


Volume 16 Number 4

# RT



International  
Plastic  
Modellers  
Society  
of  
Canada

VOODOO



### IPMS CANADA NATIONAL EXECUTIVE

National Director ..... Bob Migliardi  
Treasurer ..... John Box  
Secretary ..... Bob Traversy  
Managing & Production Editor ..... Mike Belcher  
Assistant Editor, Armor ..... Joe Sauve  
Special Projects ..... Ken Allen  
Chapter Liaison ..... Mike Billings  
Industry Liaison ..... John MacDonald  
Members Without Portfolio ..... George Hopp  
Keith Sturgeon  
Dave Lennox  
Propaganda ..... Sid Trembl  
Typesetting ..... Barb Sauve

RT is the official publication of the International Plastic Modellers Society in Canada. All contributions and enquiries should be directed to Box 626, Stn. B, Ottawa, Ontario, K1P 5P7, CANADA. Membership, including a subscription to RT, is \$12.00 per year in Canada and the US, and \$13.00 per year overseas. Please send only cheques or money orders payable to IPMS Canada. All material published in RT is strictly copyright, and is available for reprinting only with the written consent of the Editor.

ISSN 0380-8114

## COVER COMMENT

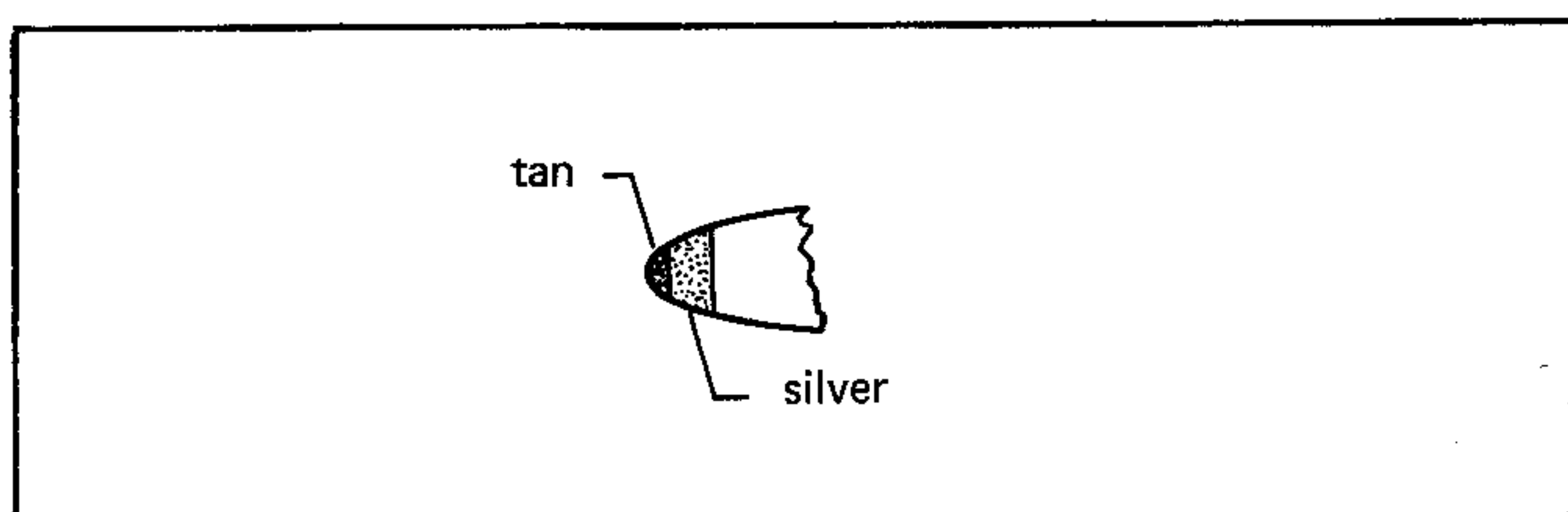
Two CF-101B's in flight, somewhere in the Great White North. Photo via Bert Williams.

## Reader's Comments...

"I must commend you on an excellent issue of RT. The Vol. 16, No. 1 was just plain outstanding. The decal sheet just added to this excellent issue. Other issues in the past may have had this same type of reaction, but this is here and now – congratulations!

"Incidentally, I would like to pass on some info on the missiles to be carried on the F-18 (CF-18/CF-188). Both the AIM-7F Sparrow and the AIM-9L Sidewinder are painted grey 36375 color. Exceptions are as follows:

- Sparrow – Radome - flat off-white color  
– Wings/fins - dull metal  
– Yellow band on warhead (forward of wings)  
– Brown band on rocket motor (aft of wings)
- Sidewinder – Nose tip - tan with narrow silver band (see sketch)  
– Forward canards - dull metal  
– Yellow band on the warhead  
– Brown band on rocket motor  
– (Editor's comment: I believe the rollerons at the tips of the rear fins should also be dull metal)



These are for tactical missiles, and will differ from those usually seen at air shows or open houses. The Sparrows provided to Macair for fit check on the Canadian F-18 were white with two gold bands. Kind of looks like them on page 15, and maybe also those on page 13. AIM-7F wings and fins are not painted except on display junk.

Henry Blecha

Bob Bryden, author of the CF-104 article in RT 16/2, writes to point out a slight inaccuracy he discovered. The green applied to the two-color upper-surface scheme is not exactly the same shade as the green 503-301 which is stated. This latter color is the one which is called for in the painting specs, but for some reason the color actually applied to the aircraft is different. We are presently trying to sort out the reasons for this as well as determine an accurate color spec for the paint actually used. Also note that the green used on the earlier overall green scheme is a different color again, being a sort of oliveish shade of dark green. Examination of color photos of these schemes will make the differences obvious. If any reader can explain all this, please write and let us know.

"How come RT has not mentioned those 1/24 scale kits of the Beaver? In case you haven't seen one, send \$9.95 plus \$4.00 postage and handling (that is for air mail delivery) in U.S. funds to Frank Mayer & Assoc. Inc., 1975 Wisconsin Ave., Grafton, Wisconsin 53024. They were originally produced for promotional purposes for Canadian Mist Rye Whiskey. Being a Scotch drinker myself, I don't know who produces Canadian Mist. The kit is a snap-fit type but goes together well and should be glued really. It comes with float gear but most modellers could easily adapt it to wheels or skis. The cabin windows and windshield are moulded solid but, again, an enterprising model builder can cut out the plastic and install clear acetate. I haven't had a chance to check it out myself but am told that the fuselage may be just a trifle short, the ventral fin may not be absolutely correct in shape and a few minor details such as air scoop are omitted. It appears, though, to be a good buy for the money, especially if Canada Customs let it through free as they often do if under \$10.00 in value."



CF101B in early sixties. Norad photo.

**THE CF-101 "VOODOO", A LAST LOOK BEFORE IT FADES AWAY**

Photos & Article by  
IPMS Champlain.

Q.G. de la Défense.

Capitaine Cyr, Services de l'information, Q.G. de la Défense.

After more than twenty years of loyal service, an old soldier is fading away. Before it completely disappears from the Canadian skies, let's take a last close look at the "one-o-wonder". In fact, compared to its contemporaries, the "Voodoo" has never been very well documented, so to correct this omission, we decided to fill the gap as best we could, knowing that our modest resources do not permit us to fully cover all aspects as we would have liked. The article is naturally oriented toward modelling, this first part covering the components of the interceptor in detail. We are already working on the second part which "tentatively" will describe the evolution of the markings and finishes of the CF-101 throughout its career. We hope that you will enjoy our effort and we shall welcome all corrections and additions.

Note: The first series of 66 "Voodoos" were acquired during 1961/62. In 1970/71 these were exchanged for 66 updated, modernized aircraft. Photo captions through the article point out the differences.

Un remerciement sincère aux personnes suivantes:

A sincere thank you to the following persons:

Lieutenant Colonel Roger Maltais, Commandant de l'escadrille 425.

Capitaine Vallée, Relations publiques, Base de Bagotville.

Colonel Boulet, Directeur services de l'information,

and the following individuals:

Mike Belcher.

Jean Côté.

Rénauld Gravel.

Richard Lavoie.

Jacques Leboeuf.

Denis Moffet.

**McDONNELL CF-101B VOODOO  
MATCHBOX 1/72**

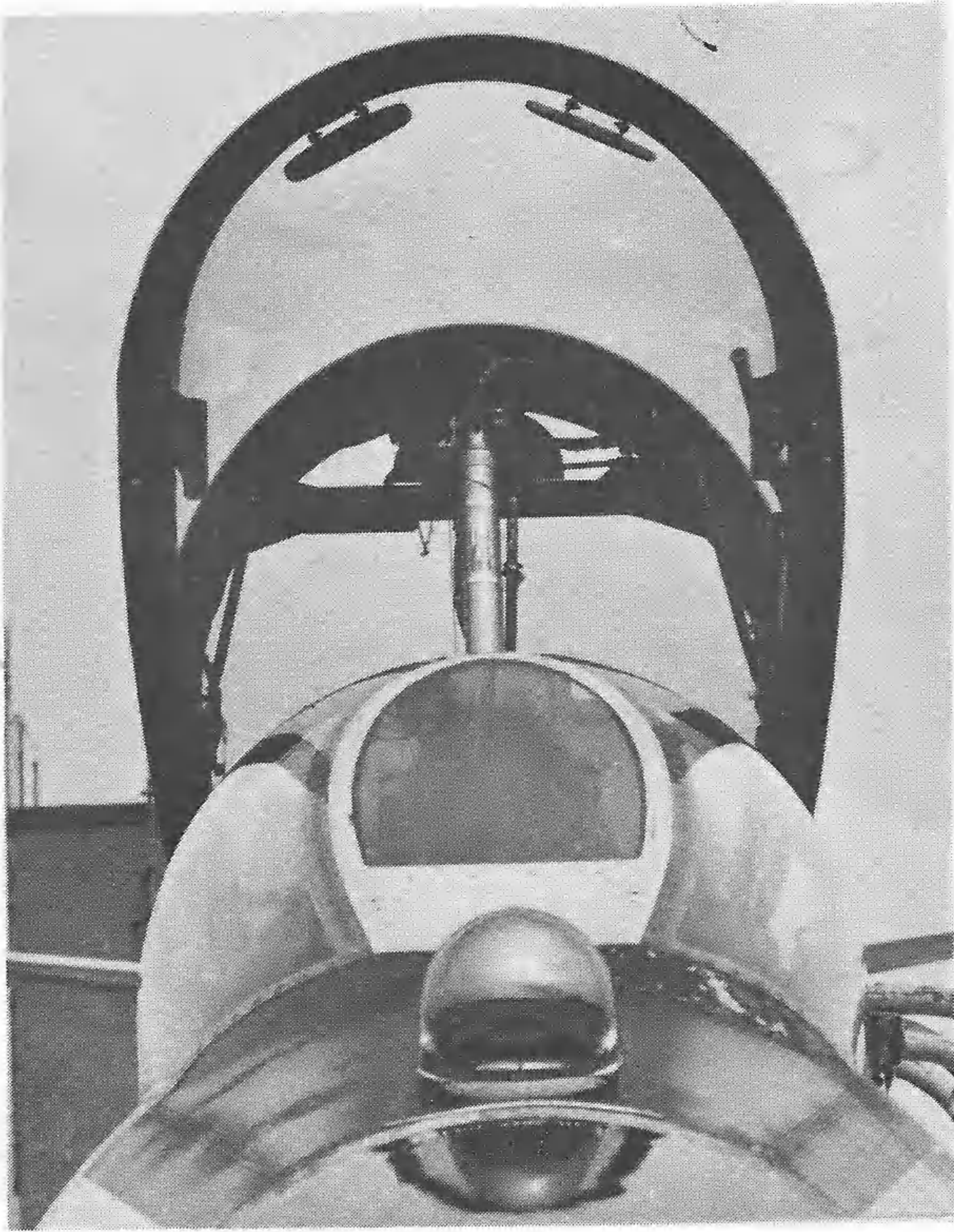
Before receiving a mountain of letters from furious modellers condemning us as "nit-pickers", we would like to explain why we chose a "purist" approach in our review. In fact our Society is composed of members who are not supposed to be simple "gluers", but people who attempt to improve their modelling skills to a certain personal limit. So, everyone has the choice to pick up on the items fitting his criteria, and to drop the rest. As for the super nit-picker, he will surely satisfy his ego by finding points we forgot, to his great satisfaction . . . and ours, particularly if he writes us to mention them.

Now, let's take a look at the beast.

The kit comes in a quite sturdy box adorned with a not so bad painting. Parts are moulded in gray, black, green and clear plastic. The dark colours of the styrene will not help in the painting. The instruction sheet is very

**Continued on p. 94**





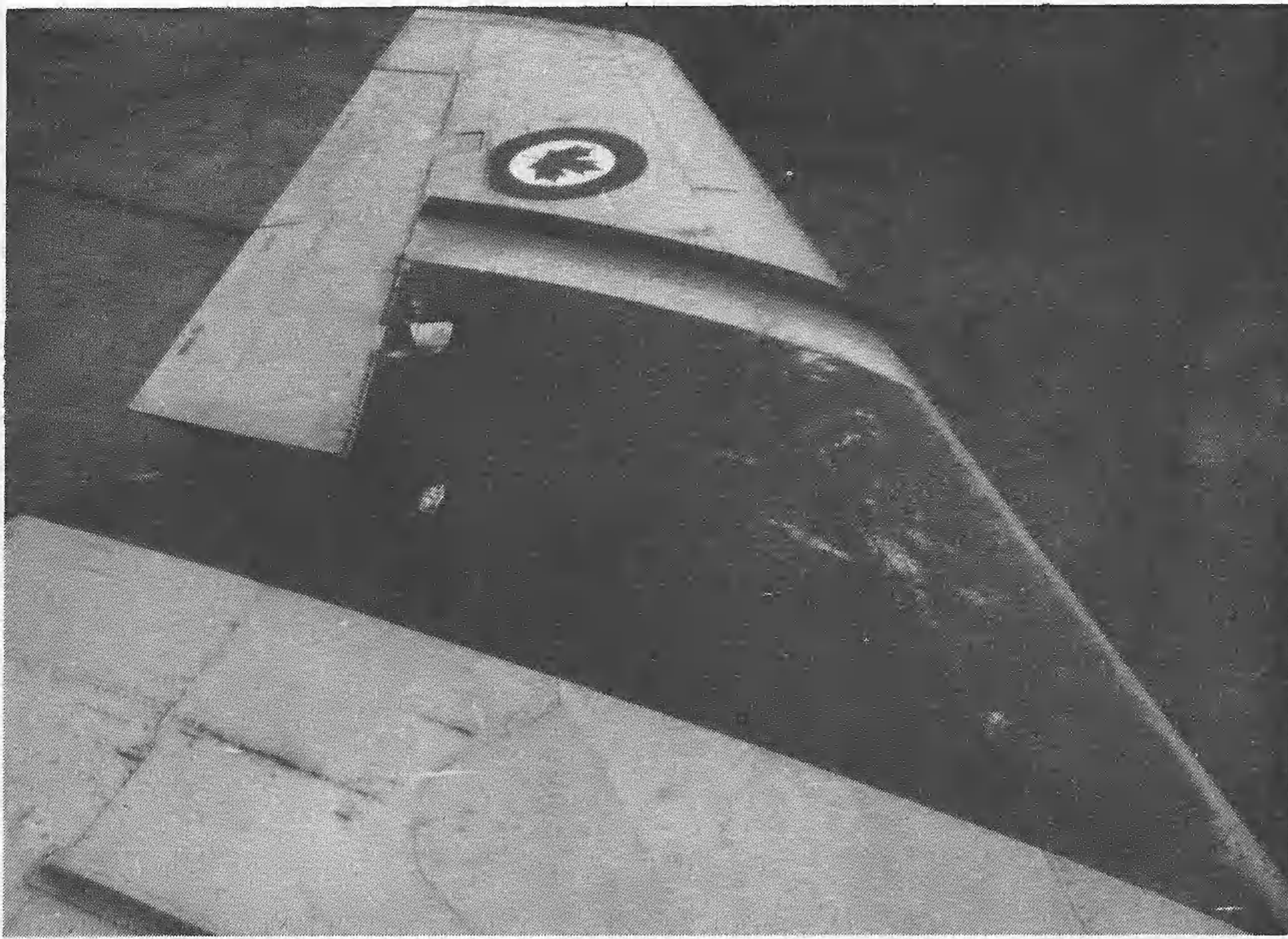
# CANOPY & WINDSCREEN

Of interest are the rear-view mirrors, the yellow latch handle and the blast shield. The grey curtain in the top right photo is used for IFR training and when unfurled is held in place by five elastic cords. Formerly there was a radio compass antenna in the rear portion. Framing is matt black inside with a faded yellow border following the contour of the canopy on the outside. Canopy opens to a maximum angle of 28°. As an interesting sidelight, during an emergency exit, CO<sub>2</sub> sprayed on the acrylic canopy will embrittle the material and help break it. Note also at top right the cylindrical black shroud for the radar scope stored in the rear corner of the canopy.

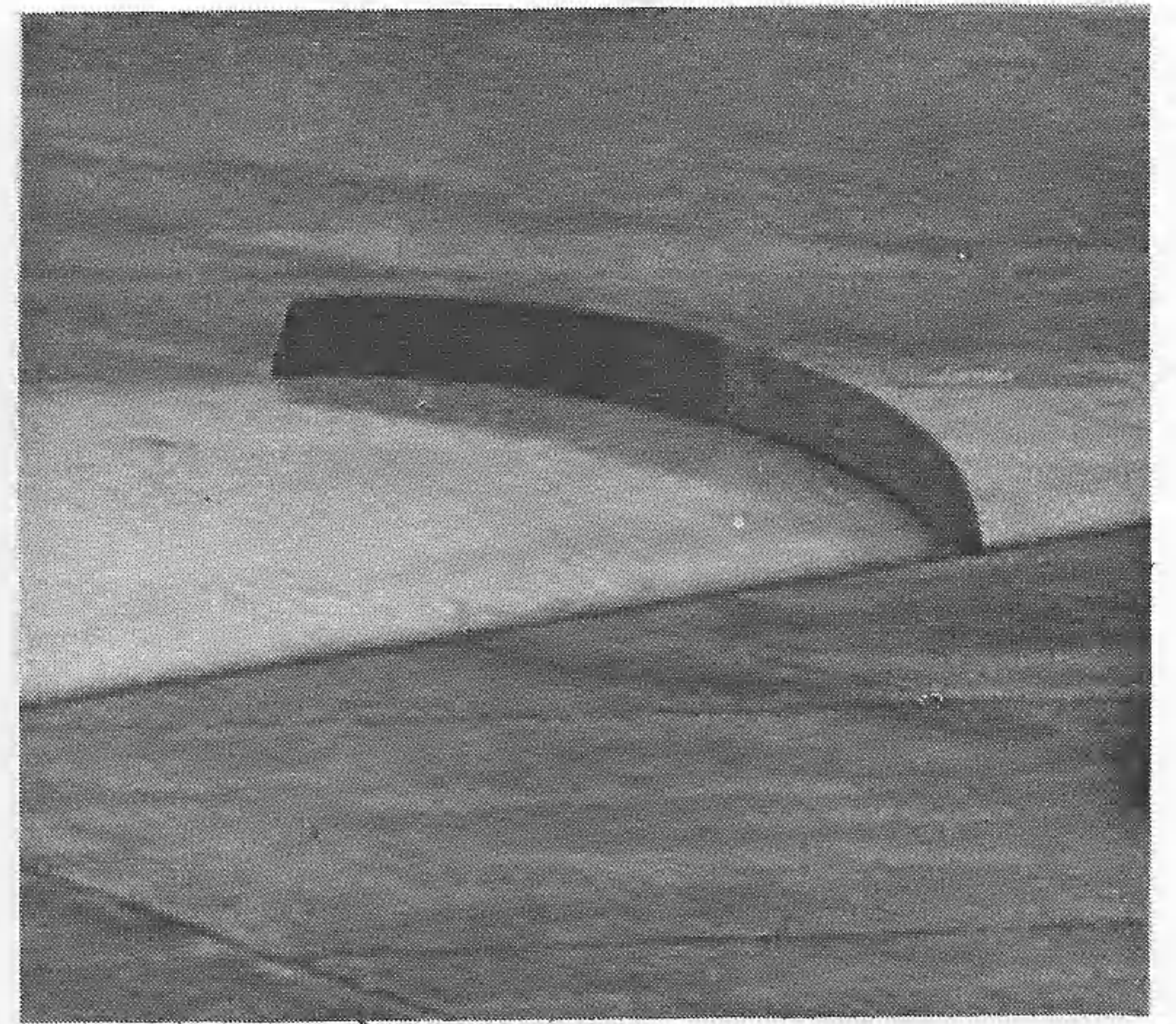


**DANGER**  
KAYOTIN  
SKATS  
**DANGER**

**RESCUE**  
EMERGENCY ENTRANCE  
CONTROL OR OTHER SIDE



Note the aileron hinge line and counterbalances, as well as the forward projection of the outboard wing fence.

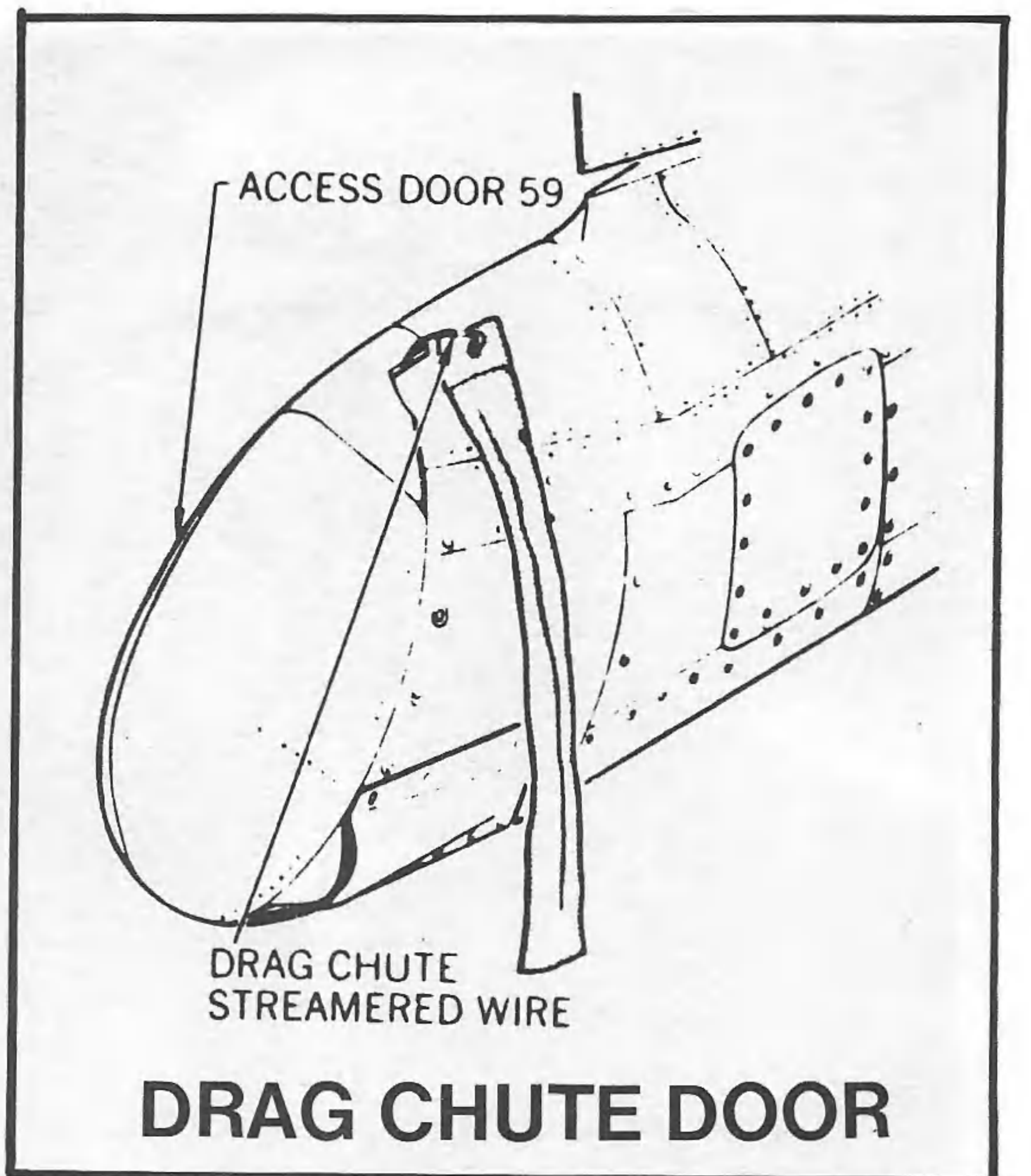
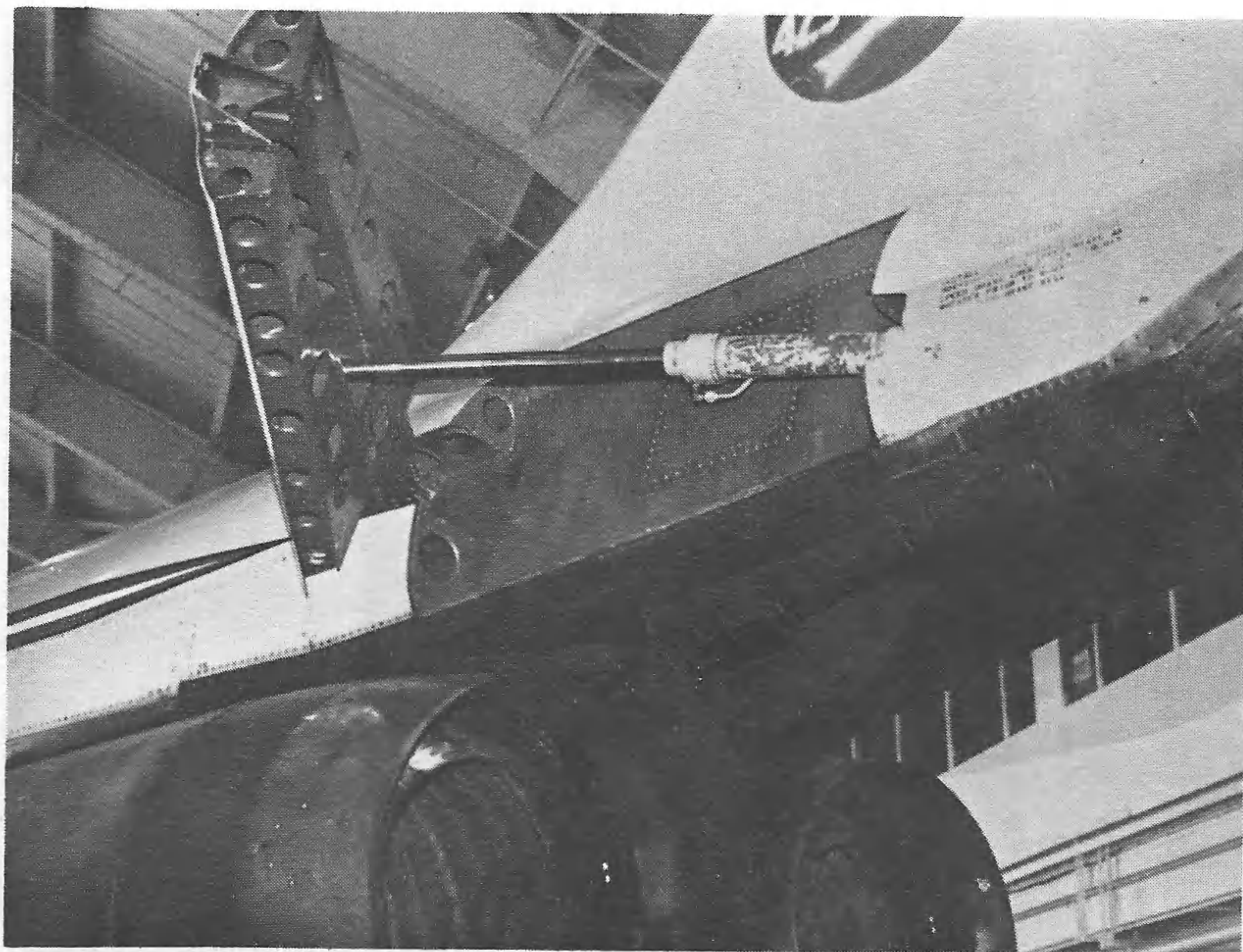


A close-up of the outboard wing fence.

