

# F-5F TIGER II

No. 689

TESTORS



## HISTORY

The *F-5E/F Tiger II* carries forward the use concept originated by its predecessor the *F-5A/B Freedom Fighter*. The original *F-5A* was developed for the Military Assistance Program which was created to help provide under-developed countries with a high performance low cost fighter. The requirements for the *F-5* were that it be inexpensive and easy to fly and maintain. The *F-5* program did, and still continues to, provide our less technologically advanced allies with a modern fighter plane that can hold its own with the more sophisticated weaponry of the World's super powers.

The *F-5E/F Tiger II* is the result of a 1969 proposal by Northrop to upgrade the original *Freedom Fighter* with the installation of more potent J85-GE-21 engines. This proposal was to improve the *F-5* to the point where it would be a match for Soviet Fighters and thus be optimized for the air-to-air fighter interceptor role. Other changes include the addition of maneuvering flaps, a two position nose gear strut to improve take-off performance, an arrestor hook, additional wing area and a longer and wider fuselage which provides increased fuel capacity. Improved avionics give the *Tiger II* a better chance of hitting aerial targets with its 20mm cannon and Sidewinder missiles.

Although the *Tiger II* was developed for use by foreign countries, its most interesting deployment is with the U.S. Navy and Air Force Aggressor squadrons where it is flown using Soviet tactics to simulate Mig-21 and Mig-23 fighters, which they closely resemble in size and performance. The Aggressors are used against all types of American and allied aircraft as a training aid to improve the combat skills of our pilots.

The *F-5* is presently on the inventory of over twenty foreign air forces. With the creation of the new *F-20 Tigershark*, equipped with the new F404 engine, power output will be increased by 60% over that of the *F-5E/F*. This plane will carry the Military Assistance Program epitomized by the *F-5* airplane, into the 21st century.

## Reference Sources

**F-5E & F in Detail & Scale**, Bert Kinzey  
(Aero Publishers)

**F-5 In Action, Aircraft No. 38**, Lou  
Drendel (Squadron/Signal Publications)

## SPECIFICATIONS

Wing Span	26 ft. 8 in.
Length	51 ft. 8 in.
Height	13 ft. 4 in.
Weight (empty)	10,100 lbs.
Weight (max. loaded)	22,028 lbs.
Engines	2 General Electric J85-GE-21 axial flow turbojets of 5,000 lbs thrust
Armament	2 sidewinder missiles, 1 M39 20mm cannon with 140 rounds

## 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 runners (sprue) until you need them. This helps avoid confusion and lost parts.
4. When cementing the parts together, check the way in which one part fits together with another. This ensures a neat job.
5. Always remember, when working with plastic model cement and paint, make sure your work is well-ventilated. The fumes from plastic modeling products can be harmful if inhaled.

## PREPARATION OF PARTS

1. Never tear parts off the runners (sprue). Use a Testor Hobby Knife, nail clippers, or small wire cutters.
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 Enamels. Parts of the model are painted individually, and then the entire model is oversprayed when you have finished construction.

First of all, be sure your brushes are soft, clean and flexible. (Keep them that way by cleaning them thoroughly with Testor Paint thinner.) Never use inexpensive brushes! A selection of Testor Shed-Proof Brushes will serve you well.

Wash plastic parts before detaching them from the sprue. Warm water and liquid detergent 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 automotive centers) to remove dust and lint.

Most parts are best painted while still attached to the sprue or they may be detached and held with tweezers or "magic" type transparent tape. Paint in one direction only. If your paint is the correct consistency, brush strokes will disappear as the color dries. If the paint seems too thick, thin it with Testor Paint Thinner. Wheels may be detached from the sprue and fit onto toothpicks or matchsticks for painting. Then just hold the paintbrush against the edge of the wheel and rotate the wheel to obtain a neat clean finish.

Let the paint dry completely before handling. When the parts are dry, assemble the model, following the directions closely. Remember cement will not stick to painted surfaces. Using your Testor Hobby Knife, carefully remove paint from all surfaces to be cemented. After you have assembled your model you may touch up areas where cement has marred the finish.

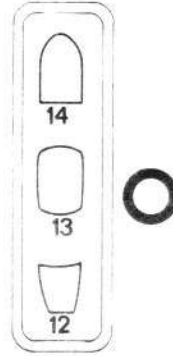
When your model is completed, apply a coat of Testor Dullcote #1260 to the entire model. This will give it an authentic, dull finish and protect the surface of the model.

Remove this page from the instruction sheet by cutting along indicated line. Use the drawings of the complete sprue as a part-locating reference when building the model.

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 00 brush, to the surfaces to be joined while holding the parts in place. Do **not** use large amounts of cement.

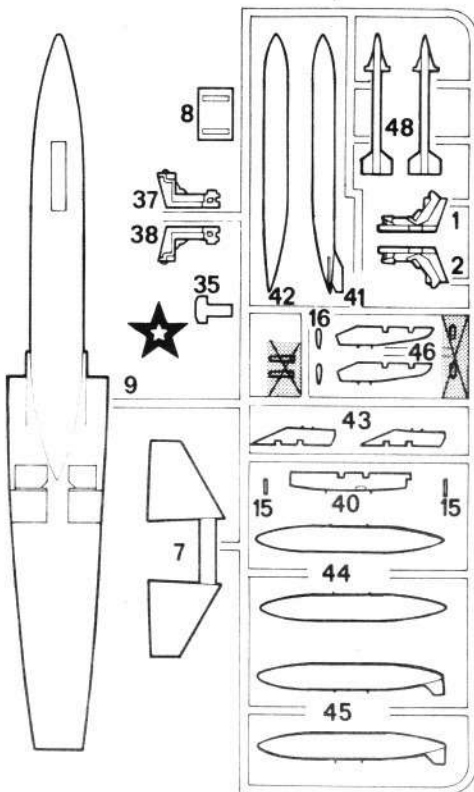
Tweezers will be useful in assembling the many small parts in this kit. The type used by postage stamp collectors is recommended.

The Testor **Model Master** paint system is specially designed to be used on military models. The **Preliminary Painting** instructions in this sheet indicate which **Model Master** colors to use by FS number and name. 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**.

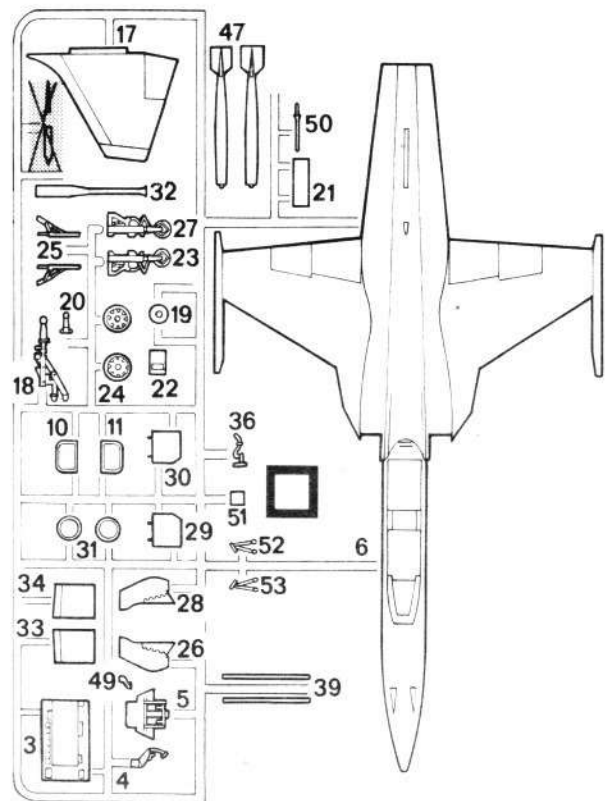


Parts from this section are identified with this symbol: ○

Cut and remove this sheet.



Parts from this section are identified with this symbol: ☆



Parts from this section are identified with this symbol: □

# 1

## PARTS 1-9, 35-39

### Preliminary Painting

☆6 interior of cockpit area only; ☆1, ☆2, □3, □5, ☆8, ☆35, ☆37, ☆38:

#### FS 36375 Light Ghost Gray

□3, □5, ☆8, ☆35 instrument and control details; □6 instrument panel fairings and flat area at front of intakes; □4, □36:

#### FS 37038 Flat Black

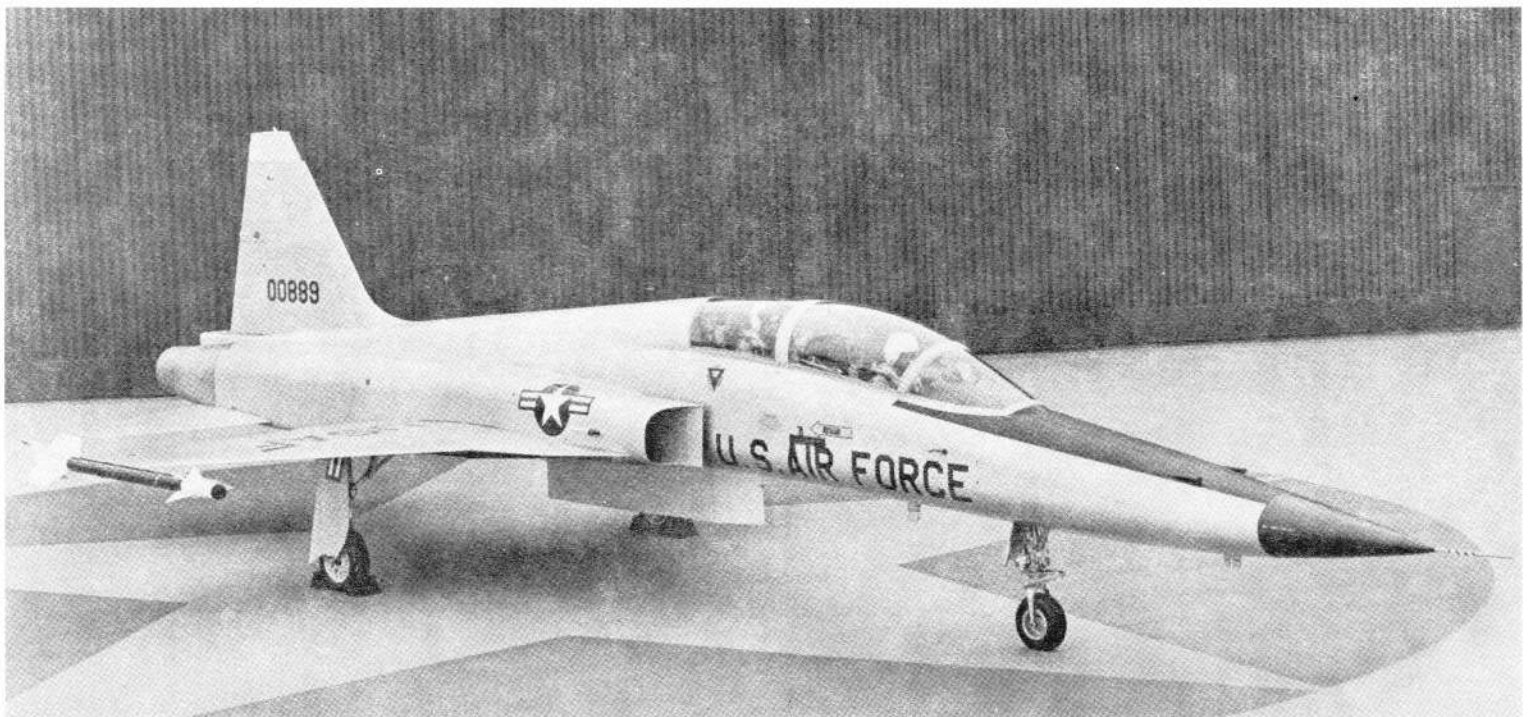
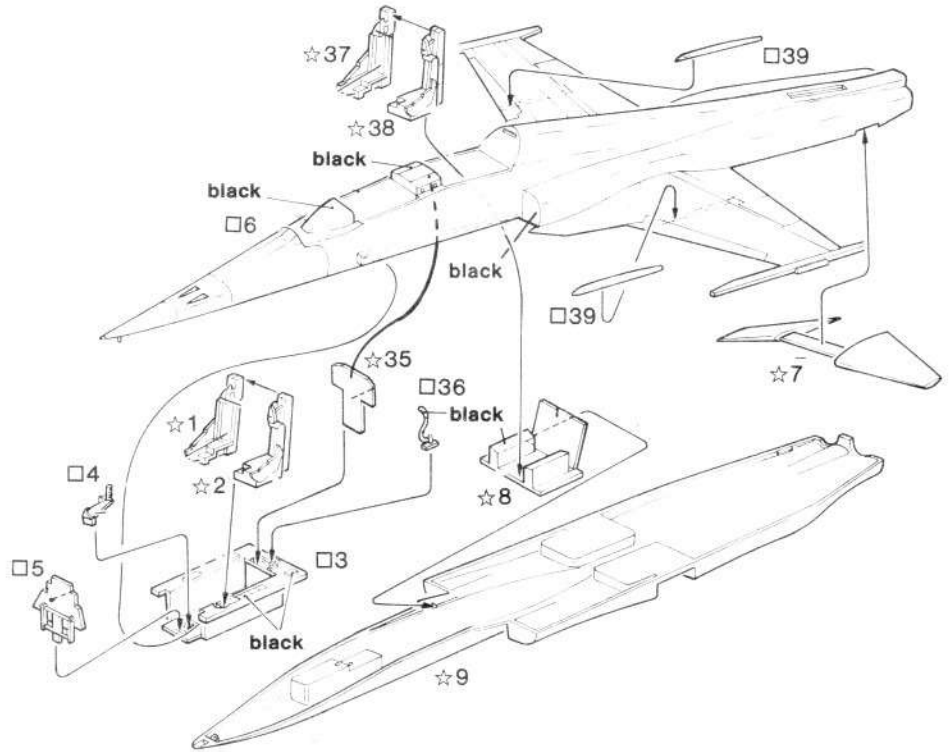
☆1, ☆2, ☆37, ☆38 seat cushions only:

#### FS 31136 Insignia Red

☆1, ☆2, ☆37, ☆38:

#### FS 34087 Olive Drab

- 1. Cement ejection seat halves ☆1 and ☆2 together, then cement seat onto square locator inside cockpit module □3. Cement control column □4 to small locator in front of seat as shown. Cement instrument panel □5 to slot at front of floor and projecting tabs at front of side consoles.
- 2. Cement rear instrument panel ☆35 against lip inside rear instrument panel shroud in upper fuselage half □6 as shown. Cement rear control column □36 between locating ribs at rear edge of cockpit module □3. Cement cockpit module □3 into notched section inside upper fuselage half □6, noting that rear control column does not interrupt rear instrument panel which should butt into locator directly in front of column as indicated.
- 3. Cement rear cockpit module ☆8 into notched locators inside lower fuselage half ☆9 at position shown. Cement stabilizer ☆7 into notch on underside of upper fuselage half □6, note that stabilizers slant downward as shown in drawing. Cement upper and lower fuselage halves □6 and ☆9 together. Cement wing fences □39 to the top of each wing at position shown. Cement rear seat halves ☆37 and ☆38 together, then cement into rear cockpit.



# 2

## PARTS 10-17, 51-53

### Preliminary Painting

- 14 inside of canopy frame; □51, □52, □53:

**FS 36375 Light Ghost Gray**

- ☆15:

**#1780 Steel**

Navigation lights on top and bottom of right wing:

**#1124 Green**

Navigation lights called out in drawing:

**#1104 Red**

**NOTE:** These lights should be painted after all painting and decal work has been completed.

### Assembly

- 1. Cement left intake scoop □10 to left side of fuselage. Cement right intake scoop □11 to right side of fuselage. Cement machine gun (left) and intake (right), parts number ☆15 to the slots above the nose. Cement one position light ☆16 to side of intake as shown, use drawings on pages 7 and 8 as a reference for position. Cement vertical fin □17 into slot at rear of fuselage.
- 2. Your model may be assembled with the canopies in either open or closed positions. For **model with closed canopies:** Glue windscreen ○12, front canopy ○13 and rear canopy ○14 into positions shown on drawing.
- 3. For **model with open canopies** (see **fig. a**): Glue windscreen ○12 into position as indicated. Cement left and right canopy supports □53 and □52 into holes on side of rear instrument panel shroud as shown. Cement rear canopy support □51 to slot at rear of cockpit. Carefully cement front canopy ○13 to "L" shaped holders at end of canopy supports. Cement rear canopy ○14 to rear canopy support. The drawings at **fig. b** shows how the canopies should appear in place.

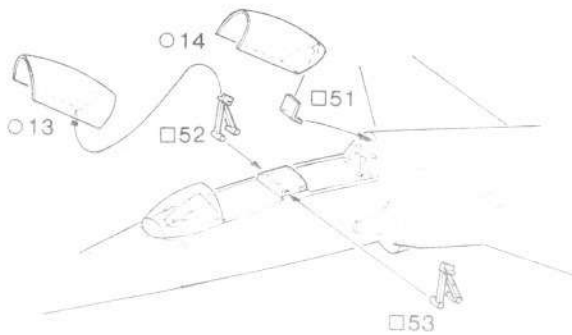
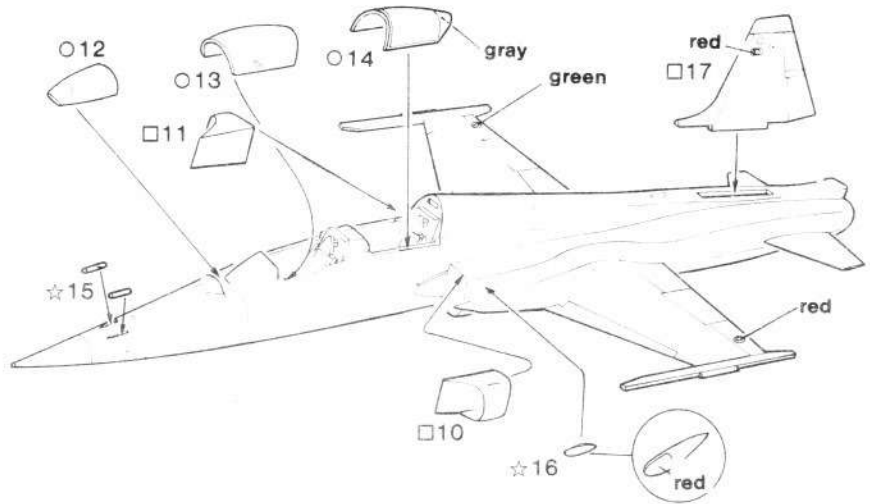


fig. a

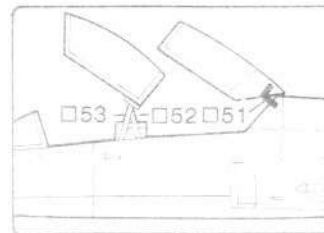


fig. b

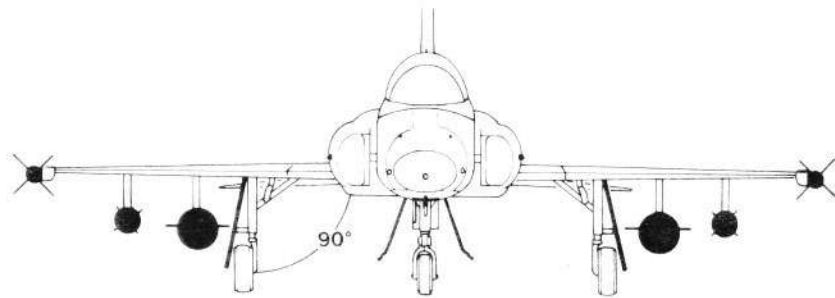


# 3

## PARTS 16, 18-34

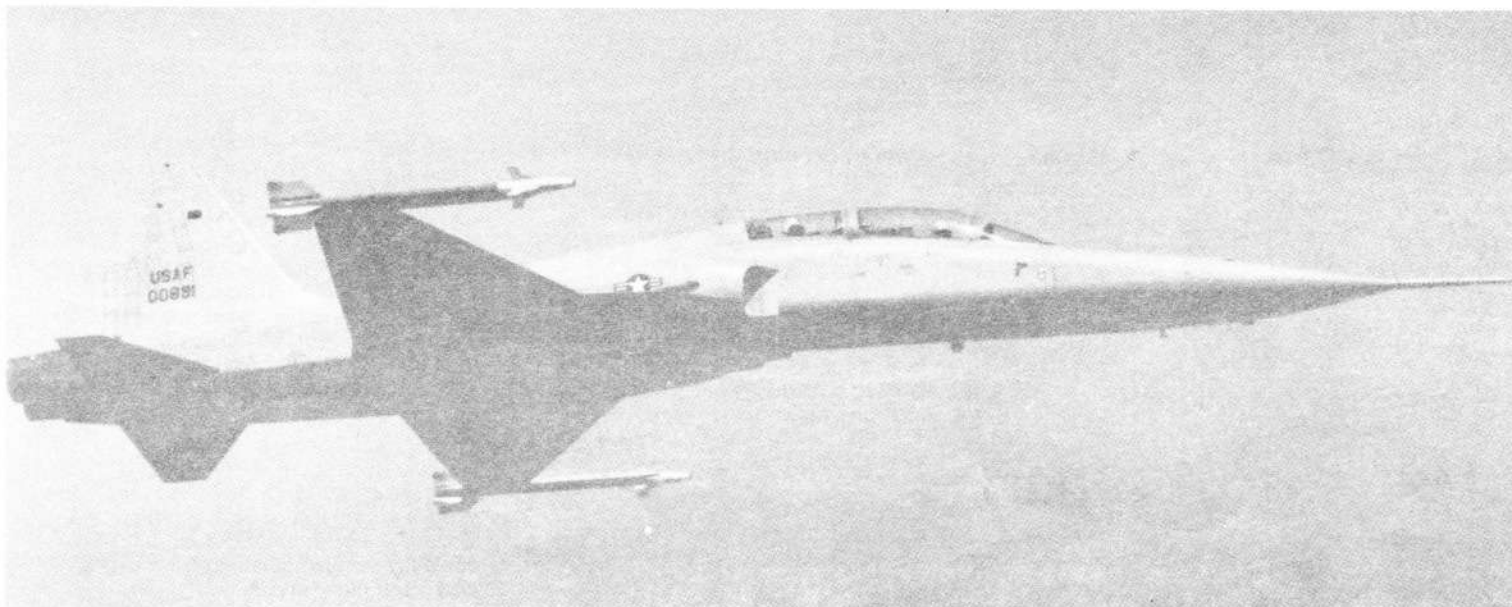
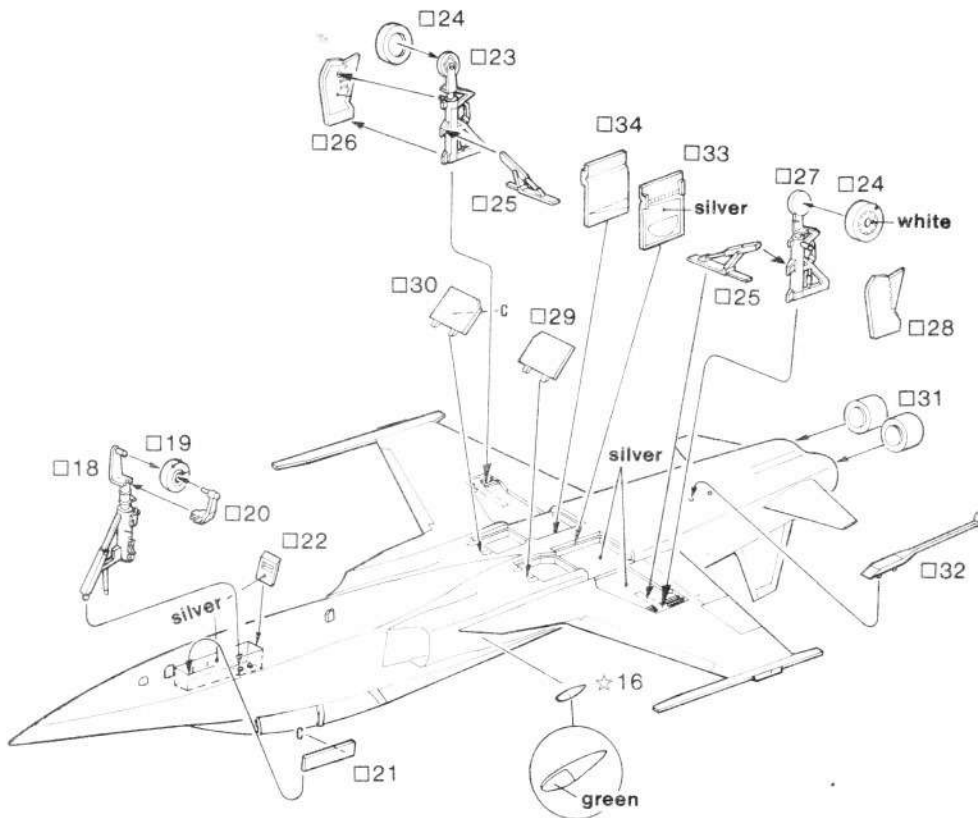
### Preliminary Painting

