

HISTORY

Considered then to be a radical civilian aircraft, the twin-engined Cessna *Skymaster* was actually a very safe layout. The production airplane first flew in August of 1962. Designated the Model 336, it did not have retractable landing gear. In February of 1965 the retractable geared Model 337 *Skymaster* entered production. The U.S. Air Force quickly identified the civil *Skymaster* as being potentially useful in the war in Viet Nam and purchased a large quantity of, what was basically, the civil version with military paint. Designated the O-2B, the aircraft found wide use in the psychological warfare role as it beamed down messages through loudspeakers mounted on its sides.

The aging and slow O-1 *Bird Dog* needed replacement as a Forward Air Controller (FAC) aircraft. Cessna offered a modified Model 337 to fit the mission requirement. Air Force liked it and signed a contract on 29 December 1966. Designated O-2A, 501 were acquired before the aircraft's production ended.

The O-2A was built with additional windows in the upper and right fuselage sides, new communications electronics, strengthened wings and 4 underwing pylons to carry useful stores such as rockets, flares and 7.62 mm Miniguns. The O-2A proved capable and performed heroically in the FAC role.

23 nations went on to fly the O-2A. It still flies with the U.S. Navy in a bombing range control mission. Surplus O-2A's are also flown in the control of fire bombers as the fire bombers do their borane drops over burning forests. Without a doubt, the *Skymaster* has filled many useful functions.

SPECIFICATIONS

Wingspan	38'-2"
Length	29'-9"
Weight (Gross)	4,630 lb.
Power	2 Continental IO-360 flat 6 engines of 210 hp. ea.
Max. Speed	206 mph
Range	780 miles
Crew	1-2

REFERENCES

World Air Power, Bill Gunston, Crescent Books

Jane's All The World's Aircraft 1972-73, John W. R. Taylor, Jane's Yearbooks.

BEFORE STARTING

1. Study the illustrations and sequence of assembly before beginning.
2. Decide how much detail you wish to add to your model and whether or not you intend to modify or "convert" the basic model in any way. Study carefully all available reference material before beginning to ensure an authentic model.
3. Due to the amount of parts in this kit, do not detach the parts from the runner of the parts tree until you need them. This helps avoid confusion and lost parts.
4. When cementing the parts together, check the way one part fits together with another. This assures a neat job with no surprises.
5. Always remember when working with plastic model cement and paint to keep your work area well ventilated. The fumes from plastic modeling products can be harmful if inhaled.

PREPARATION OF PARTS

1. Never tear parts off the runner (parts tree). Use a Testor Hobby Knife, fingernail clippers, or a small wire cutters to remove the parts from the tree.
2. It is possible some parts may require a little attention with a file or sandpaper to ensure a proper fit and neat appearance. Hobby files and Testor Hobby Sandpaper appropriate for model building are available in most good hobby shops.
3. If you desire you may fill any seams (where parts go together) or imperfections with Testor Contour Putty for Plastic Models which is also available at good hobby shops.

PAINTING

You can obtain an excellent finish on your model using Testor finish preparation products and paints. Detailed descriptions of paint types and color are included on the pages that follow.

Good brushes are essential for proper detailing. Testor *Model Master* brushes are recommended and available at good hobby stores. Be sure you have the entire selection for all your modeling needs. Always clean them in Testor thinner, wash in soap and water, and store with bristles upward when not in use.

Wash plastic parts before detaching them from the parts tree. Warm water and liquid dishwashing detergent will remove the oils left from the manufacturing process. Let the parts dry and avoid excessive handling. Immediately before painting, wipe the parts with a "tac rag" (available at auto parts stores) to remove dust and lint.

Most small parts are best painted while still attached to the parts tree. You can also detach them and hold with tweezers or "magic" tape while painting. Paint in one direction only. If your paint is the correct thickness brush strokes will disappear as the color dries. If the paint seems too thick, thin with Testor Paint Thinner. Wheels may be detached from the parts tree and fit onto toothpicks or matchsticks for painting. Just hold the paintbrush against the edge of the wheel and rotate the stick and wheel to obtain a neat finish.

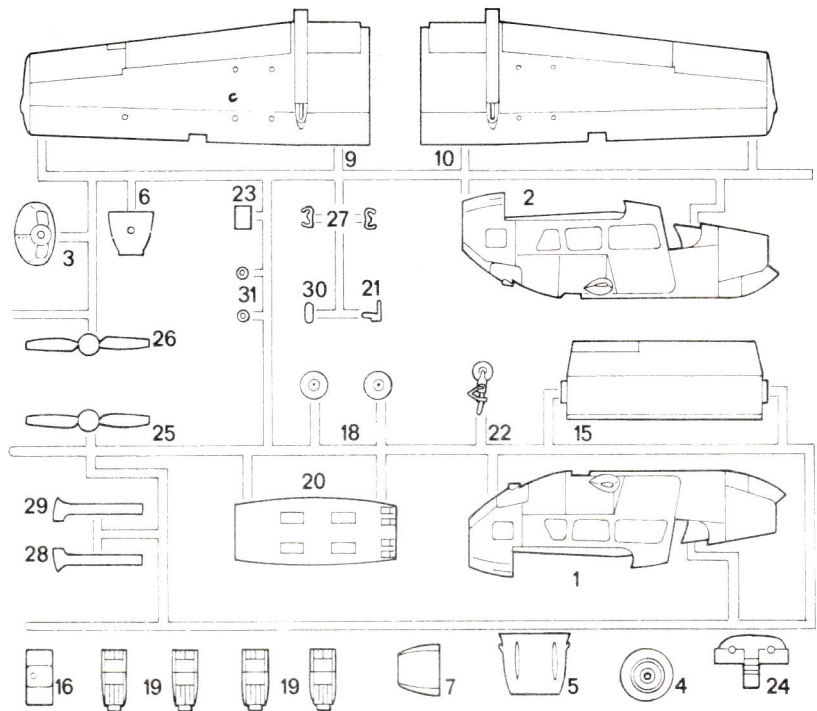
Let the paint dry completely before handling. When the parts are dry, assemble the model, following the directions closely. Remember cement will not hold strongly to painted surfaces. Use your Testor Hobby Knife to carefully remove paint from all surfaces to be cemented. After you have assembled the model you can touchup areas where cement might have marred the finish.

Use the drawings of the complete parts trees as a part locating reference while building the model.

Tweezers will be useful in assembling the many small parts in this kit. The type used by postage stamp collectors is recommended.

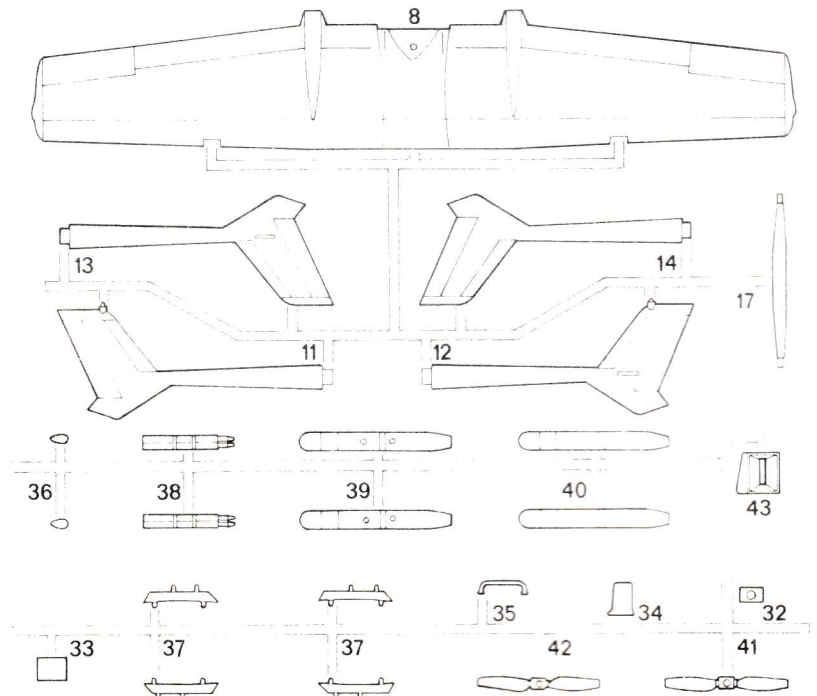
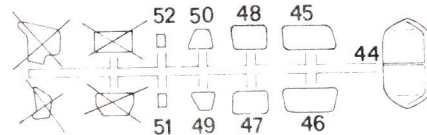
Liquid cement, Testor #3502, is recommended for construction since it can produce the neatest, quickest, and strongest glue joints. Apply small amounts of cement, using the tip of a Testor *Model Master* No. 2 brush, to the surfaces to be joined while holding the parts in place. **Do not** use large amounts of cement.

The Testor *Model Master* paint system is specially designed to be used on military models. The **Preliminary Painting** instructions on this sheet indicate which *Model Master* colors to use as indicated by name and Federal Standard (FS) number. These colors are called out by **bold italic type**. Wherever *Model Master* colors are not applicable the required Testor color will be called out by number and name in **regular bold type**.



APPLYING DECALS

- After carefully masking clear areas, spray entire model with Testor Glosscote #1261. Decals adhere best to a smooth surface and the shinier the finish the smoother it is. Allow the Glosscote to dry before going further.
- Select the decals you plan to use and cut them from the decal sheet with scissors or a Testor Hobby Knife.
- Working with only one decal at a time, dip the decal in clear water for no more than five seconds. Remove it from the water and place on a dry paper towel for about one minute.
- When the decal slides easily on the backing paper, slide it to the edge of, and onto, the surface of the model with a soft Testor *Model Master* paint brush or tweezers. Remember the decals are very thin and can be easily ripped. Work slowly and carefully.
- Once the decal is in the desired position apply a small amount of Testor Decal Set #8804. This will help the decal conform to any irregularities in the surface of the model. Allow the decal to dry undisturbed. Should you desire to purposely move it before it has dried, apply a little Decal Set to a soft brush and push the decal slowly to the desired position.
- When the decals are completely dry (usually overnight), apply a coat of Testor Dullcote, #1260, to the entire model. This will give it an authentic, dull finish and protect the surface of the model. Now you can carefully remove the masking from the clear parts.



Your Cessna O-2A Skymaster may be built as a USAF FAC (Forward Air Controller) Spotter used in Vietnam, or a current US Navy Bomb Range Observer from VFA-125 "Rough Raiders." Parts have also been included that will produce the O-2B - the choice is yours!

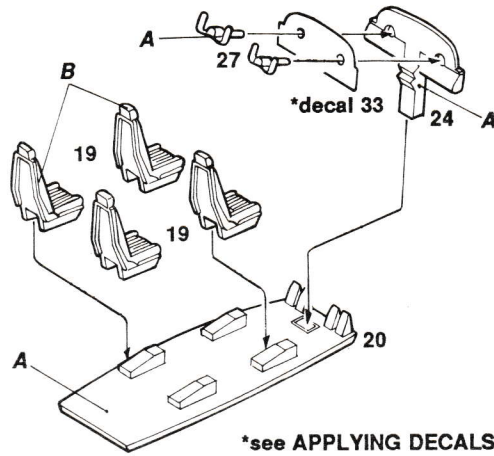
1 COCKPIT ASSEMBLY

Preliminary Painting

Paint parts as indicated by italic letter callouts using the **COLOR KEY** on this page.

Assembly

1. Cement four seats **19** onto cockpit floor **20**.
2. Apply instrument decal **33** to panel **24** and allow decal to dry. (See **APPLYING DECALS** on pg. 2.)
3. Cement two control columns **27** to panel **24**, then glue panel onto cockpit floor as shown.



*see **APPLYING DECALS** on pg. 2

2 FUSELAGE

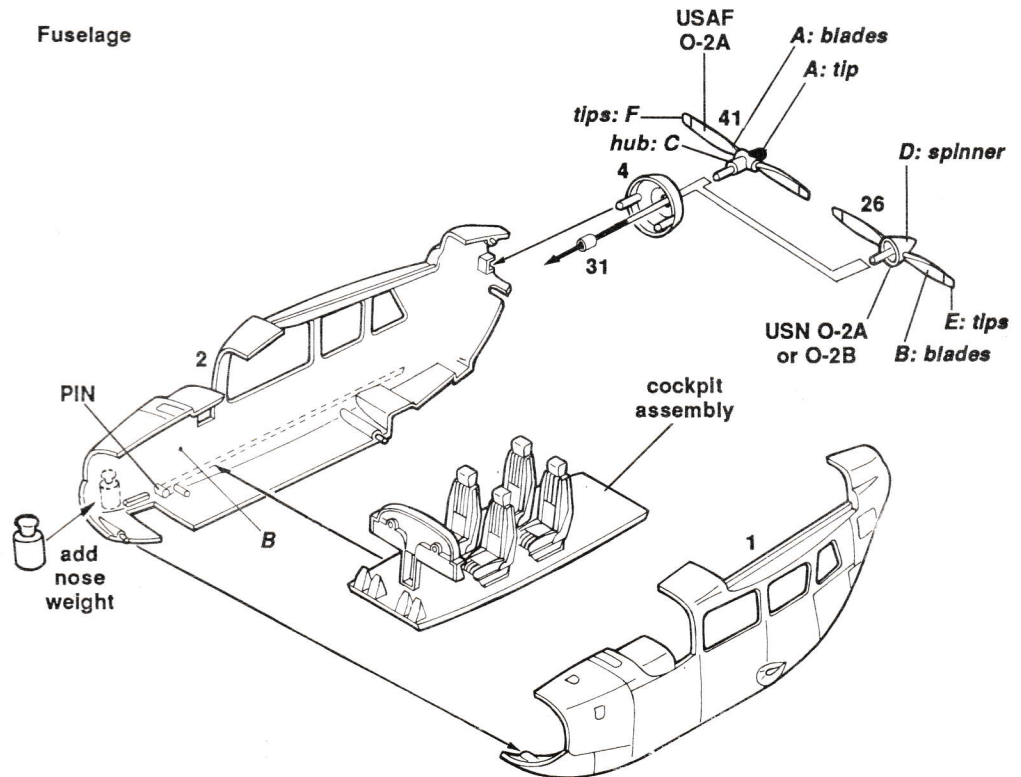
Preliminary Painting

Paint parts as indicated by italic letter callouts using the **COLOR KEY** on this page.

Assembly

1. Glue **cockpit assembly** into right fuselage half **2** as shown. Be sure the floor is up against the pin at the front.
2. Weight must be added inside nose before gluing fuselage halves together so model will rest properly on its nose gear. At least 1/2 oz. of weight should be added. We recommend lead fishing split shot. These weights can be held in place with modeling clay or epoxy glue, **do not** use model cement.
3. Glue fuselage halves **1** and **2** together, making sure that **cockpit assembly** is aligned between them properly. Let fuselage dry thoroughly before proceeding.
4. **For USAF O-2A:** If you are building the USAF O-2A (see pg. 10), insert (*do not cement*) propeller **41** into cowl **4** and *carefully* glue retainer **31** onto the tip of propeller shaft from backside of cowl. Be sure that cement does not touch cowl or propeller will not turn. Cement cowl to rear of fuselage as shown.
5. **For US Navy O-2A or USAF O-2B:** If you prefer to build the US Navy O-2A (see pg. 11), or a USAF O-2B, insert (*do not cement*) propeller **26** into cowl **4** and *carefully* glue retainer **31** onto the tip of propeller shaft from backside of cowl. Make sure cement does not touch cowl or propeller won't turn. Glue cowl to rear of fuselage as shown.

Fuselage



COLOR KEY

- A* No. 1749 Flat Black FS 37038
- B* No. 1740 Dark Gull Gray FS 36231
- C* No. 1780 Steel
- D* No. 1790 Chrome Silver FS 17178
- E* No. 1708 Insignia Yellow FS 33538
- F* No. 1745 Insignia White FS 17875
- G* No. 1795 Gunmetal
- H* No. 1103 Red
- J* No. 1124 Green
- K* No. 1731 Aircraft Gray FS 16473

A Note to Advanced Modelers

If you are constructing your model as an O-2A, **window decals 36, 37, 38 and 39** may be applied as directed on pgs. 10 and 11, then when dry, can be used as an outlining guide to cut out the window openings in fuselage halves and wing. Once the openings have been cut out and the edges sanded evenly and smooth, you can carefully cement the windows - provided on the clear parts tree - in place. It would be best to do this during **Steps 2 and 4**.

3 FUSELAGE FINAL ASSEMBLY

Preliminary Painting

Paint parts as indicated by italic letter callouts using the **COLOR KEY** on this page.

Assembly

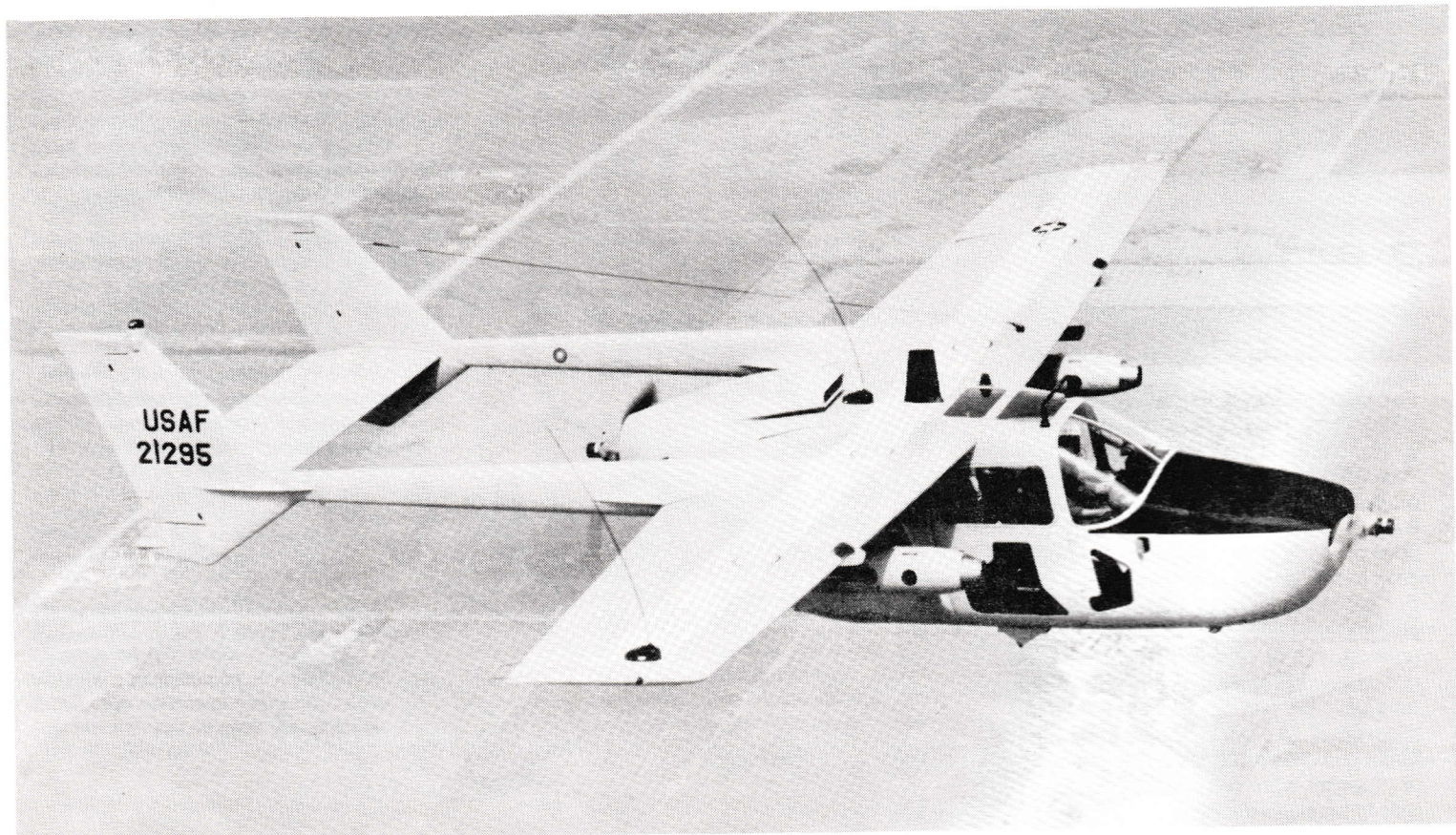
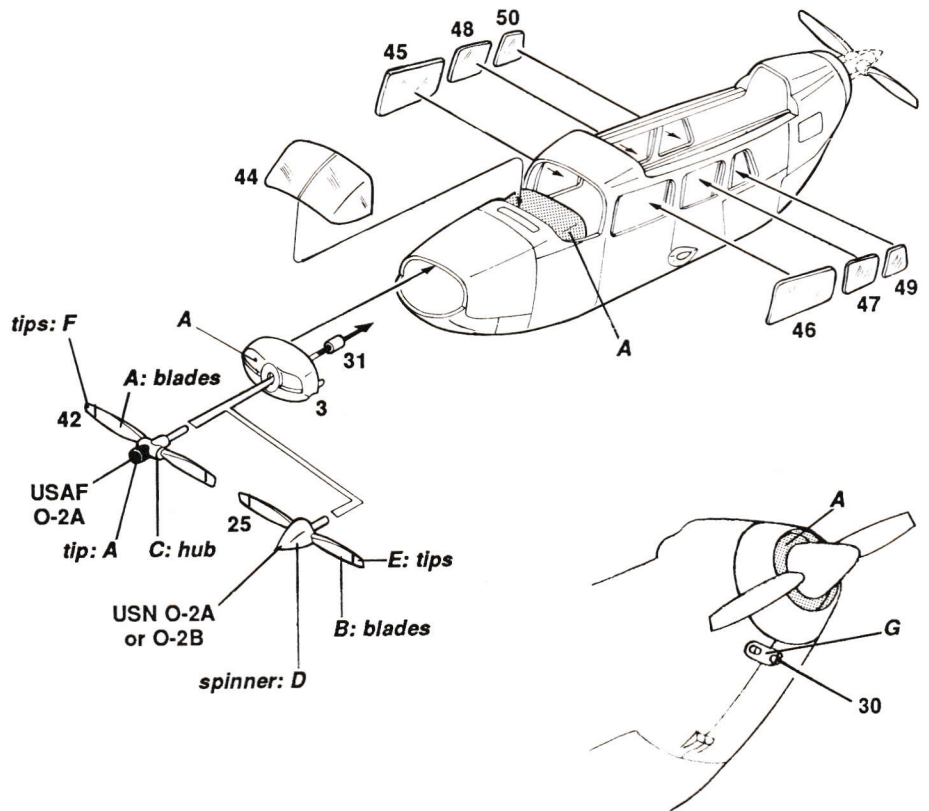
1. *Carefully* glue left side windows 46, 47 and 49 and right side windows 45, 48 and 50 into place as shown.
2. **For USAF O-2A:** Insert (*do not cement*) propeller 42 into nose cowl 3 and *carefully* glue retainer 31 onto the tip of propeller shaft *only* - from backside of cowl. Glue nose cowl to front of fuselage as shown.
3. **For US Navy O-2A or USAF O-2B:** Insert (*do not cement*) propeller 25 into nose cowl 3 and *carefully* glue retainer 31 onto tip of propeller shaft *only* - from backside of cowl. Glue nose cowl to front of fuselage as shown.
4. *Carefully* glue windshield 44 in place. Glue rear exhaust 30 in place as shown.

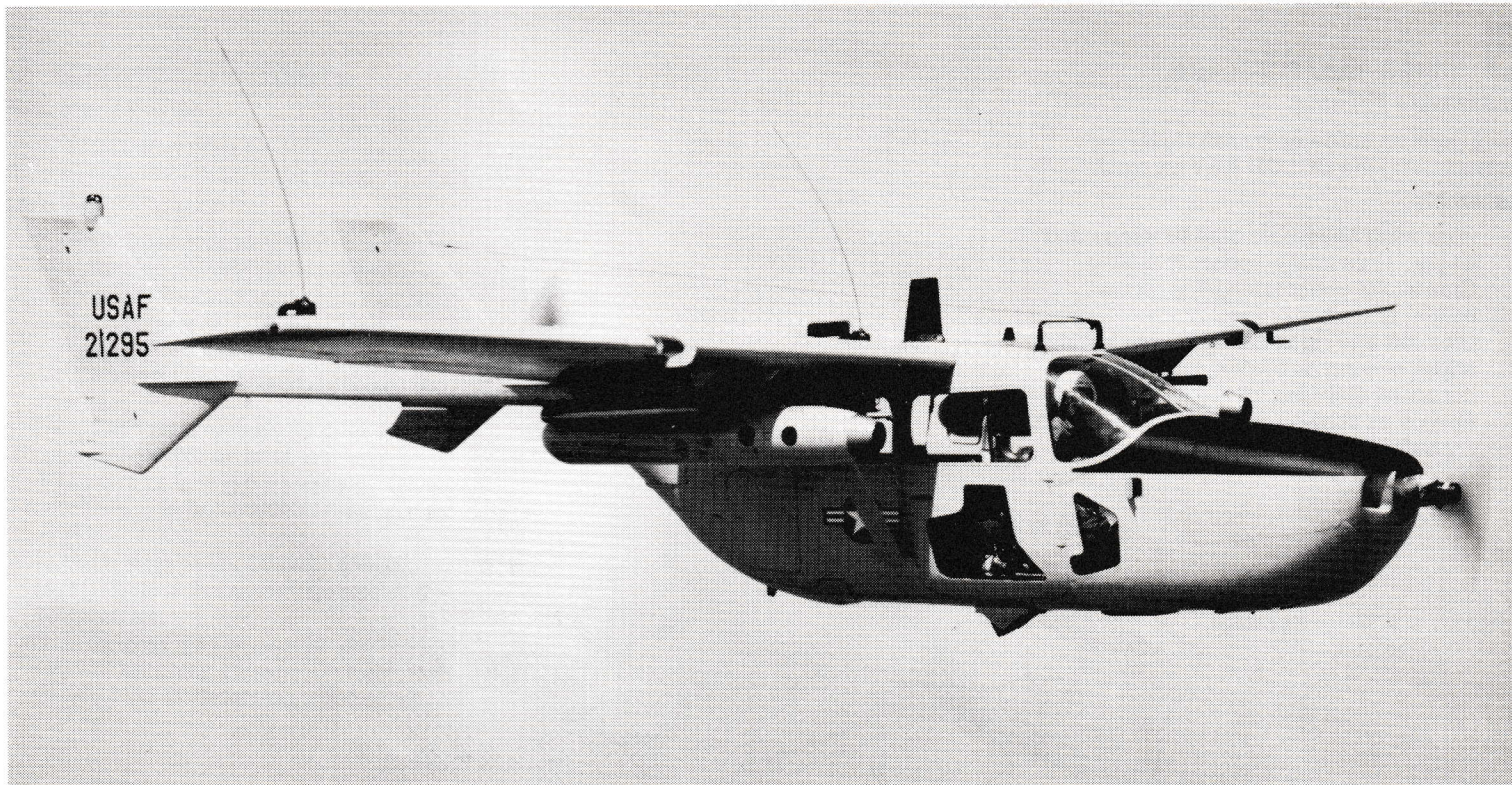
COLOR KEY

- A** No. 1749 Flat Black FS 37038
B No. 1740 Dark Gull Gray FS 36231
C No. 1780 Steel
D No. 1790 Chrome Silver FS 17178
E No. 1708 Insignia Yellow FS 33538
F No. 1745 Insignia White FS 17875
G No. 1795 Gunmetal
H No. 1103 Red
J No. 1124 Green
K No. 1731 Aircraft Gray FS 16473

Fuselage Final Assembly

Note: Clear parts are best glued in place with white glue. White glue will not mar the plastic and thus results in a better appearance than conventional model cement.





A Note to Advanced Modelers

If you are constructing your model as an O-2A, window decals 36, 37, 38 and 39 may be applied as directed on pgs. 10 and 11, then when dry, can be used as an outline guide to cut out the window openings in fuselage halves and wing. Once the openings have been cut out and the edges sanded evenly and smooth, you can carefully cement the windows - provided on the clear parts tree - in place. It would be best to do this during Steps 2 and 4.

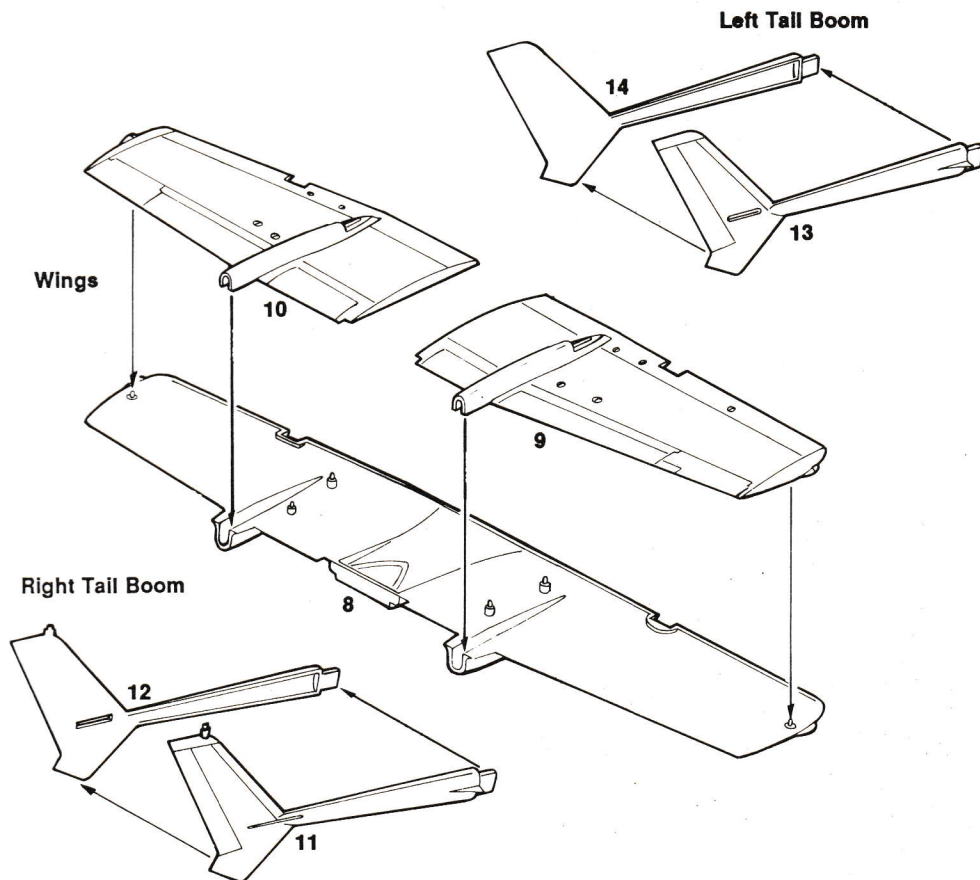
4 WINGS / TAIL BOOMS ASSEMBLY

Preliminary Painting - None.

Assembly

1. **Wings:** Cement upper wing halves 9 (right) and 10 (left) to lower wing half 8 as shown. Set aside to dry.
2. **Left Tail Boom:** Glue left tail boom halves 13 (inner) and 14 (outer) together and set aside to dry.
3. **Right Tail Boom:** Glue right tail boom halves 12 (inner) and 11 (outer) together and set aside to dry.

Wings/Tail Boom Assembly



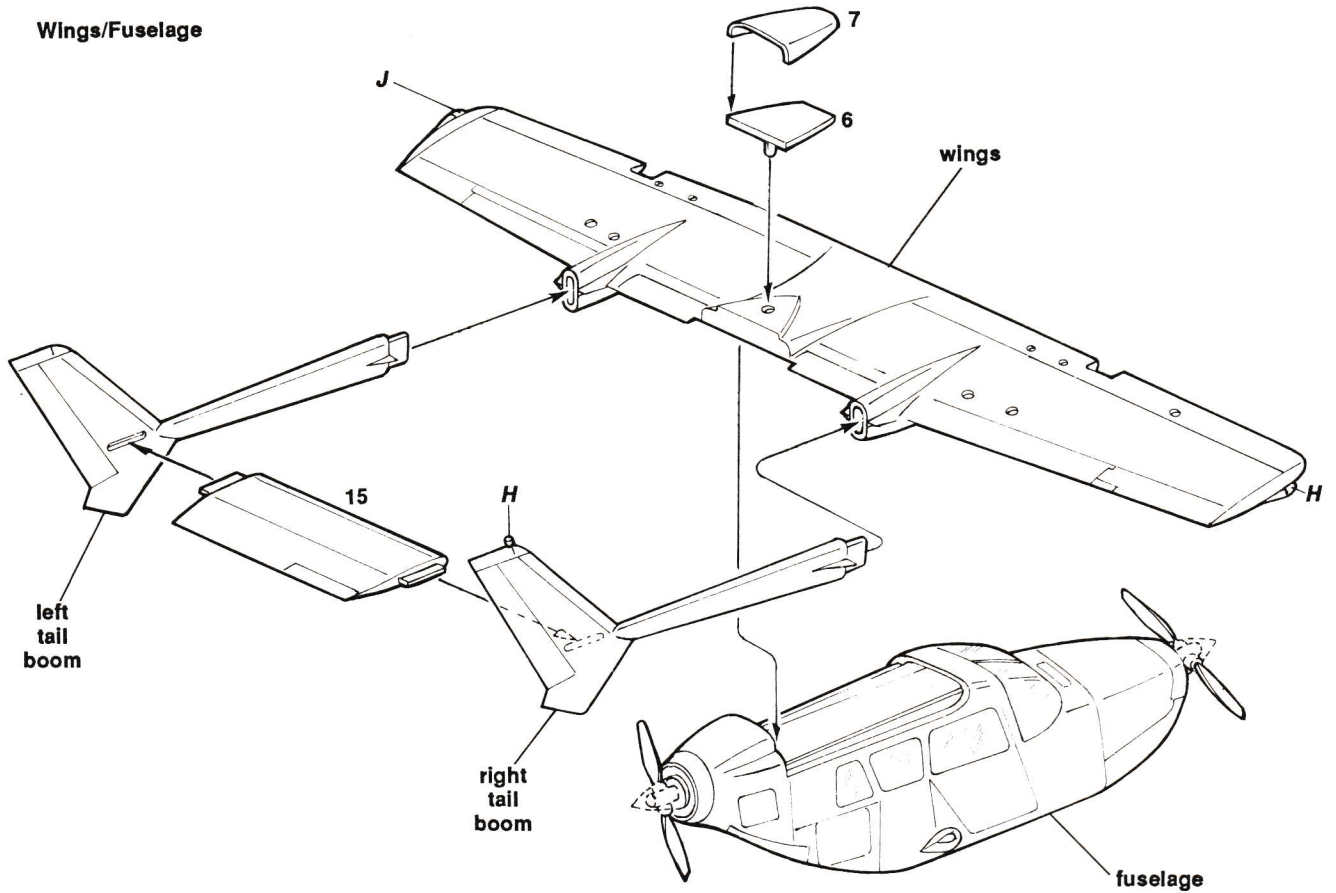
5 WINGS/ TAIL/ FUSELAGE

Preliminary Painting

Paint parts as indicated by italic letter callouts using the **COLOR KEY** on pg. 7.

Assembly

1. Glue **wing assembly** onto **fuselage** and let dry. Glue intake bottom **6** to wing. Glue intake upper fairing **7** to intake bottom **6**.
2. Glue **left** and **right tail boom** onto trailing edges of **wing** as shown, then cement horizontal stabilizer **15** between the **tail booms** as shown. Set model aside to dry before proceeding to next step.



6 LANDING GEAR/ STRUTS

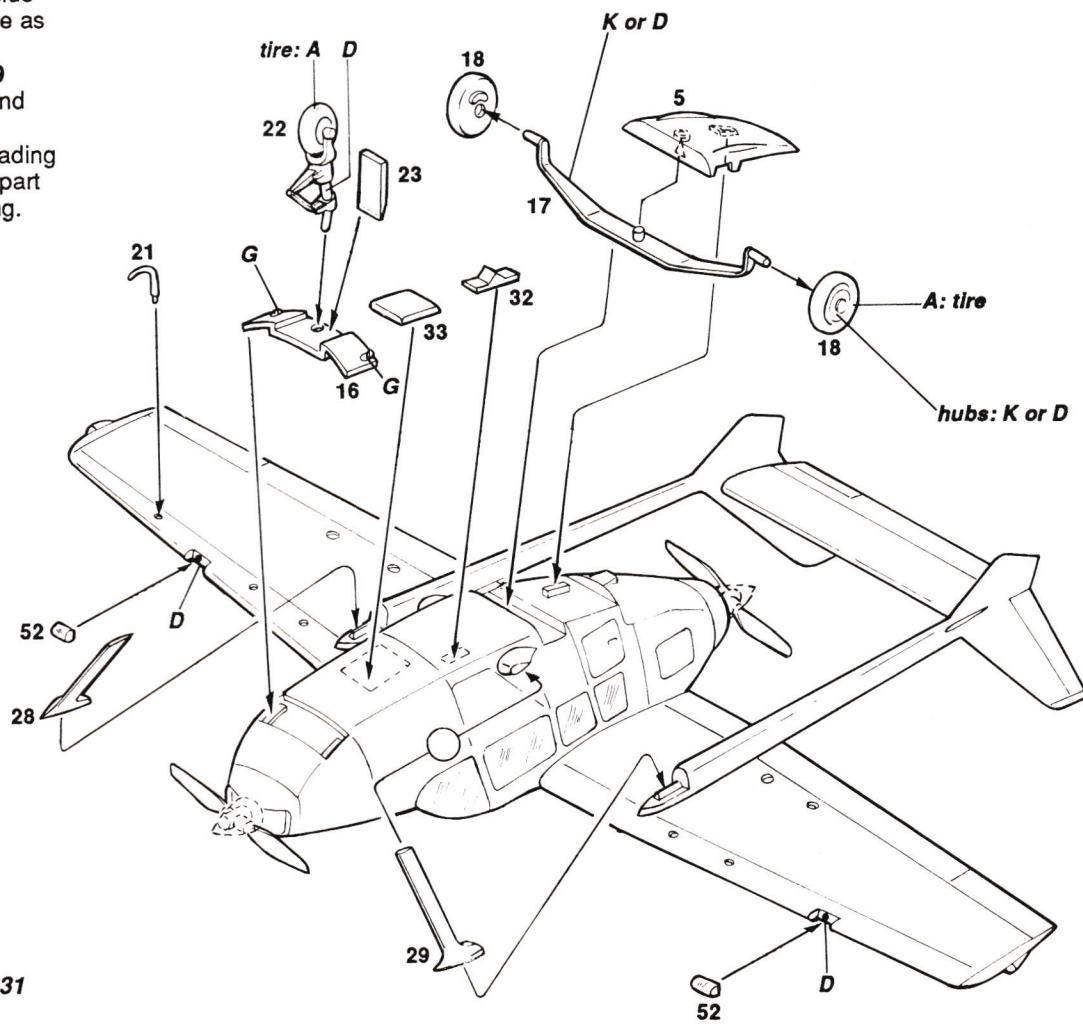
Preliminary Painting

Paint parts as indicated by italic letter callouts using the **COLOR KEY** below.

Assembly

1. Cement nosegear well **16** into opening in underside of fuselage as shown. Glue nose wheel **22** and nosegear door **23** to nosegear well **16** as shown.
2. Cement parts **32** and **33** to areas indicated on underside of fuselage as shown.
3. Glue main gear wheels **18** onto strut **17**, then cement pin on strut into hole in underside of fairing **5** as shown. Glue strut/fairing to underside of fuselage as shown.
4. Cement wing struts **28** (left) and **29** (right) in place between fuselage and wings as shown.
5. Glue landing light lenses **52** into leading edge of wings as shown. Cement part **21** into hole in underside of left wing.

Landing Gear/ Struts



COLOR KEY

- A No. 1749 Flat Black FS 37038
- B No. 1740 Dark Gull Gray FS 36231
- C No. 1780 Steel
- D No. 1790 Chrome Silver FS 17178
- E No. 1708 Insignia Yellow FS 33538
- F No. 1745 Insignia White FS 17875
- G No. 1795 Gunmetal
- H No. 1103 Red
- J No. 1124 Green
- K No. 1731 Aircraft Gray FS 16473

Note: It may be easier to paint and decal your model if underwing stores and/or armament are left off until model is completely finished.

O-2A ONLY

7 O-2A ONLY FINAL ASSEMBLY

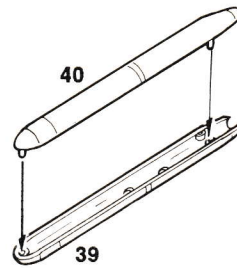
Preliminary Painting

Paint parts as indicated by italic letter callouts using the **COLOR KEY** on this page.

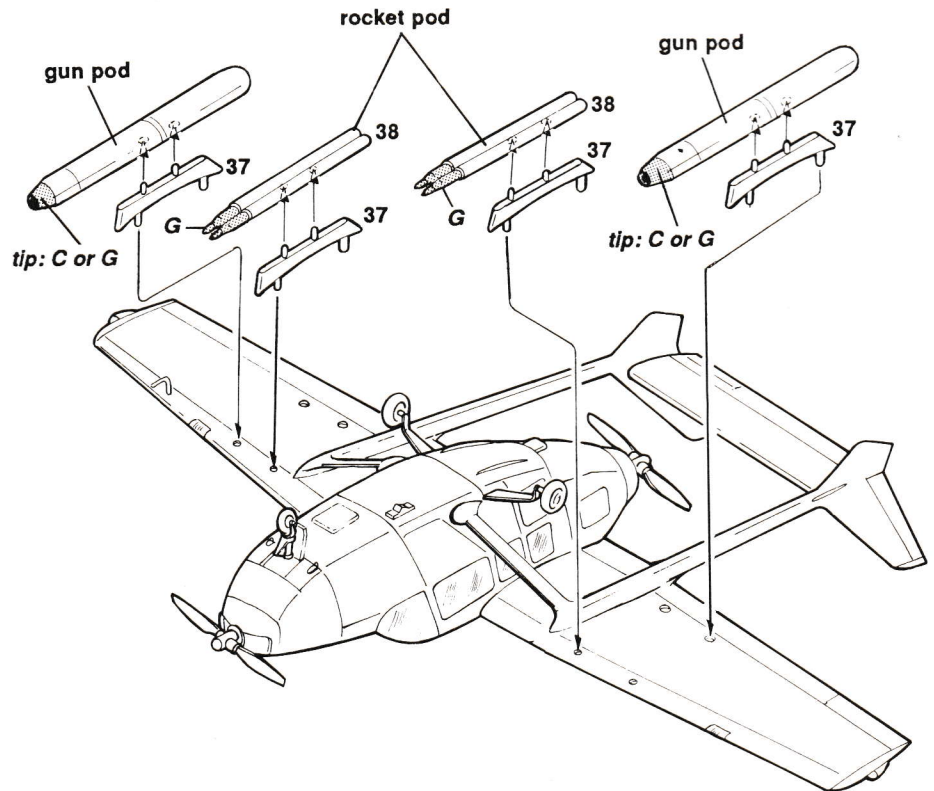
Assembly

1. Refer to **Figure A** and cement gun pod halves **39** and **40** together, make 2 **gun pod assemblies** and let them dry before handling.
2. Cement four armament pylons **37** into holes in underside of wings as shown.
3. Glue rocket pods **38** onto the pins of inboard armament pylons as shown. Cement the two **gun pods**, assembled above, in place on outboard armament pylons as shown.
4. Glue parts **34**, **35** and two **36** onto top of wing as shown. Refer to **Figure B** and make two antennae as shown, using a piece of scrap parts tree heated *carefully* over a flame, then stretching it as shown. Cement one antenna to each fairing **36** as shown.

Figure A



SUU-11/A GUN PODS
make 2



COLOR KEY

- A No. 1749 Flat Black FS 37038
- B No. 1740 Dark Gull Gray FS 36231
- C No. 1780 Steel
- D No. 1790 Chrome Silver FS 17178
- E No. 1708 Insignia Yellow FS 33538
- F No. 1745 Insignia White FS 17875
- G No. 1795 Gunmetal
- H No. 1103 Red
- J No. 1124 Green
- K No. 1731 Aircraft Gray FS 16473

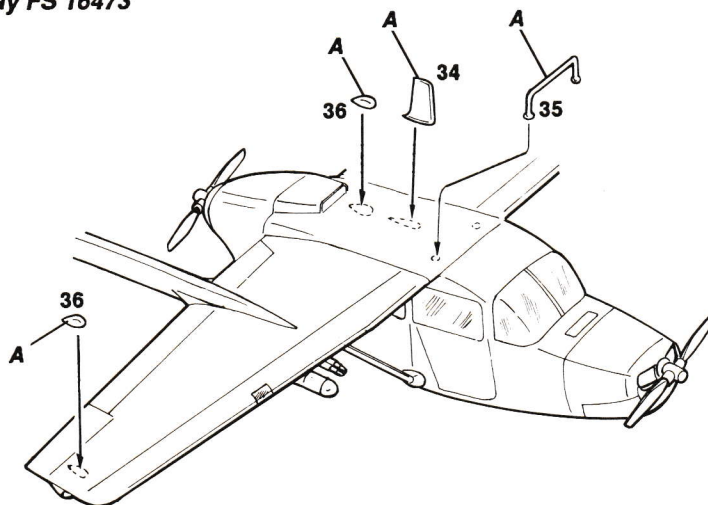
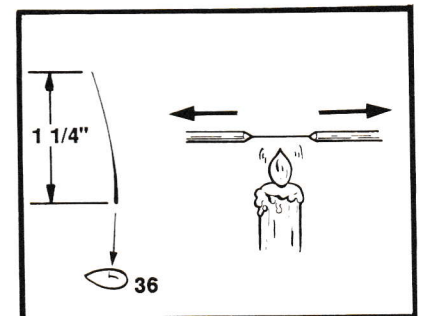


Figure B



8 USAF O-2B ONLY FINAL ASSEMBLY

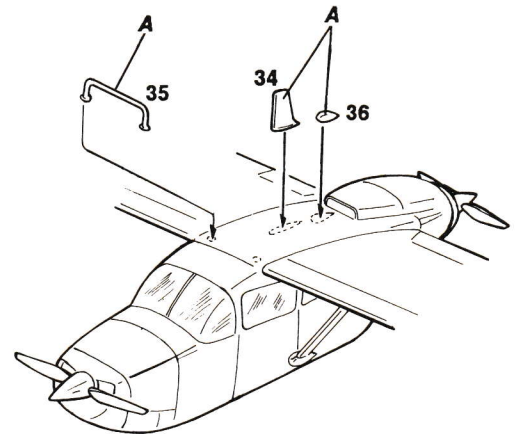
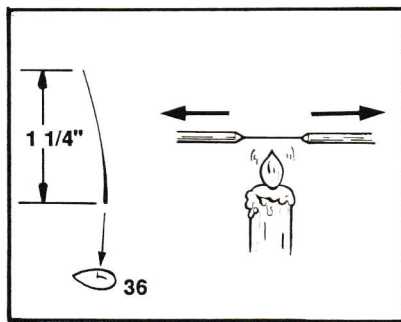
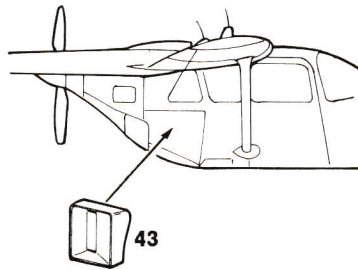
O-2B ONLY

Preliminary Painting

Paint parts as indicated by italic letter callouts using the **COLOR KEY** on pg. 8.

Assembly

1. Cement loud speaker **43** to right side of fuselage as shown.
2. Glue parts **34**, **35** and one **36** in place on upper wing as shown. Refer to the inset at right and make one antenna as shown, using a piece of scrap parts tree heated *carefully* over a flame, then stretching it as shown. Cement antenna to fairing **36** as shown.



WEATHERING HINTS

Nearly all military aircraft show some signs of wear. The process by which the modeler imparts this look to the model is referred to as **weathering**. Many times the weathering, that is, the representing on the model of soot, oil stains, or chipped paint, etc., can really make a model stand out and give it amazing authenticity.

After you have painted your model the proper colors, you can add the decals. If you first paint your model with Testor Glosscote, the decal carrier film will seem to disappear. Apply one or two coats of Glosscote for a smooth, glossy finish. Then, after this dries, apply the decals. This gives them a "painted on" look. If you want your model to have a matte finish, wait 24 hours for the decals to dry. Then spray on one or two coats of Testor Dulcote. When dry, you can begin weathering.

Always try to be logical in applying weathering techniques. For instance, you wouldn't want to put exhaust stains on a model and then apply a bright clean decal to the sooty area. Airplanes are normally well cared for, so they don't usually appear very battered. However, soot stains do tend to collect behind exhaust stacks and sometimes oil leaks onto the outside of the plane.

There are two methods of showing exhaust stains. The first is with an airbrush. This is a rather expensive item and requires practice to get the right effect. The second method is by using soft artist pastels or charcoal in shades of gray or black. Begin by grinding this material into a fine powder. Apply the powder to the model by rubbing it on with an old paint brush. Apply the color thicker and blacker near the exhaust outlet, and feather it out as it gets further away from the outlet. You should practice this on an old model or on a scrap of paper before trying it on your model. This technique is not very permanent, so it is a good idea to give your model a coat or two of Testor Dulcote to avoid rubbing off the stains.

Oil stains should be done very subtly. Oil really has very little color, so it only leaves light stains. Tint a small amount of thinner lightly with black paint. Add a small drop to the area you want to appear oily. Now with a strong breath, blow the "oil" back along the plane. Keep in mind the direction in which the planes flies, making sure you are blowing the "oil" from front to back. It is very easy to overdo this - one or two places are enough.

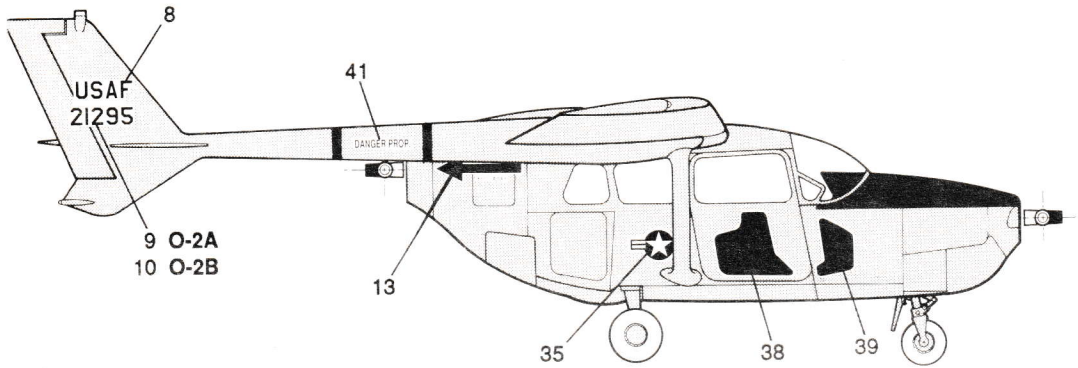
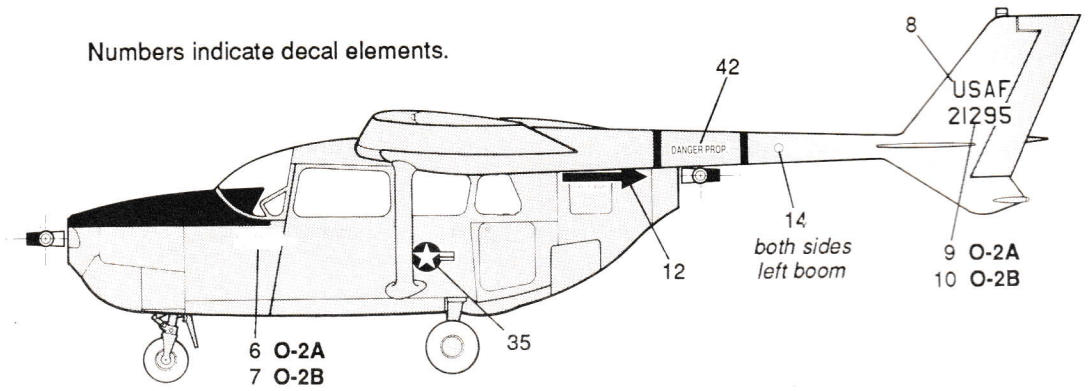
Paint chips are the simplest technique, but like the others, are easily overdone. An average military plane wouldn't have very many chips. They usually appear on the cutting edges of the propeller blades, the leading edges of wings and flying surfaces, and any areas where crew members or mechanics walk across the plane (i.e. wing roots). Use **No. 1781 Aluminum** for paint chips, applying with a fine pointed brush. With a very small amount of paint on the brush, apply the chips in small dots, the smaller the better. Large chips will look too obtrusive. Be wary of fabric covered control surfaces though; they don't chip.

Serious modelers collect books and photographs to use as reference when they finish their models. Your local hobby shop can help. Last, but certainly not least, your own observation will prove helpful. Visit museums and local airports, look at buildings and vehicles around you. Notice how rust streaks a metal roof. See the oil and dirt on a piece of road grading equipment. Study railroad boxcars and locomotives to see what the weather has done to them. Your own observation can be the best aid of all.

Remember: try not to overdo weathering - and keep practicing.

**US Air Force O-2A
FAC (Forward Air Controller)
Bien Hoa AB
South Vietnam 1969**

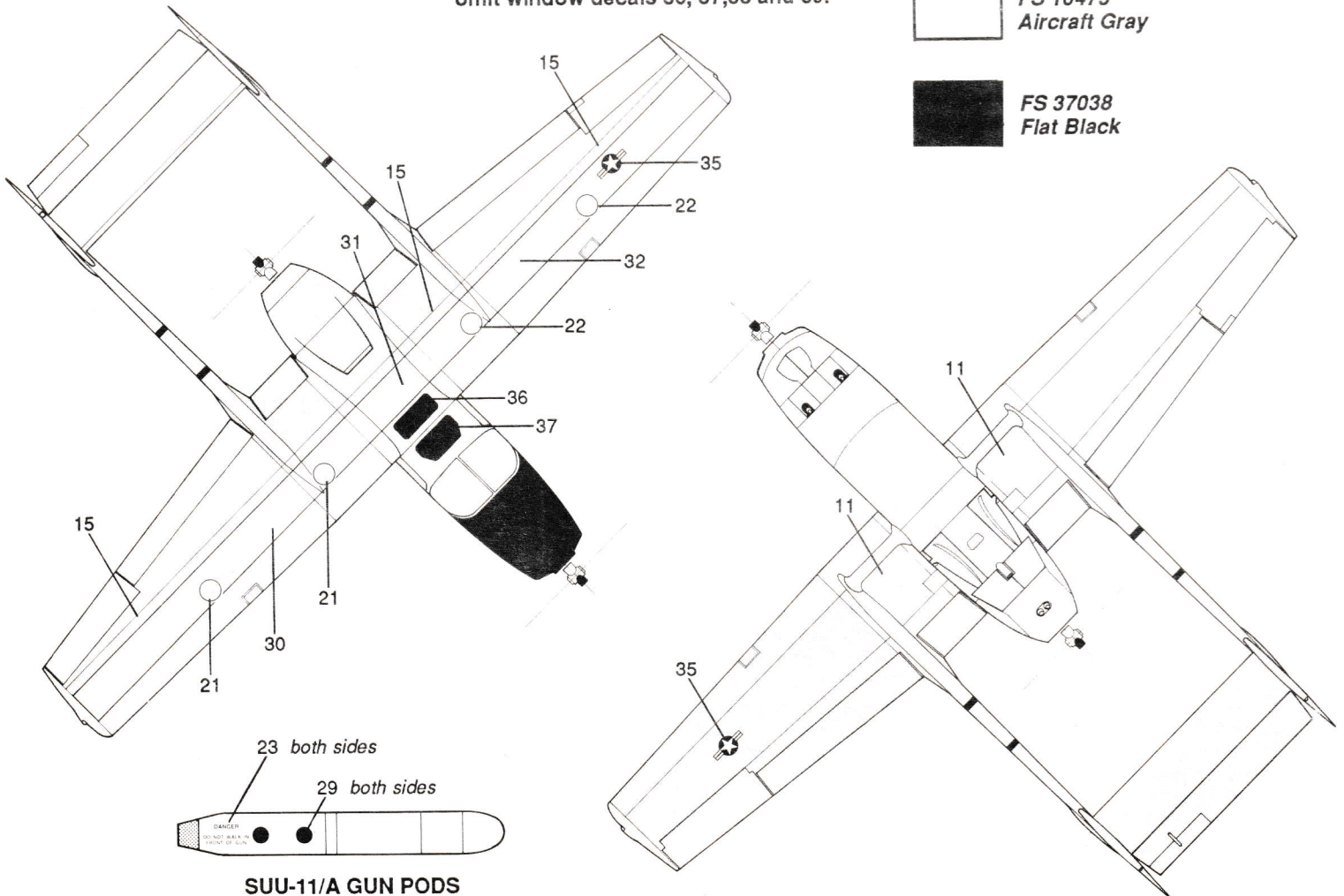
Numbers indicate decal elements.



When building the Cessna O-2B version omit window decals 36, 37, 38 and 39.

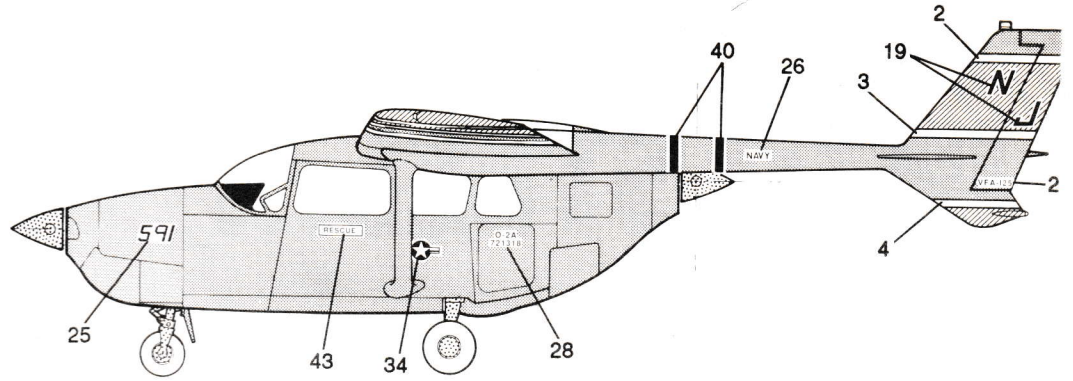
 FS 16473
Aircraft Gray

 FS 37038
Flat Black

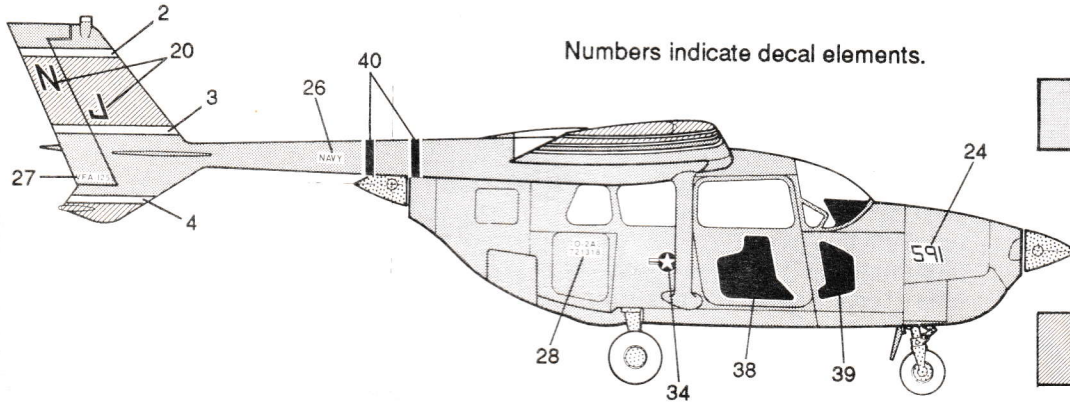


SUU-11/A GUN PODS

US Navy O-2A
VFA-125 "Rough Raiders"
NAS Fallon
Las Vegas, Nevada 1989



Numbers indicate decal elements.

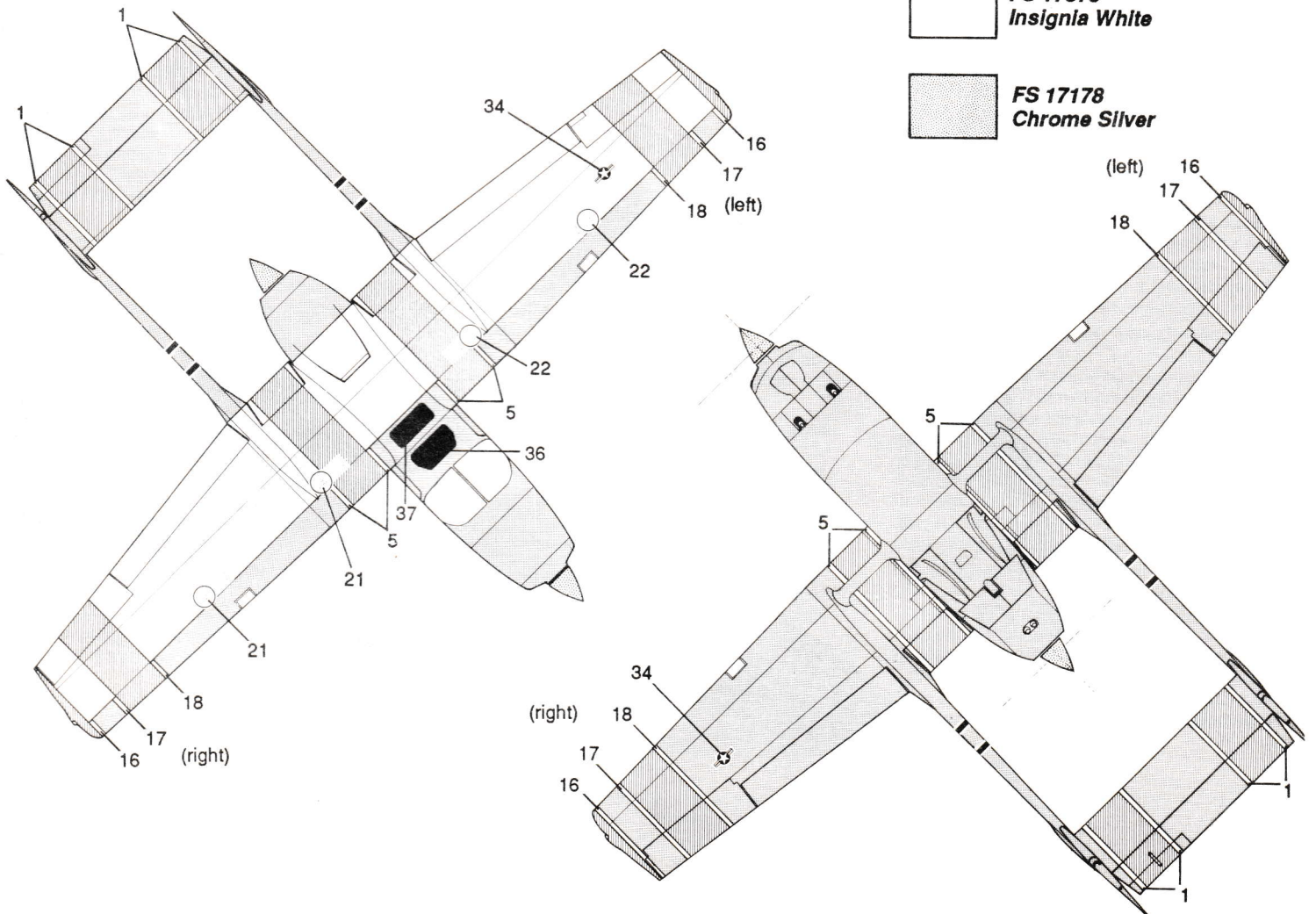


 **No. 2726**
Ford Engine Light Blue

 **No.2717**
Bright Yellow

 **FS 17875**
Insignia White

 **FS 17178**
Chrome Silver



TURN PLASTIC INTO STEEL...

...or magnesium or titanium or even burnt iron. New Model Master Metalizer[™] paints allow you to authentically duplicate almost any natural metal "plate" finish.



Premixed for airbrushing in 1/2 oz. bottles, Metalizer[™] includes a wide range of buffing and non-buffing metallic colors. Spray Metalizer[™] with your airbrush (internal or external mix) on clean, unpainted plastic model parts, let dry for about ten minutes, and then buff to the desired sheen with facial tissue or a soft cloth.

Subtle variances in color — that truly distinguish your model — are obtained by refining your buffing technique. Buff vigorously for one kind of effect, softly and easily for another. If you're painting an aircraft wing, for example, reflectance and tone can be precisely defined from

panel to panel. An automobile engine, with all of its metal parts, also is a perfect application for Metalizer[™]. Add decals to a surface painted with Metalizer[™] in the usual way.



Look for the Metalizer[™] merchandiser and informative instruction booklets on top of the Testor Model Master paint racks in your favorite hobby store.

The Testor Corporation
620 Buckbee Street
Rockford, Illinois 61104



Model by Mike Fritz

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