# WINGS & FLAPS

The hydraulically operated and electrically controlled zap-type flaps move slightly backwards as they are lowered, maximum down angle being 50°. Red inside surfaces, with last 3 serial number stencilled in white.

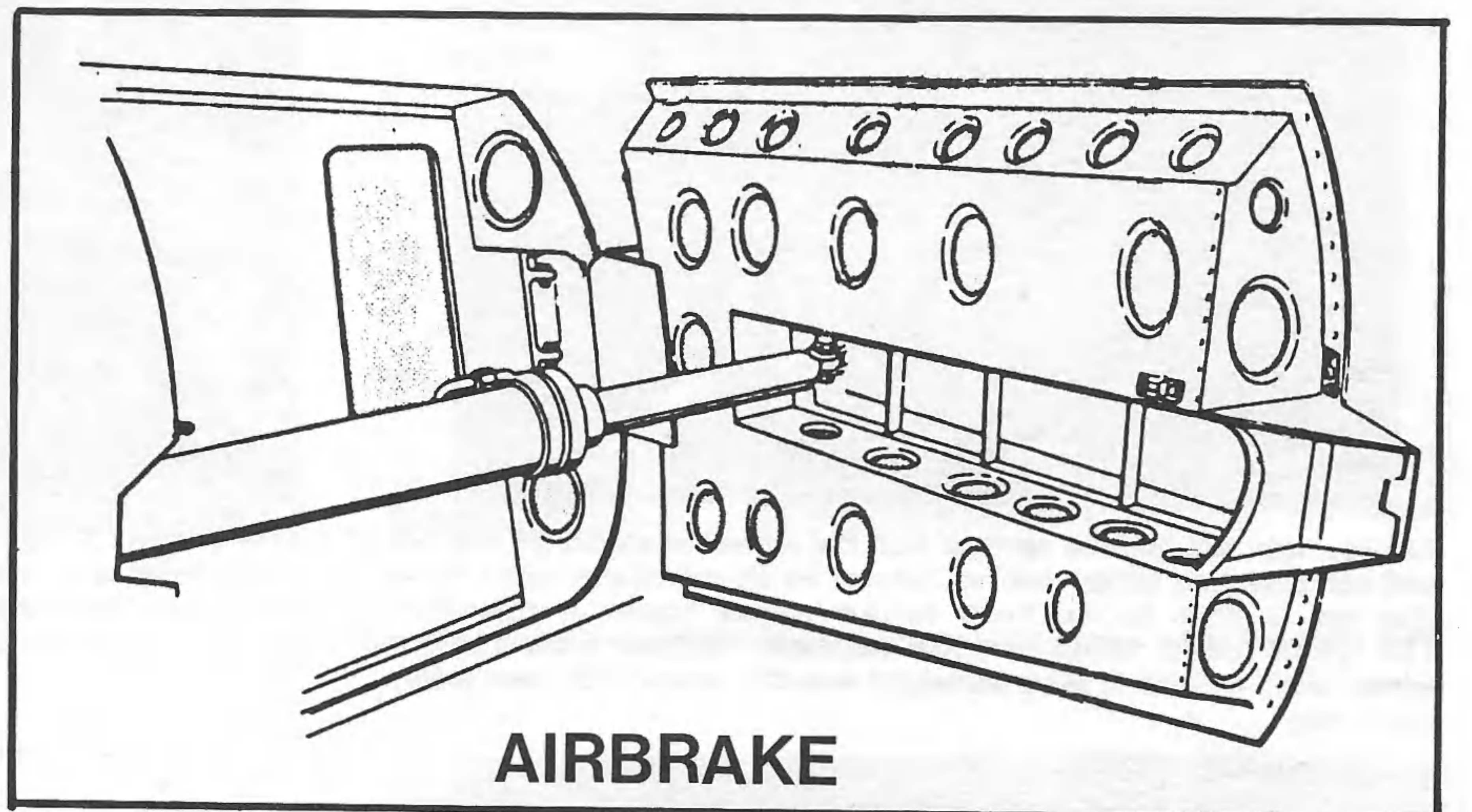


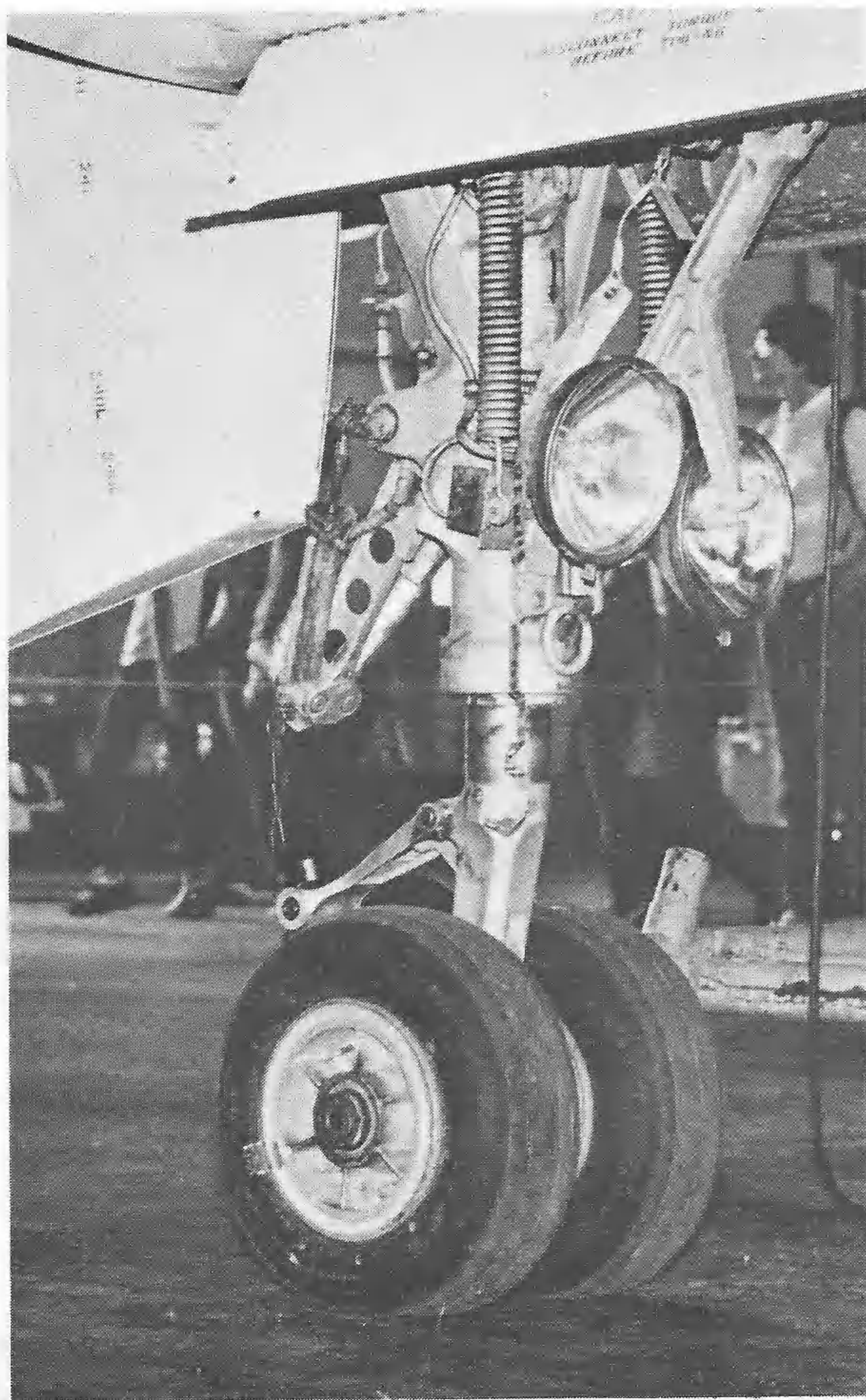


Airbrakes are normally kept closed on the ground but when hydraulic pressure drops they open slightly. Red inside.

## TAIL

Note the triangular 'hole' in the stabilator hinge when set at this incidence. Stabilator has 10° of dihedral. Note also small drain pipe protruding just below the drag chute door. The aft compartment cooling vent protruding from the leading edge was present on the first series of Voodoos but was removed and faired over sometime after the second series was received.