- 21, □22, □26, □28, □29, □30, □33,  
□34 inner side only;
- 19 wheel hubs only; interiors of wheel  
and speed brake wells; □18, □20,  
□23, □25, □27:
- FS 17178 Chrome Silver** (natural metal)
- 19, □24 tires only:
- FS 37038 Flat Black**
- 31:
- #1780 Steel**
- 32:
- FS 17875 Insignia White** with **FS 37038  
Flat Black** stripes (see drawings on pgs.  
7 and 8)
- 24 wheel hubs only:
- FS 17875 Insignia White**
- ☆16 portion shown in drawing:
- #1124 Green**



### Assembly

- 1. Cement remaining position light ☆16 to right intake. Glue nose wheel □19 to nose gear strut □18. Cement fork □20 to nose wheel and nose gear strut. Cement nose gear strut □18 into holes inside front wheel well as shown. Cement nose gear door □21 to right edge of wheel well as shown. Cement rear door □22 to rear edge of wheel well.
- 2. Cement one main wheel □24 to left main gear strut □23, then cement □23 into locator inside left main wheel well, see frontal view drawing for correct angle of strut. Repeat procedure for right main gear strut □27. Cement one actuator □25 to each wheel well and main gear strut. Cement left and right outer gear doors □26 and □28 to main gear struts as shown in assembly and frontal view drawings.
- 3. Cement right and left speed brakes □29 and □30 to positions indicated in front of speed brake wells. Cement exhaust cones □31 into openings at rear of fuselage. Glue arrestor hook □32 to holes on underside of fuselage.
- 4. Cement inner main gear doors □33 and □34 to inner edges of wheel wells as shown, frontal view shows correct angle for these doors.



# 4 PARTS 40-50

## Preliminary Painting

- 50 center section only; □49: **FS 37038 Flat Black**
- 50 all except center section (see drawing on this page)  
**FS 17178 Chrome Silver**
- ☆40, ☆43, ☆46:  
**Overall Undersurface Color** (differs depending on which version you are building, see drawings on pgs. 7 and 8)
- ☆47, ☆48:  
Paint as shown in diagram at right

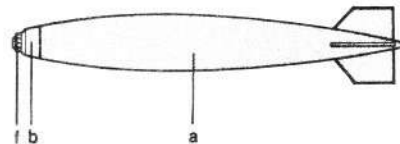
## Assembly

- 1. **NOTE:** U.S. Navy and Air Force Aggressors usually carry Sidewinder missiles, and the centerline pylon which occasionally mounts a drop tank. However, given their air superiority function, Aggressor aircraft do not carry underwing stores or racks of any kind. Both versions offered on our decal sheet are Aggressor planes. For an Aggressor version, omit underwing racks, bombs and tanks parts ☆43, ☆44, ☆45, ☆46 and ☆47. If you choose to build a model with markings from other sources, you may want to use these parts as explained below. It will be easier to finish your model if these parts are left off until painting is completed.
- 2. Cement centerline rack ☆40 to holes on underside of fuselage. Cement centerline tank halves ☆41 and ☆42 together, then cement to slots on centerline rack as shown. Glue inboard wing racks ☆43 to positions shown under each wing. Cement wing tank halves ☆44 and ☆45 together making two tanks. Cement one tank to each rack ☆43. Cement outboard wing racks ☆46 to positions shown under each wing. Cement one bomb ☆47 to each rack ☆46. Cement one Sidewinder missile ☆48 to each wing tip launch rail.
- 3. Cement angle of attack vane transmitter □49 to right side of fuselage at position shown. Cement pitot tube □50 to hole at tip of nose.

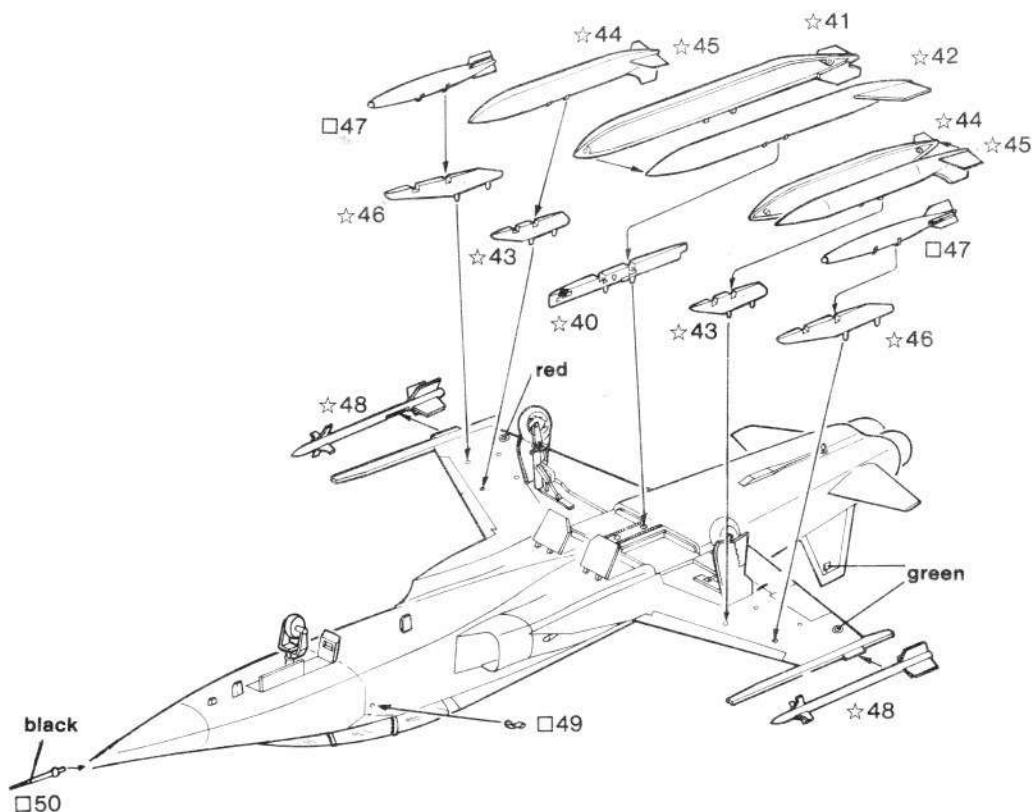
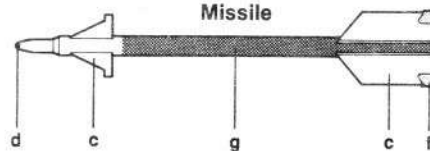
## Key

- a. FS 34087 Olive Drab
- b. FS 33538 Insignia Yellow
- c. FS 17875 Insignia White
- d. FS 37038 Flat Black
- e. FS 33613 Radome Tan
- f. #1780 Steel
- g. #1111 Blue

## Bombs



## Missile



## APPLYING DECALS

1. After carefully masking canopy and other 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 thoroughly before going further.
2. Select the decals you plan to use, and cut each of them out from the decal sheet with small scissors or Testor Hobby Knife.
3. Working with only one decal at a time, dip the decal in clear water for no more than five seconds, then remove it from the water and place on a dry paper towel for about one minute.
4. When the decal slides easily on the backing paper, slide it to the edge of the paper and onto the surface of the model with a soft paintbrush or tweezers. Remember: the decals are very thin and can be easily ripped if care is not taken. Work slowly and patiently.
5. Once the decal is in the desired position, apply a small amount of Testor Decal Set #8804. This will help the decal to conform to any irregularities in the surface of the model (rivets, curves, etc.). Allow the decal to dry undisturbed. Should you find the decal has moved or should you desire to purposely move it, apply a little Decal Set to a soft brush and push the decal slowly into the desired position.
6. 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. Then carefully remove masking from canopy and other clear areas.

**COLOR KEY**



1. FS 34079 Dark Green



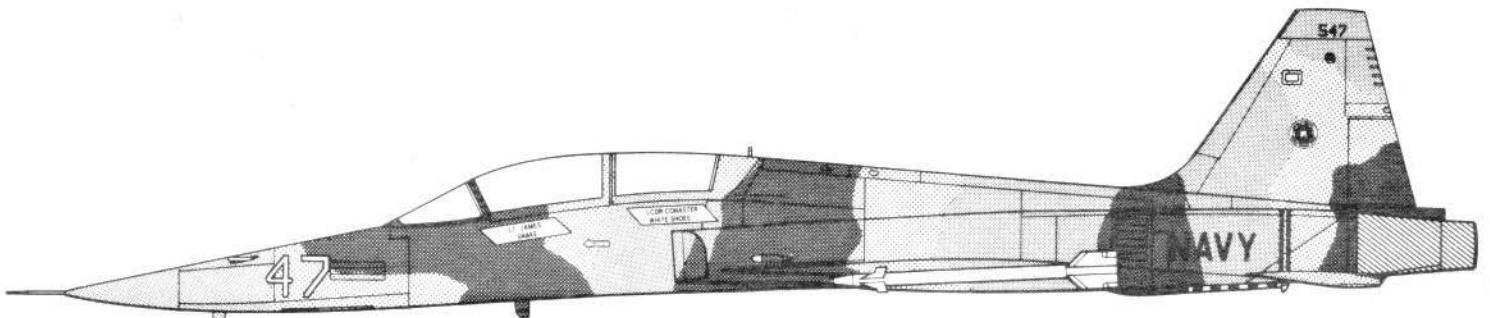
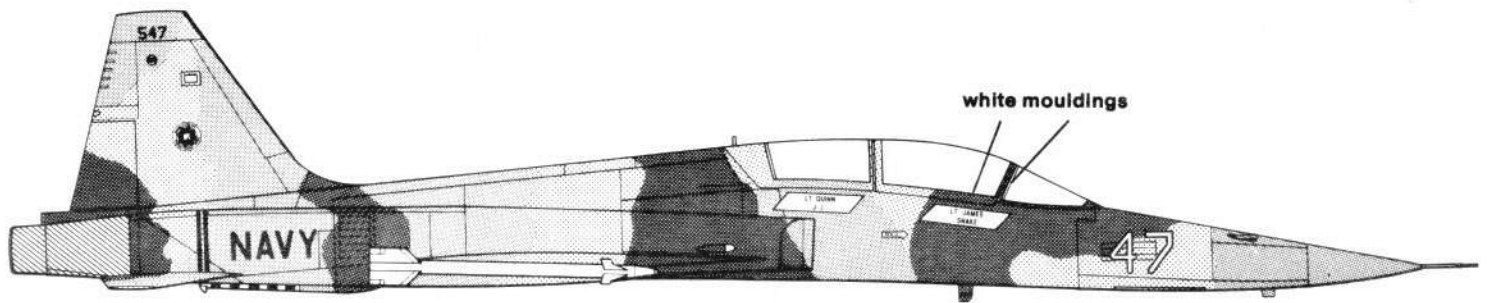
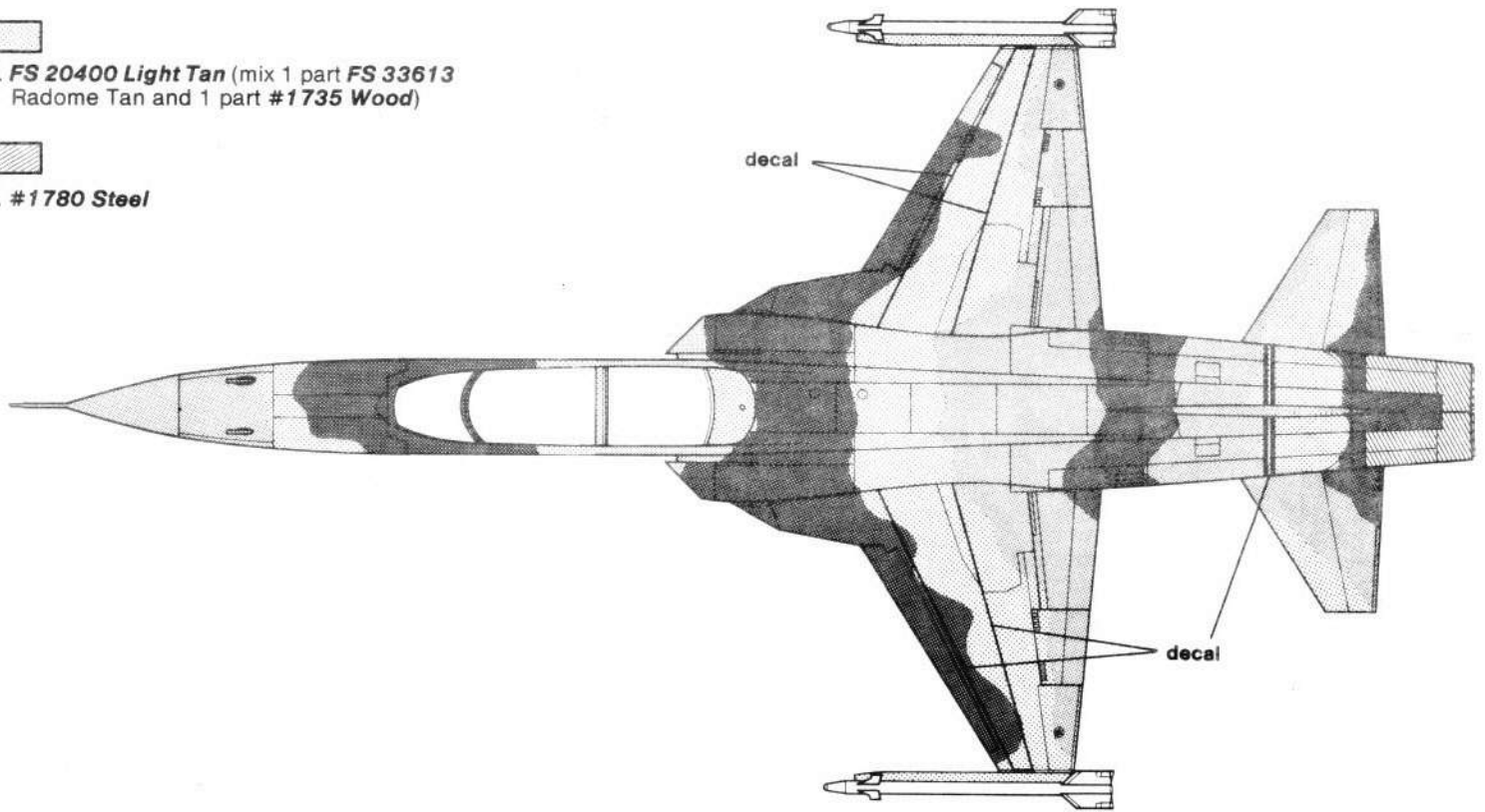
2. FS 30219 Dark Tan



