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JACKET, BRAID AND FOIL REMOVED FROM SHUNT TO LENGTH. LEAVE DIELECTRIC INTACT. APPLY SHRINK TUBE AND THREAD PROTECTOR AFTER SOLDERING SHUNTS AT BOTH ENDS.	AIRFRAMES
SHUNT POINT. REMOVE 1/8" DIELECTRIC TO EXPOSE THE CENTER CONDUCTOR. REMOVE 1/8" OF COAX JACKET BELOW SHUNT POINT. WRAP CENTER CONDUCTOR	airplanes.live
WITH 2 TURNS 22 AWG TINNED COPPER BUS WIRE AND CONTINUE THE WRAP TO THE EXPOSED BRAID. SOLDER BOTH CONNECTIONS,	 REVISION NOTES: VERSIONS: AREOLA-TENNA 128 MHZ (AIR-BAND) AREOLA-TENNA 162 MHZ (AIS) AREOLA-TENNA 403 MHZ (SONDES) SUPPLIED PARTS - ALL VERSIONS: AREOLA-TENNA WITH SHORT FEED LINE. F-81L CONNECTOR. F FEMALE TO MALE SMA ADAPTER. DESIGN NOTES: THE AREOLA-TENNA SISTERS ARE COAXIAL CENTER FED DIPOLES,
1" I.D. POTTING CUP. FILL WITH EPOXY SEAL 9000 OR SIKA 1A AFTER QC. FEED POINT AT CENTER OF ANTENNA LENGTH. SEE DET. 6	 SOMETIMES CALLED DOUBLE BAZOOKAS (BAZOOMS?). SHE IS INHERENTLY WIDE BAND AND WILL COVER THE ENTIRE AIR-BAND INCLUDING VOICE, ACARS AND VDL2 FREQUENCIES WHEN TUNED FOR 128 MHZ LIKE THE -128 VERSION. 2. USE INEXPENSIVE TRI OR QUAD SHIELD CATV RATED COAX TO EXTEND THE FEED LINE. THE ANTENNA MATCHES TO 50 AND 75 OHM LINE WITH MINIMUM LOSS. 3. AREOLA-TENNA IS WATERPROOF AND CAN BE USED IN INDOORS AND OUTDOORS. 4. THE DIMENSIONS OF THIS DESIGN ARE BASED ON BELDEN 1505A CABLE WITH A Vp OF 82%, USING ANY OTHER CABLE WILL ALTER THE DIMENSIONS SHOWN HERE. BELDEN
	1505A IS A 3 GHZ RATED RG-59 CLASS CABLE WITH A SOLID CU CENTER CONDUCTOR, FOAMED PE DIELECTRIC AND AN ALUMINUM FOIL TAPE / 95% COVERAGE BRAIDED TINNED COPPER SHIELD. BECAUSE THERE IS SOLDERING INVOLVED, COPPER CABLE IS ESSENTIAL. DO NOT ATTEMPT TO DIY ANYTHING SIMILAR WITH COPPER CLAD STEEL CENTER CONDUCTOR OR ALUMINUM BRAID CABLE. IF YOU HAVE OTHER SCRAPS OF CABLE TO USE, CONTACT LOTHAR OF THE HILL PEOPLE WITH THE CABLE SPECIFICATION SHEET AND HE WILL GIVE YOU APPROPRIATE DIMENSIONS TO USE IN FABRICATION. INSTALLATION: 1. UNCOIL THE FEED LINE AND RADIATING ELEMENTS. GENTLY FORM THE CABLES TO PERPENDICULAR. DO NOT STRESS THE SHUNTS AND CENTER FEED
SHUNT POINT. REMOVE 1/8" DIELECTRIC TO EXPOSE THE CENTER CONDUCTOR. REMOVE 1/8" OF COAX JACKET ABOVE SHUNT POINT. WRAP CENTER CONDUCTOR WITH 2 TURNS 22 AWG TINNED COPPER BUS WIRE AND CONTINUE THE WRAP TO THE EXPOSED BRAID. SOLDER BOTH CONNECTIONS, JACKET, BRAID AND FOIL REMOVED FROM SHUNT TO LENGTH. LEAVE DIELECTRIC INTACT. APPLY SHRINK TUBE AND THREAD PROTECTOR AFTER SOLDERING SHUNTS AT BOTH ENDS.	 POINTS. 2. YOU MUST PROVIDE YOUR OWN SUPPORTS FOR ALL VERSIONS, EXCEPT THE SONDE VERSION WHERE THE ELEMENTS ARE SO SHORT THAT THEY STAND ON THEIR OWN AND DO NOT NEED SUPPORTS OR RADOME. THE AIR-BAND AND AIS VERSIONS REQUIRE VERTICAL ELEMENT SUPPORT WHICH CAN BE ANY NON-METALIC MATERIAL OR A RADOME MADE FROM CARLON UV RATED PVC PARTS AND CONDUIT. 3. MOUNT THE ELEMENTS VERTICALLY POLARIZED. 4. RUN THE ATTACHED FEED LINE PERPENDICULAR AND HORIZONTAL TO THE ELEMENTS AS FOLLOWS: 4.1. AIR-BAND - 3' BEFORE TURNING DOWN. 4.2. AIS - 2' BEFORE TURNING DOWN. 4.3. SONDE - 1' BEFORE TURNING DOWN. 4.4. ATTACH AND TIGHTEN (20 IN./OZ.) THE F-81L TO THE ANTENNA AND YOUR FEED LINE AND APPLY TAPE, COAX SEAL OR SHRINK TUBING. TO SEAL YOUR FEEDLINE.
	LOTHAR OF THE HILL PEOPLE OBO AIRFRAMES.IO AND AIRPLANES.LIVE AREOLA-TENNA -128,-162 AND -403 MHZ ANTENNAS SCALE:
REMOVE 1/8" DIELECTRIC OVER CENTER CONDUCTOR. WRAP BRAID AND CENTER CONDUCTOR WITH 22 AGG TINNED COPPER BUSS WIRE AND SOLDER.	1"=1" UON TITLE: AREOLA-TENNA FABRICATION AND TYPICAL MOUNTING APPLICATIONS
7 SHUNT POINT DETAIL A1 NONE	SHEET: