

AD-115 THREE OUTPUT VOR SINGLE OUTPUT GLIDESLOPE COUPLER \$159.95
 (Allows the use of two VOR receivers and two GLIDESLOPE receivers from
 the same VOR/GLIDESLOPE antenna)

AD-01 COMMUNICATIONS ANTENNA DUPLEXER \$379.95
 (This device allows the operation between two VHF COMM radios from a
 single VHF COMM ANTENNA without suffering high transmission range losses)

AD-139 COMM ANTENNA SWITCHBOX \$ 49.95
 (Allows the use of one COMM antenna for both your handheld and panel
 mount VHF radios. Simply attach the interconnect cord to your handheld
 and plug it into the port. When the interconnect cord is plugged into
 the port the panel mount VHF will not work)

new item

ACCESSORY KITS

ADK-8 100 FOOT OF R/G 58 COAX CABLE \$ 25.95
 (This high quality MIL SPEC cable is recommended for connecting our
 antennas and couplers to their respective radios). (Sold only 100 foot
 lengths).

ADK-9 BNC MALE CONNECTORS
 (Use these high quality connectors to connect antennas and couplers
 to their respective radios)
 1-10 pcs=\$3.25/ea.
 11-25 pcs=\$2.99/ea.

TERMS

* PLEASE ADD \$6.00 EACH ITEM FOR SHIPPING AND HANDLING.

* PAYMENT: CASH, CHECK, MONEY ORDER, AMERICAN EXPRESS OR UPS COD. (FOR UPS
 COD SHIPMENTS A MINIMUM COD CHARGE OF \$6.60 WILL BE ADDED). PLEASE ALLOW
 TIME FOR CHECKS TO CLEAR.

* CALIFORNIA RESIDENTS PLEASE ADD 6.75% STATE SALES TAX.

* FOR INTERNATIONAL SHIPMENTS PAYMENT MUST BE MADE IN ADVANCE VIA (U.S. \$\$\$
 OR INTERNATIONAL MONEY ORDER. PLEASE ADD \$10.00 FOR EACH ITEM, ANTENNA,
 COUPLER OR KIT FOR SHIPPING AND HANDLING. WE ARE NOT RESPONSIBLE FOR IMPORT
 DUTIES OR TARIFFS.

* ALL PRODUCTS ARE GUARANTEED FOR ONE YEAR AGAINST DEFECTS IN MATERIAL AND
 WORKMANSHIP.

* WE NOW ACCEPT AMERICAN EXPRESS TELEPHONE ORDERS.



Cards

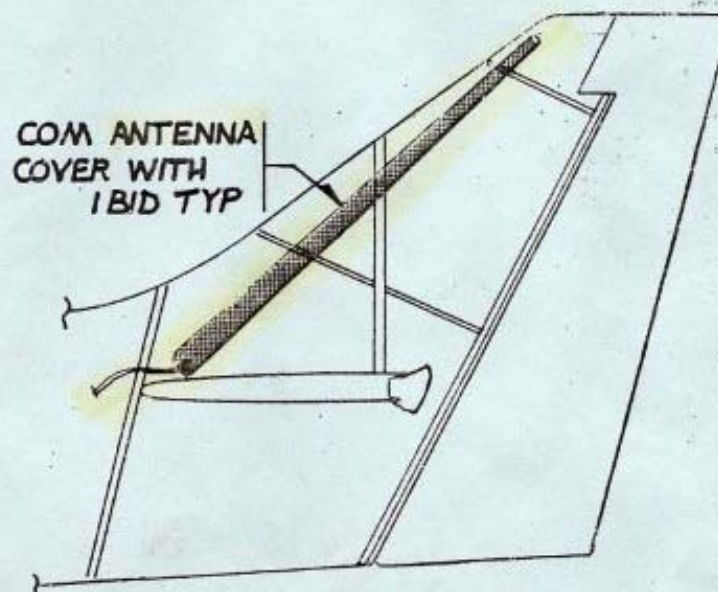
*Builder's MANUAL***Supplement
1.****ANTENNA INSTALLATION****COMMUNICATIONS ANTENNA**

The com antenna is best installed into the tail section of the plane. The antenna should be vertically orientated and thus the vertical fin is an excellent location for it. This antenna will essentially be "buried" into the vertical fin so that you have a good antenna or if you are building your own antenna, do so with this in mind.

1. With the first side of the vertical fin installed and before the ribs and stabilizer are installed, fit the antenna into the fwd section of the vertical fins side. See fig. 1.
2. If you are using the antenna that Neico supplies, it is a simple matter of attaching it in position with either hot glue or equiv. and immediately following up with 1 BID over top of it.

This antenna will be supplied with 25 ft of RG58 cable already attached. Drill a small hole into the fwd bulkhead and route the cable fwd into the tail cone. Place a ring of silicone around the cable where it goes through the bulkhead to secure it and prevent abrasion.

3. Install the vertical stab ribs, etc. over this flat antenna installation.

COM ANTENNA

*
ANTENNA DYNAMICS, INC.
7826 BALBOA BLVD.
VAN NUYS, CA.
(818) 780-9978

LANCAIR

Comm Ant. Install

INSTALLATION INSTRUCTIONS
FOR
VHF COMMUNICATIONS ANTENNA
PART NUMBER AD-7

- 1) This sheet describes in general terms the installation of so-called "Hidden" (also referred to as "flush" or "conformal") antenna systems on foam-fiberglass "plastic" airplanes.
- 2) The P/N AD-7 is designed to "look out" (send and receive) VHF Communications signals through foam/fiberglass (non-metallic) surfaces. It cannot send or receive VHF Communications signals when mounted directly on heavy wood, metal or carbon cloth materials. Care should be taken to choose a large enough vertical area so the antenna is not guarded (shielded) by metallic surfaces around, under or on top of the antenna, or within the immediate area of installation.
- 3) The P/N AD-7 VHF Communications antenna is a unique State-of-the-Art flexible stripline design which optimizes the VHF Comm. signal both in the send and receive modes.
- 4) The antenna is designed to be used with any of the transceivers presently available.
- 5) Substantial Dynamic (flight) and Static (ground) testing has been accomplished to assure the user that he will obtain maximum range performance from his VHF Comm. System.
- 6) The antenna has been designed using exacting MIL-SPEC standards and materials to provide a long trouble free operating life.
- 7) Normally all VHF Communications antennas are installed vertical to the earth's surface as this is the electrical plane in which the VHF Comm. Signals are sent and received by your antenna. A little thought will show that your antenna can be placed in several possible locations [i.e. vertical stabilizer (tail) or vertical stabilizer (wing winglets)].
(See figs 1 and 2)
- 8) The antenna may be slightly tilted, but try to keep it in the vertical position as much as possible.
(See figs 1 and 2)
- 9) The antenna may be placed anywhere in or on the foam or fiberglass; the surface, inside the glass but on the foam, or buried within the foam are all valid locations for the antenna.

- 10) Install the antenna as far away as possible from other antennas, metal surfaces or other wires or electrical devices.
- 11) Remember, if the airplane were made of clear glass, and if a person at the VHF Communications station couldn't "see" the antenna (and that includes looking through engines, fuel tanks, people, etc.) then the antenna will not be able to properly send or receive the VHF Comm. signal.
- 12) Do not install the antenna in areas of high flex. An analysis of the circumstances surrounding failures in high flex areas leads to the conclusion that antennas installed on fiberglass surfaces subject to flex are most likely to break. Although the antenna is really quite strong, it cannot survive the strain imposed by a half-ton airplane bouncing along the runway. All of the reported failures have been on gear leg antennas or canard gear antennas, especially after hard landings.
- 13) It is virtually impossible for us to answer all the questions you may have as this antenna is meant for use on many types of aircraft. When in doubt consult with the Avionics man at your local airport or question other builders of aircraft.
- 14) Statistics on thousands of hours of antenna flight show that approximately 90% of all antenna problems are due to improper installation.

WARRANTY

Antenna Dynamics warrants that, at the time of shipment, the products manufactured by the Seller are free from defects in material and workmanship. Our obligation under this warranty is limited to replacement or repair of such products within one year from the date of shipment.

No material is accepted for replacement or repair without authority. Replacement or repair is made only after our examination shows defective material or workmanship at the time of manufacture. All shipping charges on returned material must be prepaid by the buyer.

Antenna Dynamics is in no event liable for consequential damage, installation cost or other costs of any nature as a result of the use of the products manufactured by us, whether used in accordance with instructions or not.

This warranty is in lieu of all others, either expressed or implied. No representative of Antenna Dynamics is authorized to assume any liability in connection with our products.