3. FS 20400 Light Tan (mix 1 part FS 33613 Radome Tan and 1 part #1735 Wood)



4. #1780 Steel



# COLOR KEY

F-5F U.S. Air Force Aggressor, Williams AFB



1. FS 36307 Light Sea Gray



2. FS 36251 Gray (mix 2 parts FS 36231 Dark Gull Gray and 1 part FS 36307 Light Sea Gray)



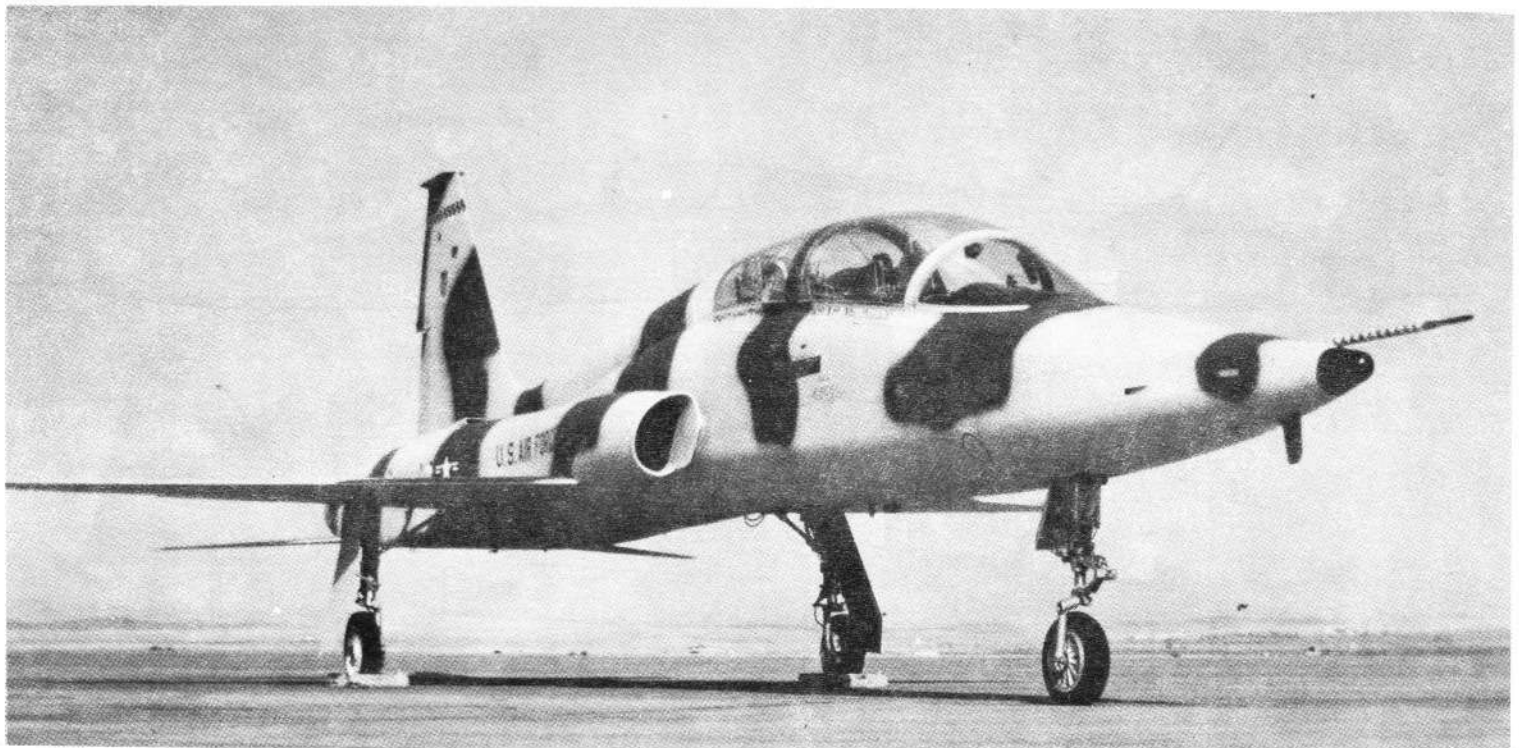
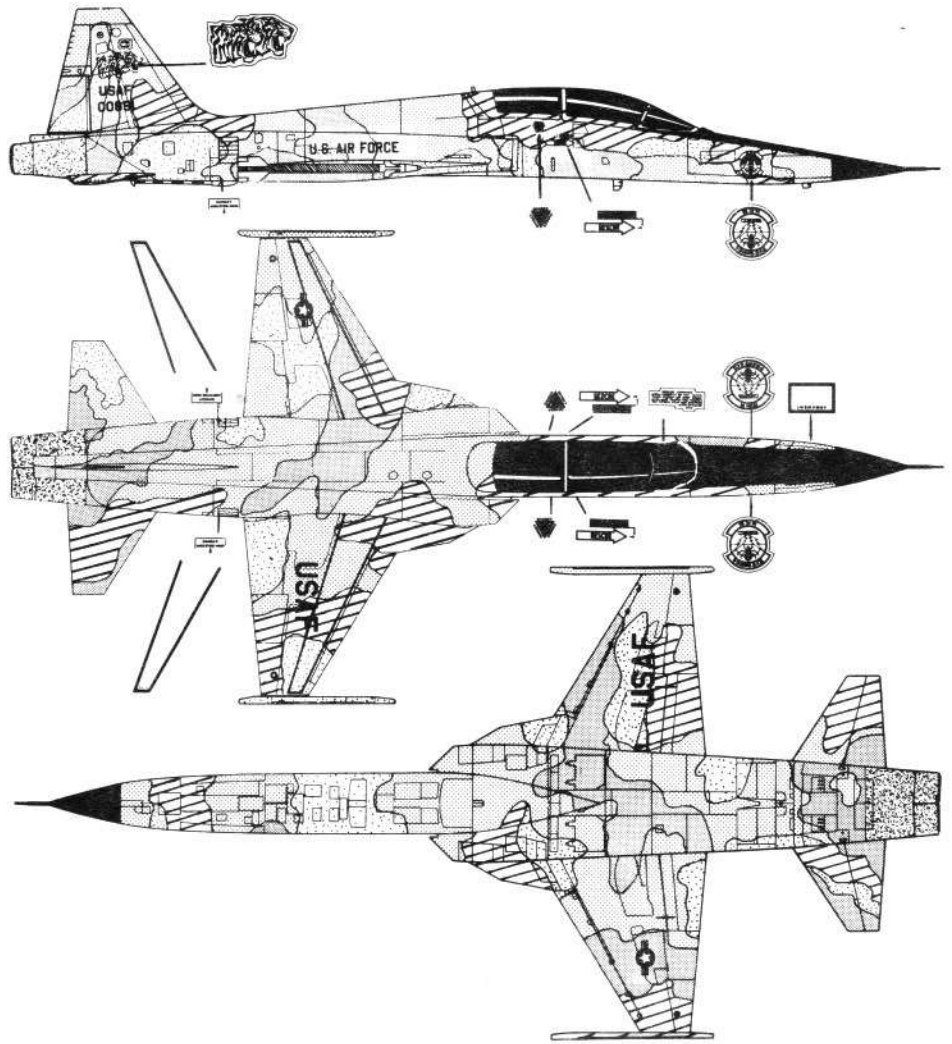
3. FS 35237 Medium Gray



4. #1780 Steel



5. FS36622 Camouflage Gray





SCALE-MASTER



#689 F-5F TIGER II



47 47

5 6

LT JAMES SNAKE

LT QUINN JJ

547 547



TESTORS



ITALERI



16



17

USAF USAF

7 8  
LT JAMES SNAKE  
LCDR CONASTER WHITE SHOES

10 U.S.AIR FORCE



USAF  
00891



19



18

11 NAVY NAVY U.S.AIR FORCE

15  
USAF  
00891

15



21



20

23



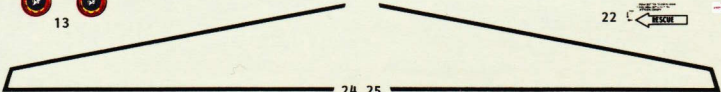
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14



22



24 25