2 METER END-FED WHIP ANTENNA NO GROUND PLANE REQUIRED N1L0 1/2 WAVE RADIATOR 2.2 dBi OMNIDIRECTIONAL GAIN VERSION 4-11-03 (VERTICAL DIPOLE) -SAND THE TIP ROUND TO HELP APPLY BRAID RADIATOR TUNING STUB - 1.5" OF 16 GA SOLID COPPER SOLDER TO TOP OF BRAID RADIATOR RADIATOR - SHIELD BRAID GENTLY REMOVED FROM 72° OF RG-58. SLIP OVER ROD, STRETCH IT TO LOCK IN PLACE. TRIM & TIN ENDS RADIATOR: 37.25* TIP: TO REMOVE BRAID FROM RG-58, FIRST GENTLY SLIT & REMOVE JACKET. FROM ONE END, GENTLY PUSH BRAID TOWARD OTHER END TO EXPAND AND LODSEN IT, TAKING CARE NOT TO KINK IT. BEFORE TUNING CONNECT TOP OF COIL AND STUB EXTENSION TO BOTTOM OF RADIATOR SOLDER TOP OF COIL & STUB HERE TIP: SOLDER WIRE TO RADIATOR, WIND TURNS TIGHTLY, STUB CENTER WITH INSULATOR EXTENDS ALONG COIL & CONNECTS TO BOTTOM OF RADIATOR COİL: 15 TURNS 2" LONG 16 GAUGE SOLID THEN STRETCH TO 2" LENGTH COAXIAL MATCHING STUB MAKE FROM 4' SECTION OF RG-58 WITH SOLID DIELECTRIC (NOT FOAM) STRIP JACKET AND SHIELD FROM UPPER SECTION, LEAVING 1 5/8' JACKET AND SHIELD AT BOTTOM STRIP 1/8' JACKET & TIN TOP OF REMAINING SHIELD COPPER 1 5/8" TOTAL SHIELD LENGTH BOTTOM OF STUB NOT SHORTED CONNECT SHIELD OF FEEDLINE TO BOTTOM OF COIL CONNECT CENTER OF FEEDLINE TO BRAID OF STUB BALUN/CHOKE COIL -RG-174 (MINI) - 4 TURNS @ 1.5' OD RG-58 - 6 TURNS 1.75' OD HELICALLY WOUND, NOT BUNCHED SPIRAL WRAP WITH TAPE TO UNITIZE ---- TUNING PROCEDURE ------ TUNING PROCEDURE ---ASSEMBLE COMPONENTS AS SHOWN. SPIRAL WRAP WITH SCOTCH 35 TAPE IN COLOR OF YOUR CHOICE FROM MATCHING STUB UP TO TUNING STUB. CHECK FREQ. OF BEST MATCH, WHICH SHOULD A BIT LOW. UNWRAP TUNING STUB, TRIM 1/4*, RE-WRAP AND CHECK AGAIN. REPEAT UNTIL CENTER RESUNANCE/BEST SWR IS CENTERED ON 146.00 MHZ WITH EVERYTHING TAPED. FEEDLINE BICYCLE FLAG WITH 0.25' FIBERGLASS WHIP REMOVE FLAG IF DESIRED MOUNT HIGH AS POSSIBLE FEEDPOINT DETAIL