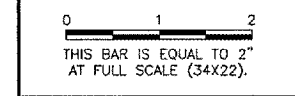


IMAGE FILES

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**FREEPORT - ALBERTUS AIRPORT
 FREEPORT, ILLINOIS**

ILLINOIS PROJECT: FEP-3132 / A.I.P. PROJECT: 3-17-0045-B16

**LIR STRUCTURE ASSEMBLY DETAILS
 SHEET 3**

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SHEET	25 OF 34 SHEETS

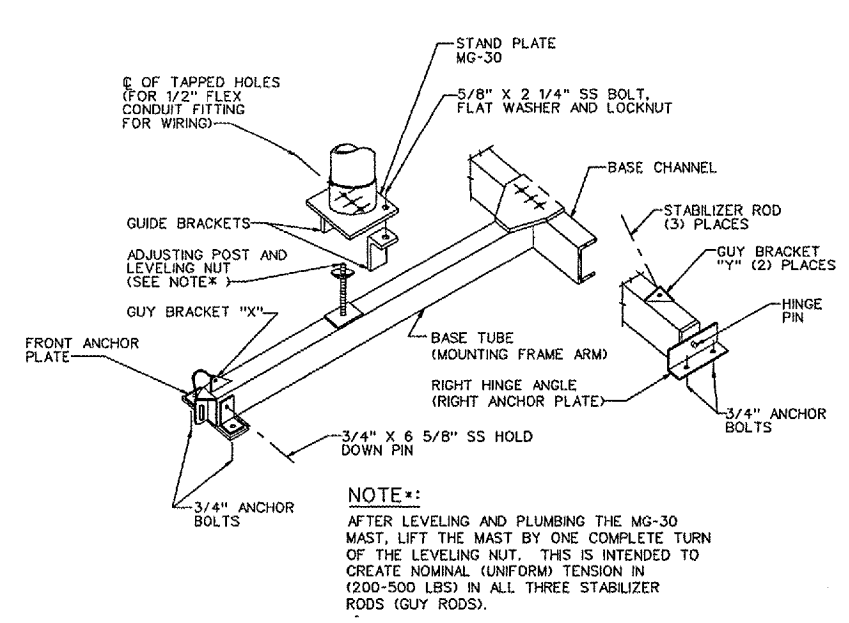


FIG 6
MOUNTING FRAME ASSEMBLY MG-30

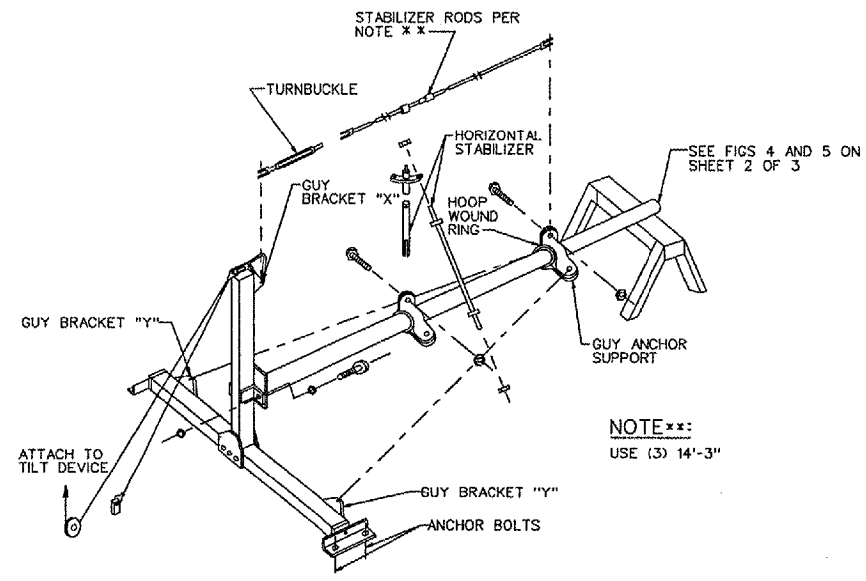


FIG 7
MG-30

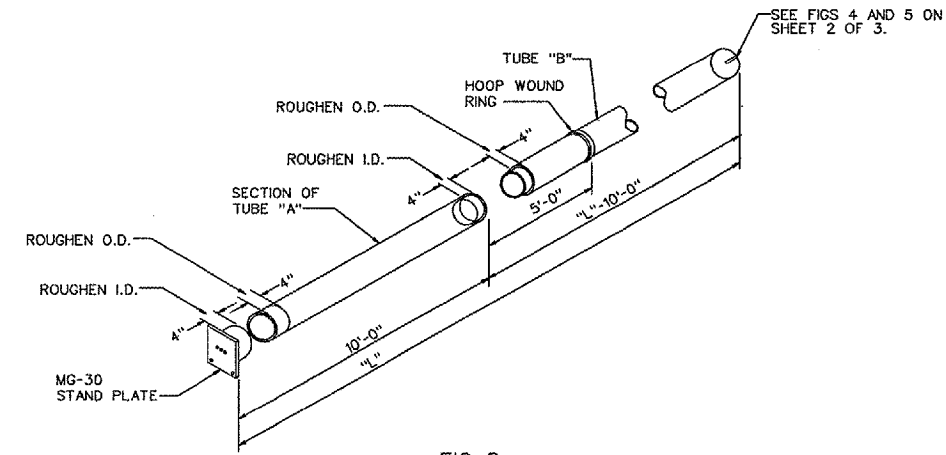


FIG 8
MG-30 MAST

NOTES:

1. TUBE "B" OF EACH MG-30 STRUCTURE HAS BEEN TAILOR CUT TO THE PROPER LENGTH. THE TOPS OF THESE TAILOR CUT TUBES HAVE FACTORY CUT SLOTS. THE STATION DESIGNATIONS ARE MARKED INSIDE THE TUBES AT THE TOP. TUBE "A" OF EACH MG-30 STRUCTURE HAS BEEN CUT TO A LENGTH OF 10'-0". THE DIMENSION "L" IN FIGS 8 AND 9 IS FACTORY-DETERMINED TO PROVIDE THE CORRECT TOWER HEIGHT.