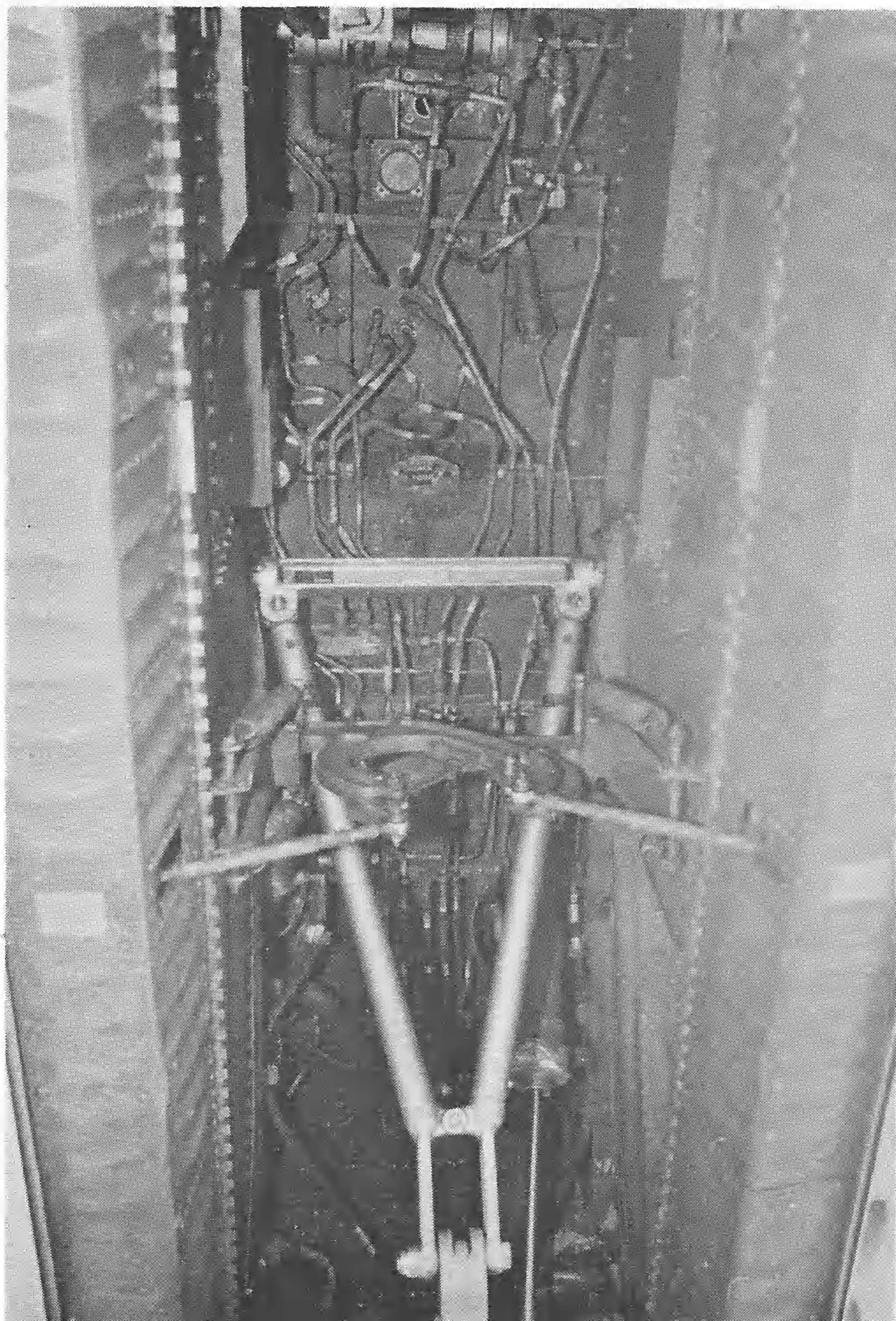




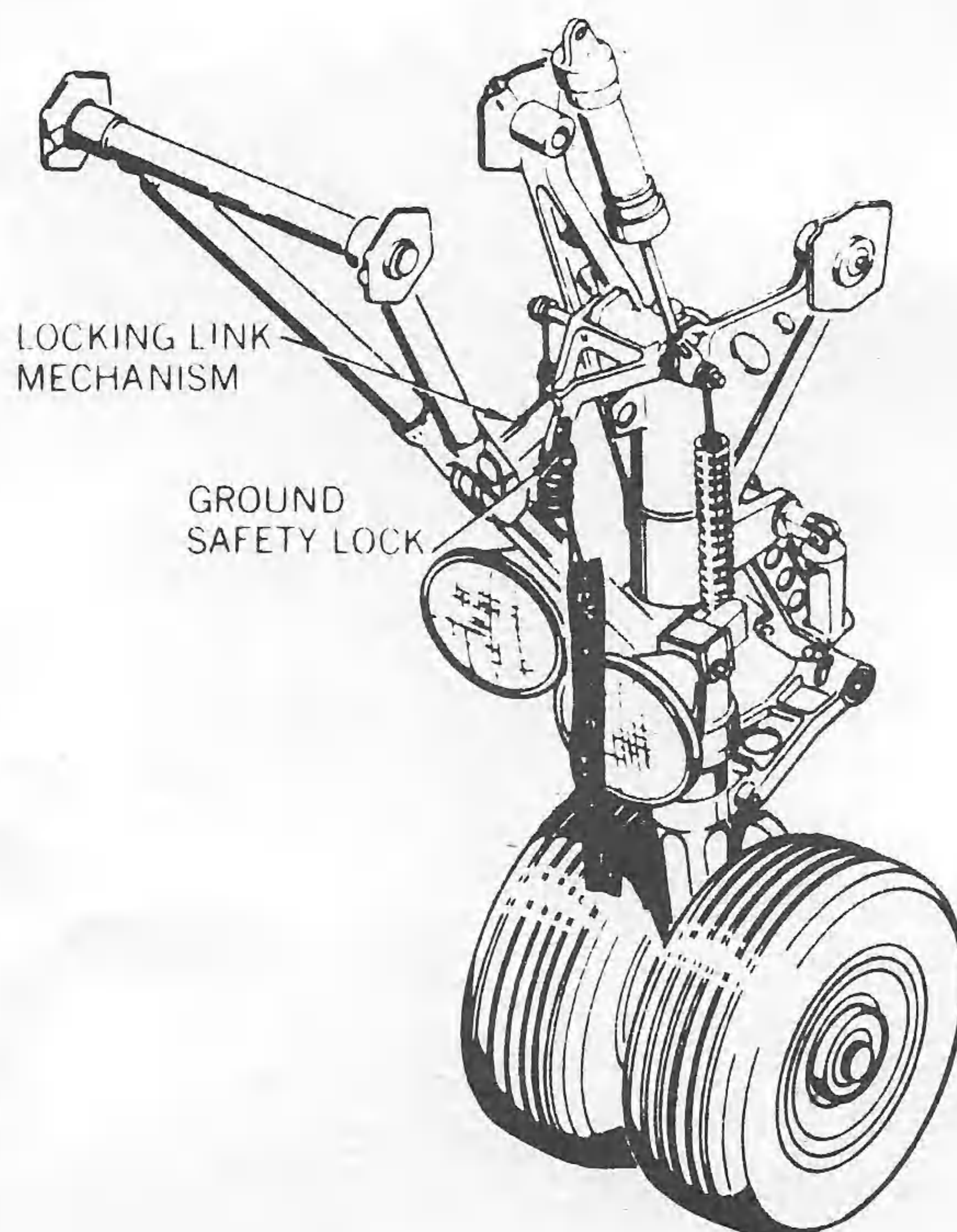
Above, note the tension springs and the different angles of the left and right landing lamps (which cannot be lit simultaneously). Note also the overrun barrier hook for emergency barrier engagement. The wheel hub is white or silver normally. Below, a view of the wheel well. Colour is zinc chromate interior green with gear doors red inside.

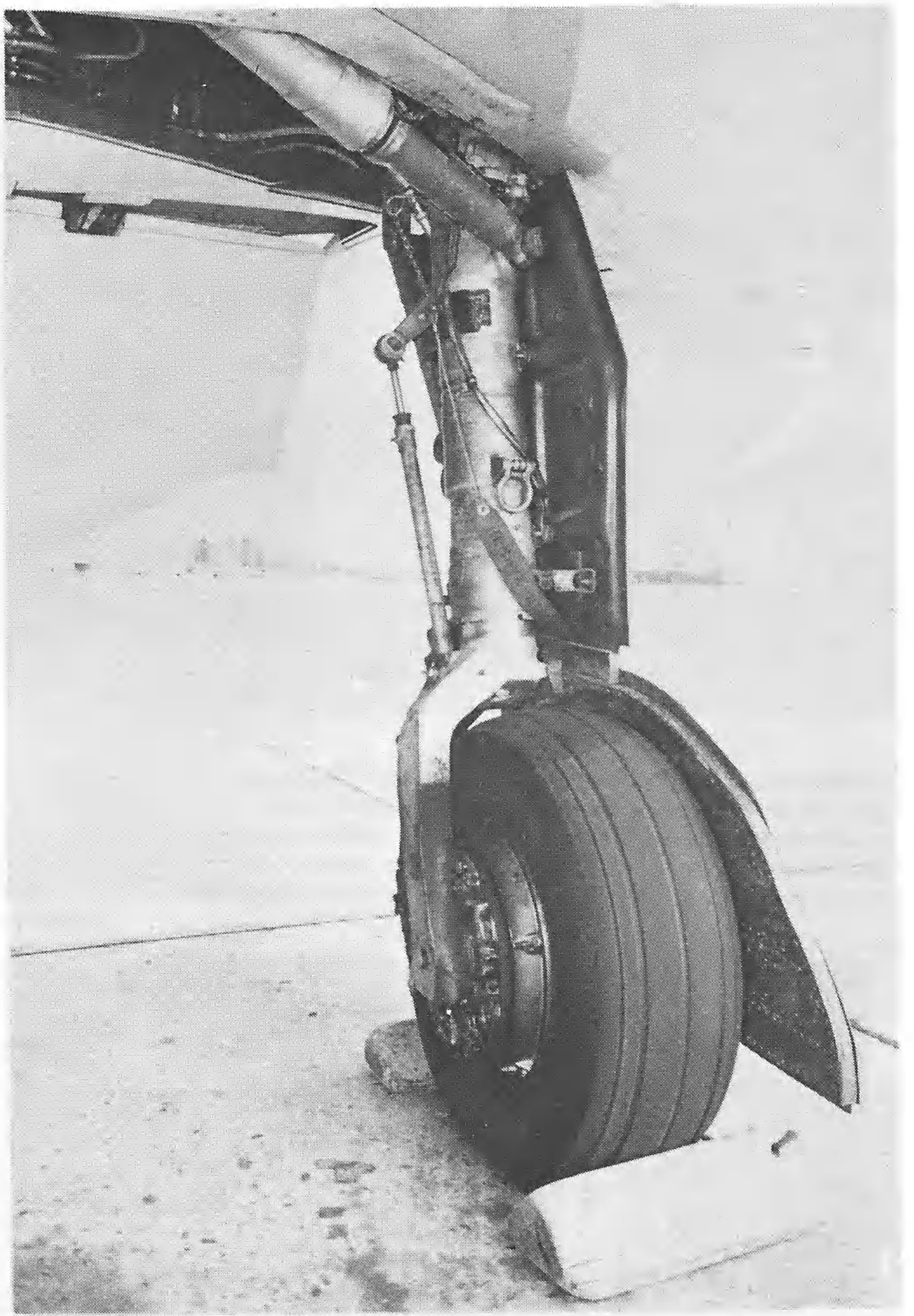
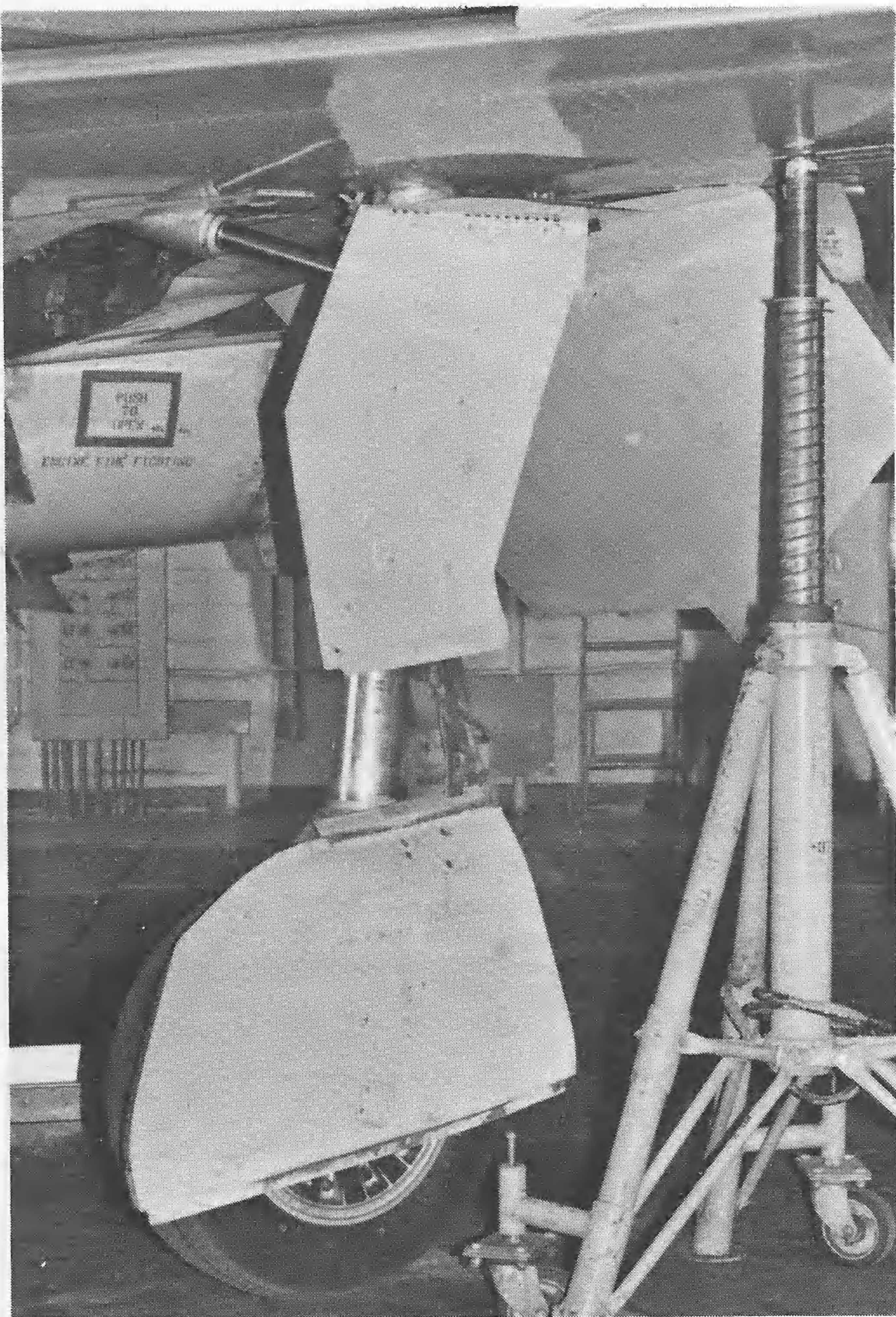


Front view of the nose gear. Note again the landing lights. The rectangular and round dielectric panels ahead of the wheel well are grey-green fiberglass.

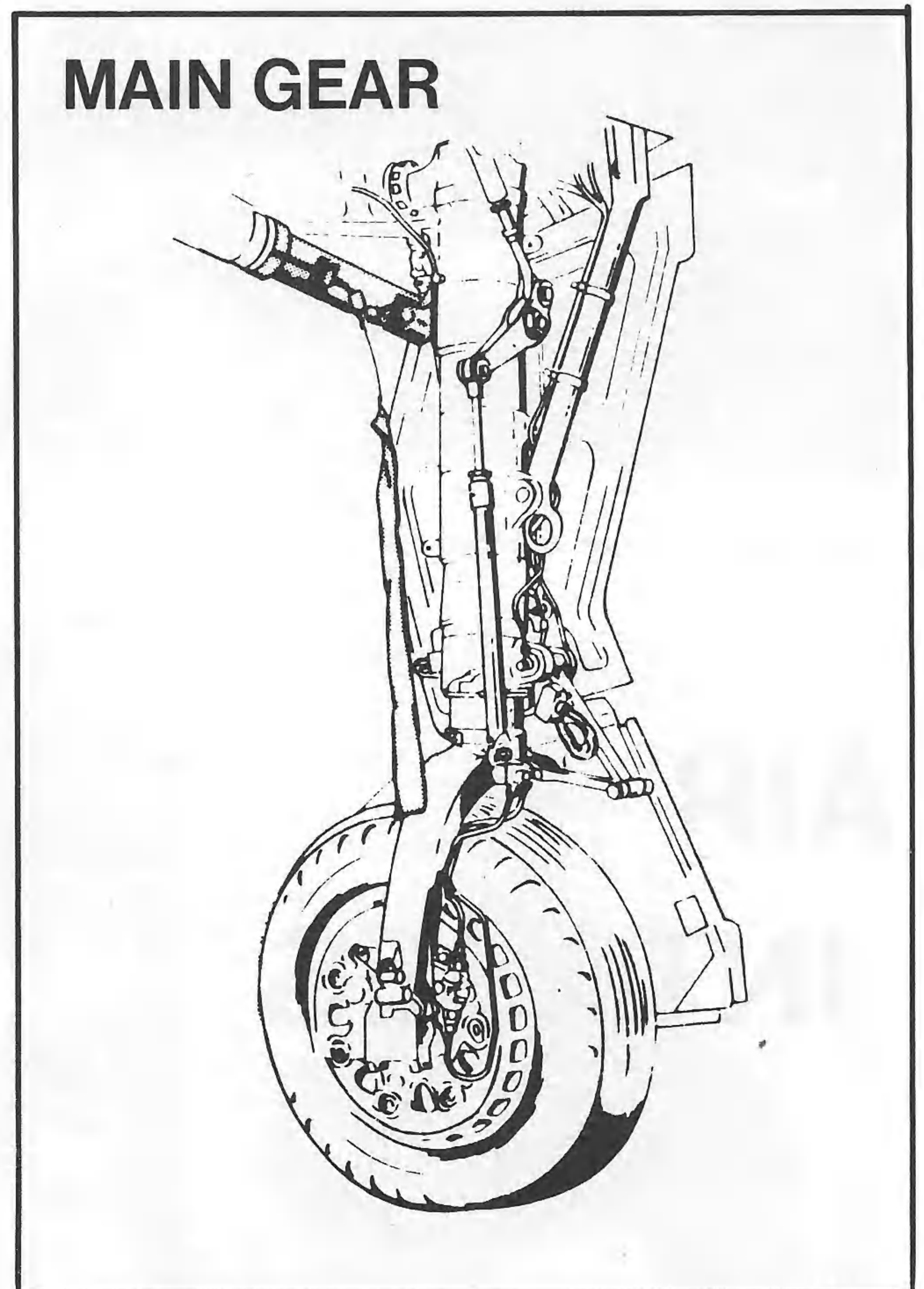
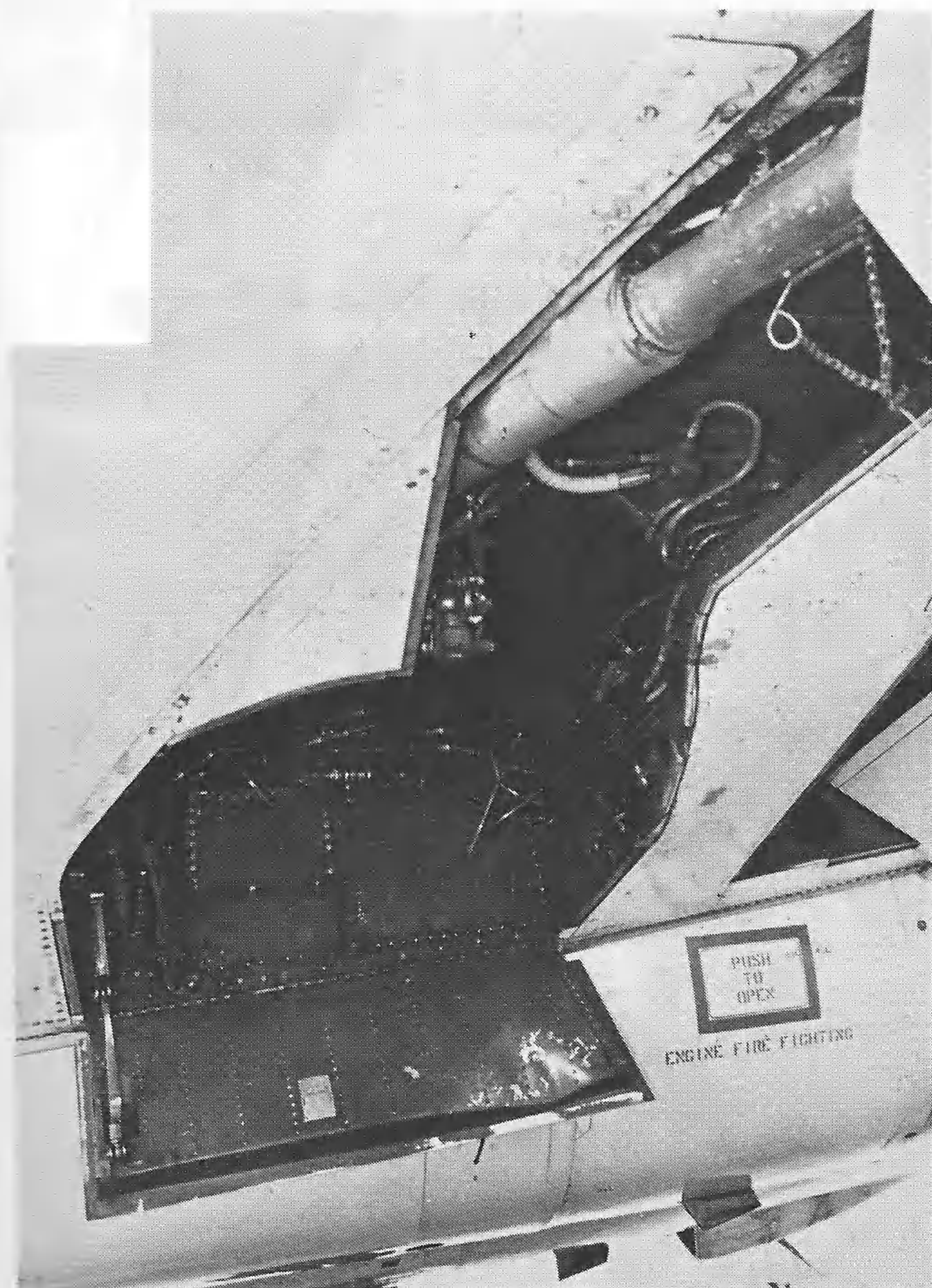