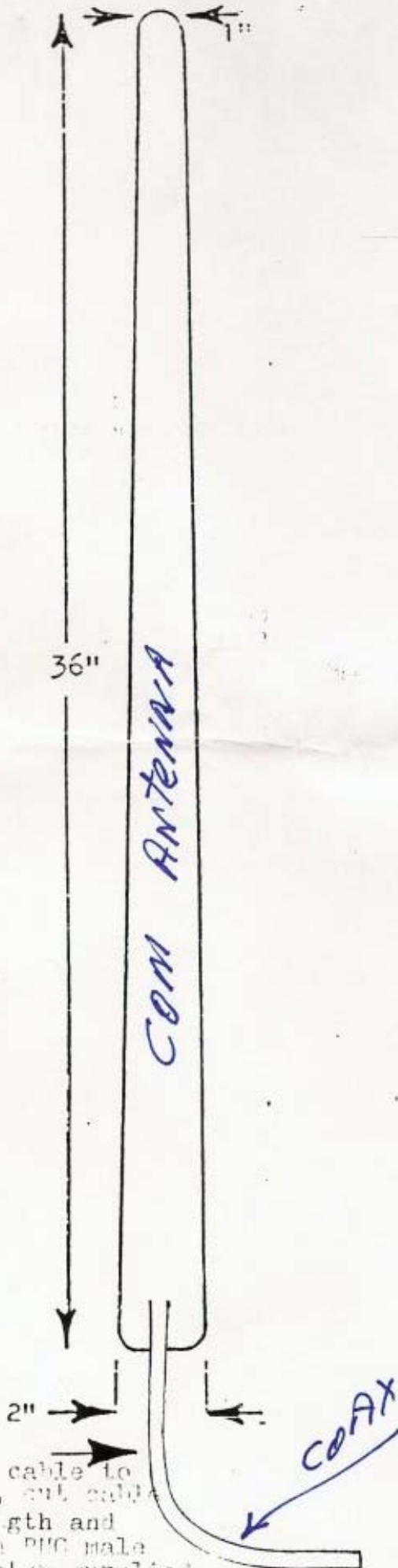


Figure 1
Long EZ

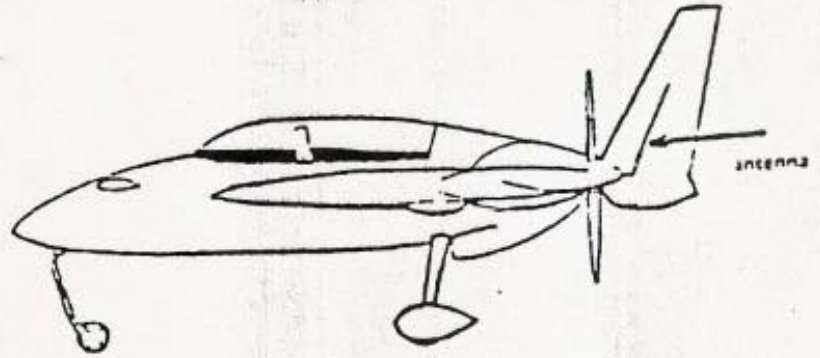
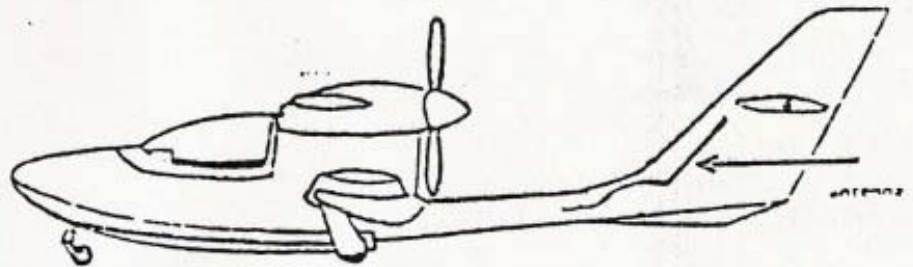


Figure 2
Sea Hawk



oute cable to
radio, cut cable
to length and
attach PIG male
connector, install

Builder's MANUAL

Supplement

1.

ANTENNA INSTALLATIONS

COMMUNICATIONS ANTENNA

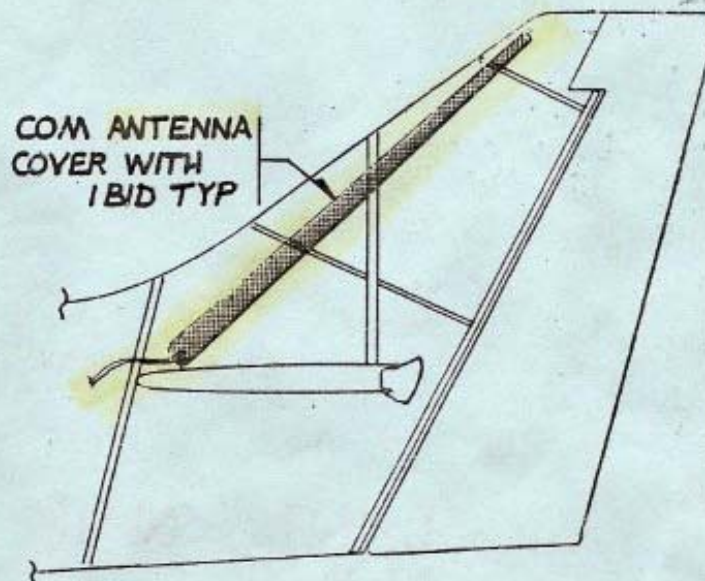
The com antenna is best installed into the tail section of the plane. This antenna should be vertically orientated and thus the vertical fin is an excellent location for it. This antenna will essentially be "buried" into the vertical fin so you need a good antenna or if you are building your own antenna, do so with integrity in mind.

1. With the first side of the vertical fin installed and before the ribs and stab spar are installed, fit the antenna into the fwd section of the vertical fin side. See fig. 1.
2. If you are using the antenna that Neico supplies, it is a simple matter of attaching it in position with either hot glue or equiv. and immediately following up with 1 BID over top of it.

This antenna will be supplied with 25 ft of RG58 cable already attached. Drill a small hole into the fwd bulkhead and route the cable fwd into the tail cone. Place a ring of silicone around the cable where it goes through the bulkhead to secure it and prevent abrasion.

3. Install the vertical stab ribs, etc. over this flat antenna installation.

COM ANTENNA



NAVIGATION ANTENNA

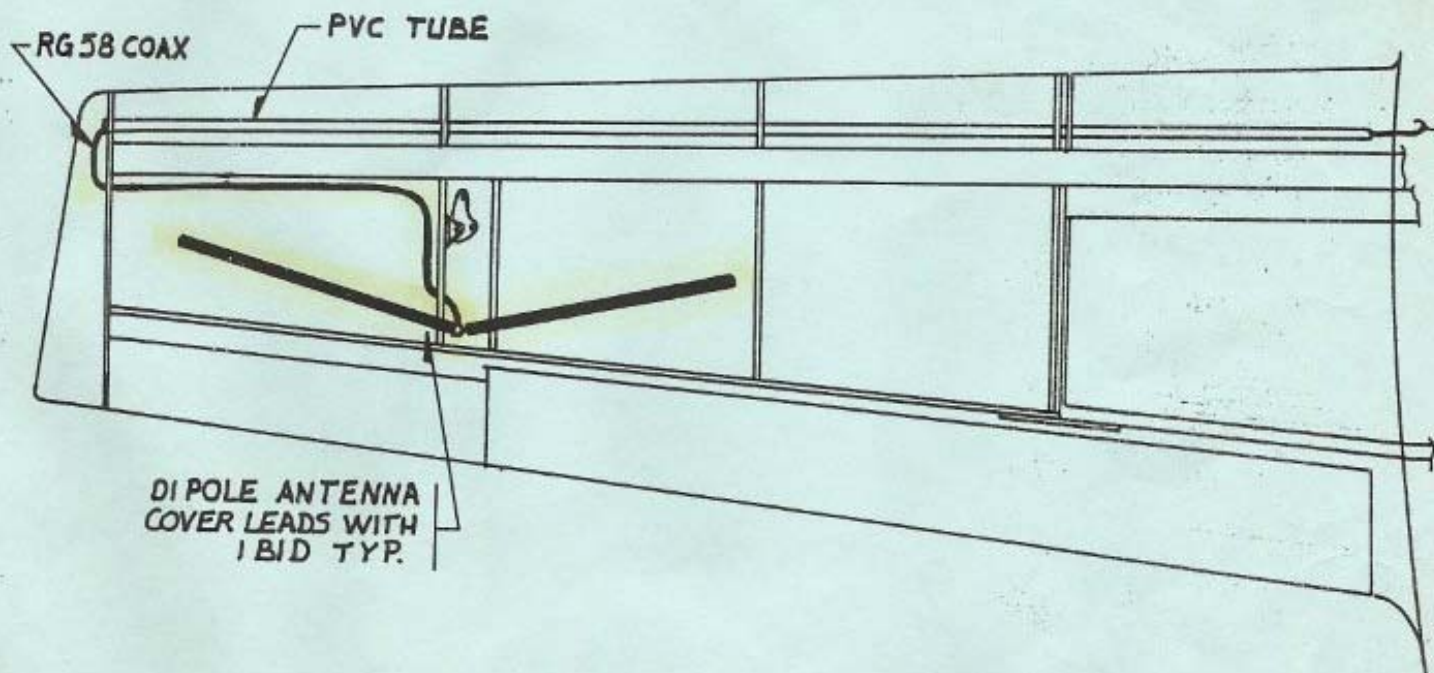
4. The nav antenna will also serve as a glide slope antenna with the use of a splitter.
5. The nav antenna is best located in the outboard lower wing skin as shown in fig.2.
6. This antenna (again the particular type supplied by Neico) will require a BNC connection at the middle. This connection box should be located within the area where the aileron bellcrank and the inspection panel are located. This is for subsequent access to the BNC connection.
7. There are several schools of thought about the best angle for the antenna ears. Generally, about a 135°'s is considered to be pretty good.
8. Locate the optimum position on the inside of the bottom wing skin. Make an epoxy/micro mound to pot the center "hot" box into and cover the foil ears with 1 BID. Note that the inbd ear will actually run in the fuel tank, but that is o.k.
9. Punch a small hole through the outboard rib and run the connecting coax cable in from the wing tip. The line will then route into the cabin through the PVC tube in the fwd D section.