2. THE BASE OF EACH LIR STRUCTURE ARE ELECTRICALLY GROUND.

MG-30 ASSEMBLY INSTRUCTIONS
 (ALSO SEE INSTRUCTION BOOK T1 6850.77.)

CAUTION:

BONDING INVOLVES THE USE OF CHEMICALS. FOLLOW THE MANUFACTURER'S PRECAUTIONS.

1. SURFACE PREPARATION:

ALL BURRS ON SAW-CUT EDGES ARE FILED SMOOTH. USE EMERY CLOTH TO ROUGHEN THE SURFACES TO BE BONDED, AS SHOWN IN FIGURE 8. CLEAN THE ROUGHENED SURFACES WITH A SOLVENT (TRICHLOROETHYLENE, ACETONE, OR METHYL ETHYL KETONE).

2. EPOXY ADHESIVE:

AS THE BONDING ADHESIVE, USE 2-PART EPOXY, FUSOR 304-1 RESIN AND 304-2 HARDENER. FUSOR 304-1 AND 304-2 ARE AVAILABLE FROM LORD CORP. CHEMICAL PRODUCTS GROUP, ERIE, PA. FOLLOW MANUFACTURER'S INSTRUCTIONS. THE ADHESIVE MUST BE MIXED AND CURED IN AIR TEMPERATURES WHICH DO NOT DROP BELOW 67° F. STIR THOROUGHLY, BUT AVOID AIR INCLUSION. FOR EACH JOINT TO BE BONDED, SPREAD A LIGHT COAT OF MIXED ADHESIVE ON BOTH SURFACES TO BE BONDED. SLOWLY SLIDE ONE TUBE INTO THE OTHER TUBE, WHILE ROTATING IT TO EXCLUDE AIR. CURE 48 HOURS AT A TEMPERATURE ABOVE 67° F. NEXT, BOND THE SPLICED TUBE TO THE STAND PLATE AS FOR MG-20, EXCEPT THE SPLICED TUBE IS SLOWLY SLID INTO THE STAND PLATE.

3. ASSEMBLY - IMPORTANT:

ALL LIR STRUCTURES ARE ASSEMBLED IN HORIZONTAL POSITION (SEE FIG 7). USE MOUNTING FRAME ASSEMBLY SHOWN IN FIGURE 6. INSERT HINGE PINS WHICH ARE ATTACHED TO BASE CHANNEL, INTO LEFT AND RIGHT ANCHOR PLATES. PLACE THE FRONT ANCHOR PLATE, AND THE LEFT AND RIGHT ANCHOR PLATES OVER THE 3/4" ANCHOR BOLTS. CONNECT BASE TUBE TO BASE CHANNEL, MAKING SURE MOUNTING FRAME ASSEMBLY SWINGS FREELY ON HINGE PINS. LEVEL AND SECURE ON ANCHOR BOLTS WITH 3/4" HEX NUTS AND FLAT WASHERS. RAISE MOUNTING FRAME ARM TO ABSOLUTE VERTICAL. CHECK WITH LEVEL. ATTACH THE GUY ANCHOR SUPPORT ABOVE THE HOOP WOUND RING. ATTACH STABILIZER RODS TO THREE GUY ANCHOR ENDS (FIG 7). BOLT TWO GUIDE BRACKETS (FIG 6) TO BOTTOM OF MAST STAND PLATE WITH THE 5/8" X 2 1/4" STAINLESS STEEL BOLTS AND NUTS. DO NOT TIGHTEN. POSITION STAND PLATE WITH TAPPED HOLES ALIGNED PER FIG. 8. SET STAND PLATE OVER ADJUSTING POST. POST GOES INTO HOLE IN CENTER OF STAND PLATE. ADJUST NUT FOR PROPER HEIGHT. SUPPORT UPPER END OF MAST SO IT IS APPROXIMATELY PARALLEL WITH GROUND. CLAMP GUIDE BRACKETS TO BASE TUBE, AND TIGHTEN THE 5/8" BOLTS. FASTEN TURNBUCKLES (ATTACHED TO STABILIZER RODS) TO GUY BRACKETS "X" AND "Y". TIGHTEN TURNBUCKLE AT GUY BRACKET "X" UNTIL MAST IS EXACTLY PERPENDICULAR TO MOUNTING FRAME. TIGHTEN THE OTHER TWO TURNBUCKLES AT GUY BRACKETS "Y". ATTACH HORIZONTAL STABILIZER ASSEMBLY. USE THE APPROPRIATE NUMBER AND SIZE OF STABILIZER RODS DEPENDING ON THE TOWER TYPE (MG-30 OR MG-40). SEE FIGURE 7. FIGURE 7 APPLIES TO THE MG-30 AND MG-40 STRUCTURES, BUT PICTORIALLY ILLUSTRATES ONLY THE MG-30.

4. ELECTRICAL ASSEMBLY:

ELECTRICAL ASSEMBLY IS NOT SHOWN ON THIS DRAWING. FOR ELECTRICAL DETAILS, SEE SHEETS 19 AND 20.

3. WHERE SPECIFIC MANUFACTURERS OF EQUIPMENT ARE GIVEN, THE CONTRACTOR MAY SUBMIT ALTERNATE EQUIPMENT EQUAL TO THAT PROPOSED FOR CONSIDERATION BY THE ENGINEER.