## NOSE GEAR

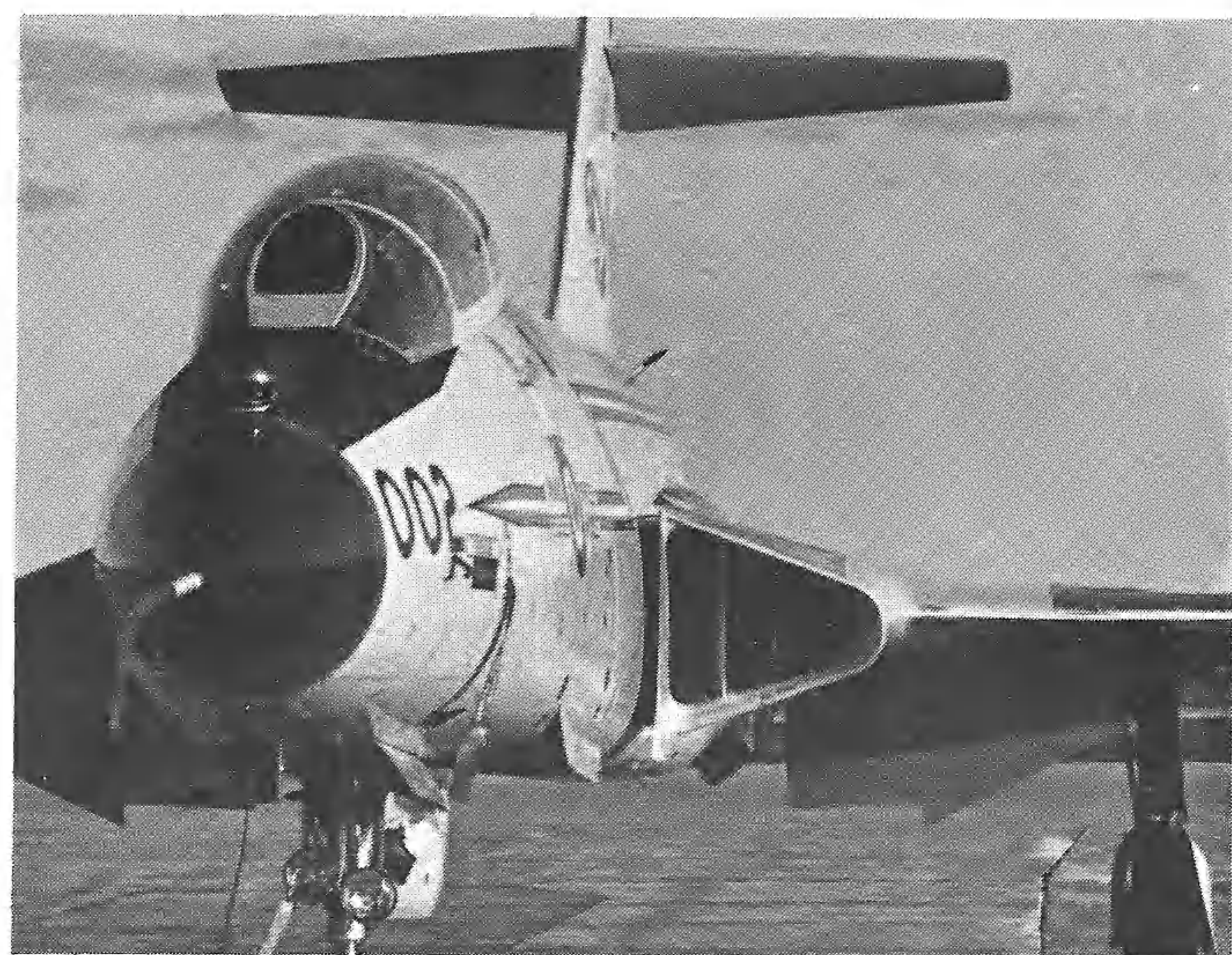




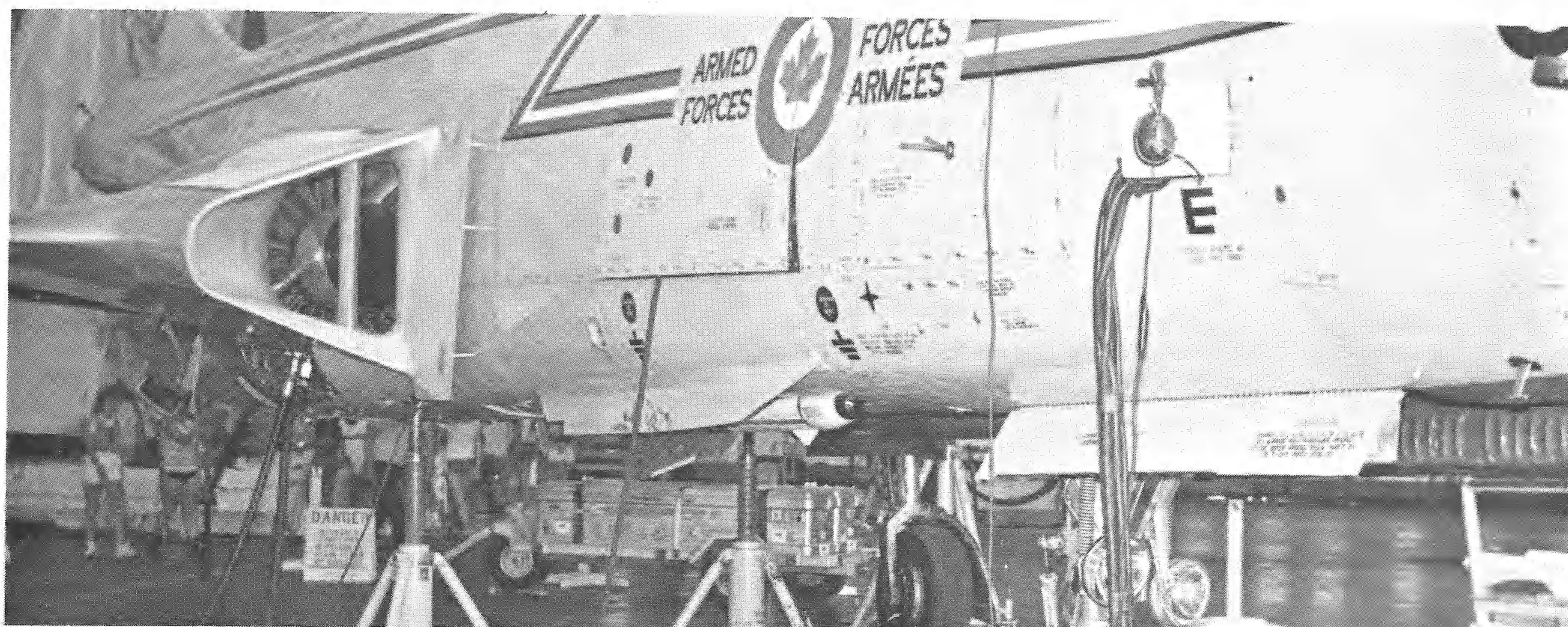
The CF-101B & F used wider tires than earlier Voodoos and the gear doors are bulged to accommodate them. Main wheel hubs are dark grey. Again, well is interior green, and doors are red.







Above left, a first series CF101. Above right, a second series Voodoo. The first series had a protruding intake scoop for cooling equipment on the lower port nose beside the nose wheel well. The second series had a flush NACA type inlet in the same position. Look closely! Other differences are that the first series had a radio compass sense antenna, angle of attack transmitters rather than alpha probes and no IR sensor. On the photo at right, you will notice two vanes in the engine air inlet. These are only on second series 'F' models and were fitted in an attempt to improve airflow. Below, a better view of the single vane 'B' model inlet.



Below, the port afterburner cooling duct.

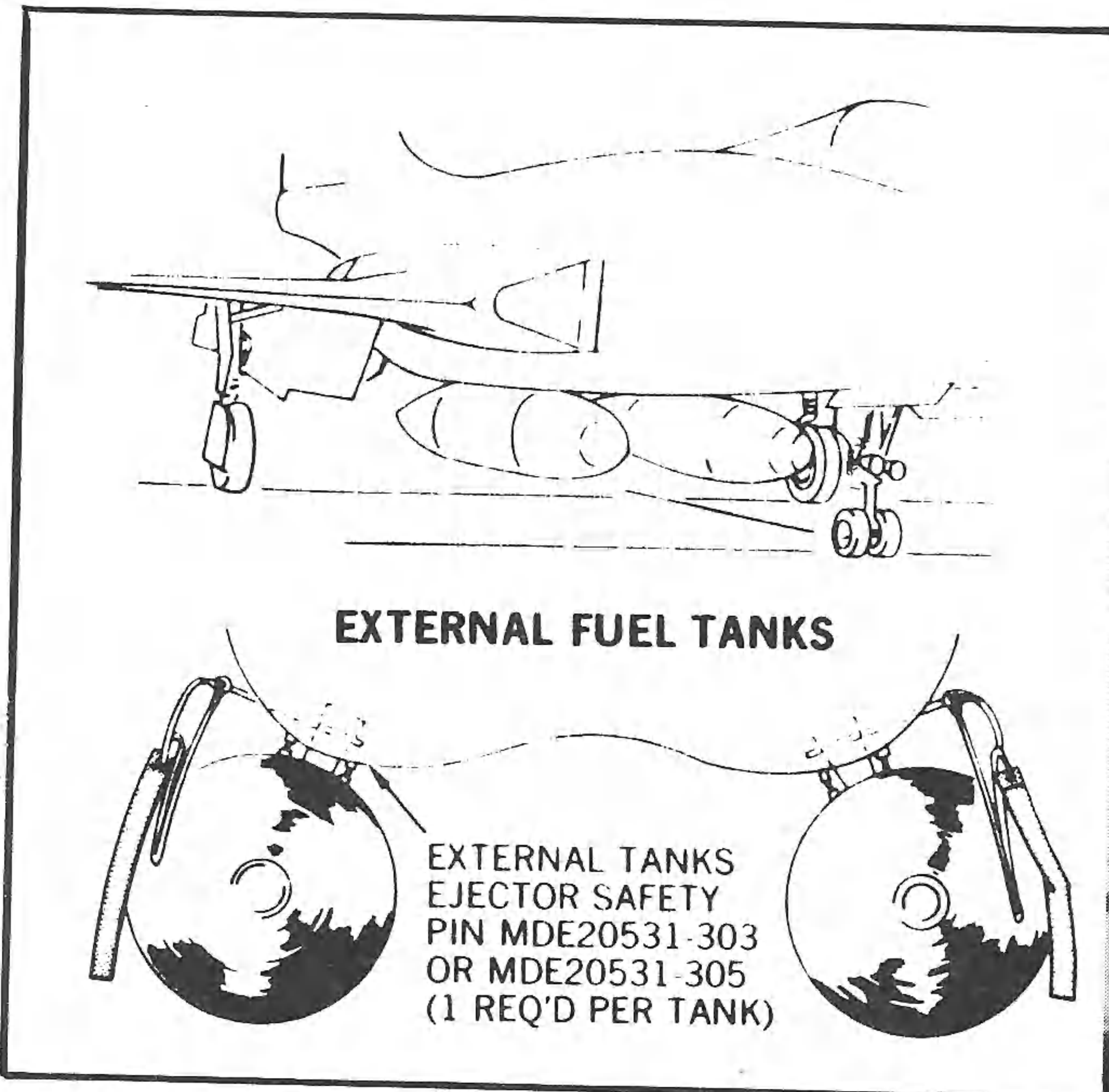
# AIR INTAKES



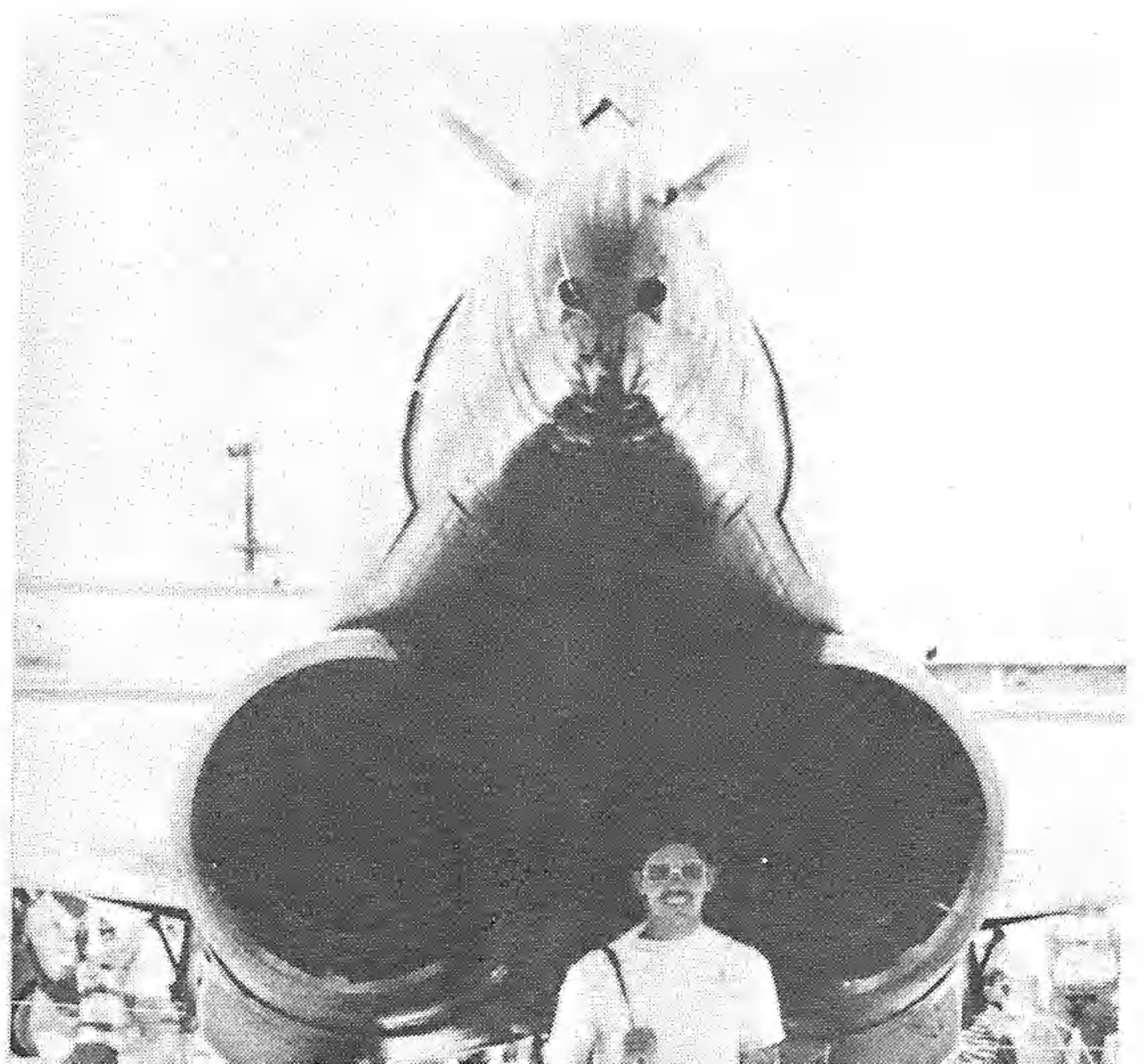
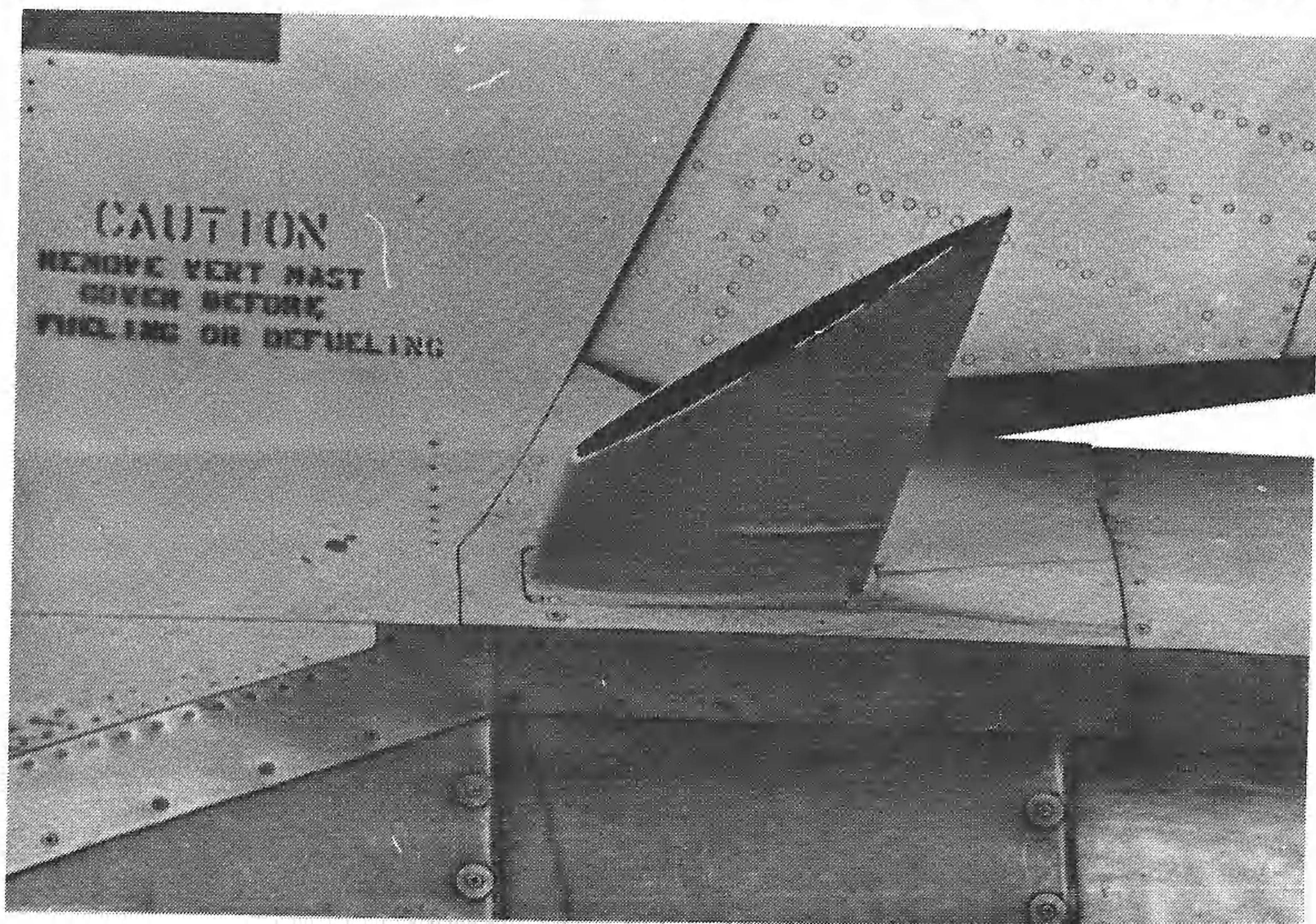


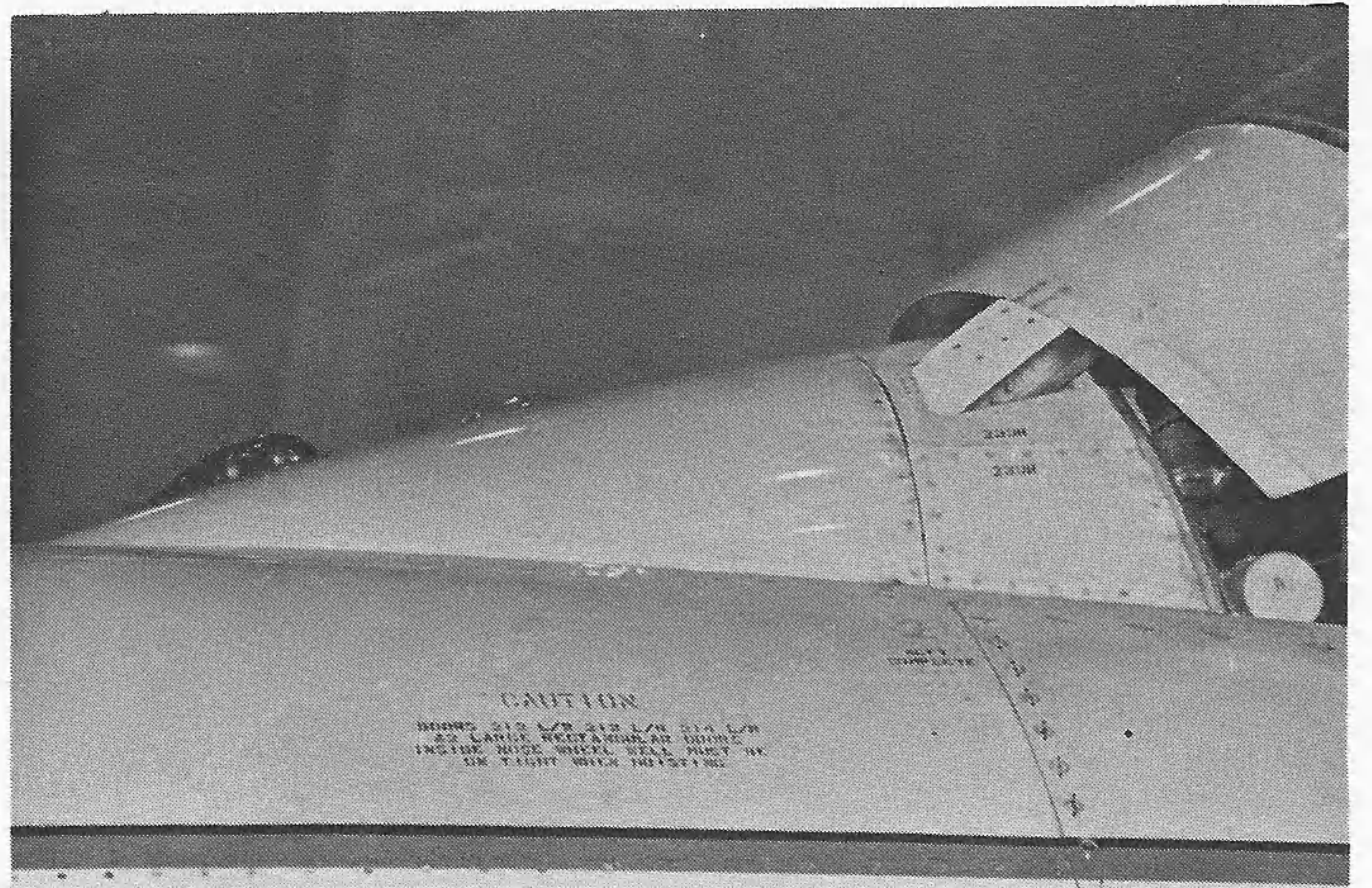
# EXTERNAL FUEL TANKS

External fuel tanks, which are said to induce negligible drag can be of two types, stubby (225 in lg x 35 in dia) or streamline (273 in lg x 27 in dia). It is common to see an asymmetrical installation with only the starboard tank installed.

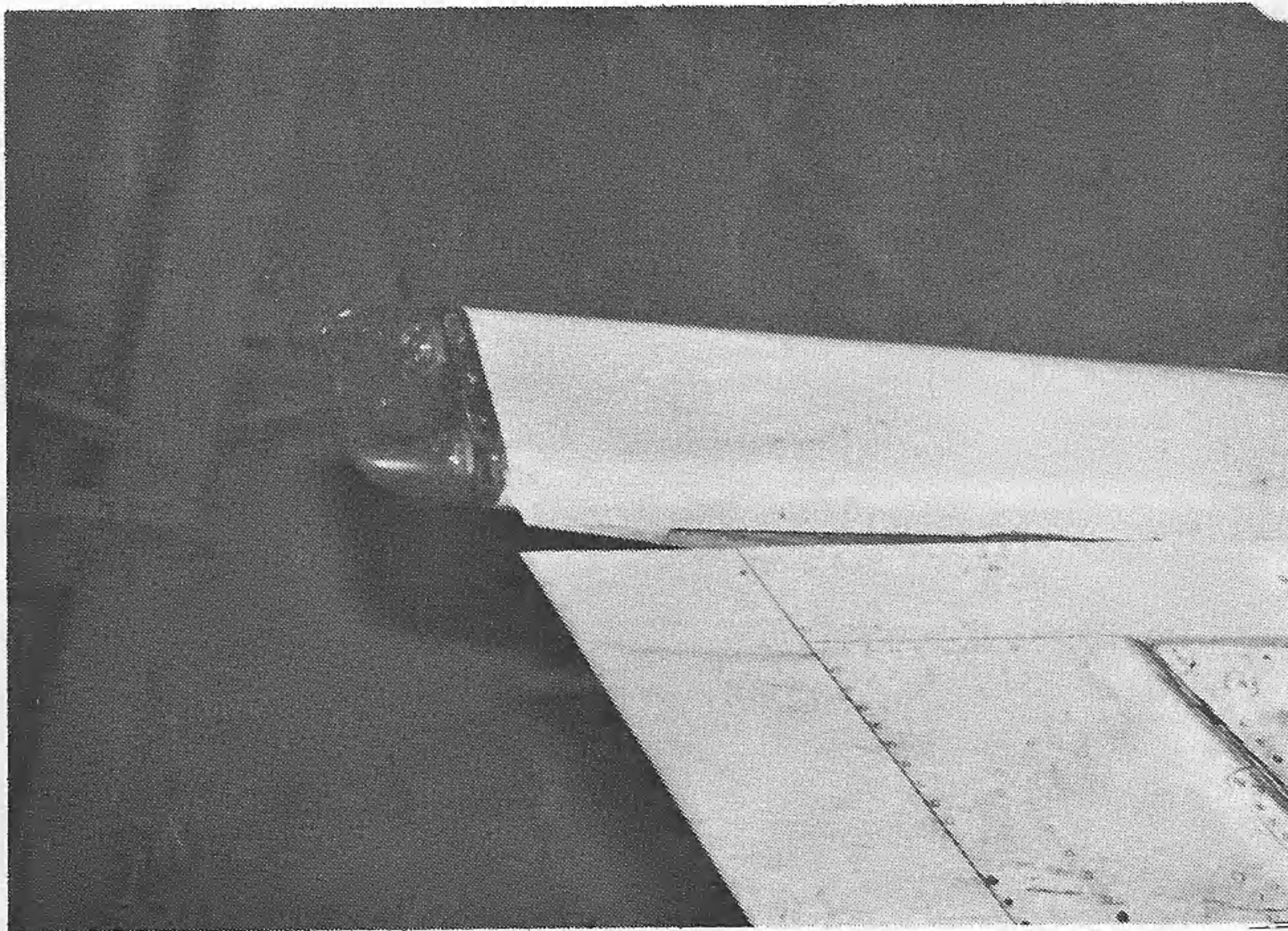


Below, the fuel vent masts. Note the different lengths as seen in the right photo. The longer one, the 'high scarf' mast maintains positive pressure of 0.5 to 2.5 psi in the fuselage cell, while the 'low scarf' mast maintains a pressure in excess of 2.5 psi.



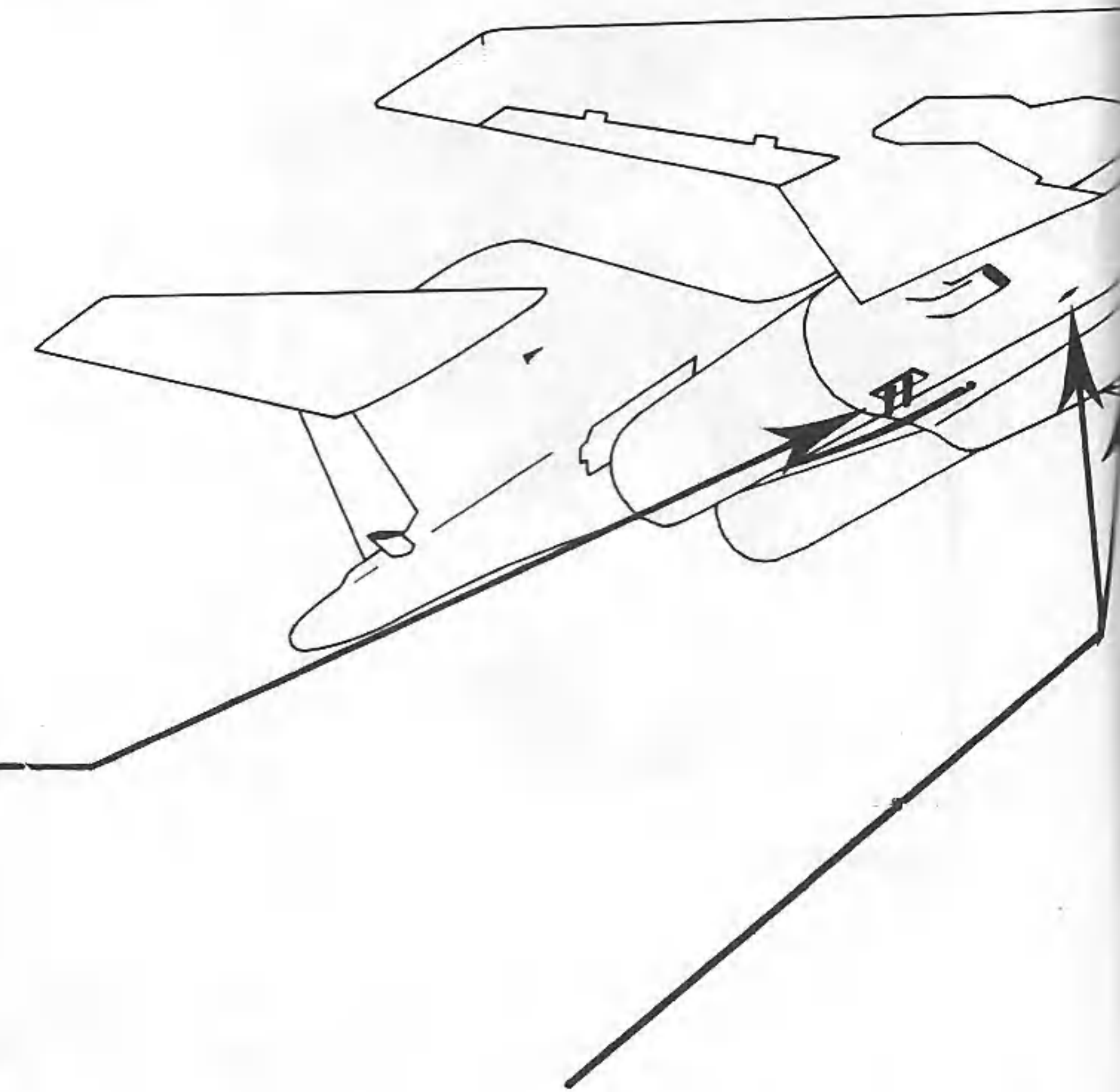
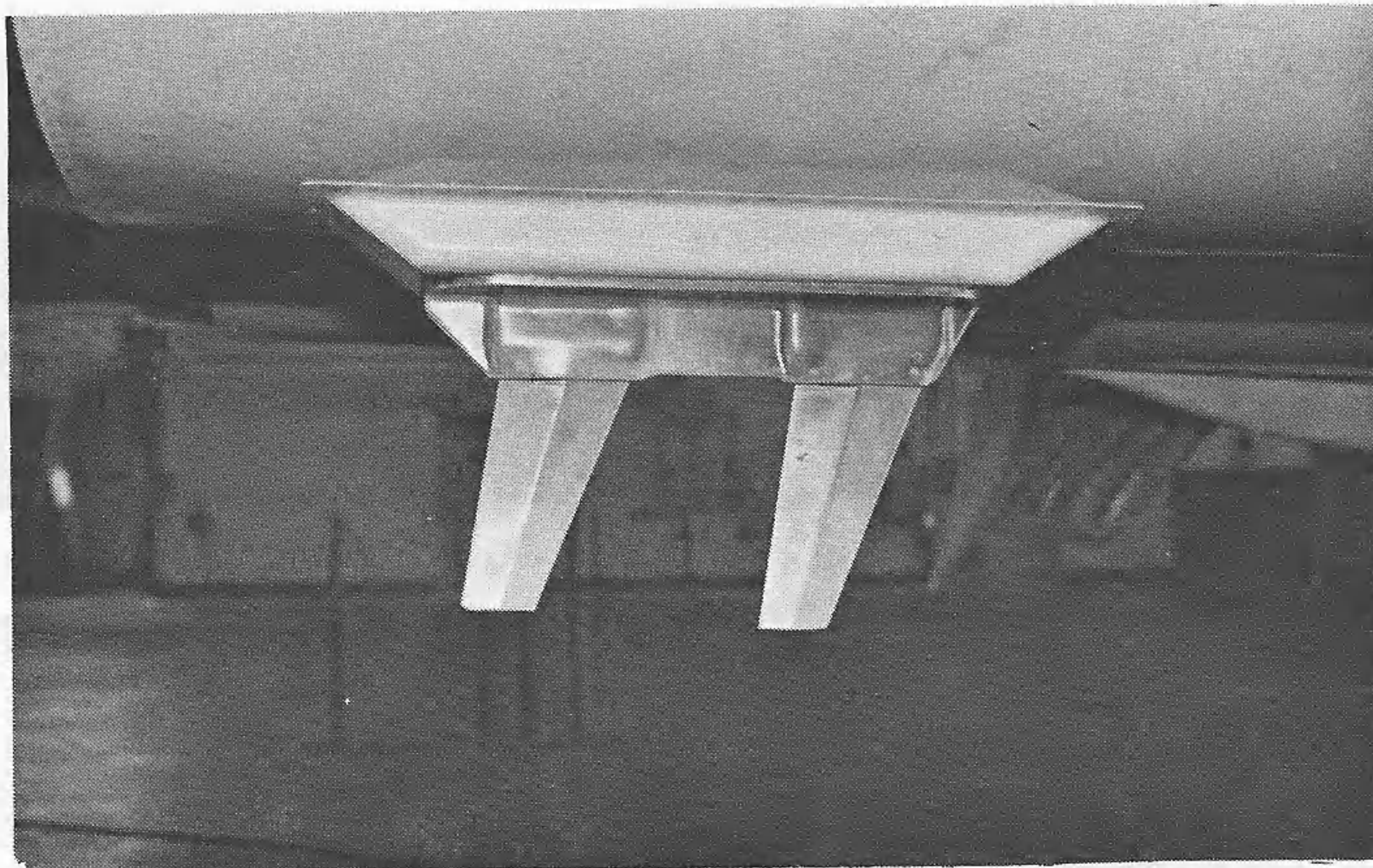


Red anti-collision light and just visible ahead is the clear fuselage light, as well as a little more detail of canopy hinges.

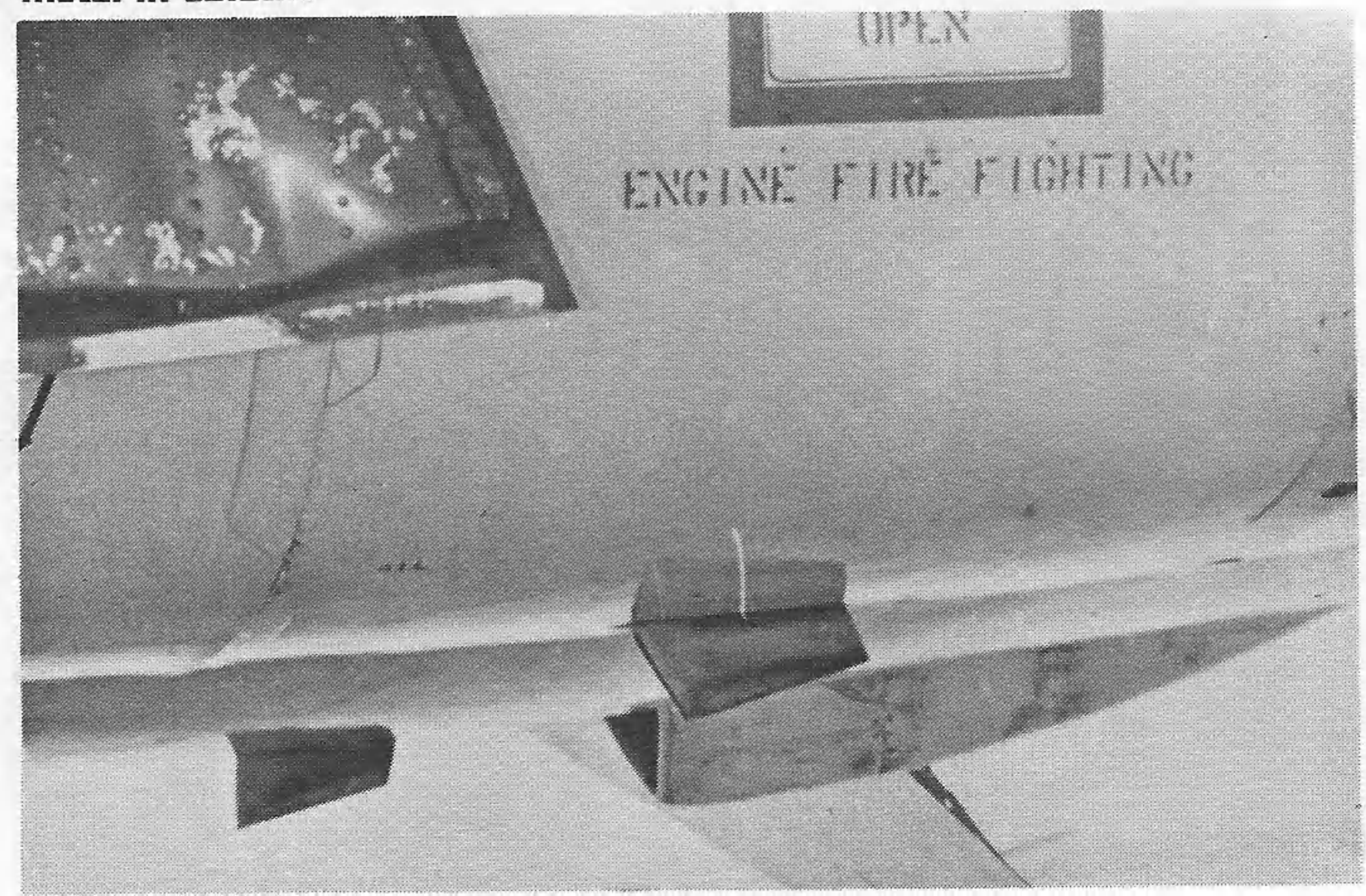


A view of the beacon mounted at the rear tip of the vertical fin, colour orange.

