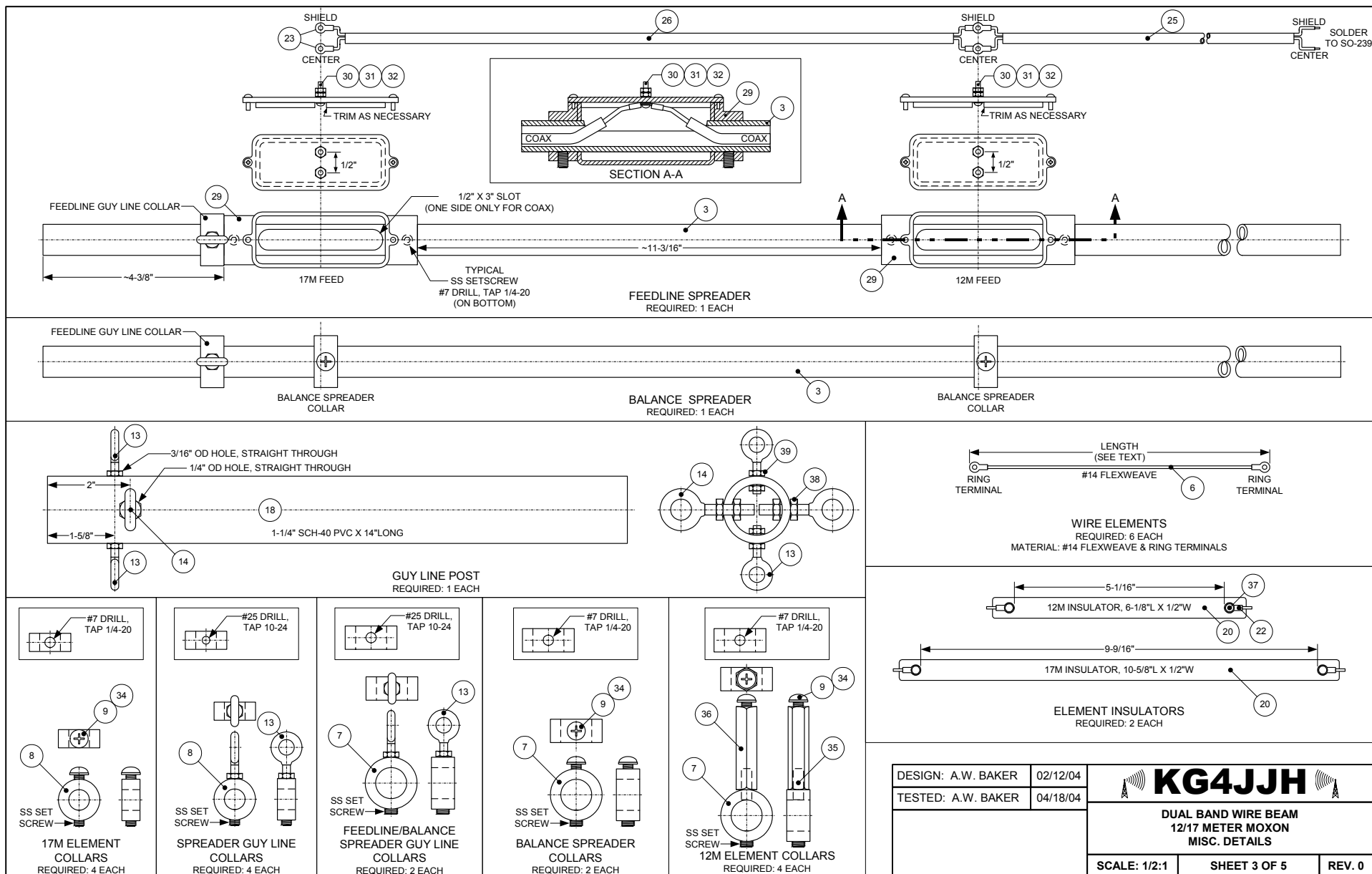


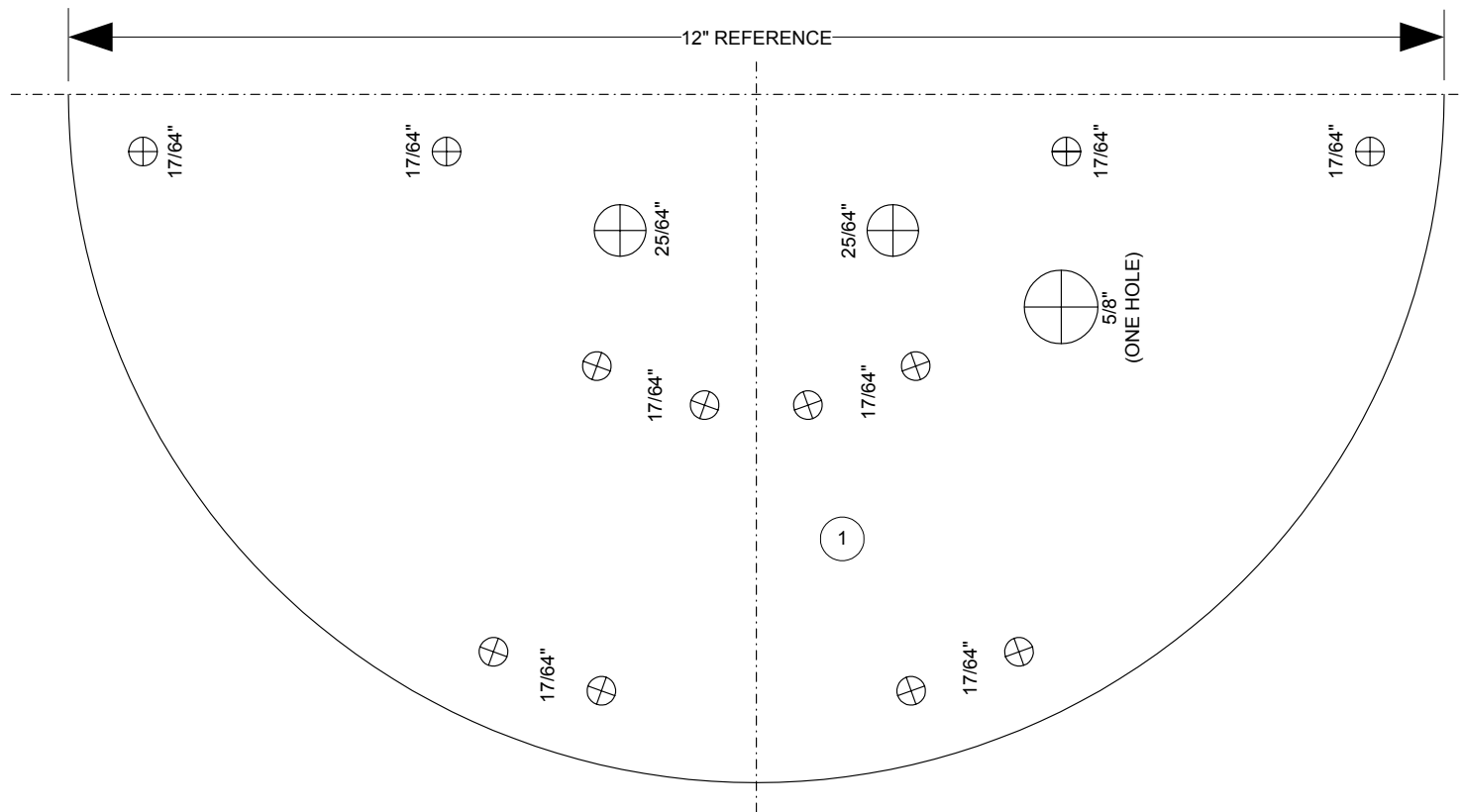
HUB ASSEMBLY  
TOP VIEW




VIEW A-A

|                    |          |   |
|--------------------|----------|---|
| DESIGN: A.W. BAKER | 02/12/04 |  |
| TESTED: A.W. BAKER | 04/18/04 |   |
|                    |          | DUAL BAND WIRE BEAM<br>12/17 METER MOXON<br>HUB ASSEMBLY                              |
|                    |          | SCALE: 1/2:1    SHEET 2 OF 5    REV. 0  |