WARNING: Be sure to check that the "hot box" will not interfere with the aileron linkage. Generally, the box should be located off to the side of the area between the 99.5 rib and the 105.5 rib.

10. The cable will need another BNC connector in the cabin where it exits the PVC tube. This is required for wing disconnect.

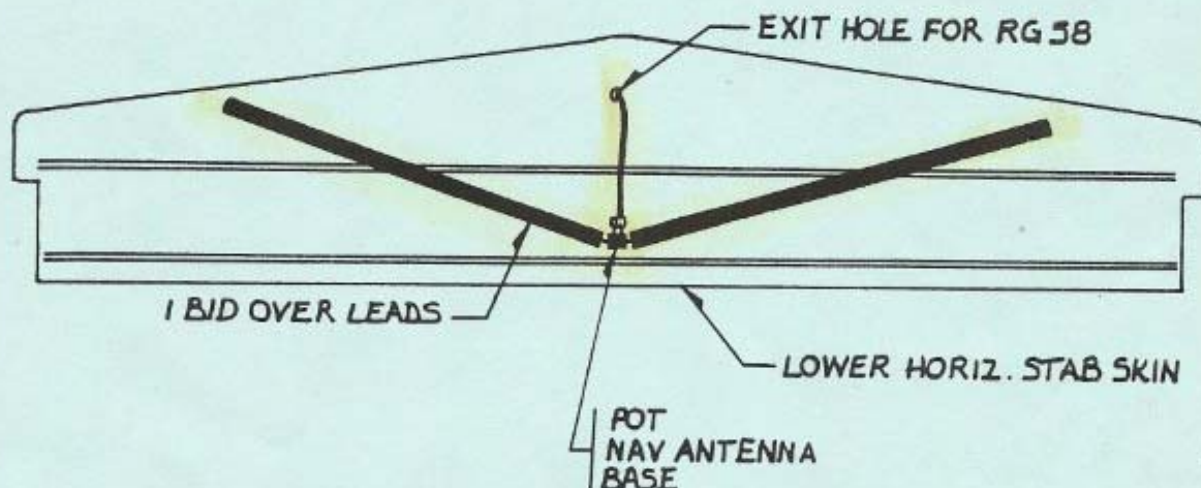
NAV ANTENNA WING PANEL INSTALLATION



NAV ALTERNATE

Some builders have selected an alternate location for the nav antenna. While we at Neico have not tested this on one of our own aircraft, we do feel that it should work well.

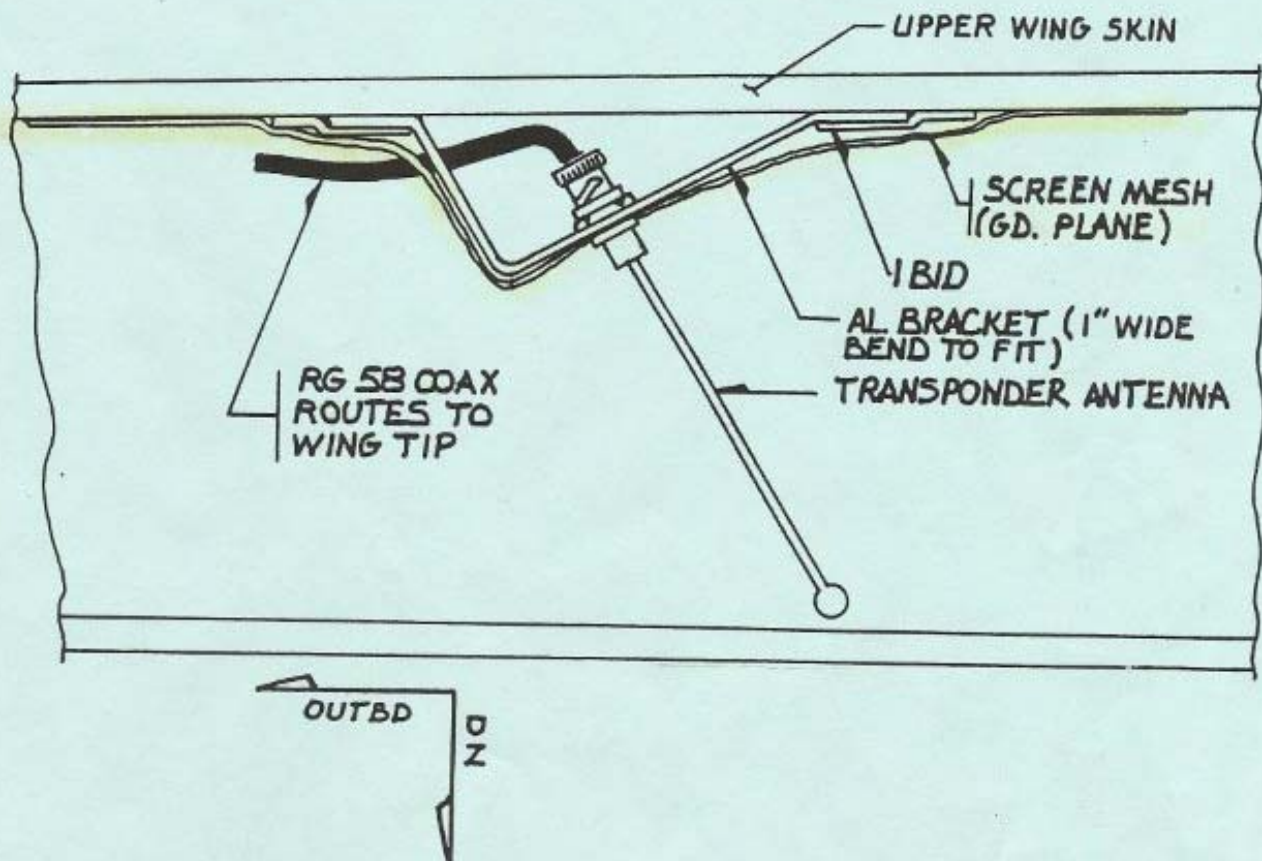
11. Install the antenna into the lower skin of the horizontal stabilizer in a similar manner as discussed for the wing installation. It should install toward the back. Rotate the "hot box" such that the BNC connection comes off the side that faces fwd, this will allow better clearances for the cable connection.
12. Attach a sufficiently long piece of RG58 with a BNC connection and exit the horizontal stab on the fwd lower surface into the fuselage. Drill a small through hole in the fwd bulkhead to gain access into the tail cone.

**NAV ANTENNA
HORIZONTAL STABILIZER INSTALLATION**

TRANSPONDER

13. The transponder is a small post type antenna and can be located in a couple of different places.
14. In the outboard wing bay opposite to the wing the nav antenna is in, locate this transponder antenna in a downward position. See fig. 3.
14. First, make the small bracket to hold the antenna in an angular orientation. This is necessary since the antenna is too long for the thickness of the wing bay and the antenna will work sufficiently well at a slight angle. Attach the bracket to the upper wing skin with 1 BID.
15. You'll need a groundplane for the antenna. Use a piece of screen door material. Make it as big as possible in the wing bay yet keep the corners well rounded. Simply lay it into the bay and stick it to the upper inside of the wing skin with some mounds of micro. It will lay over the antenna bracket.
16. Next screw the antenna post into position securing it with the nut and verify a good contact to the ground plane only.
17. Attach a length of RG58 coax cable with a BNC connector and route the cable out through the wing tip rib where it will pass into the PVC tubing and on into the cabin where another BNC connector will be required for wing disconnect.

TRANSPONDER ANTENNA WING TIP INSTALLATION



ALTERNATE TRANSPONDER LOCATION

If you prefer, the transponder antenna can be installed in the baggage compartment. This will require the antenna to be stuck out in the wind and the "blade" type should be used. If you have a standard "pole" type, you can simply make a fairing over it by carving a piece of foam and covering it with 1 BID.

18. Install the antenna into the center of the baggage area such that the post comes up through the floor and into the area where the elevator push pull tube is routed. You must obviously clear the push pull tube but remain within the tunnel formed to isolate it. Insert a small piece of 1/4" phenolic where the antenna mounts so you'll have a hard point to screw it to. Or, you could simply dig out the foam and make a glass to glass close out there. Add three extra small plies as a pad to gain some thickness where the antenna stud mounts.
19. Install a ground plane in a similar manner as in the wing. Use screen door material and cover with a film of epoxy / micro. Lay a piece of plastic over it and weight it down evenly. After cure, it will be well stuck to the baggage compartment floor. Again, verify that the contact is good between ground plane and the shield of the antenna base.

MARKER BEACON

20. This is easy to install and can be retro fitted quite easily as well.
This antenna orientates along the fuselage center line and thus can be installed down the inside of the fuselage center line.
21. Again, simply bond the flat foil antenna down with 1 BID over it. Locate the center "hot box" at a point that will not interfere with any control systems. The ear that extends aft can pass through the elevator bob-weight idler arm bracket.

LORAN C

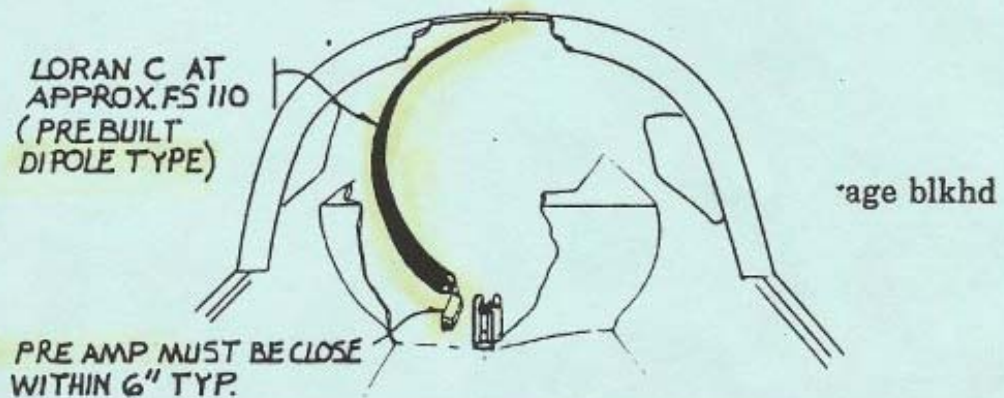
22. The most important aspect of good loran C reception is to produce a "quiet" airframe. That means good grounding, good shielding and good alternator filtering. Of course, the antenna installation is also important.
23. The flat di-pole antennas work well but the home made types seem to work equally well and are a lot cheaper. And it should also be mentioned that the antennas supplied with many of the lorans will also work well being installed into the tail cone area but they will still need a ground plane.
The antenna likes to see as much vertical component as possible so that means a vertical fin location although we've had good results with just a tail cone installation.
24. To make the simple home made antenna, simply select a piece of RG62 cable about 6-8 feet long. Strip exactly 1/2 of it down to the single center wire- that's the antenna!

25. Attach this antenna wire into the vertical fin from its top and run along the inside L.E. where the foam core has been terminated. This must be installed when you have only the first side of the vertical fin bonded on. Apply 1 BID over it. Run the cable down into the tail cone, attach it to the side of the fslg at various points so that it is well secured.

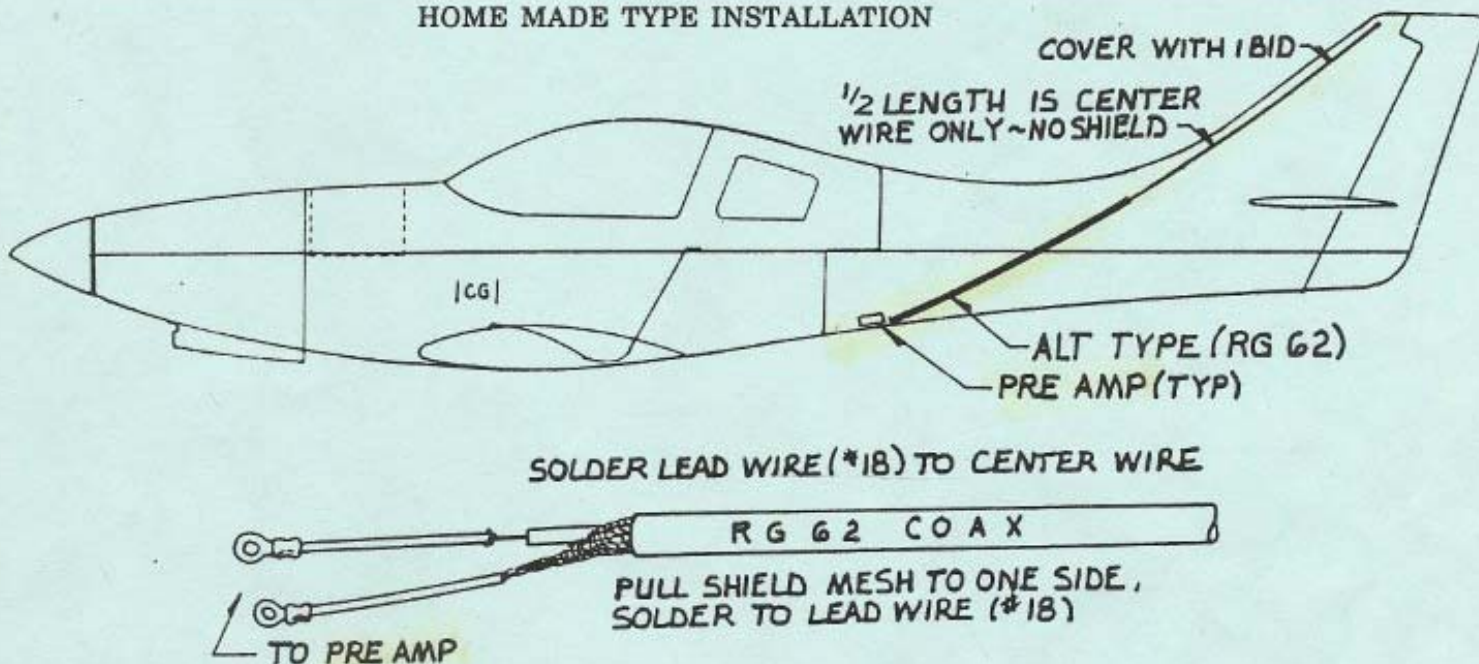
The antenna should extend to the bottom of the fslg. At that point you will attach the pre-amp for the loran. The pre-amp must be secured as well. These pre-amps are all different, depending on the type of loran chosen but generally then can be secured with a couple of small studs potted into small pieces of 1/4" plywood that have been attached to the fslg with 1 BID. This technique has been described elsewhere in the plans and is no different.

NOTE: Keep all antenna cables away from electrical cables as much as possible. This is especially true with the heavy battery cables. Noisy interference could result if this is not carefully attended to.

LORAN C ANTENNA PREBUILT TYPE INSTALLATION



HOME MADE TYPE INSTALLATION



03/208

came w/ Laneair Kit.

ANTENNA DYNAMICS INC. ^{nm}

"Antennas for Composite Aircraft"

7826 Balboa Blvd, Van Nuys, CA. 91406

NAV-

(818) 780-9978, 780-9979

Installation Instructions for P/N AD-1 VOR/LOC/GS and P/N AD-1-2 VOR/LOC Antennas

- 1) This sheet describes in general terms the installation of so-called "hidden" (also referred to as "flush" or "conformal") antenna systems on foam-fiberglass "plastic" airplanes.
- 2) The p/n AD-1 and p/n AD-1-2 antennas are designed to "look out" or receive through foam-fiberglass (non-metallic) surfaces. The antennas cannot "see" (receive) the incoming NAV/LOC/GS signals (AD-1) or NAV/LOC signals (AD-1-2) when mounted directly on heavy wood, metal or carbon fiber materials. Care should be taken to choose a large enough horizontal area so the antenna is not guarded (shielded) by metallic surfaces either directly under the antenna or within the immediate area of installation.
- 3) The p/n AD-1 NAV/LOC/GS antenna and the p/n AD-1-2 NAV/LOC antenna are basically copper foil element dipoles fed through unique state-of-the-art micro electronic devices that allows maximum signal reception sensitivity throughout both the Navigation/Localizer frequency range of 108-118 MHz and the Glideslope frequency of 329-335 MHz (p/n AD-1 only). The p/n AD-1-2 is capable of receiving only the NAV/LOC frequency of 108-118 MHz. These antenna designs are presently being used on many types of aircraft including business jets assuring their high degree of capability and reliability.
- 4) The p/n AD-1 and the p/n AD-1-2 antennas are equally sensitive although selecting the proper antenna for your aircraft is important. In order to receive both the NAV/LOC and GLIDESLOPE signals from the p/n AD-1 antenna you must use a "power splitter" in the line to the avionics bay (see fig. 4). Although this is commonly done on all types of aircraft certain electrical losses are associated with the signal split and this situation can lead to less than optimum range from both the NAV/LOC and GLIDESLOPE receivers. If you have the space, in order to totally optimize the range reception characteristics of both your NAV/LOC and GLIDESLOPE receivers, you should install a p/n AD-1 NAV/LOC antenna and a separate antenna for the GLIDESLOPE receiver (p/n AD-1-3). If, due to space or location limitations on your aircraft, you simply run out of room to install both antennas you should install the p/n AD-1 NAV/LOC/

GS antenna and "split" the signal as was previously discussed. If you intend to use only a NAV/LOC receiver on your aircraft and do not ever intend to use a GLIDESLOPE receiver, you should install the p/n AD-1-2 NAV/LOC antenna only. Please refer to "split" configurations figure 4.

- 5) The antennas may be placed anywhere in or on the foam or fiberglass; the surface, inside the glass but on the foam, or buried within the foam are all valid locations for the antenna. In order to optimize antenna performance, try to keep the antenna as close as possible to the bottom surfaces of the aircraft. (see fig. 2B)
- 6) The antennas may be installed in the standard configuration (see fig. 1) or the "V" configuration. Remove backing tape from copper elements and install per figure 1. Be careful not to bend lead wires too many times as they may work harden and break.
- 7) Normally all NAV/LOC/GS antennas are installed horizontal to the earth's surface as this is the electrical plane in which the NAV/LOC/GS signals are both sent from the stations and received by your antenna. A little thought will show that your antenna can be placed in a large number of locations in most plastic airplanes (I.E., canard, main wing, fuselage, etc). Choose the most suitable configuration (see fig. 1) for your antenna. If the whole antenna will not fit flat inside the horizontal surface, the foil elements may be slightly bent (see fig. 2) to conform with the airframe surface.
- 8) Install the antenna as far as possible away from metal surfaces or other wires or electrical devices.
- 9) Remember, if the airplane were made out of clear glass, and if a person at the NAV/LOC/GS station could not "see" the antenna (and that includes looking through engines, fuel tanks, people, etc.) then the antenna will not be able to properly receive the NAV/LOC/GS signals.
- 10) Do not install the antenna in areas of high flex. An analysis of the circumstances surrounding failures in high flex areas leads to the conclusion that antennas installed on fiberglass surfaces are subject to flex are most likely to break. Although the tape is really quite strong, it cannot survive the strain imposed by a half-ton airplane bouncing along the runway. All of the reported failures have been on gear leg antennas or canard gear antennas, especially after hard landings. Remember that copper foil tape is not structural, and that the foil tape is much more likely to fail on tension than any other mode.
- 11) Keep the antenna as far away as possible from other antennas (especially VHF communications antennas).
- 12) Statistics on thousands of hours of antenna flight show that approximately 80-90% of all antenna problems are due to improper installation.
- 13) It is virtually impossible for us to answer in this document all the questions you may have as these antennas are meant for use on many

types of aircraft. When in doubt we highly recommend you call us to discuss your problems or requirements. A knowledgeable Engineer is always available to talk to you.

WARRANTY

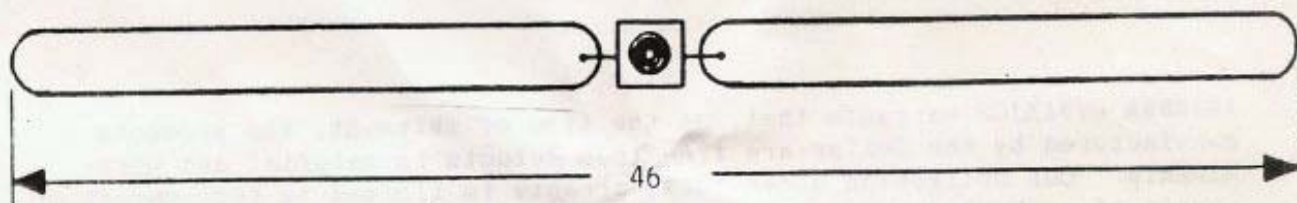
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No material is accepted for replacement or repair without authority. Replacement or repair is made only after our examination shows defective material or workmanship at the time of manufacture. All shipping on returned material must be prepaid by the buyer.

ANTENNA DYNAMICS is in no event liable for consequential damage, installation cost or other costs of any nature as a result of the use of the products manufactured by us, whether used in accordance with instructions or not.

This warranty is in lieu of all others, either expressed or implied. No representative of ANTENNA DYNAMICS is authorized to assume any liability in connection with our products.

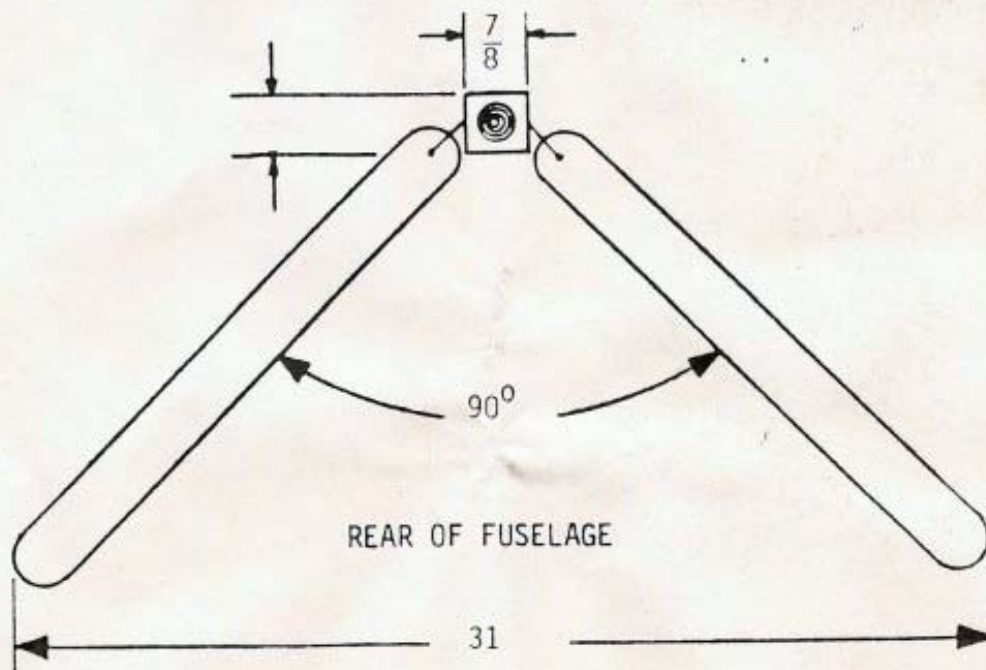
FIGURE 1
STANDARD CONFIGURATION
FRONT OF FUSELAGE



REAR OF FUSELAGE

STANDARD CONFIGURATION WITH ELEMENTS 180° OPPOSED. THE ANTENNA IS INSTALLED AT A RIGHT ANGLE TO THE AIRCRAFT FUSELAGE.

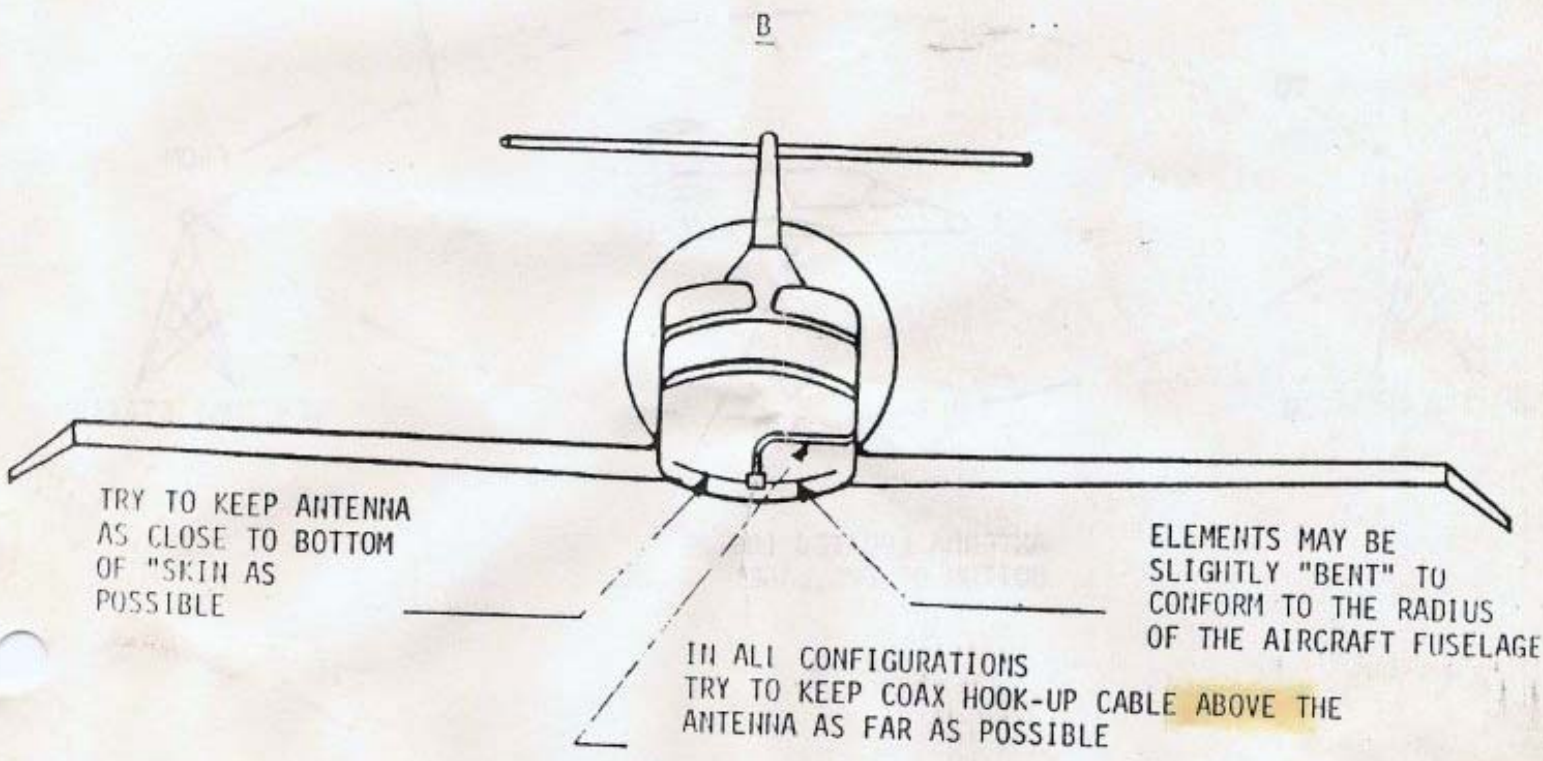
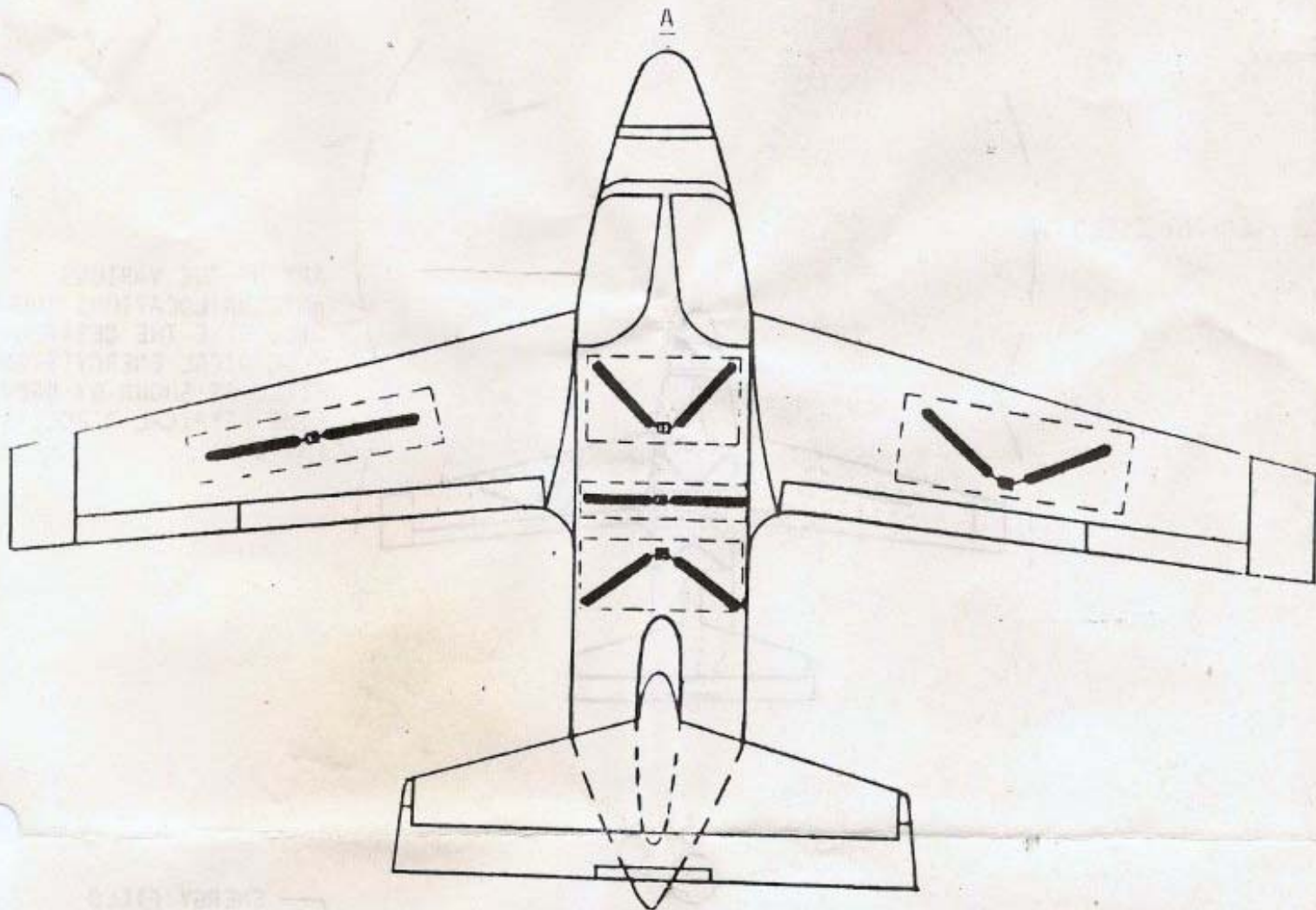
"V" CONFIGURATION
FRONT OF FUSELAGE



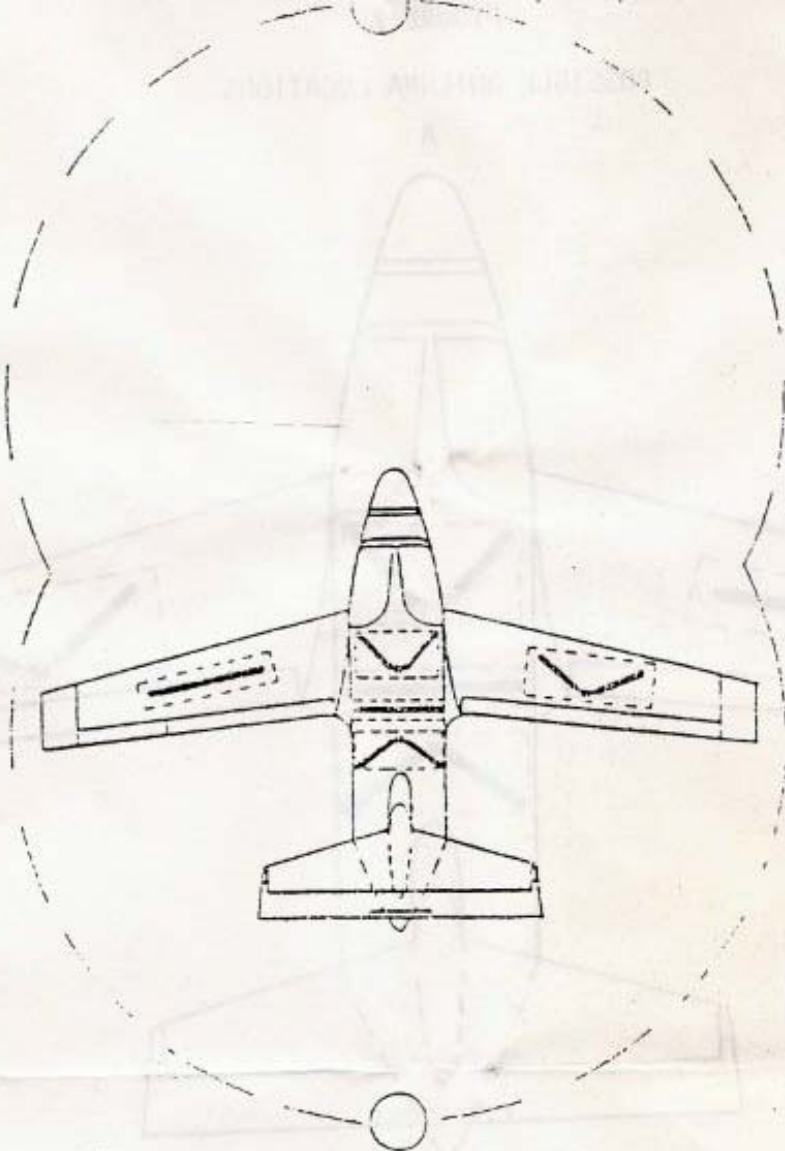
"V" CONFIGURATION WITH ELEMENTS AT A 90° INCLUDED ANGLE ON THE LONGITUDINAL AXIS OF THE AIRCRAFT. THE ANTENNA MAY BE INSTALLED WITH THE OPEN END OF THE "V" POINTED EITHER FORE OR AFT.

FIGURE 2

POSSIBLE ANTENNA LOCATIONS



ENERGY FIELD



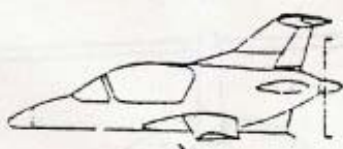
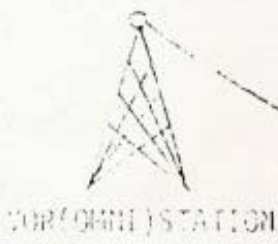
ANY OF THE VARIOUS ANTENNA LOCATIONS SHOWN WILL GIVE THE DESIRED ELECTRICAL ENERGY (SIGNAL FIELD) AS SHOWN BY BROKEN LINE (TYPICAL DIPOLE PATTERN)

VOR(OMNI) STATION

ENERGY FIELD

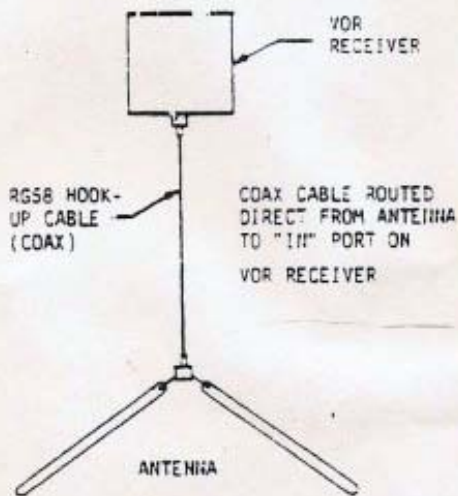
TO

FROM

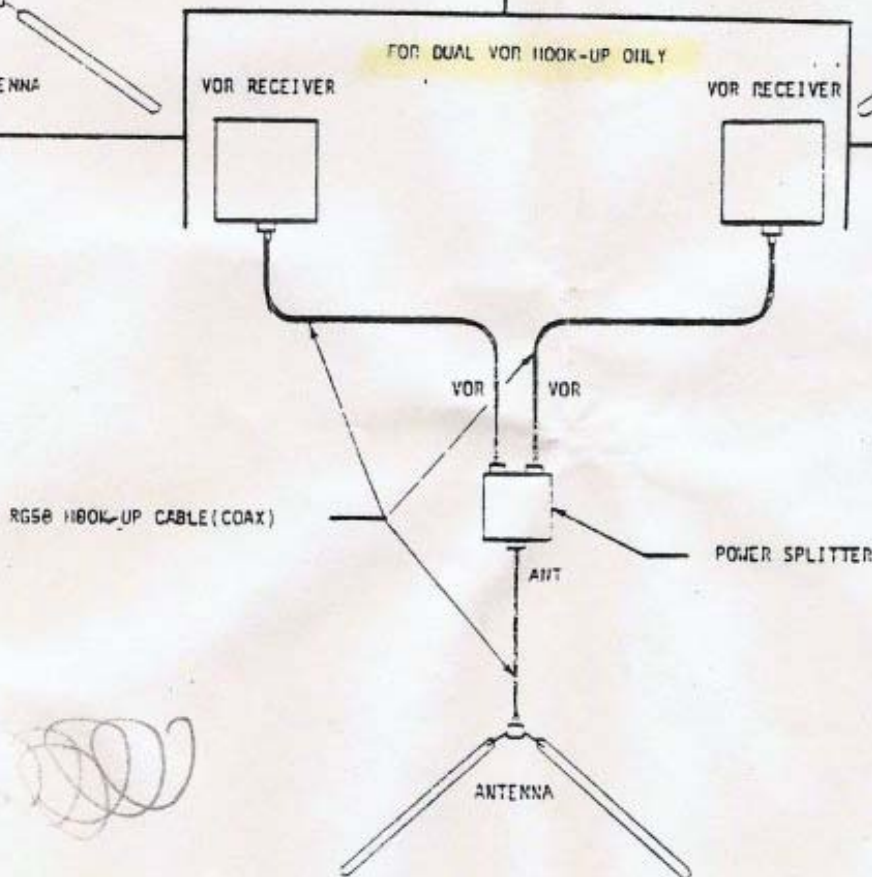
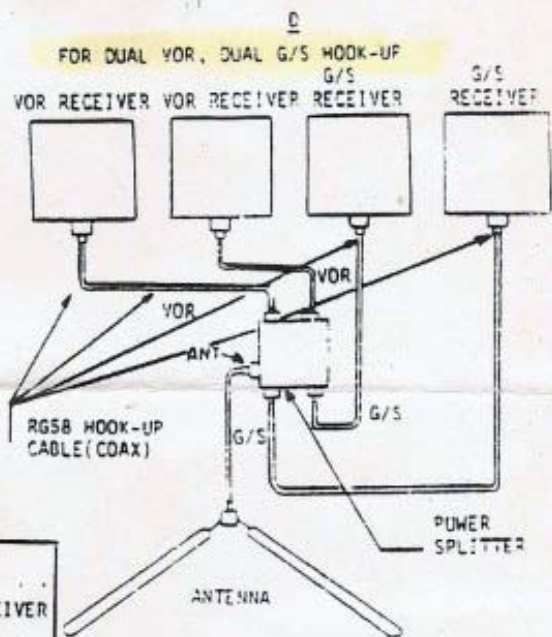
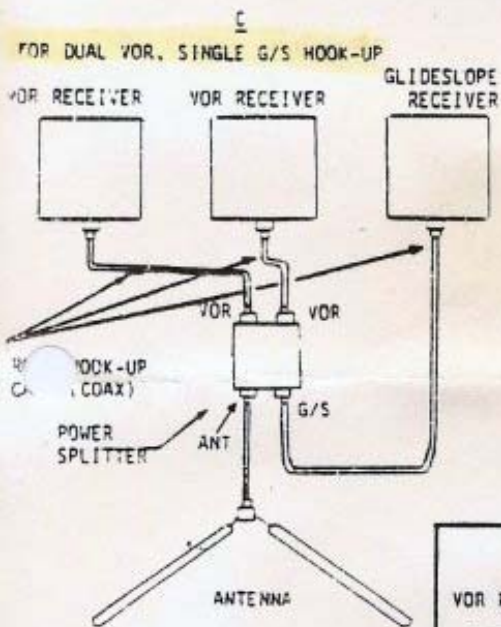
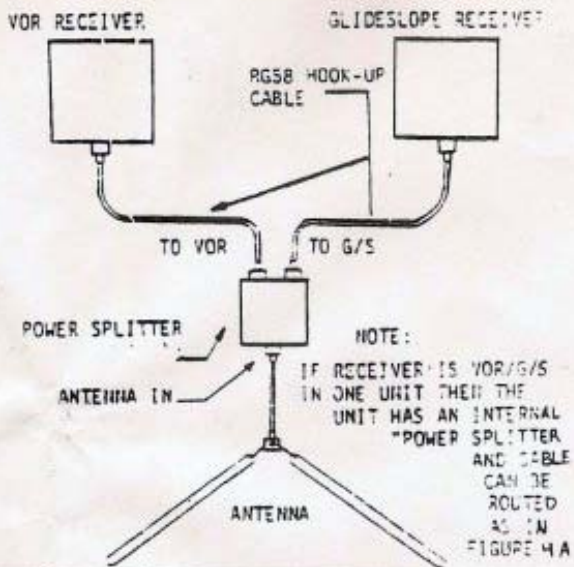


ANTENNA LOCATED INSIDE BOTTOM OF FUSelage

FOR SINGLE VOR HOOK-UP ONLY



FOR SINGLE VOR/GLIDESLOPE HOOK-UP



*
ANTENNA DYNAMICS, INC.
7826 BALBOA BLVD.
VAN NUYS, CA.
(818) 780-9978

LANCAIR

Comm Ant. Install.

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- 9) The antenna may be placed anywhere in or on the foam or fiberglass; the surface, inside the glass but on the foam, or buried within the foam are all valid locations for the antenna.

- 10) Install the antenna as far away as possible from other antennas, metal surfaces or other wires or electrical devices.
- 11) Remember, if the airplane were made of clear glass, and if a person at the VHF Communications station couldn't "see" the antenna (and that includes looking through engines, fuel tanks, people, etc.) then the antenna will not be able to properly send or receive the VHF Comm. signal.
- 12) Do not install the antenna in areas of high flex. An analysis of the circumstances surrounding failures in high flex areas leads to the conclusion that antennas installed on fiberglass surfaces subject to flex are most likely to break. Although the antenna is really quite strong, it cannot survive the strain imposed by a half-ton airplane bouncing along the runway. All of the reported failures have been on gear leg antennas or canard gear antennas, especially after hard landings.
- 13) It is virtually impossible for us to answer all the questions you may have as this antenna is meant for use on many types of aircraft. When in doubt consult with the Avionics man at your local airport or question other builders of aircraft.
- 14) Statistics on thousands of hours of antenna flight show that approximately 90% of all antenna problems are due to improper installation.

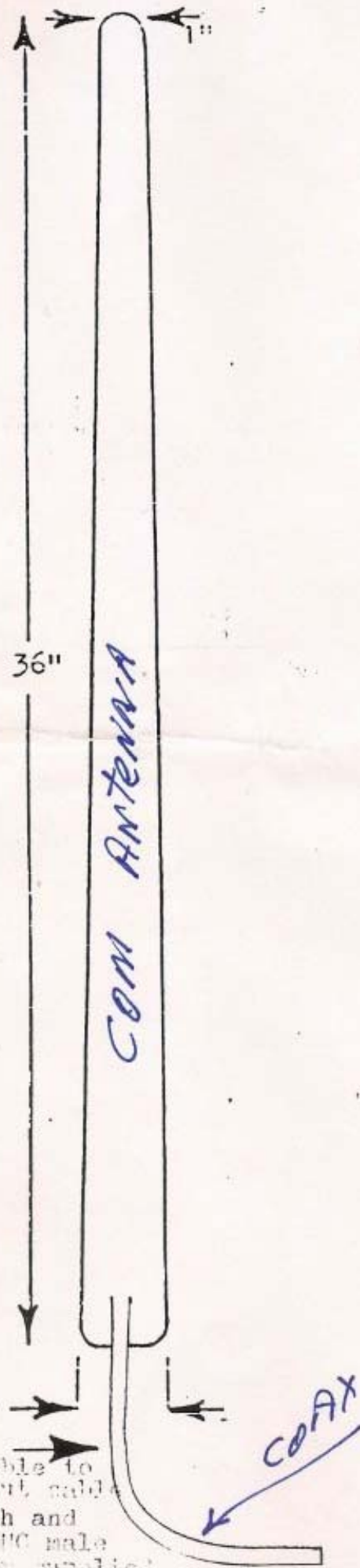
WARRANTY

Antenna Dynamics warrants that, at the time of shipment, the products manufactured by the Seller are free from defects in material and workmanship. Our obligation under this warranty is limited to replacement or repair of such products within one year from the date of shipment.

No material is accepted for replacement or repair without authority. Replacement or repair is made only after our examination shows defective material or workmanship at the time of manufacture. All shipping charges on returned material must be prepaid by the buyer.

Antenna Dynamics is in no event liable for consequential damage, installation cost or other costs of any nature as a result of the use of the products manufactured by us, whether used in accordance with instructions or not.

This warranty is in lieu of all others, either expressed or implied. No representative of Antenna Dynamics is authorized to assume any liability in connection with our products.



oute cable to
dio, cut cable
length and
attach DPC male
connector.

Figure 1
Long EZ

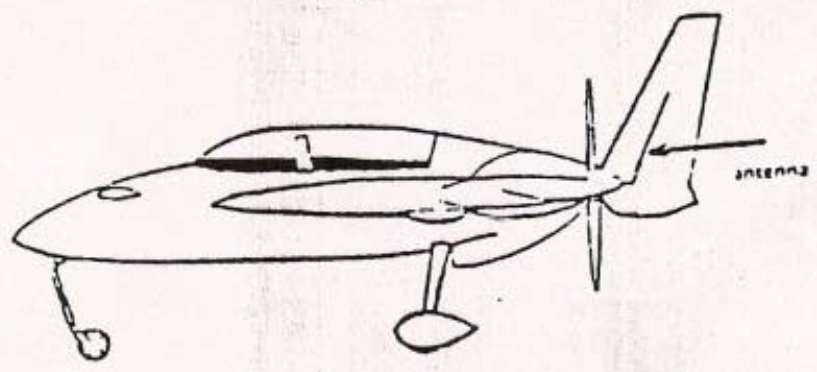
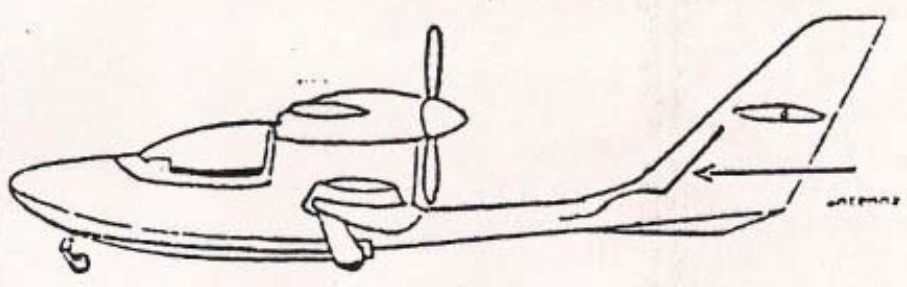


Figure 2
Sea Hawk



ANTENNA DYNAMICS INC.

"Antennas for Composite Aircraft"

7826 Balboa Blvd. Van Nuys, CA. 91406

(818) 780-9978, 780-9979

*revised to PC.
040312 MM*

WHY SHOULD I USE ANTENNA DYNAMICS ANTENNAS ON MY COMPOSITE AIRCRAFT?

A common daily occurrence both in metal and composite aircraft is problems associated with antennas that degrade the performance of the aircraft's avionics. These problems are incorrect antenna application, location, type and above all incorrect installation. Any of the above conditions WILL CAUSE serious degradation in Transmit/Receive range, in some instances up to 50% reduction.

Over a period of years statistics show a large percentage of avionics problems are antenna associated.

A typical occurrence is a person spending literally thousands of dollars in VOR/GS VHF COMM. and LORAN-C radios and seriously degrading the performance of his avionics panel by making critical errors in the selection and installation of his antennas. This is not an isolated instance but occurs to some degree in almost every composite airplane installation we have observed that has not used our antenna systems. The real problem is that builders usually find out TOO LATE after the antennas have been glassed-in and changing antennas becomes a MAJOR TEARDOWN PROCEDURE!!!!

Our 20 years in the design and manufacture of all types of antennas for aircraft assure you of the most up-to-date, State-of-the-Art antennas available for your bird which will give you the maximum performance available from your avionics panel.

Most people do not understand the complexity of modern day antennas and tend to diminish their importance. In avionics it is agreed that the system is only as good as the antennas.

Antenna technology, much like the rest of the electronics industry, has advanced in quantum jumps since the 70's and 80's, and ANTENNA DYNAMICS is at the forefront of that technology.

Sure you can scrimp and save a few bucks by buying kit type antennas with obsolete designs, but if you do, be prepared to pay the price of less than optimum performance from your avionics.

Our antennas come with complete pictorial installation instructions to assure the user/installer of correct installation.

Use antennas from ANTENNA DYNAMICS, and when your flying, be comfortable with the thought you are obtaining maximum performance from your avionics systems!!!!

(OVER FOR ORDER FORM)

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RUTAN CHOOSES ANTENNA DYNAMICS

Mike Melville reported after installation and flight test of the ANTENNA DYNAMICS P/N AD-1 VOR/GS antenna on the RAF Factory Long-EZ it was reported that "the distance from the VOR for usable navigation is increased and our left right needle does not fluctuate as it used to with the Kit-type antenna."

NEICO SELECTS ANTENNA DYNAMICS

Lance Neibauer, President of Neico Aviation, has selected ANTENNA DYNAMICS INC. as the exclusive antenna supplier for all the Lancair series aircraft. Neibauer commented "we chose ANTENNA DYNAMICS line of VOR/LOC/GS, VHF COMM. MARKER BEACON, LORAN-C and DME/TRANSPONDER antennas because they are specifically designed to be installed within the structure of composite aircraft and demonstrate the optimum performance necessary for an airplane such as the Lancair".

INFINITY SPECIFIES ANTENNA DYNAMICS

Jim Newman, President of Infinity Aerospace, manufacturers of the Infinity high performance canard pusher aircraft, announced the Infinity aircraft will use antennas from ANTENNA DYNAMICS for their aircraft. Newman commented "we need maximum performance from our avionics and chose ANTENNA DYNAMICS because of their design and performance specifications."

ANTENNA DYNAMICS REPORTS OVER 10,000

Larry Brown, Vice-President, Engineering announced that over 10,000 antennas have been shipped "with no field problems reported on any avionics function that uses our antennas."

ANTENNA DYNAMICS INC.
"Antennas for Composite Aircraft"
1255 South Blvd. Van Nuys, CA 91406
818-708-1000

UNSOLICITED TESTIMONIAL

1-18-90

Dear Sir:

I am currently flying Longeze M424RW with your AD-1 mounted in the canard. It has given me Super Results and I can't say enough good things about it. I am currently building the new high performance canard and need another one of those great Antenna Systems. Please ship UPS COD at your earliest convenience.

Yours Truly,
R.G. Westphal
3400 White Ave.
Eau Claire, WI.
54703

*original on file

ANTENNA DYNAMICS REPORTS OVER 10,000

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PRICE LIST

PART NUMBER	DESCRIPTION	PRICE
AD-1(pat. pend)	VOR/LOC/Glideslope Antenna	\$74.95
new item AD-1-2(pat. pend)	VOR/LOC Antenna	\$69.95
new item AD-1-3(pat. pend)	GLIDESLOPE Antenna	\$67.95
AD-2(pat. pend)	MARKER BEACON Antenna	\$74.95
ADL-3(pat. pend)	LORAN-C Antenna	\$89.95
AD-5(pat. pend)	VHF COMMUNICATIONS Antenna	\$89.95
AD-6(pat. pend)	DME/TRANSPONDER Antenna	\$42.95
AD-7(pat. pend)	VHF COMMUNICATIONS Antenna	\$99.95
new item AD-35(pat. pend)	(Same as P/N AD-5 but has 25 ft. of RG 58 cable attached to antenna) DME/TRANSPONDER BLADE Antenna (This tiny aerodynamic antenna is meant for external installation when necessary)	\$109.95

SPLITTERS/COUPLERS

AD-52	DUAL VOR COUPLER	\$69.95
(Allows the simultaneous use of two VOR receivers from one VOR antenna)		
AD-53	DUAL GLIDESLOPE COUPLER	\$79.95
(Allows the operation of two Glideslope receivers from one G/S antenna)		
AD-55	VOR/GLIDESLOPE DIPLEXER	\$79.95
(Allows the operation of two VOR receivers and one Glideslope receiver from one VOR/GLIDESLOPE antenna)		
AD-57	SINGLE VOR/SINGLE GLIDESLOPE DIPLEXER	\$69.95
(Allows the operation of one VOR and one GLIDESLOPE receiver from one VOR/GLIDESLOPE antenna)		
AD-59	DUAL MARKER BEACON COUPLER	\$79.95
(Permits the use of two MARKER BEACON receivers from one MARKER BEACON antenna)		
AD-114	THREE OUTPUT VOR COUPLER	\$149.95
(Permits the use of three VOR receivers from one VOR antenna)		
AD-115	THREE OUTPUT VOR SINGLE OUTPUT GLIDESLOPE COUPLER	\$159.95
(Use three VOR receivers and one G/S receiver from the same VOR/GS antenna)		

(PLEASE TURN OVER)

3/90