

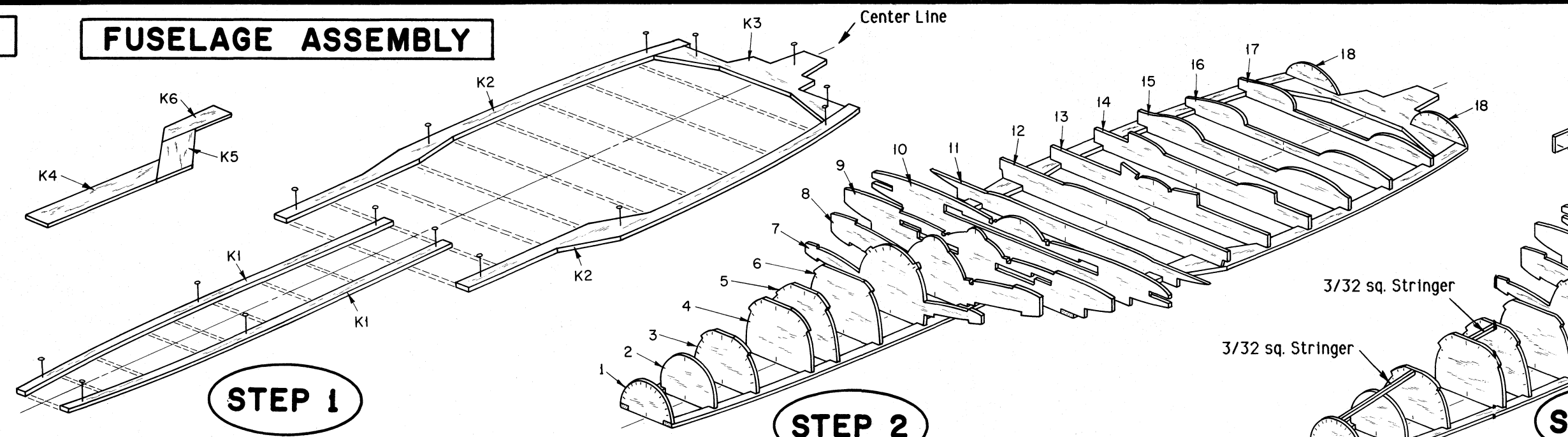
PLEASE READ FIRST !!

Before you start construction of your model, study the plan and construction procedure carefully so you have a complete understanding of the step - by - step method of building this airplane. Careful attention to detail, patience and quality workmanship will insure a beautiful model. Remember - work slowly and carefully at all times. This multi-purpose model has been designed to give you a variety of building choices. You can build the model for static display on table top with landing gear in position. You can build the model for static display in flying mode without landing gear (simulated retract position) or you can build the model for flying either as a hand launch or catapult launched glider. You must decide how you want to build your model now and then proceed accordingly. Choose a flat building board and always cover plan with a clear kitchen film to prevent parts from sticking to plan.

ADHESIVES YOU CAN USE

Your model can be built using many different products such as white glue, epoxy, regular model cements or cyanoacrylate (CA) glues. You may choose to use any one or a variety of these adhesives for your model. For example: white glue will not hold plastic parts together or on the model but any of the others will. **WARNING** - be very careful when using CA glues and read the manufacturers instructions completely.

FUSELAGE ASSEMBLY



STEP 1

Cover Plan with any clear plastic kitchen wrap to prevent parts from sticking to plan. Carefully identify and remove Keel parts #K1, #K2 and #K3 from decut sheets. Pin in place over full size Keel drawing gluing together where they join. Identify and remove inner keel parts #K4, #K5 and #K6 from decut sheet. Assemble these parts over full size drawing and when dry remove from building board and make a second identical assembly.

STEP 2

Carefully identify and remove Bulkheads #1 to #18's from decut sheets. Mark center lines on top and bottom of each Bulkhead. Lay Bulkheads #1, #3, #4, #5, #7 and #18's over full size drawing of each and mark stringer locations. Glue Bulkheads in place on Keel vertically as shown.

STEP 3

Cut 3/32 sq strip for center stringers to length and glue in place as shown. Note that the front piece fits between #1 and #3 and rests on top of #2. Center piece fits between #4 and #5 and the rear piece fits between #7 and #3 resting on top of all other bulkheads. This will now support the bulkheads and prevent accidental breaking.

STEP 4

Glue the two #57's in place as shown with front against back of #12 and rear on outside of #18's. Glue #61's in place. Mark stringer locations on the two #58's then glue them in place. Cut 3/32 sq for rear stringers at center of #18's and glue them in place.

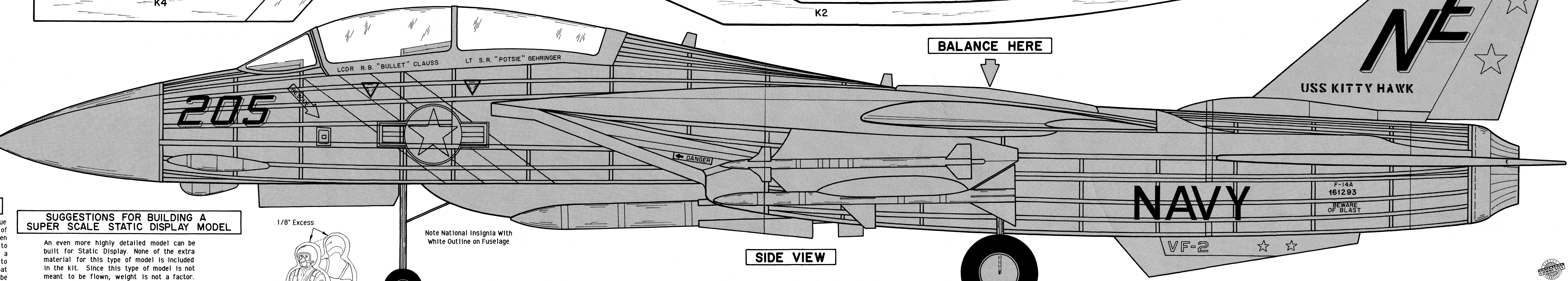
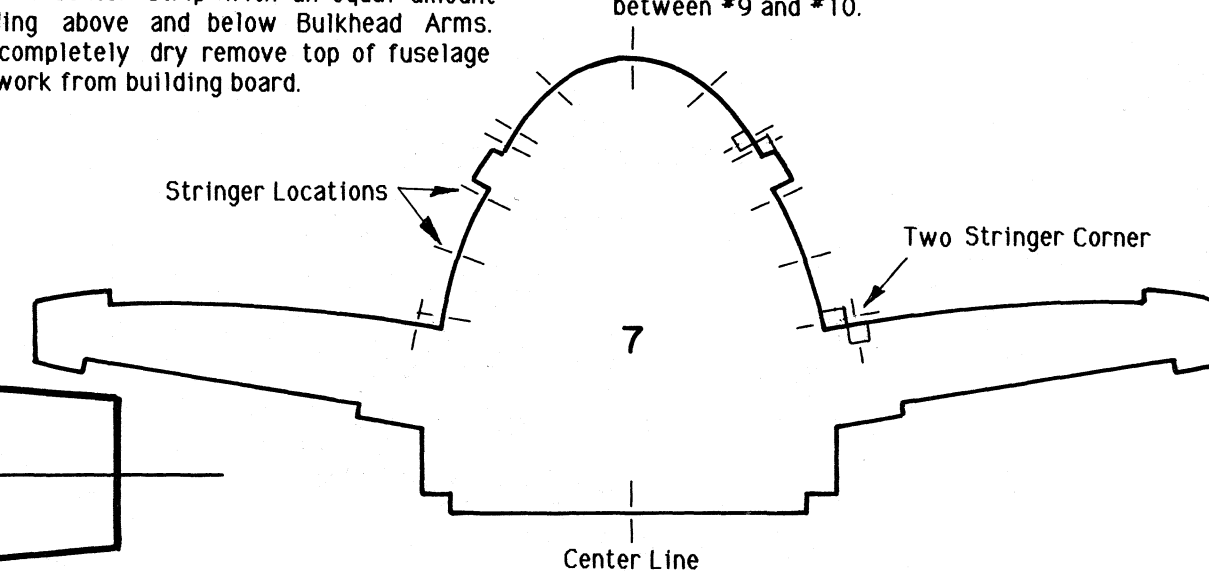
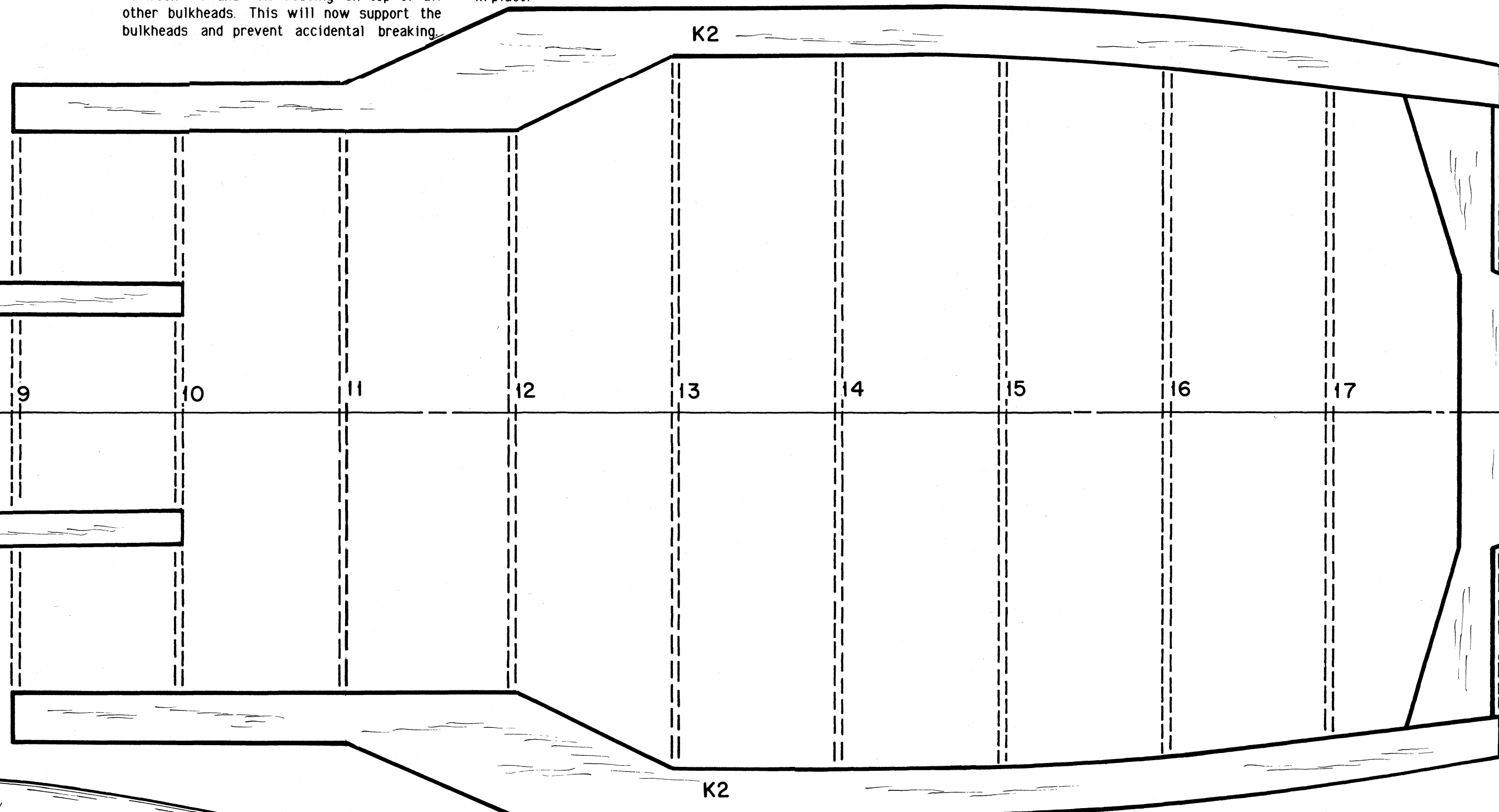
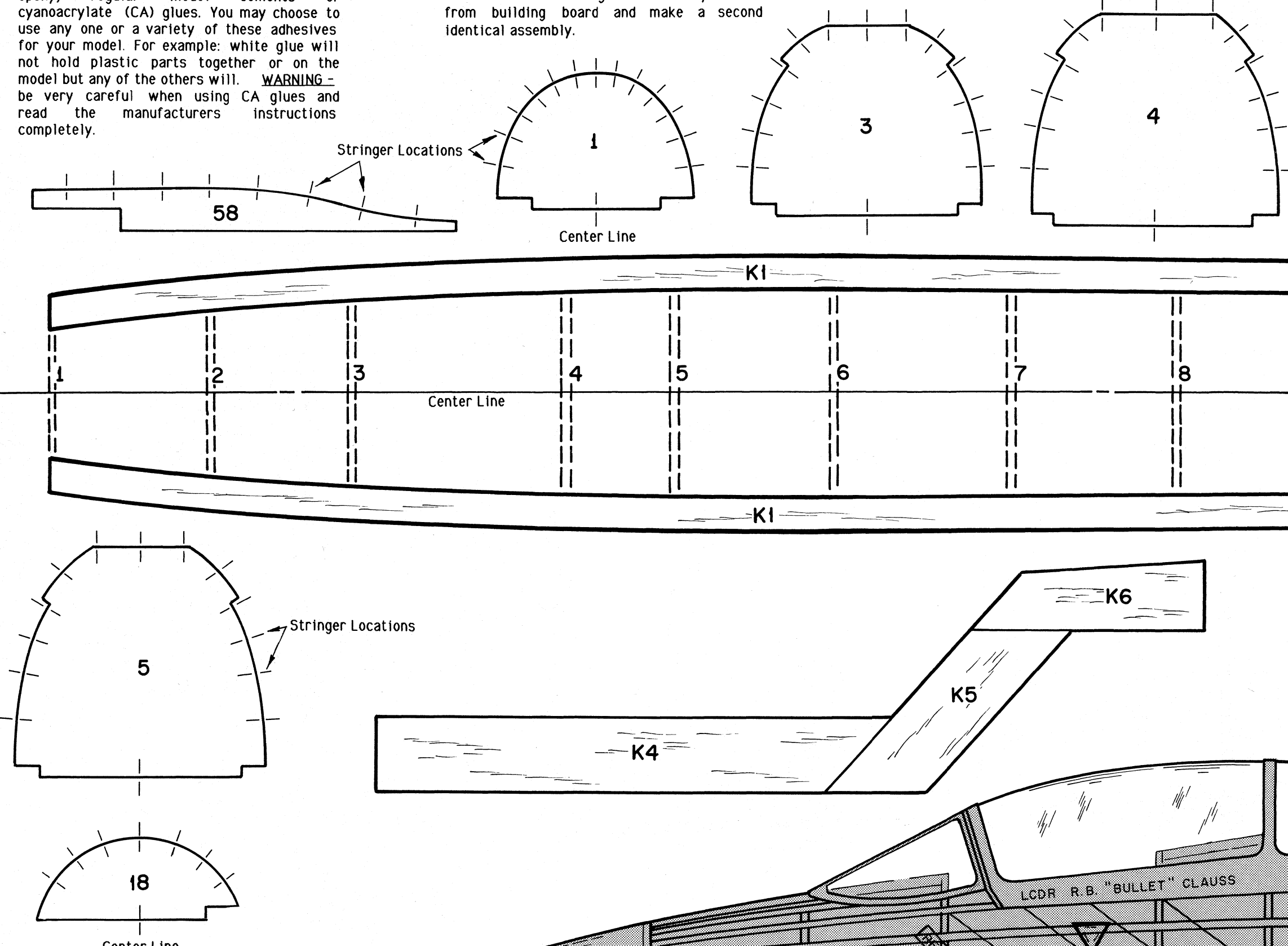
STEP 5

Glue assembled Inner Keels in place as shown. These Keels fit into slots in #9 and #10, against back of #8 and front of #13. Now glue the #11's and #12's to top of inner Keels in line with the respective Bulkheads #11 and #12 as shown. Glue the #K7 sideplates in place as shown.

Drill a 1/8" dia. hole in the two #60's at punch marks then glue #60's in place between #10 and #11 as shown. Glue a #59 between #11T and #12T on each side flush with top. Cut remaining 3/32 sq stringers to length and glue them in place centering them on marks previously made on parts. Note the Two stringer corner (see full size #7 bulkhead) required from rear of #7 back to #14. This will allow attaching surfaces for tissue and balsa covering. Cut the 3/8 x 5/8 x 18" strip in half to 9" lengths. Glue strips in place against outside of Bulkhead arms from #7 to #10 as shown with 2-1/2" extending past front of #7. **BE SURE** to center strip with an equal amount extending above and below Bulkhead Arms. When completely dry remove top of fuselage framework from building board.

STRINGER SETBACK DETAIL

Drawing shows how stringers are arranged on Bulkhead #7 to create setback. Note how one stringer fits on top of bulkhead at extended area and is cut off flush with front of bulkhead. Second stringer is mounted against back of bulkhead, flush with outside of bulkhead. This short stringer is glued in place on the other stringer angling lower so that it becomes flush on outside of lower stringer and ends between #9 and #10.



TISSUE COVERING

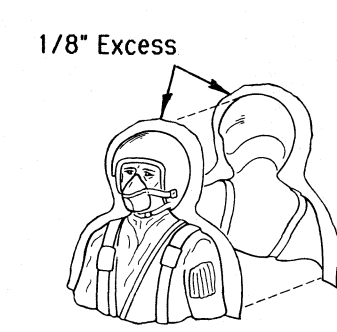
Read entire note before starting. The tissue supplied in this kit allows covering of compound curves without wrinkling when moistened with water before applying to framework. Tissue shrinks as it dries to a tight, smooth surface. Use clear dope to attach tissue as follows: Apply a light coat of dope to outside edges of area to be covered. Allow to dry and sand smooth with fine sandpaper. Cut tissue to shape needed plus about 1/2" oversize on all sides. Place tissue on a flat surface and dampen with moistened cloth by dabbing. Apply a second coat of clear dope to area to be covered, then place moistened tissue over frame and wet dope. Pull tissue gently to work out wrinkles and sags. Allow to dry - trim off excess. Apply two coats of clear dope (thinned 50 - 50 with thinner) before final assembly. All parts are covered with the largest piece of tissue possible without causing wrinkles. For instance: The wing panels can be covered with one piece for the top and one piece for the bottom. The same holds true for the tail parts. The fuselage however, will require many separate pieces. You can use your own skill and judgement to determine just how large and many pieces you will need to do the entire fuselage. Remember any area that develops wrinkles can be cut out and recovered. Check wing panels and tail surfaces for warps. If any have developed, they can be removed by holding over steam from a boiling kettle, and twisting gently in opposite direction. Check again when cool. **BE CAREFUL - STEAM IS VERY HOT - DON'T BURN YOURSELF.**

SUGGESTIONS FOR BUILDING A SUPER SCALE STATIC DISPLAY MODEL

An even more highly detailed model can be built for Static Display. None of the extra material for this type of model is included in the kit. Since this type of model is not meant to be flown, weight is not a factor. The real aircraft framework is covered with sheets of Aluminum, Fiberglass, Carbon Fiber, etc. To duplicate this full skin covering, all tail surfaces can be duplicated with sheet balsa of the proper thickness and not built with open framework. The wings are already sheet covered so there is nothing necessary there. The fuselage is a bit more involved. Instead of using 3/32 sq stringers spaced as shown in drawings the entire fuselage is planned with 3/32 x 3/8 strips. All assembled components are sanded smooth and covered with tissue to fill wood pores more quickly and result in a smooth surface. This method will eliminate framework from being visible thru covering and allow you to add as much detail as you wish, using the Scale Spec. Drawings as reference.

PROUD OF YOUR MODEL

If you wish, send us a photo of your completed model. We have a photo album for display at trade shows and exhibitions. Don't forget your name, address and age on back of the photo so we can credit the builder.



PLASTIC PARTS

Carefully trim all plastic parts from sheets. Pilot and his NFO are optional. If they are used leave about 1/8" excess plastic on front and rear halves as shown. Glue halves together and when dry trim off excess. Sand seam smooth. Pilots uniform is painted a blue/gray color with the helmets almost any color you choose.

SUGGESTIONS FOR BUILDING A LIGHTWEIGHT FLYING MODEL

Sand all finished parts (wing panels, stab, vertical fin, fuselage) very carefully tapering surfaces (see specification views) so that all surfaces have a minimum of wood structure. Do not install landing gears, missiles, air probe, or any unnecessary details. After applying tissue use two coats of clear dope thinned 50 - 50 with thinner and one very light spray coat of finish color.

Note National Insignia With White Outline on Fuselage

I NEED HELP

If, during the construction of your model you need a word of explanation to solve a building problem, just drop a line and we'll be glad to answer your question by return mail. We also welcome your comments or suggestions since we are intent on furnishing you the model builder with the finest scale flying model kits.

PARTS IN THE KIT

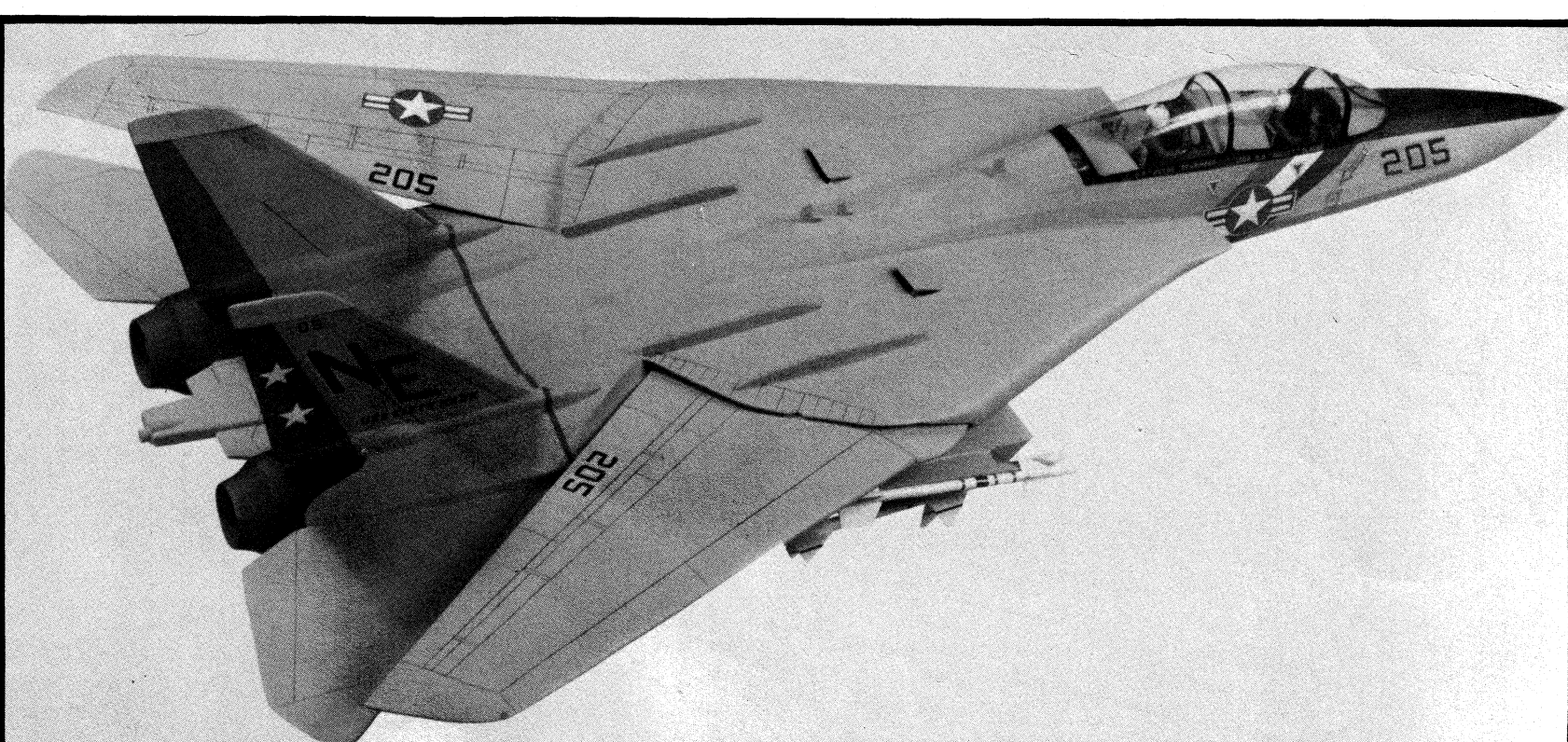
We strive to supply quality materials in all our kits. All parts are inspected with regard to the function they serve. If an imperfection is spotted in a scrap area of die cut sheets, plastic parts, etc. and doesn't affect the actual part, the sheet is considered acceptable. Also, when wooden parts are cut, natural internal stresses can be relieved. These relieved stresses may allow parts to bow or twist. These will readily straighten out as parts are assembled into a structural unit.

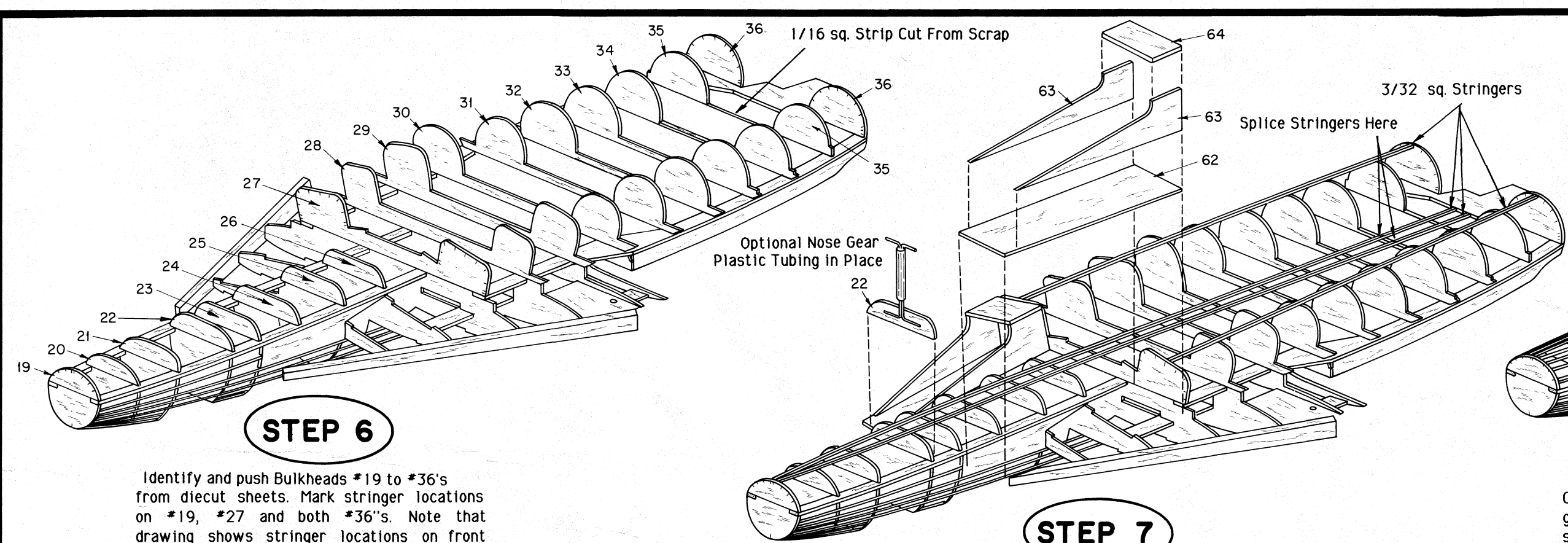


KIT J-4 **TODAYS HOBBIES INC.**

Wingspan: 32" Length: 31"
1/24 Scale Balsa Flying Model

F-14A TOMCAT



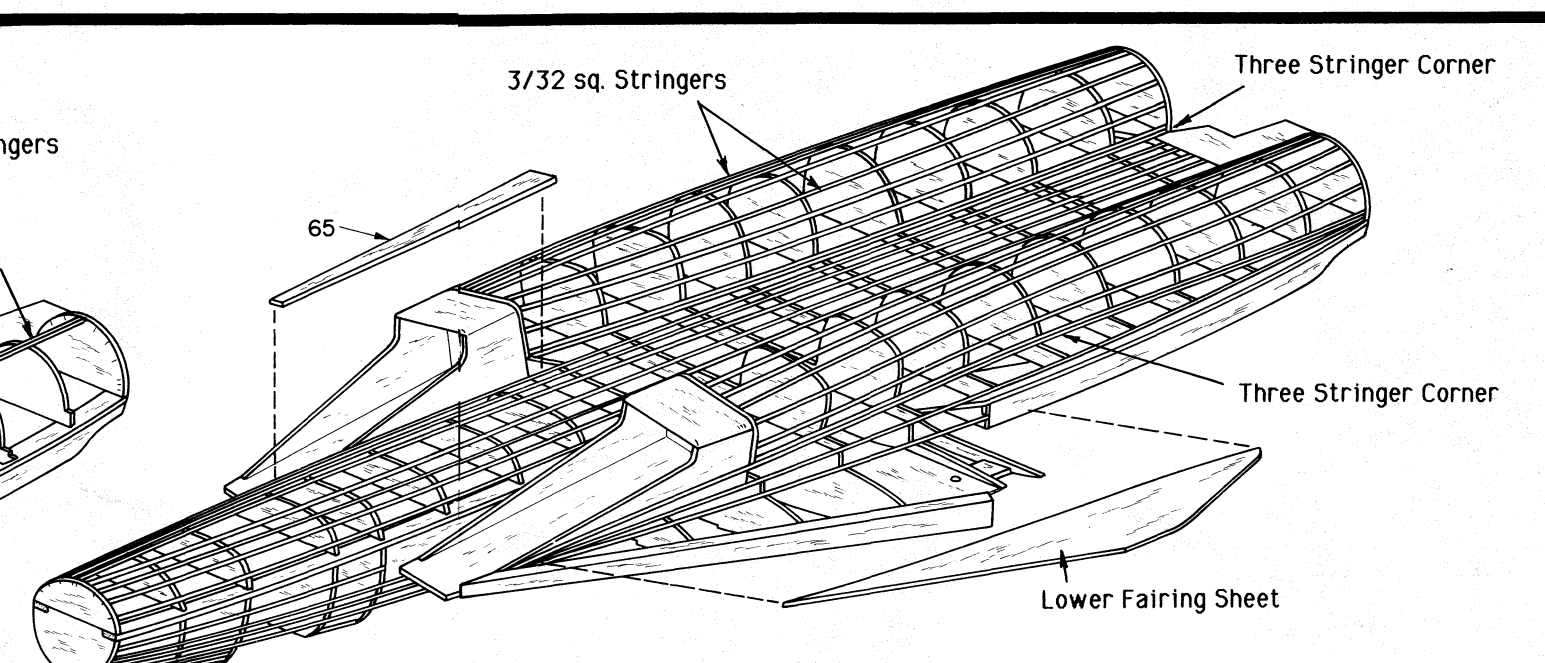


STEP 6
Identify and push Bulkheads #19 to #36's from de-cut sheets. Mark stringer locations on #19, #27 and both #36's. Note that drawing shows stringer locations on front of #27 for clarity only, they must be on the back side of this bulkhead to prevent them from being covered by Air Intake Parts. Glue bulkheads in place as shown against bottom of top bulkheads. **BE SURE** they are all centered. Using a piece of 1/16" scrap, cut a piece of 1/16 sq. strip and glue it against bottom of #17 between the two #35's.

If model is to have Landing Gear, bend gears to shape using full size drawings. Glue Nose Gear into crease marks in the second #22 and glue this assembly behind the previously installed #22 as shown sandwiching gear between. Cut two 3/32 sq. strips to length and glue in place down center of outer portion of bulkheads from #27 to #36's. Now cut two center stringers to length and glue in place from #19 to rear



as shown. Note that a single length will not be long enough for these stringers and another short length must be spliced on at rear as shown. Air Intakes are glued in place next. Hold a #62 in place and mark where the 3/8 x 5/8 strip is to be cut and then trim it off as shown. Now glue the #62 in place followed by the #63's and #64. Complete opposite side in same manner.



STEP 8

Cut the remaining 3/32 sq. stringers and glue them in place. Remember the six long stringers in the center section will have to be spliced at rear. Note the three stringer corners required as shown. Examine sketch and Side View carefully for stringer positions. Glue a #65 in place on ledge on #7 and #8 and against front of #27 as shown. Repeat on opposite side. Using pattern provided, cut lower fairing sheet to shape and glue one in place on each side as shown. Please remember that building variances can cause slight differences in size and shape of such pieces; therefore patterns should be used as guides and duplicated in paper and adjusted to fit your particular model before they are cut from wood. When dry continue 1/8" dia. hole thru this sheet cover.

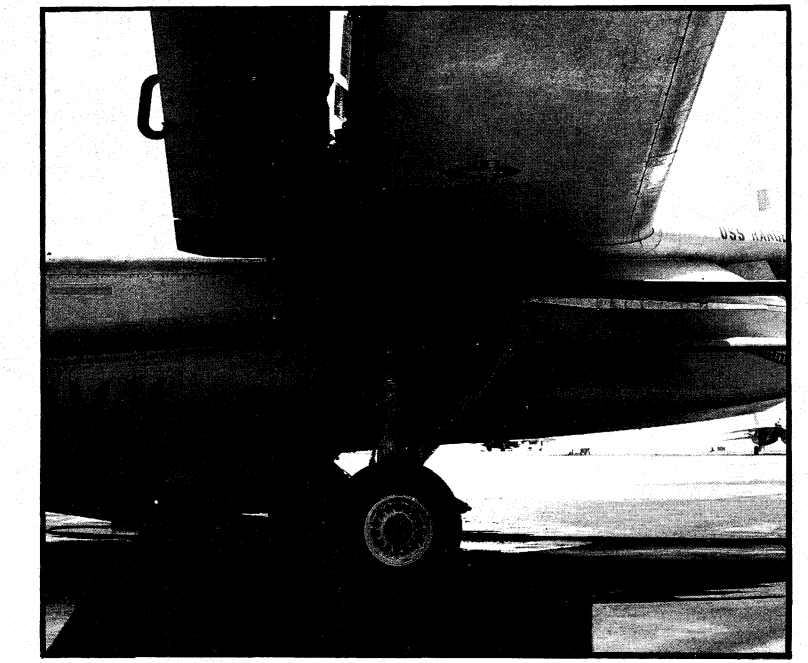
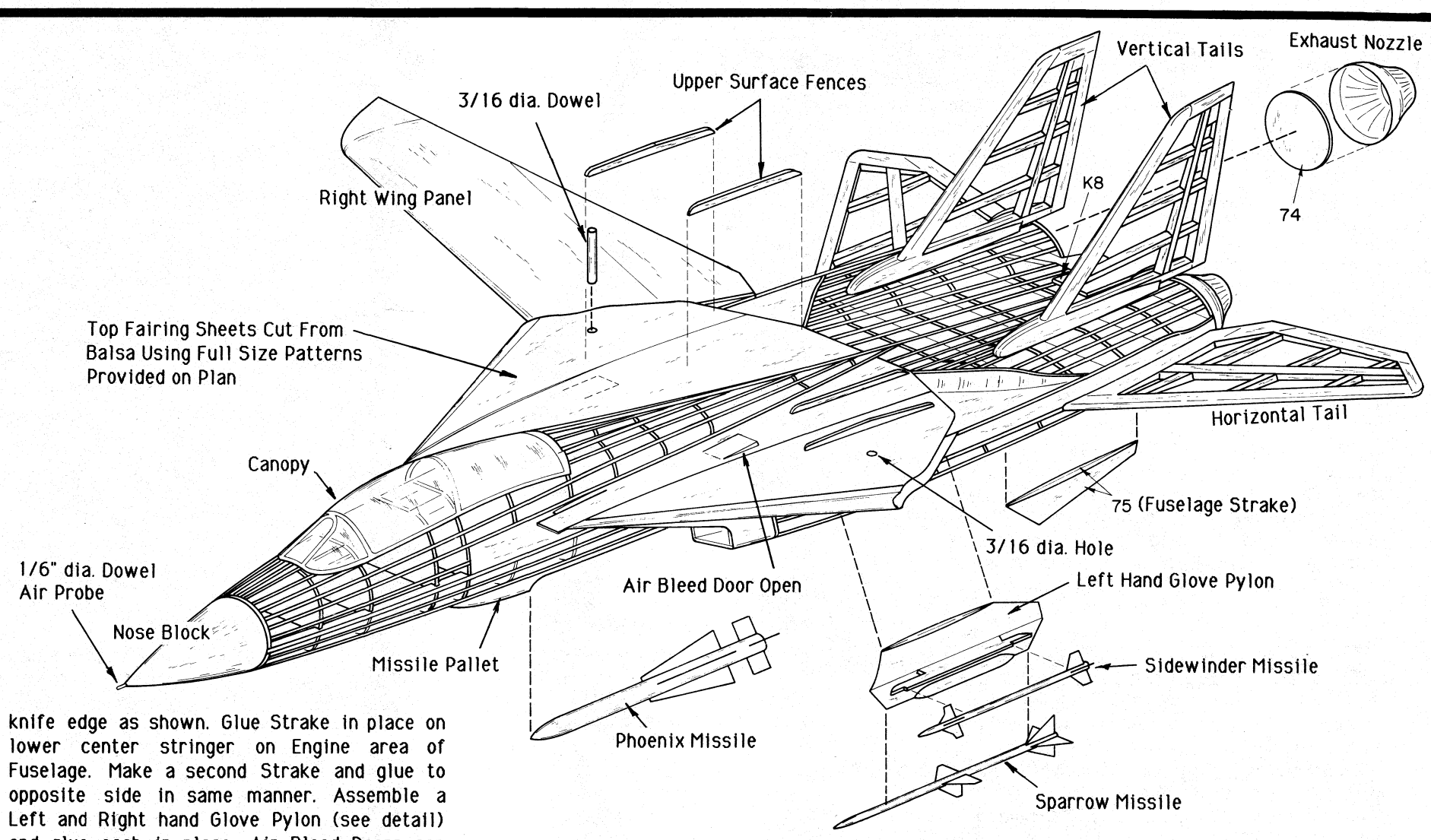


Photo of Real Aircraft's Main Gear Showing Landing Gear Doors

FINAL ASSEMBLY

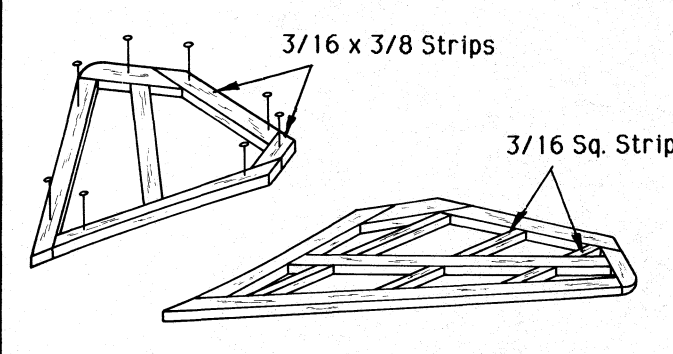
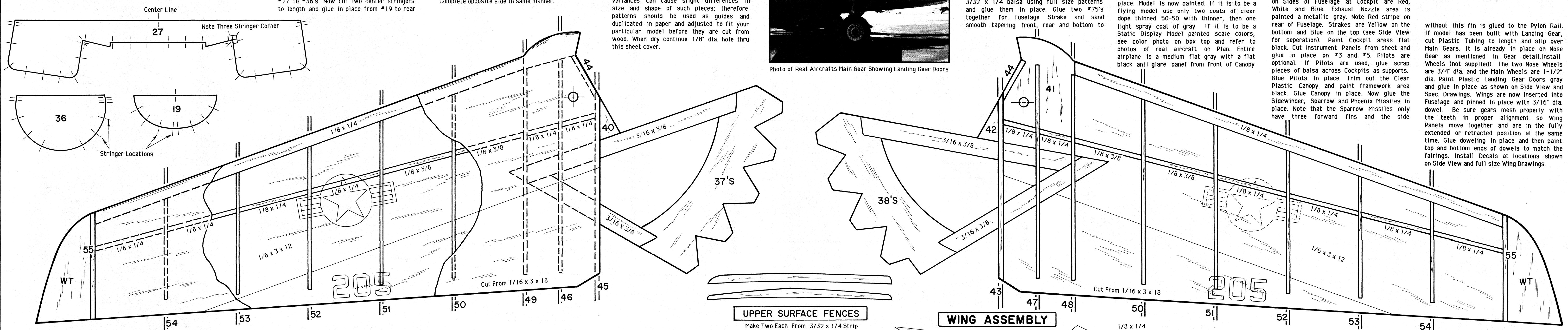
Carve Nose Block (see detail) and glue to front of Fuselage. Cut the Top Fairing Sheets to shape and glue in place. Note how inner sheet steps down from outer sheet at seam from front to half way back then the two are flush. Also front inside of inner sheet has small strip which is angled downward to fit against front of #65 below it. Sand entire Fuselage smooth. Now CAREFULLY drill a 3/16 dia. hole thru previously drilled 1/8 dia. holes in Wing Panels and Fuselage Fairing. Trim all other parts, Tails, Plastic parts and Wings to be sure they fit and Wing gears mesh and swing properly, then cover Fuselage with tissue. The Final Assembly sketch shows parts uncovered for clarity only, they are actually covered separately and then joined. Glue #74's into front of Plastic Exhaust Nozzles and then glue these assemblies to rear of Fuselage. Trim out the two Plastic Phoenix Missile Pallets and glue them in place on bottom of Fuselage. Note that there is a Left and Right Pallet. (The straighter side is on the outside). Glue a #K8 to top and bottom of Fuselage Beaver Tail as shown, then round off edges. Glue Horizontal Tails in place in line with Keel and at location shown on Side View and Spec. Drawings. Glue Vertical Tails in place at a slight outward tilt as shown again checking Side View and Spec. Drawings. Check alignment of all surfaces as glue dries. Cut two each of the Upper Surface Fences from 3/32 x 1/4 balsa using full size patterns and glue them in place. Glue two #75's together for Fuselage Strake and sand smooth tapering front, rear and bottom to



knife edge as shown. Glue Strake in place on lower center stringer on Engine area of Fuselage. Make a second Strake and glue to opposite side in same manner. Assemble a Left and Right hand Glove Pylon (see detail) and glue each in place. Air Bleed Doors can be raised to the open position by slicing thru the covering and gluing scrap wedges in place. Model is now painted. If it is to be a flying model use only two coats of clear dope thinned 50-50 with thinner, then one light spray coat of gray. If it is to be a Static Display Model painted scale colors, see color photo on box top and refer to photos of real aircraft on Plan. Entire airplane is a medium flat gray with a flat black anti-glare panel from front of Canopy

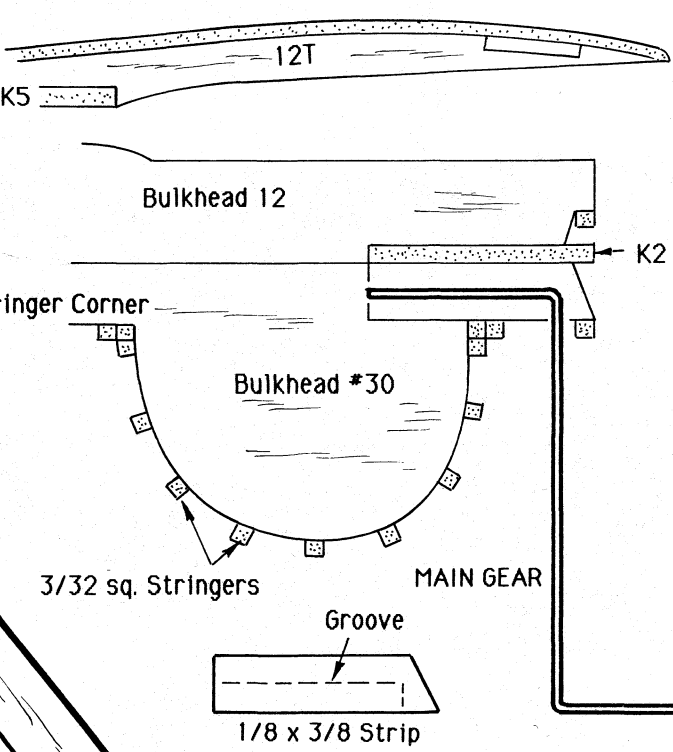
to tip of nose. Top of Vertical Tails are yellow with Ruders painted Blue. Stripes on Sides of Fuselage at Cockpit are Red, White and Blue. Exhaust Nozzle area is painted a metallic gray. Note Red stripe on rear of Fuselage. Strakes are Yellow on the bottom and Blue on the top (see Side View for separation). Paint Cockpit areas flat black. Cut Instrument Panels from sheet and glue in place on #3 and #5. Pilots are optional. If Pilots are used, glue scrap pieces of balsa across Cockpits as supports. Glue Pilots in place. Trim out the Clear Plastic Canopy and paint framework area black. Glue Canopy in place. Now glue the Sidewinder, Sparrow and Phoenix Missiles in place. Note that the Sparrow Missiles only have three forward fins and the side

without this fin is glued to the Pylon Rail. If model has been built with Landing Gear, cut Plastic Tubing to length and slip over Main Gears. It is already in place on Nose Gear as mentioned in Gear detail. Install Wheels (not supplied). The two Nose Wheels are 3/4" dia. and the Main Wheels are 1-1/2" dia. Paint Plastic Landing Gear Doors gray and glue in place as shown on Side View and Spec. Drawings. Wings are now inserted into Fuselage and pinned in place with 3/16" dia. dowel. Be sure gears mesh properly with the teeth in proper alignment so Wing Panels move together and are in the fully extended or retracted position at the same time. Glue doweling in place and then paint top and bottom ends of dowels to match the fairings. Install Decals at locations shown on Side View and full size Wing Drawings.



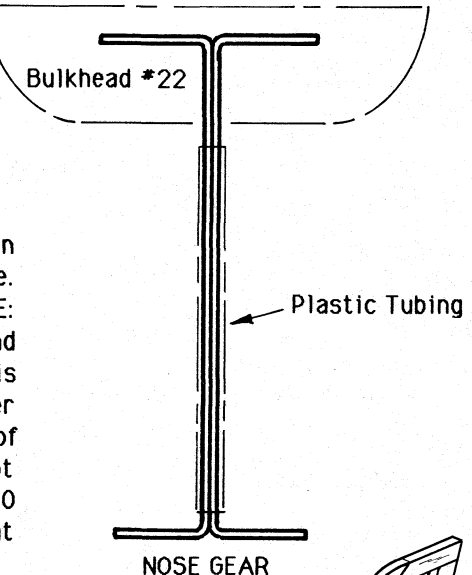
HORIZONTAL TAIL ASSEMBLY
Build Horizontal Tail directly over full size drawings. Use 3/16 x 3/8 material and cut to sizes and shapes shown for perimeter frame and center spar. Pin strips in place gluing together where they join. Use 3/16 sq. strips for inner structure. Cut strips to length and glue in place. Allow to dry thoroughly then sand smooth tapering as shown in technical drawings and cover with Tissue.

Note National Insignia Without White Outline on Wings



LANDING GEAR DETAIL

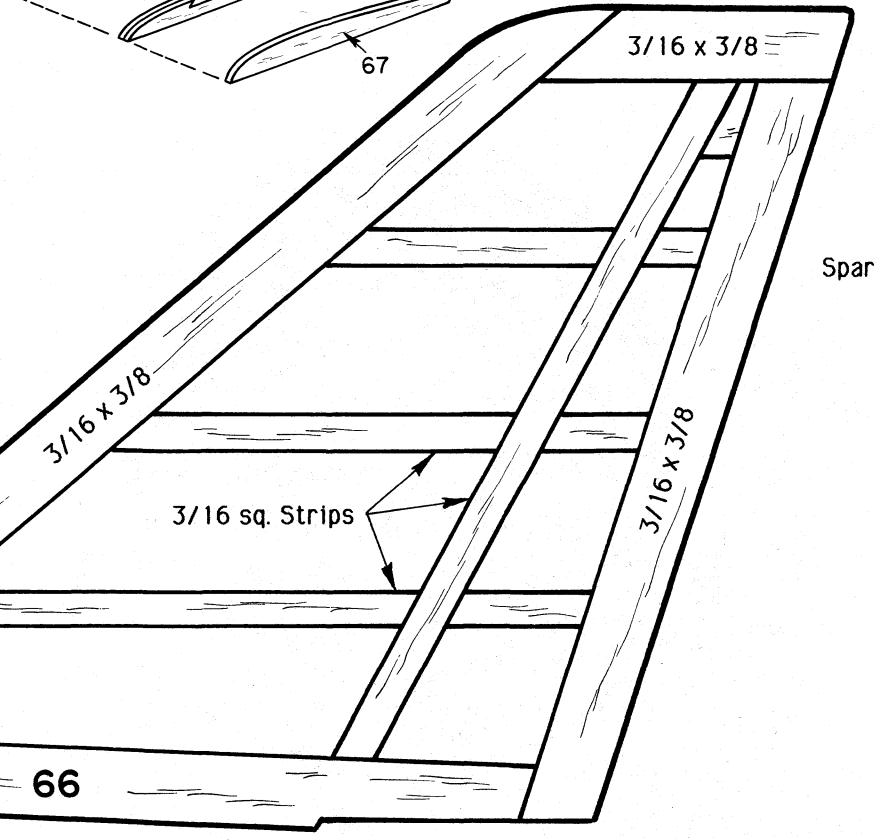
Landing Gear is optional. Cut and bend Main Gears and Nose Gear from 045 dia wire. Nose Gear is installed in Step 7. NOTE: Plastic Tubing must be cut to length and installed on Nose Gear before gear is installed. Main Gears are installed after Step 8 has been completed. Cut a piece of 1/8 x 3/8 strip to shape, groove to accept gear and then glue to front of bulkhead #30 as shown sandwiching gear between. Repeat for other side.



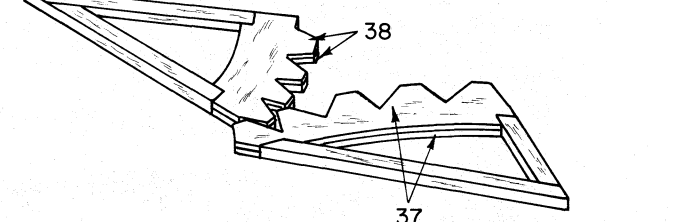
Bulkhead #22
Plastic Tubing
NOSE GEAR

VERTICAL TAIL ASSEMBLY

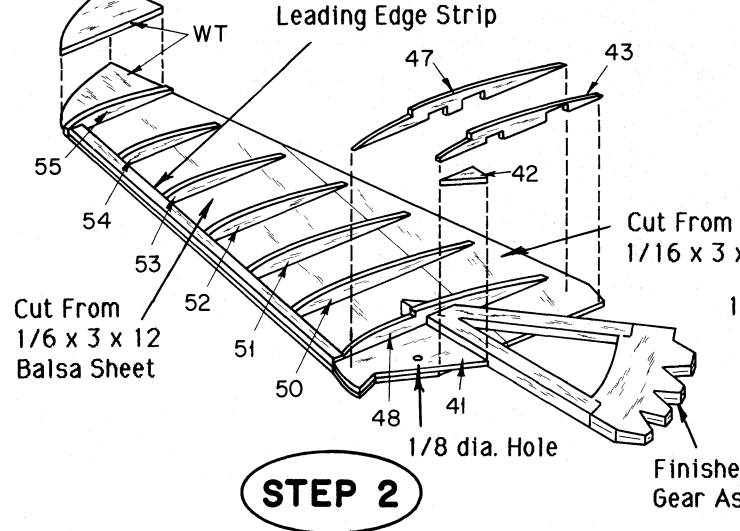
Build Vertical Tails directly over full size drawing as shown. Glue two #66's together and pin in place. Cut 3/16 x 3/8 strips to length and pin and glue in place. Finish off with 3/16 sq. strips as shown. Allow to dry, then glue a #67 to left side followed by a #68 and #69 to right side as shown. When dry, sand smooth rounding tops of #67, #68 and #69. Sand and taper remainder of Vertical Tail as shown in Final Assembly sketch and on technical drawings. Build a second Vertical Tail in same manner. Cover with Tissue.



WING ASSEMBLY

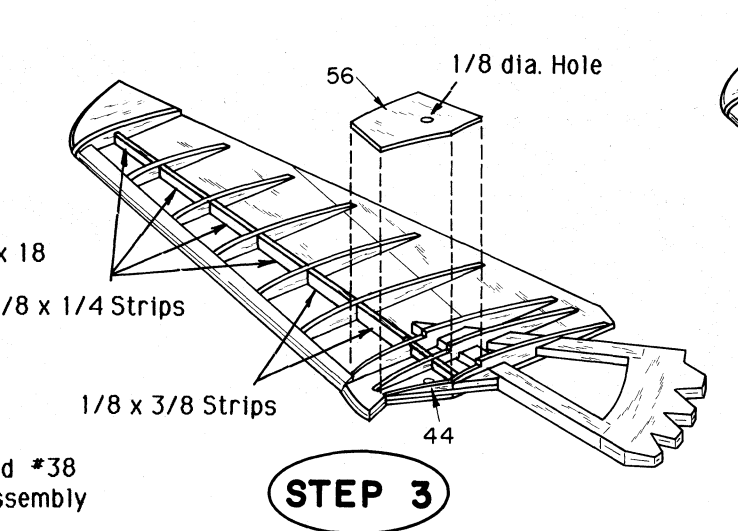


STEP 1
When building Wing --- Please work carefully making sure parts fit correctly. Wing swinging mechanism must be built properly or you will have alignment problems later in construction and your wing will not move properly. Assemble both Wing Gear units by gluing two #37's together and also two #38's together. Pin these assemblies in place over full size drawings on Plan. Using 3/16 x 3/8 strips, cut Gear Arms to length and pin and glue in place as shown. Allow to dry thoroughly then remove from building board.



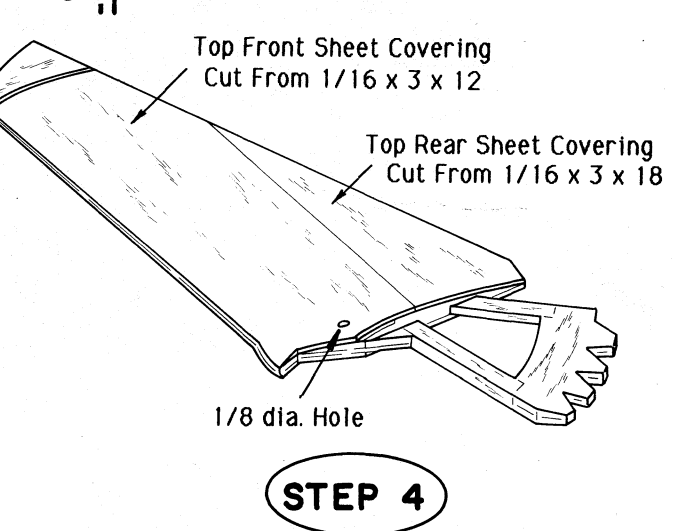
STEP 2

Wing Panels are built directly over full size drawings on Plan. Be sure to cover Plan with a clear Plastic Kitchen Wrap. Note in Step 4 sketch that the tops of the Wing Panels are covered with sheet balsa. This top covering has been omitted completely on the Right Wing Panel Drawing and partially cut away on the Left Wing Panel Drawing for clarity. Also, since the drawing is covered by the bottom sheet covering right at the start of construction, it is recommended that you build one side at a time so you can use the opposite drawing for reference. Note too, that Wing Rib reference lines extend beyond Leading and Trailing Edges for easy rib location. Instructions and Assembly Sketches are for Right Hand Wing Panel. Using 1/16 x 3 x 12 Balsa Sheet cut the lower front covering to shape and pin in place. Sheet does not extend under Rib #55. Do the same with lower rear covering using 1/16 x 3 x 18 sheet. Pin and glue the #38 Gear Mechanism in place. Drill a 1/8" dia. hole at punch mark on #41 and glue it in place. Cut Leading Edge from 1/8 x 1/4 strip and glue in place on top of lower sheet covering as shown. Now glue Ribs #43, #47, #48 and #50 to #55 in place. Note again that lower sheets do not extend beneath Rib #55. Glue gusset #42 in place. Glue two WT's together as shown then pin and glue in place at Wing Tip. Please note wood grain direction on WT's. One should have grain running spanwise and the other opposite for maximum strength.



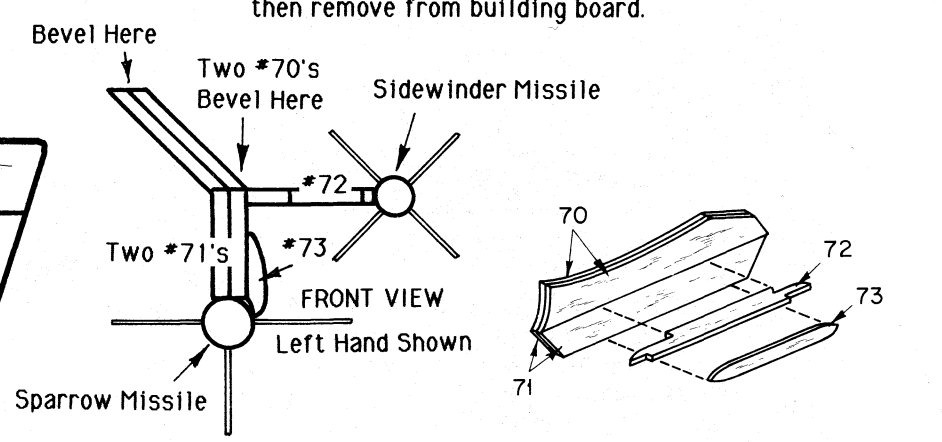
STEP 3

Glue Rib #44 in place as shown. Drill a 1/8" dia. hole at punch mark on #56 then glue #56 to top of ribs as shown. Using 1/8 x 3/8 and 1/8 x 1/4 strips, cut Main Spar pieces to length and shape and glue in place. Allow glue to dry thoroughly then remove Wing from building board and continue 1/8" dia. hole through bottom covering.



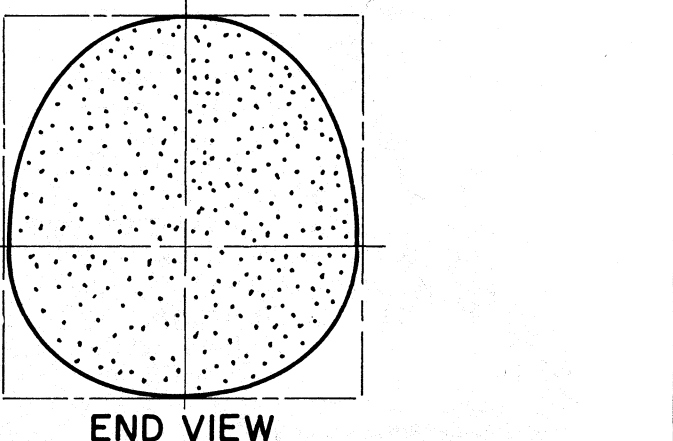
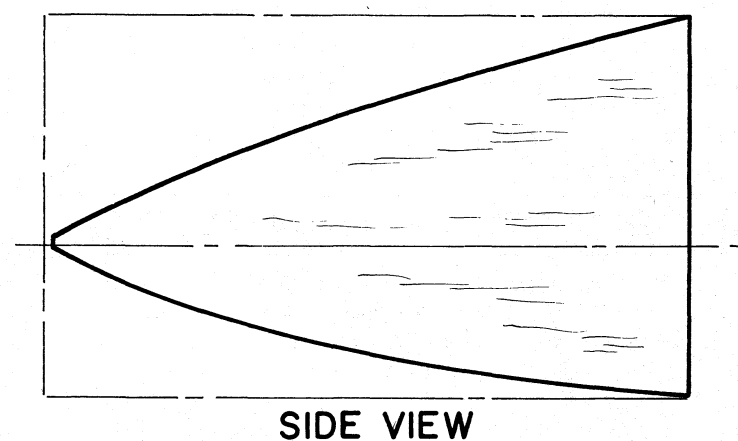
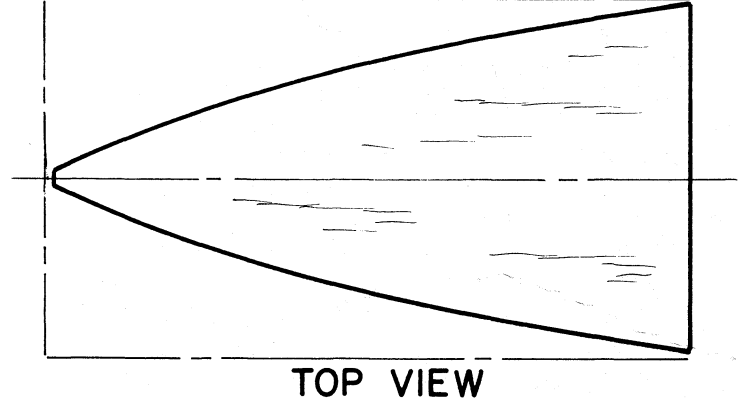
STEP 4

Taper Leading Edge strip to follow the shape of Ribs then cut Top Covering to size and shape using the same material used for bottom covering. Glue top sheets in place as shown. Again note that Top Covering does not go over Rib #55. When dry, sand entire Wing smooth. Continue 1/8" dia. hole up thru top covering. The Left Wing Panel is built in the same manner using of course the #37 Gear Mechanism with matching parts #39, #40, #45, #46 and #49.



GLOVE PYLON DETAIL

The Glove Pylons for mounting the Sidewinder and Sparrow Missiles are built by gluing two #70's together as shown. Also glue two #71's together. Cut angle on bottom of #70's as shown on Front View and glue #70's and #71's together. **BE SURE TO MAKE ONE RIGHT AND ONE LEFT HAND ASSEMBLY.** Glue #72 to outside of #70 as shown. Do likewise with #73. Note how #73 extends slightly below #71. Front View shows Missiles in place for clarity; they are mounted in Final Assembly. Sand Pylons smooth tapering front and rear to point. Pylons are painted gray and mounted in Final Assembly.

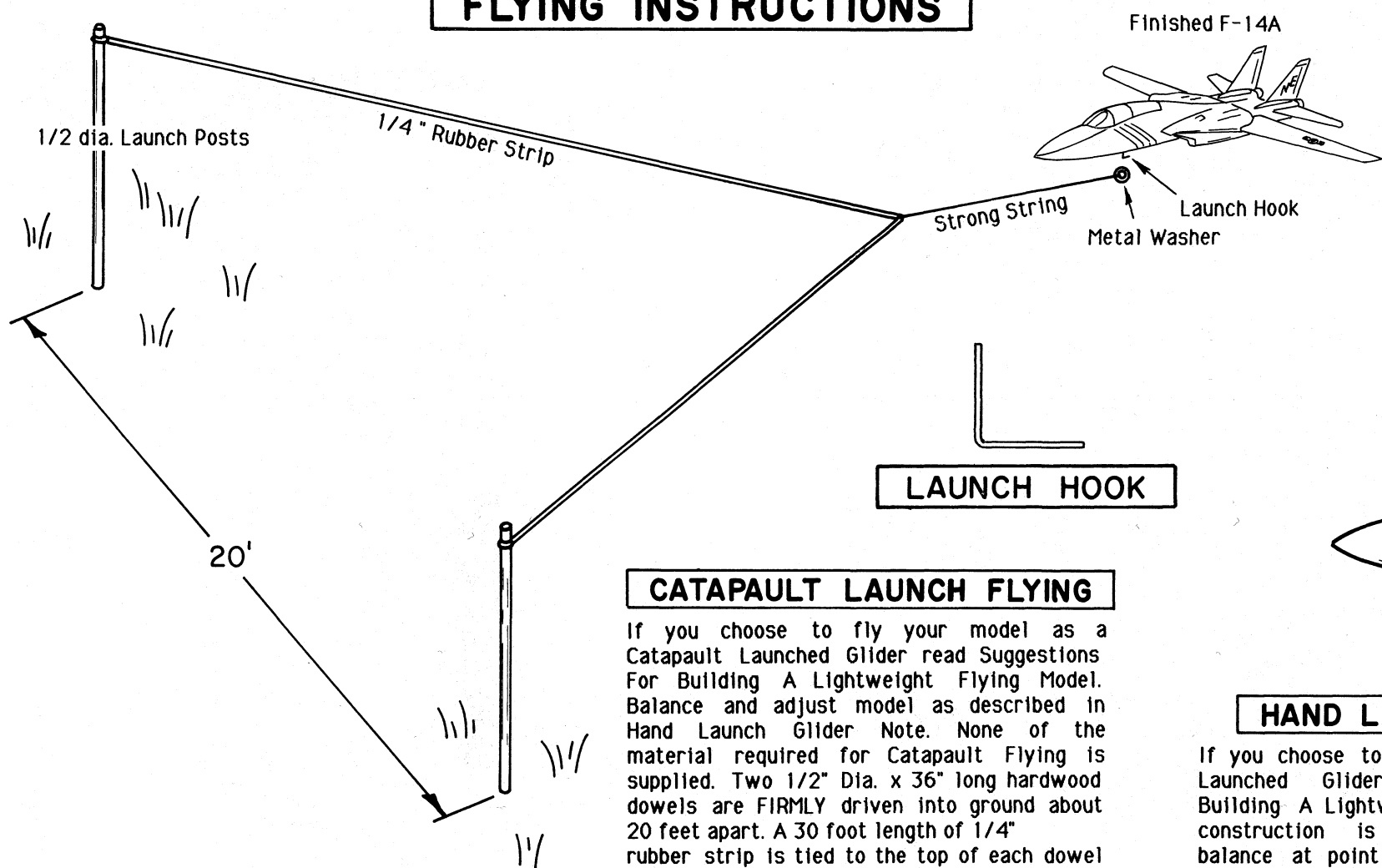


NOSE BLOCK DETAIL

Make balsa Nose Block using 1-7/8 x 2 x 3-3/8 stock. Trace off Side View, Top View and End View from plan. Trim and sand block to this shape and install in Final Assembly.

KIT J-4
F-14A TOMCAT
TODAYS HOBBIES INC.

FLYING INSTRUCTIONS



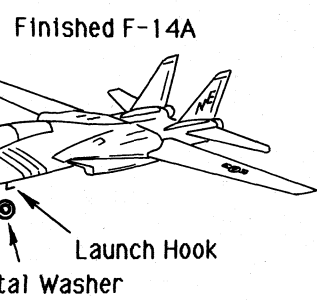
LAUNCH HOOK

CATAPULT LAUNCH FLYING

If you choose to fly your model as a Catapult Launched Glider read Suggestions For Building A Lightweight Flying Model. Balance and adjust model as described in Hand Launch Glider Note. None of the material required for Catapult Flying is supplied. Two 1/2" Dia. x 36" long hardwood dowels are FIRMLY driven into ground about 20 feet apart. A 30 foot length of 1/4" rubber strip is tied to the top of each dowel with a 5 foot length of strong string tied to middle of rubber strip. Now tie a metal washer to the other end of string. Bend a launch hook from wire using full sized drawing as pattern. firmly glue hook into bottom of fuselage sandwiched between bulkheads #22. When catapulting model, BE CERTAIN FLYING AREA IS CLEAR AND UNOBSTRUCTED, then slip washer over launch hook. Take steps backward, stretching rubber while holding model in flight position, then release model. Model will be launched forward and when it reaches the dowels, washer will slip from launch hook and model will glide free.

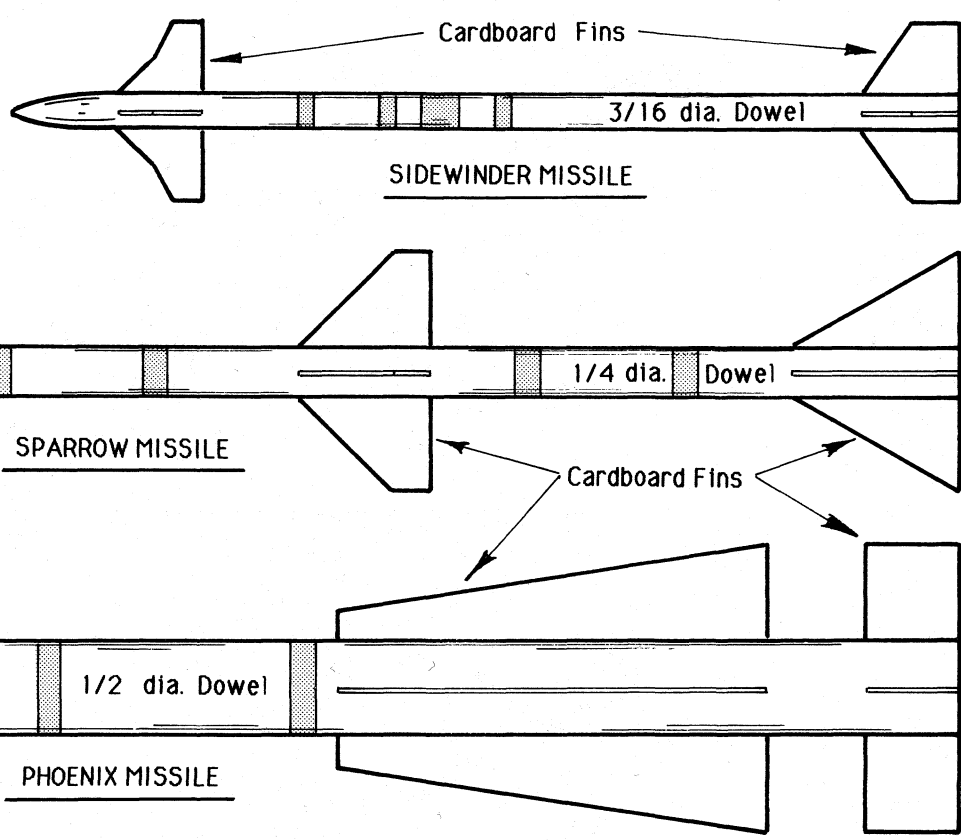
CAUTION

Do not fly any model in the vicinity of Electric Power Lines, or if flying sight is obstructed or spectators are in unsafe positions.



HAND LAUNCH FLYING

If you choose to fly your model as a Hand Launched Glider read Suggestions For Building A Lightweight Flying Model. After construction is completed, model MUST balance at point shown on Side View. Add weight as needed to nose or tail. Choose a calm day for flying and a field with tall grass for first test flights. Allow model to rest on your forward hand at air intake and push off hard and slightly nose down with your other hand. If model Stalls and balance is correct - adjust horizontal tail to a slightly down position. If model Dives adjust tail up slightly. Continue adjustments until model glides well. Remember - this is a scale model of a Jet Airplane. Flying speed is CRITICAL due to small wing area and heavy loading. Model will glide well under speed and drop quickly when flying speed is lost.



MISSILE DETAIL

Make two each of the Sidewinder, Sparrow and Phoenix Missiles. Cut the 3/16" dia., 1/4" dia. and 1/2" dia. Dowels to length for the Missiles and round off fronts as shown. Cut the Fins from cardboard sheet and glue in place. Note only three front fins are required on the Sparrows. All Missiles are painted white with Blue stripes. The Sidewinders also have one broad Black stripe. The front stripe only, on the Phoenix is Red. Missiles are installed in Final Assembly.

LOWER FAIRING COVER

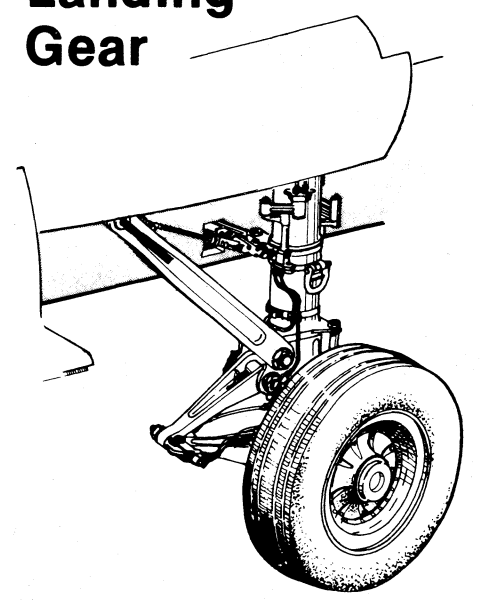
Cut From 1/16 x 3 x 12
 MAKE TWO

Air Bleed Door Location

UPPER FAIRING COVERS

Cut From 1/16 x 3 x 14
 MAKE TWO Each

Main Landing Gear

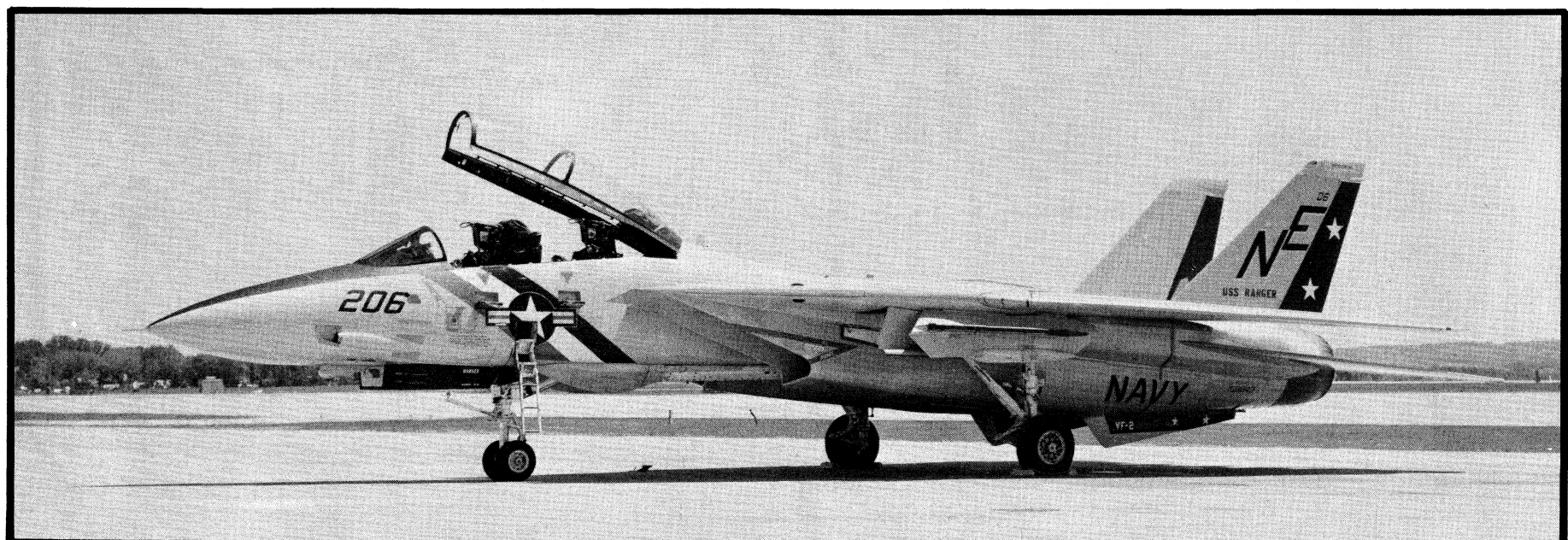


COURTESY OF U.S. NAVY

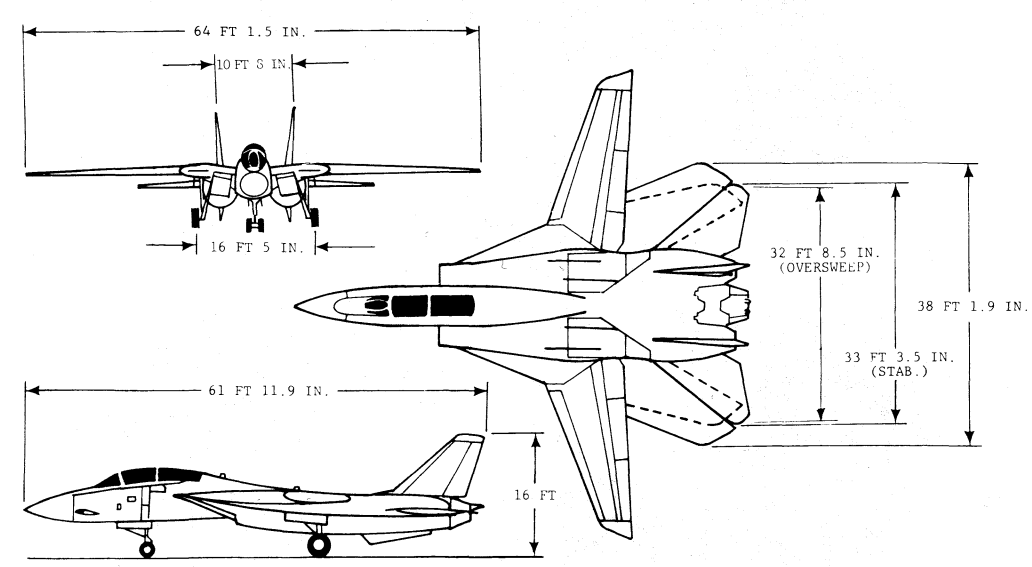
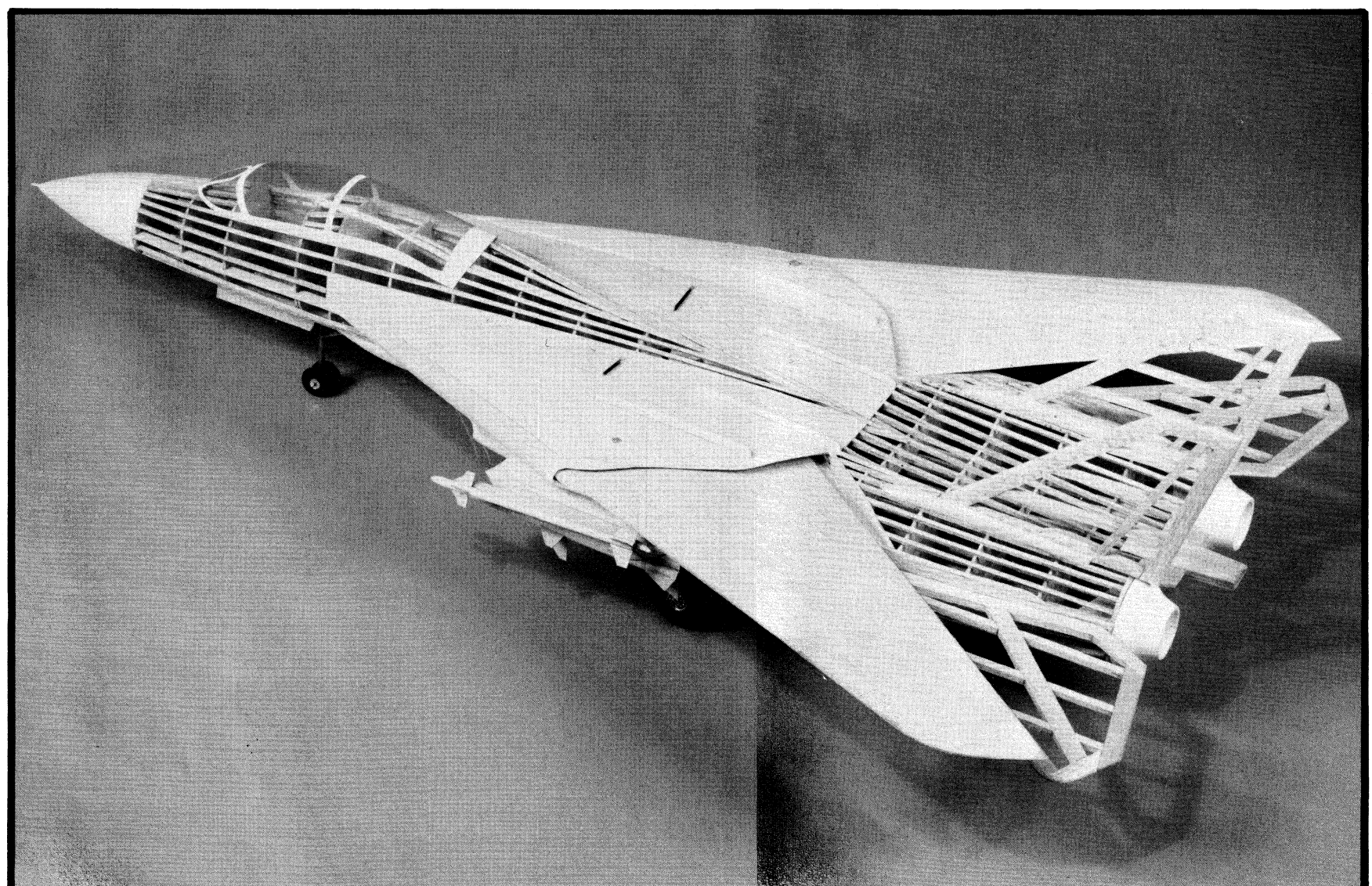
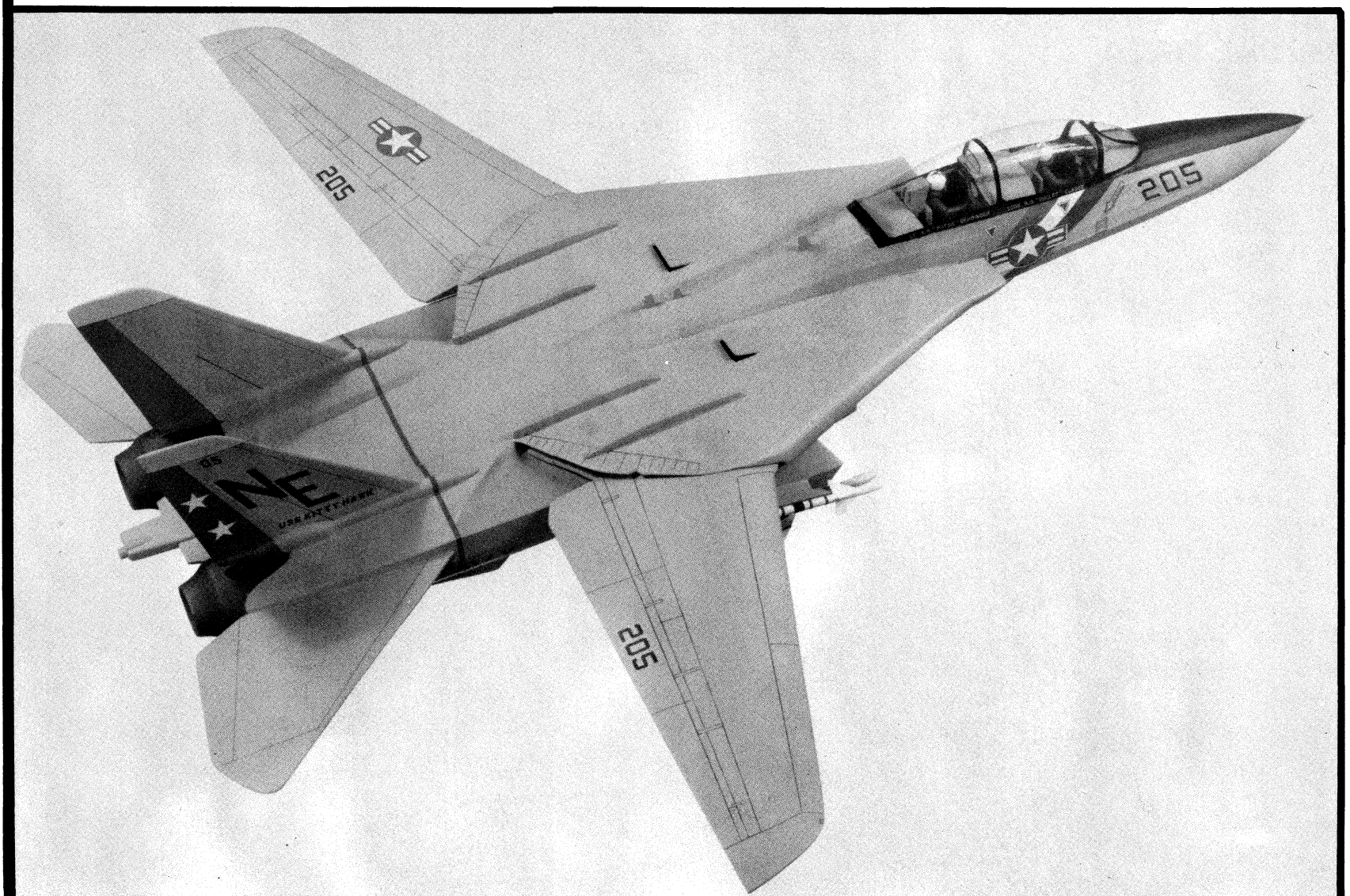


Nose Landing Gear

COURTESY OF U.S. NAVY



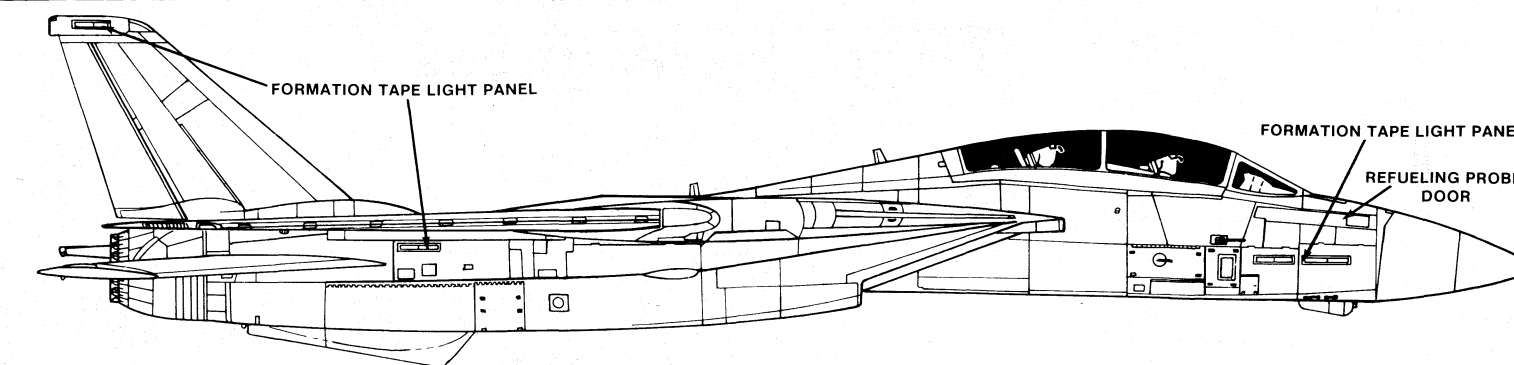
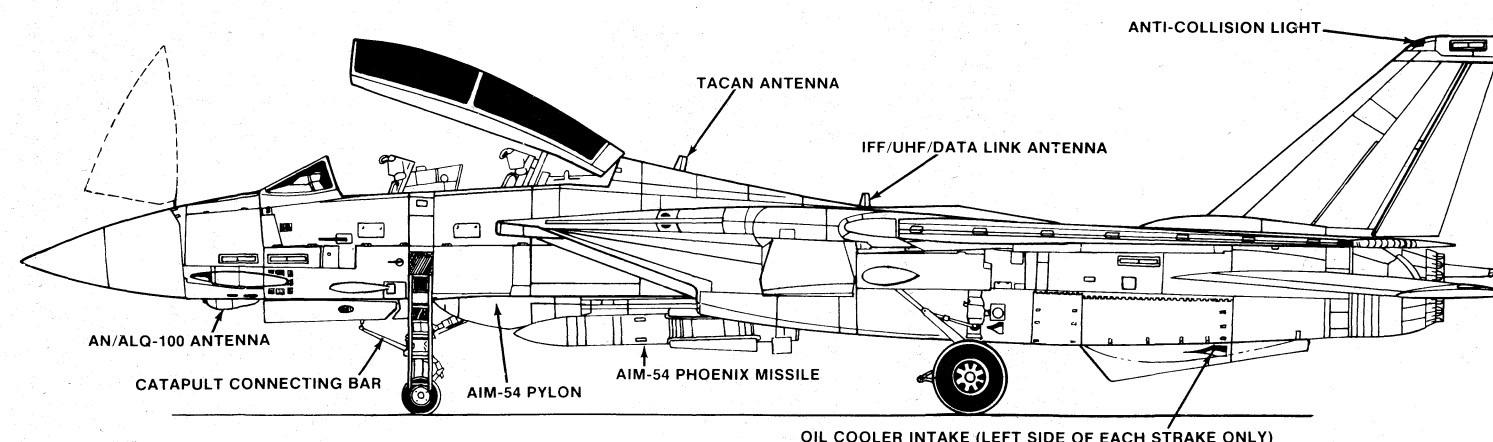
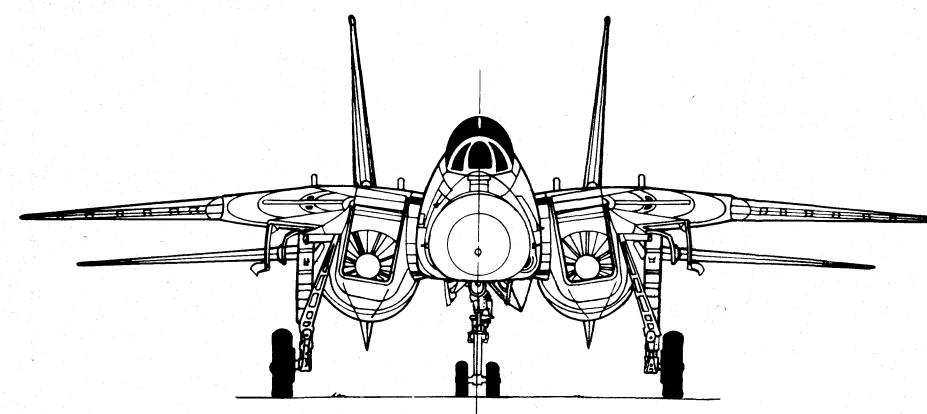
George Cockle Photo



DIMENSIONS

Wingspan (Extended)	64' 1.5"
Wingspan (Swept)	38' 1.9"
Wingspan (Overswept)	32' 8.5"
Length	61' 11.9"
Dist. between Vertical Tails at Tips	10' 8"
Track, Main Landing Gear	16' 5"
Horizontal Tail Span	33' 3.5"
Height	16' 0"

Actual dimensions supplied by U.S. Navy

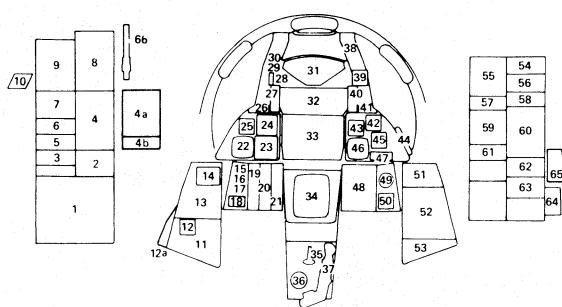


KEYS TO COCKPIT LAYOUTS

PILOT'S INSTRUMENT PANEL AND CONSOLES

NOTES

- 1. AIRCRAFT BUNO 158612 THRU 158601
- 2. AIRCRAFT BUNO 158631 AND SUBSEQUENT AND AIRCRAFT INCORPORATING AFC 35
- 3. AIRCRAFT BUNO 158678 AND SUBSEQUENT
- 4. AIRCRAFT BUNO 158602 AND SUBSEQUENT AND AIRCRAFT INCORPORATING AFC 181
- 5. AIRCRAFT BUNO 158678 AND SUBSEQUENT AND AIRCRAFT INCORPORATING AFC 599
- 6. AIRCRAFT BUNO 158687 AND SUBSEQUENT AND AIRCRAFT INCORPORATING AFC 529
- 7. AIRCRAFT BUNO 158678 AND SUBSEQUENT AND AIRCRAFT INCORPORATING AFC 334

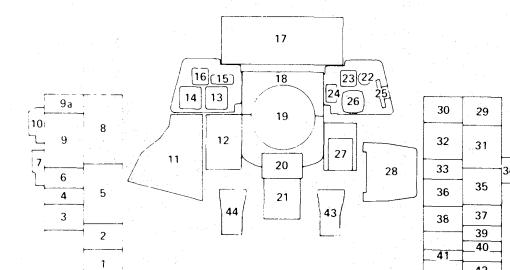


- LEFT SIDE CONSOLE**
1. O₂ VALVE POSITION
 2. OXYGEN VENT AIRFLOW CONTROL PANEL
 3. COMM NAV COMMAND CONTROL PANEL
 4. UHF JAMMING TSB
 5. UHF COMM SELECT PANEL
 6. TORQ VOL/REV CONTROL PANEL
 7. JFC CONTROL PANEL
 8. THROTTLE QUADRANT
 9. INLET RAMPTHROTTLE CONTROL PANEL
 10. TARGET DESIGNATE SWITCH
- LEFT VERTICAL CONSOLE**
11. FUEL MANAGEMENT PANEL
 12. CONTROL SURFACE POSITION INDICATOR
 13. LAUNCH BAR ABORT
 14. LANDING GEAR CONTROL PANEL
 15. WHEELS LAMP POSITION INDICATOR
- LEFT KNEE PANEL**
16. ENGINE PRESSURE RATIO INDICATOR
 17. EXHAUST NOZZLE POSITION INDICATOR
 18. HYDRAULIC PRESSURE INDICATOR
 19. ELECTRICAL TACHOMETER INDICATOR (IRPP)
 20. THERMOCOUPLE TEMPERATURE INDICATOR (TST)
 21. RATE OF FLOW INDICATOR (IFF)
- RIGHT INSTRUMENT PANEL**
22. SERVOHYDRAULIC ALTIMETER
 23. RADAR ALTIMETER
 24. AIRSPEED MACH INDICATOR
- RIGHT VERTICAL CONSOLE**
25. VERTICAL VELOCITY INDICATOR
 26. LEFT ENGINE FUEL SHUTOFF HANDLE
 27. ANGLE OF ATTACK INDICATOR
- RIGHT KNEE PANEL**
28. FUEL QUANTITY INDICATOR
 29. LIQUID OXYGEN QUANTITY INDICATOR
 30. CABIN PRESSURE ALTIMETER
- LEFT FRONT WINDSHIELD FRAME**
31. APPROACH INDEX KEB
 32. WHEELS WARNING LIGHT
 33. WHEELS WARNING LIGHT
 34. ACLS/AP WARNING LIGHT
 35. WHEELS LAMP POSITION INDICATOR
- CENTER PANEL**
36. HEAD DISPLAY
 37. AIR COMBAT MANEUVER PANEL
 38. VERTICAL DISPLAY INDICATOR (VDI)
 39. HORIZONTAL SITUATION DISPLAY
 40. PEDAL ADJUST HANDLE
 41. BRANK PRESSURE INDICATOR
 42. CONTROL STICK
- RIGHT FRONT WINDSHIELD FRAME**
43. ECG WARNING LIGHTS
 44. STANDBY COMPASS
- RIGHT INSTRUMENT PANEL**
45. WING SWEEP INDICATOR
 46. RIGHT ENGINE FUEL SHUTOFF HANDLE
 47. ACCELEROMETER
 48. STANDBY ATTITUDE INDICATOR
 49. CANOPY JETTISON HANDLE
 50. CLOCK
 51. BEARING DISTANCE HEADING INDICATOR (BDHI)
 52. UHF REMOTE INDICATOR

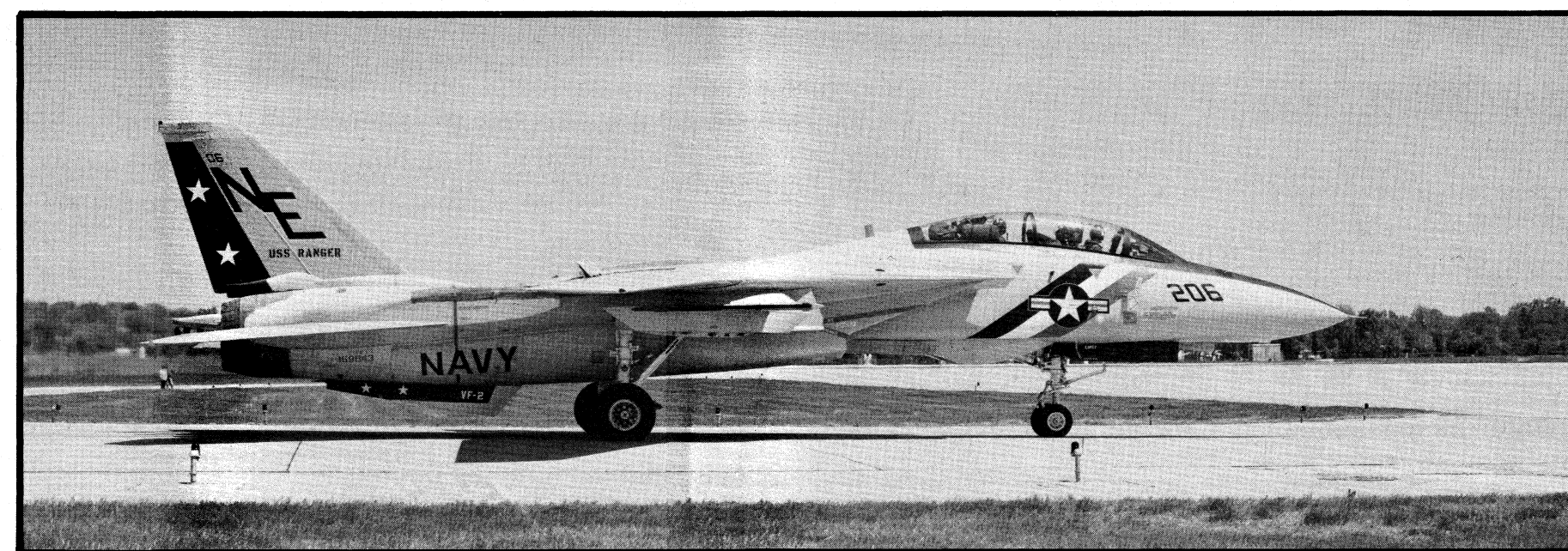
NFO INSTRUMENT PANEL AND CONSOLES

NOTES

- 1. AIRCRAFT BUNO 158678 AND SUBSEQUENT
- 2. AIRCRAFT BUNO 158612 AND SUBSEQUENT
- 3. AIRCRAFT BUNO 158678 AND SUBSEQUENT AND AIRCRAFT INCORPORATING AFC 599
- 4. AIRCRAFT BUNO 158678 AND SUBSEQUENT

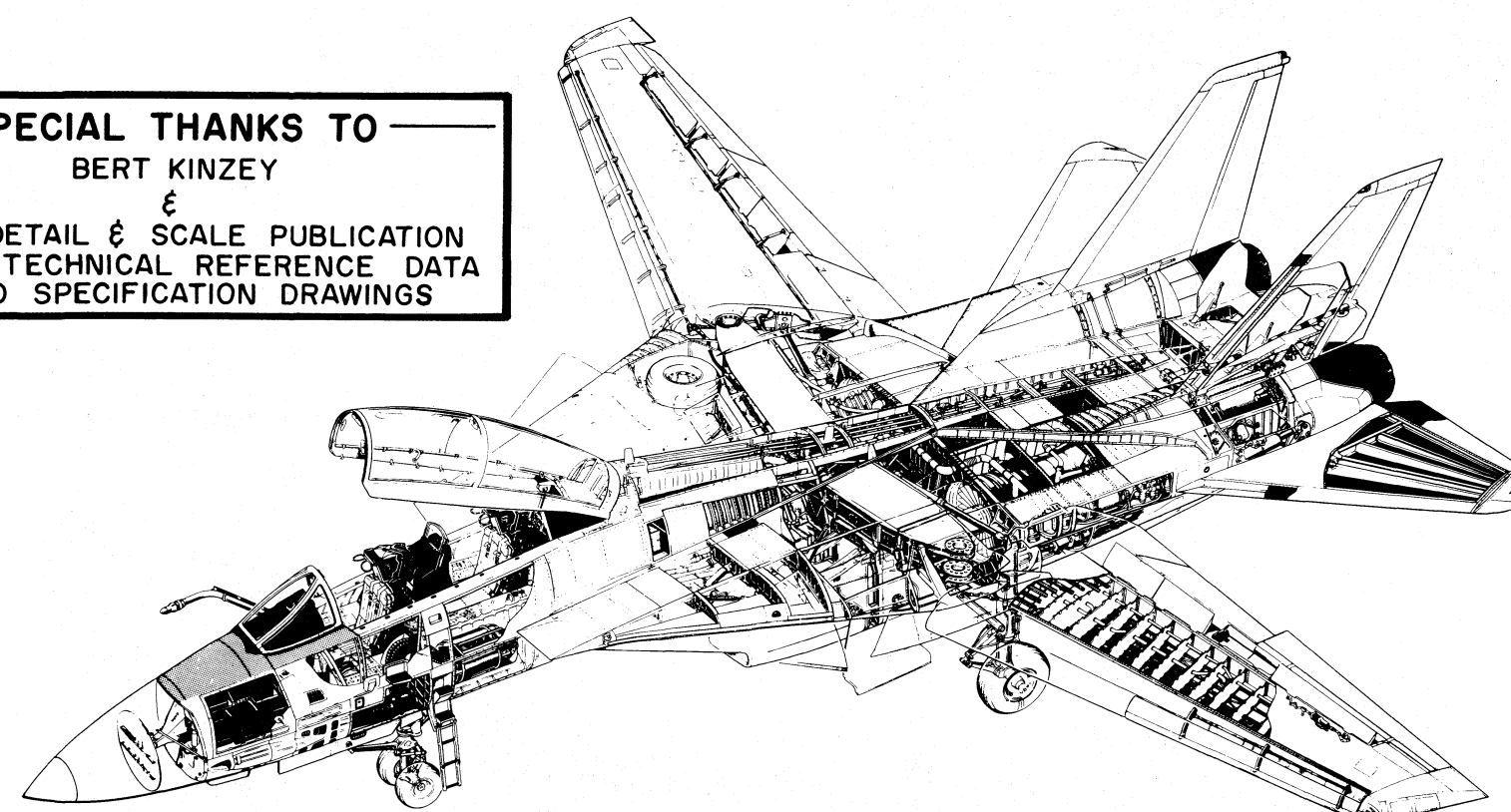


- LEFT SIDE CONSOLE**
1. O₂ VALVE POSITION
 2. OXYGEN VENT AIRFLOW CONTROL PANEL
 3. COMM NAV COMMAND PANEL
 4. ICS CONTROL PANEL
 5. INTEGRATED CONTROL PANEL
 6. TACAN CONTROL PANEL
 7. LIQUID COOLING CONTROL PANEL
 8. COMPUTER ADDRESS PANEL
 9. RADAR RPTV CONTROL PANEL
 10. UHF COMM SELECT PANEL
 11. EJECT COMMAND PANEL
- LEFT VERTICAL CONSOLE**
12. SYSTEM TEST - SYSTEM POWER PANEL
 13. DE TAIL DATA DISPLAY PANEL (DDDP)
- LEFT INSTRUMENT PANEL**
14. SERVOHYDRAULIC ALTIMETER
 15. AIRSPEED MACH INDICATOR
 16. UHF REMOTE INDICATOR
 17. STANDBY ATTITUDE INDICATOR
- CENTER PANEL**
18. NAVIGATION CONTROL AND DATA READOUT
 19. TACTICAL INFORMATION DISPLAY (TID)
 20. TACTICAL INFORMATION CONTROL PANEL
 21. HAND CONTROL UNIT
- RIGHT INSTRUMENT PANEL**
22. FUEL QUANTITY TOTALIZER
 23. CLOCK
 24. THREAT ADVISORY LIGHTS
 25. CANOPY JETTISON HANDLE
 26. BEARING DISTANCE HEADING INDICATOR (BDHI)
- RIGHT VERTICAL CONSOLE**
27. CAUTION ADVISORY PANEL
 28. MULTIPLE DISPLAY INDICATOR
- RIGHT SIDE CONSOLE**
29. DIGITAL DATA INDICATOR (DDI)
 30. ECG DISPLAY CONTROL PANEL
 31. DATA LINK REPLY AND INTERIOR LIGHT CONTROL PANEL
 32. ECG CONTROL PANEL
 33. DEFOG CONTROL LEVER
 34. DEFOG CONTROL LEVER
 35. TANK RESPONSE CONTROL PANEL
 36. CHAFF/LARV DISPENSE PANEL
 37. AAI CONTROL PANEL
 38. AN/ALQ-104 PROGRAMMER
 39. IFF ANTENNA AND TEST PANEL
 40. RADAR BEACON CONTROL PANEL
 41. IFF CR CONTROL PANEL
 42. ELECTRICAL POWER SYSTEM TEST PANEL
- LEFT AND RIGHT FOOT WELLS**
43. MI6 FOOT BUTTON
 44. ICS FOOT BUTTON



George Cockle Photo

SPECIAL THANKS TO BERT KINZEY & IN DETAIL & SCALE PUBLICATION FOR TECHNICAL REFERENCE DATA AND SPECIFICATION DRAWINGS



Tomcat Cutaway

COURTESY OF U.S. NAVY

F-14 TOMCAT TECHNICAL DATA

PERFORMANCE:

Maximum Speed	Mach 2.34
Cruise Speed	400-553 Knots
Approach Speed	120 Knots
Minimum Field Take Off Distance	1,000 Feet
Minimum Field Landing Distance	2,000 Feet
Service Ceiling	60,000 Feet
Effective Combat Wing Loading	40-50 PSF
Range	2,000 Miles

WEIGHTS:

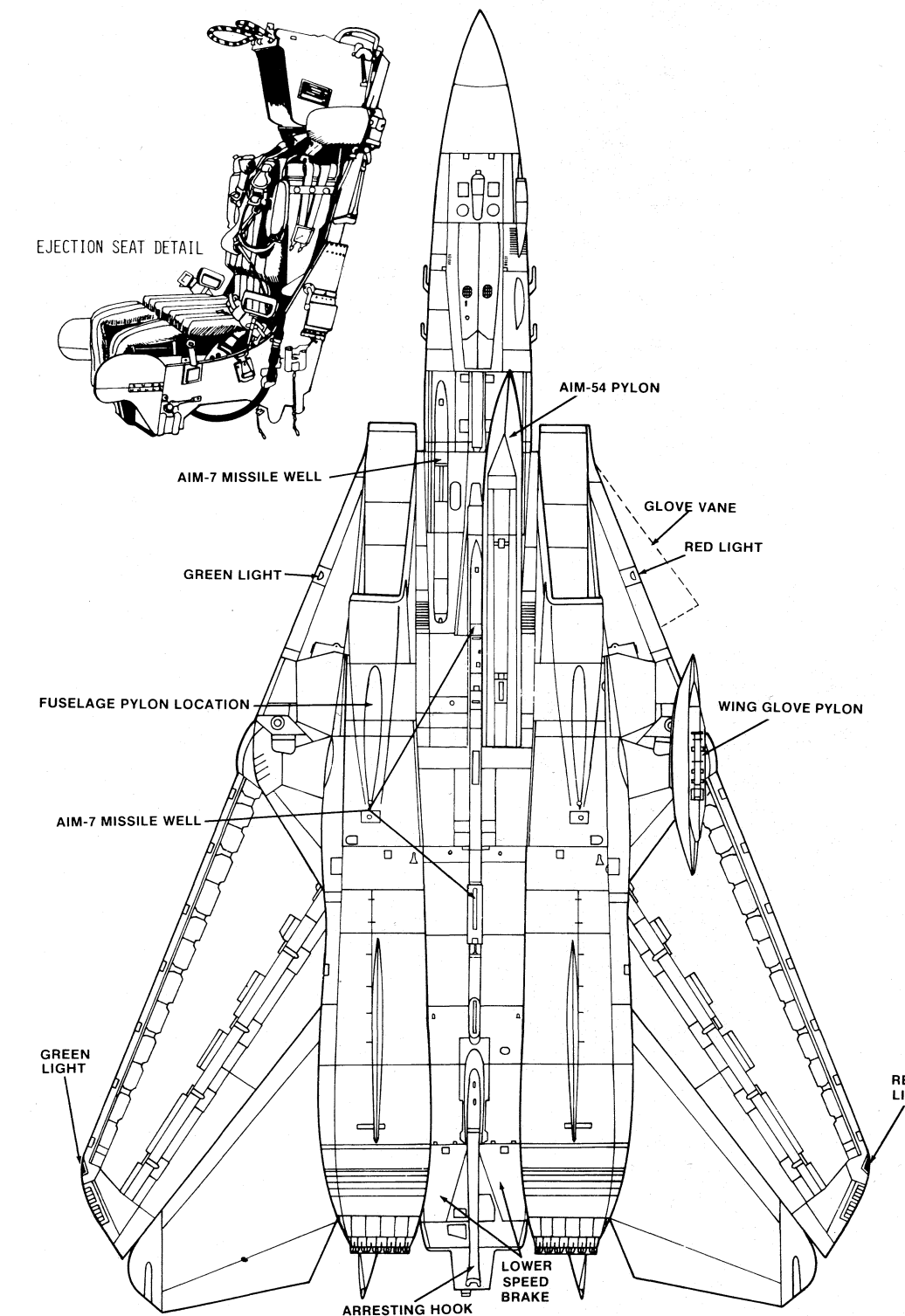
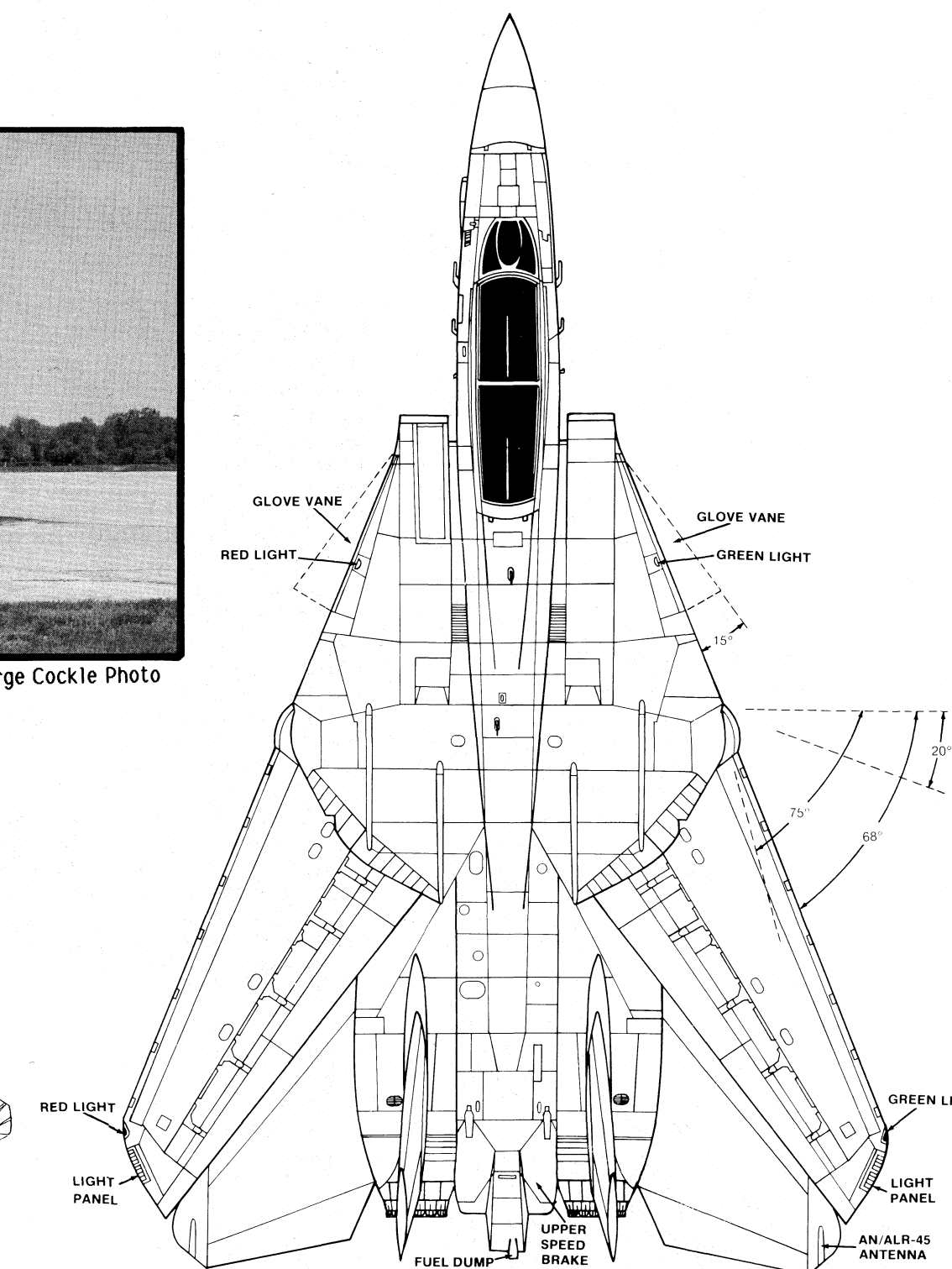
Empty	38,000 Pounds
Fighter T.O. with 4 Sparrows	56,000 Pounds
Fighter T.O. with 6 Phoenix	69,000 Pounds
Max Gross Weight	72,000 Pounds
Max External Stores	14,500 Pounds

ENGINES:

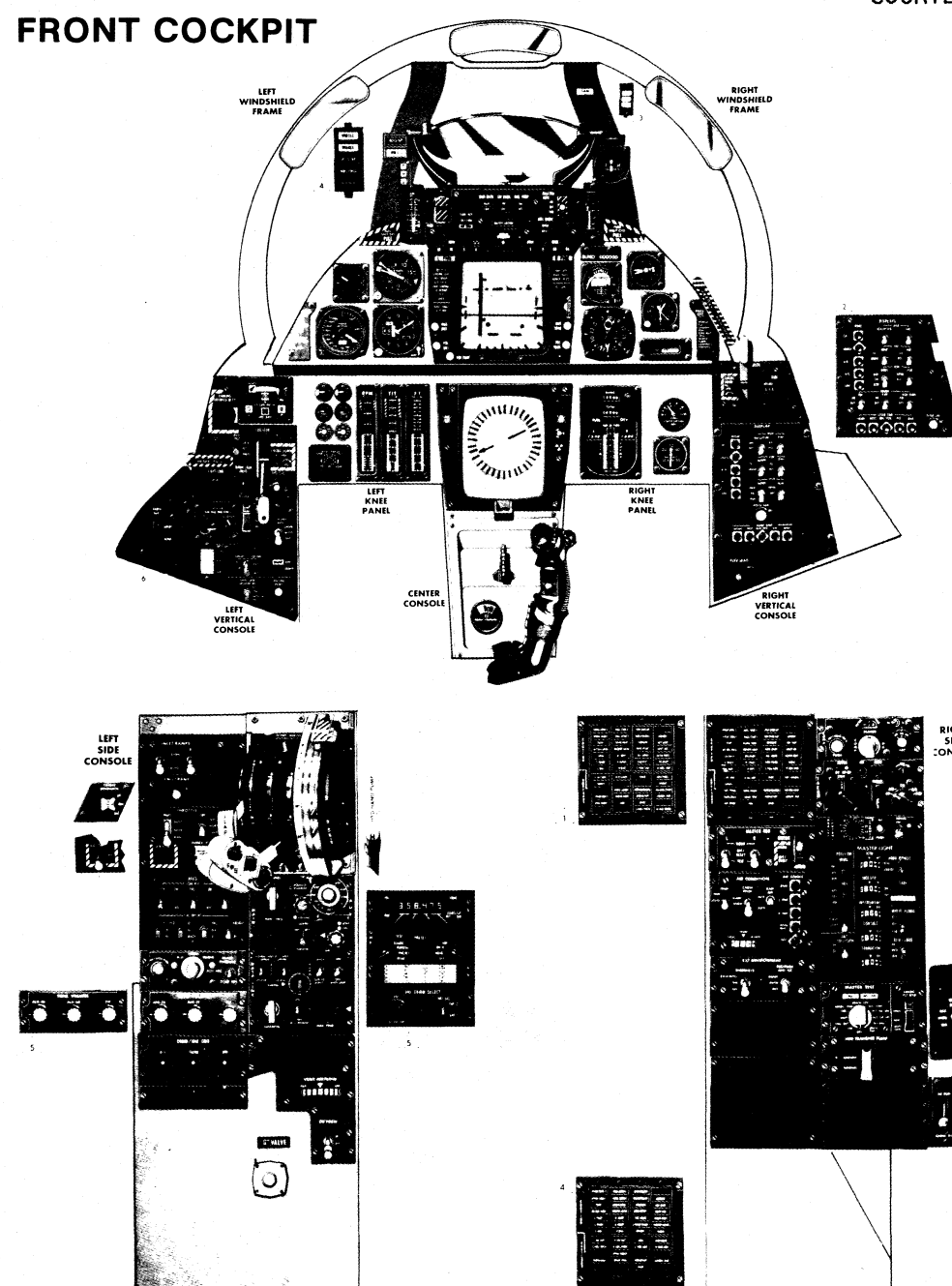
2 Pratt & Whitney TF 30-P-412A Turbofans	
Max Thrust (each)	20,900 Pounds
Internal Fuel	16,200 Pounds

MISSILES:

TYPE	LENGTH	DIAMETER	FIN SPAN	WEIGHT
AIM-7E Sparrow	143.71"	7.87"	39.37"/32.28"	441 Pounds
AIM-9H Sidewinder	113"	5"	15"/25"	190 Pounds
AIM-9L Sidewinder	113"	5"	22"/25"	190 Pounds
AIM-54A Phoenix	155.9"	15"	36"	985 Pounds



FRONT COCKPIT



REAR COCKPIT