**HUB DRILLING TEMPLATE**  
(MAKE TWO COPIES AND TAPE TOGETHER AT CENTERLINE)

|                    |          |   |                        |
|--------------------|----------|---|------------------------|
| DESIGN: A.W. BAKER | 02/12/04 |  |                        |
| TESTED: A.W. BAKER | 04/18/04 |   |                        |
|                    |          | DUAL BAND WIRE BEAM<br>12/17 METER MOXON<br>HUB DRILLING TEMPLATE                     |                        |
|                    |          | SCALE: 1:1  | SHEET 4 OF 5<br>REV. 0 |

| MATERIALS LIST |          |  |                              |            |  |
|----------------|----------|--|------------------------------|------------|--|
| ITEM           | QTY      | DESCRIPTION  | MFR & PART NUMBER            | PRICE EACH | SOURCE   |
| 1              | 1 SQ FT. | 6061-T6 ALUMINUM PLATE, 0.190" X12" X 12"                                | METALS DEPOT #P3316T6        | \$27.28    | https://www.metalsdepot.com/index.phtml              |
| 2              | 2        | 4-HOLE SQUARE FLANGE, DIE-CAST ALUMINUM                                  | KEE-LITE #L152-7             | \$8.00     | http://shop.store.yahoo.com/hawkmat/keelitalfit.html |
| 3              | 5        | FIBERGLASS, ROUND TUBE, 1/8" WALL, 3/4"OD X 8FT.                         | MAX-GAIN SYSTEMS             | \$9.00     | http://www.mgs4u.com/fiberg.htm                      |
| 4              | 3        | FIBERGLASS, ROUND TUBE, 1/8" WALL, 1/2"OD X 8FT.                         | MAX-GAIN SYSTEMS             | \$6.50     | http://www.mgs4u.com/fiberg.htm                      |
| 5              | 1        | CONNECTOR, CHASSIS MOUNT, SO-239   | RADIOSHACK #278-201          | \$2.99     | http://www.radioshack.com                            |
| 6              | 100 FT.  | WIRE, 14 AWG, STRANDED, BARE COPPER                                      | FLEXWEAVE #542               | \$14.00    | http://thewireman.com/antennap.html#2                |
| 7              | 8        | COLLAR, NYLON, STAINLESS STEEL SET SCREW, 3/4" BORE                      | MCMaster-CARR #60475K74      | \$2.58     | http://www.mcmaster.com                              |
| 8              | 8        | COLLAR, NYLON, STAINLESS STEEL SET SCREW, 1/2" BORE                      | MCMaster-CARR #60475K72      | \$2.34     | http://www.mcmaster.com                              |
| 9              | 14       | PAN HEAD MACHINE SCREW, NYLON, 1/4-20 X 1/4"                             | MCMaster-CARR #91766A533     | \$6.81/100 | http://www.mcmaster.com                              |
| 10             | 12       | U-BOLT & NUT, STAINLESS STEEL, 1/4-20 X 5/8"L. THREAD, 3/4" BETWEEN LEGS | MCMaster-CARR #8896T101      | \$1.84     | http://www.mcmaster.com                              |
| 11             | 24       | LOCKWASHER, SPRING, STAINLESS STEEL, 1/4"                                |                              |            | ACE HARDWARE   |
| 12             | 6        | TURNBUCKLE, HOOK AND EYE, ALUM. BODY, STAINLESS STEEL SCREW              | IVES 1/4 X 5-1/4"            | \$6.29     | ACE HARDWARE   |
| 13             | 6        | EYEBOLT, STAINLESS STEEL, WITH NUT, 3/16" X 1-1/2"                       | NATIONAL N197-277            | \$1.43     | ACE HARDWARE   |
| 14             | 2        | EYEBOLT, STAINLESS STEEL, WITH NUT, 1/4" X 2"                            | NATIONAL N197-293            | \$1.92     | ACE HARDWARE   |
| 15             | 1        | THREAD, KEVLAR 346, 0.038" DIAMETER, 66 YARD SPOOL                       | MCMaster-CARR #8800K43       | \$10.38    | http://www.mcmaster.com                              |
| 16             | 4        | HEX BOLT, STAINLESS STEEL, 3/8-16 X 1-1/2"                               |                              |            | ACE HARDWARE   |
| 17             | 4        | HEX STOP NUT, STAINLESS STEEL, 3/8-16                                    |                              |            | ACE HARDWARE   |
| 18             | 1        | PIPE, PVC, 1-1/4", SCHEDULE 40, 14" LONG                                 |                              |            | HOME DEPOT   |
| 19             | 1        | CAP, PVC, 1-1/4", SCHEDULE 40  |                              |            | HOME DEPOT   |
| 20             | 1        | SCREEN BASE, VINYL, 3-1/2" WIDE  | SCREEN TIGHT                 |            | HOME DEPOT   |
| 21             | 4        | STANDOFF, HEX, NYLON, 2" LONG, 1/4-20 THREAD                             | MCMaster-CARR #92319A778     | \$4.47     | http://www.mcmaster.com                              |
| 22             | 4        | RING TERMINAL, NONINSULATED, FOR 14-16 AWG WIRE, #6 RING (0.138" STUD)   | MCMaster-CARR #7113K815      | \$1.48/10  | http://www.mcmaster.com                              |
| 23             | 1        | RING TERMINAL, NONINSULATED, FOR 14-16 AWG WIRE, #8 RING (0.164" STUD)   | MCMaster-CARR #7113K816      | \$1.16/10  | http://www.mcmaster.com                              |
| 24             | 1        | RING TERMINAL, NONINSULATED, FOR 14-16 AWG WIRE, 1/4" RING (0.25" STUD)  | MCMaster-CARR #7113K818      | \$1.52/10  | http://www.mcmaster.com                              |
| 25             | ~5 FT.   | COAX, 50 OHM, 1/4" OD, STRANDED CENTER CONDUCTOR, RG-8X                  | THE WIREMAN#118              | \$0.30/FT. | http://thewireman.com/coaxp.html                     |
| 26             | ~2 FT.   | COAX, 75 OHM, VF = 0.8, STRANDED CENTER CONDUCTOR, RG-59U                | BELDEN #1505F, #8241F, #9221 | #0.40/FT.  | http://www.newark.com                                |
| 27             | 4        | PAN HEAD MACHINE SCREW, STAINLESS STEEL, 6-32 X 1/2"                     |                              |            | ACE HARDWARE   |
| 28             | 4        | HEX STOP NUT, STAINLESS STEEL, 6-32                                      |                              |            | ACE HARDWARE   |
| 29             | 2        | CONDUIT BODY, PVC, THROUGH WIRE, 1/2"                                    | MCMaster #7905K11            | \$3.67     | http://www.mcmaster.com                              |
| 30             | 8        | HEX NUT, STAINLESS STEEL, 8-32   |                              |            | ACE HARDWARE   |
| 31             | 4        | PAN HEAD MACHINE SCREW, STAINLESS STEEL, 8-32 X 1-1/2"                   |                              |            | ACE HARDWARE   |
| 32             | 8        | LOCKWASHER, STAINLESS STEEL, #8  |                              |            | ACE HARDWARE   |
| 33             | 12       | SNAP SWIVEL, BRASS, SIZE 1   | LAKER 5S121                  |            | WALMART  |
| 34             | 8        | WASHER, NYLON, 1/4"  |                              | \$0.11     | ACE HARDWARE   |
| 35             | 4        | STUD, FULLY THREADED, STAINLESS STEEL, 1/4-20 X 3/4"                     | MCMaster #90575A540          | \$0.53     | http://www.mcmaster.com                              |
| 36             | 4        | STANDOFF, FEMALE THREADED HEX, NYLON, 1/4-20 X 2"                        | MCMaster #92319A778          | \$4.47     | http://www.mcmaster.com                              |
| 37             | 9        | SCREW, SELF TAPPING, STAINLESS STEEL, #6, 1/2" LONG                      |                              |            |  |
| 38             | 2        | HEX NUT, STAINLESS STEEL, 1/4-20   |                              |            |  |
| 39             | 2        | HEX NUT, STAINLESS STEEL, 10-24  |                              |            |  |
| 40             |          |  |                              |            |  |

HUB END

TIP

5-3/4"

1/2"OD TUBING

MAIN SPREADER 17M COLLAR

HUB END

TIP END

3"

1/2"OD TUBING

1-3/4"

MAIN SPREADER 12M COLLAR & GUY LINE COLLAR

Optibeam OB4-2WARC Yagi

Dual-Band Wire Beam Moxon

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