Twin blades gray TDDL antennae relay information from ground radar stations monitoring air interception. TDDL appeared in the mid sixties.



Unburned fuel from the engine is drained from the lines at engine shut-down and spilled out by the two fuel vent masts which are dark stained metal in colour.



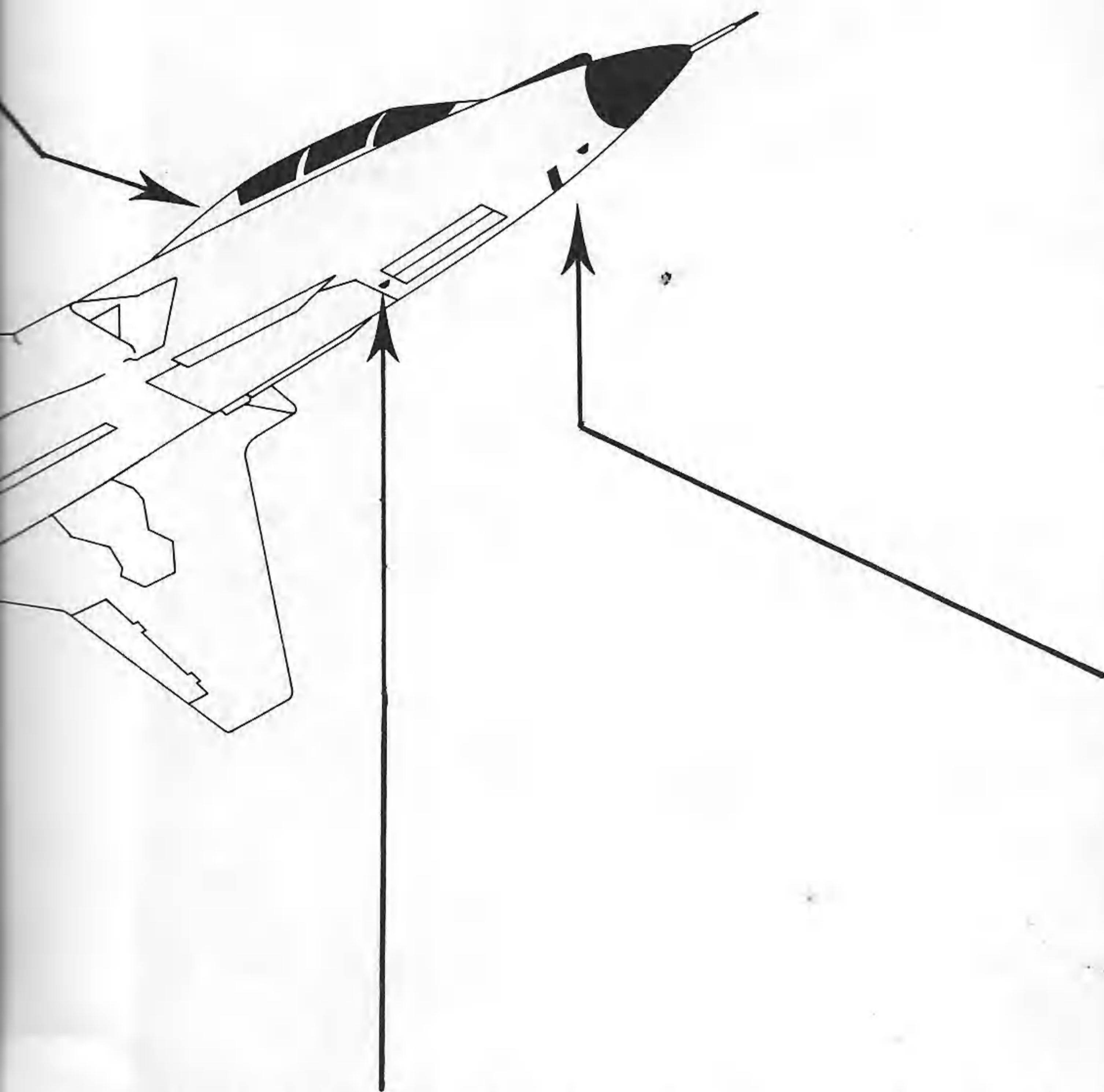
# BUMPS & LUMPS



The angle of attack sensor, visible below the lettering "FORCES ARMÉES", is common to interceptors of both early and later series. Just behind and beside the UHF antenna under the nose is the temperature probe.



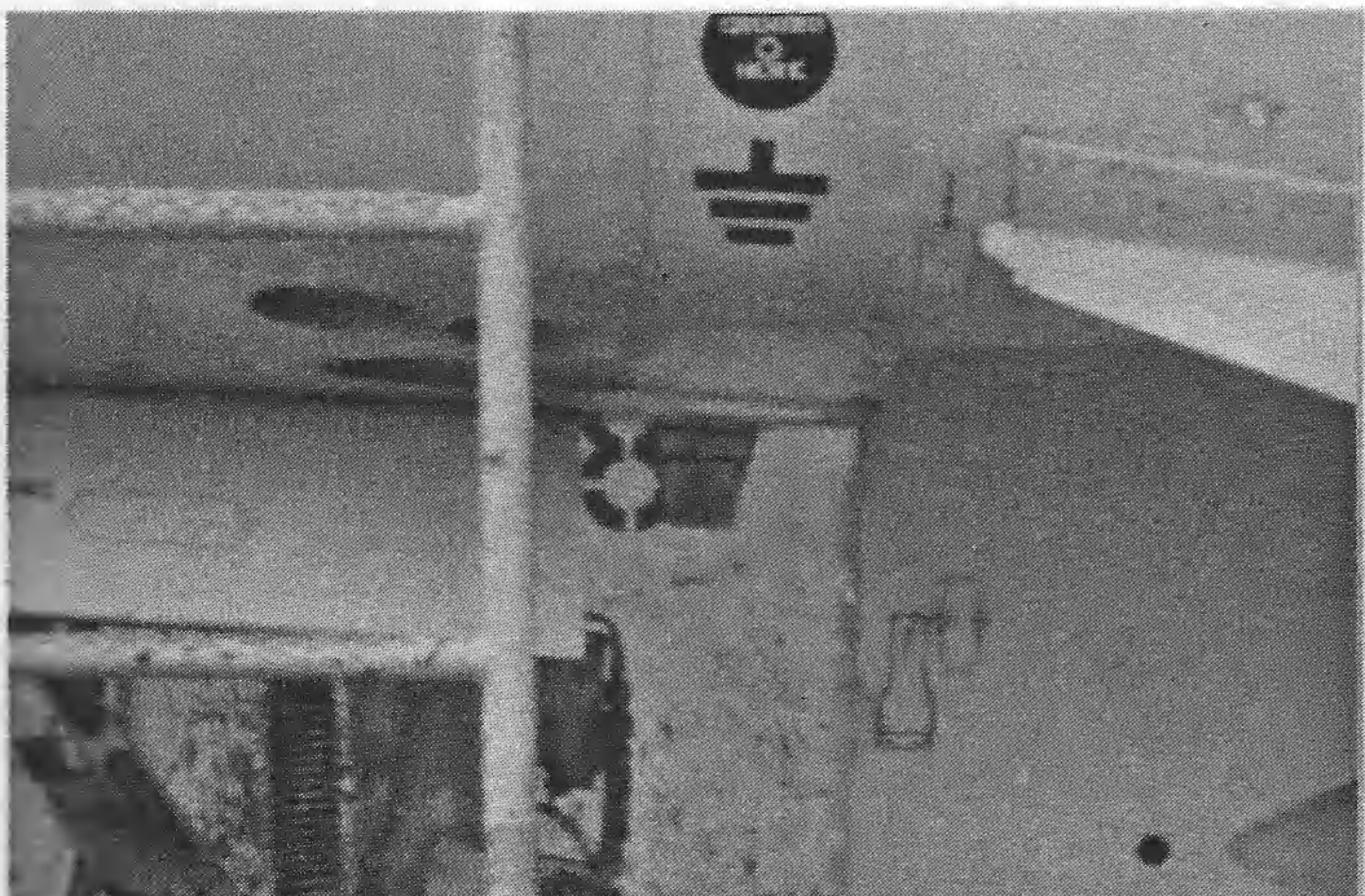
Second series a/c like this are equipped with an alpha probe on each side of the nose which furnishes data to the computer of the autopilot. On the first series, there were AOA sensors located here, in addition to the one highlighted above left.

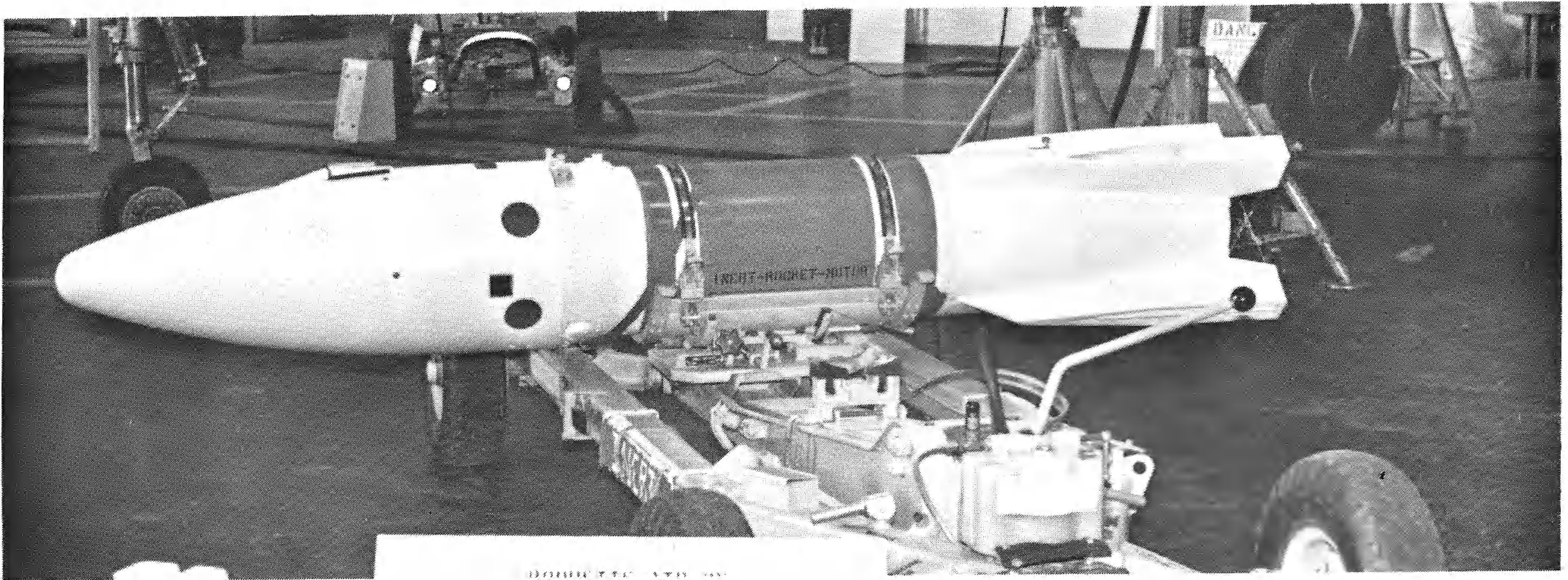


Below the alpha probe is the UHF antenna, metallic with a white stripe. Ahead we can see the black TACAN blade antenna, installed behind the radome only on CF101F's.



Between the nose wheel well and the weapons bay is the well-hidden black IFF blade antenna.

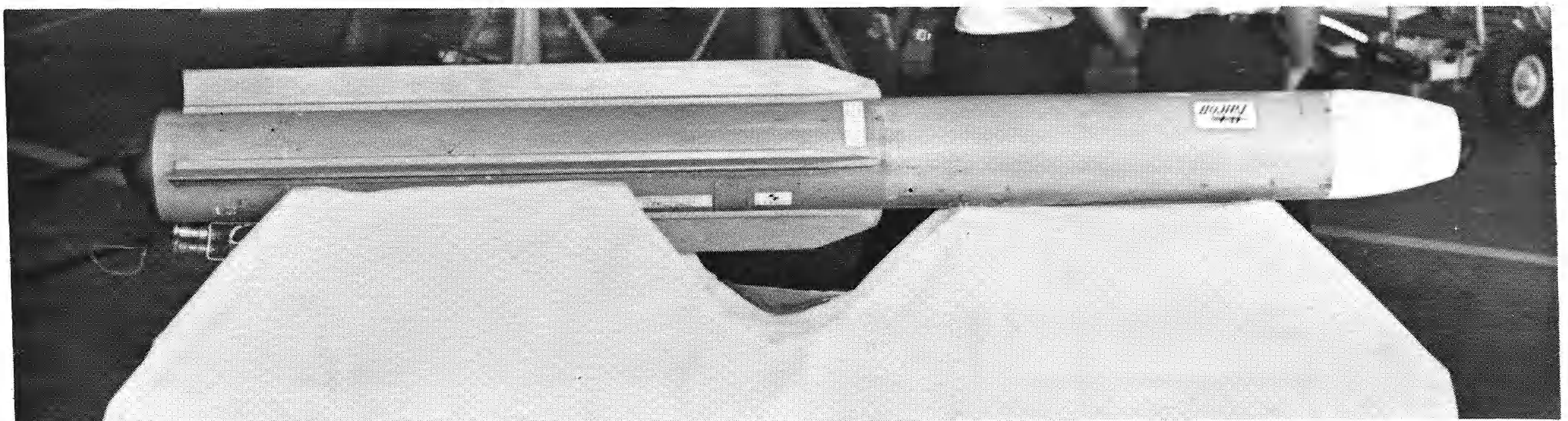




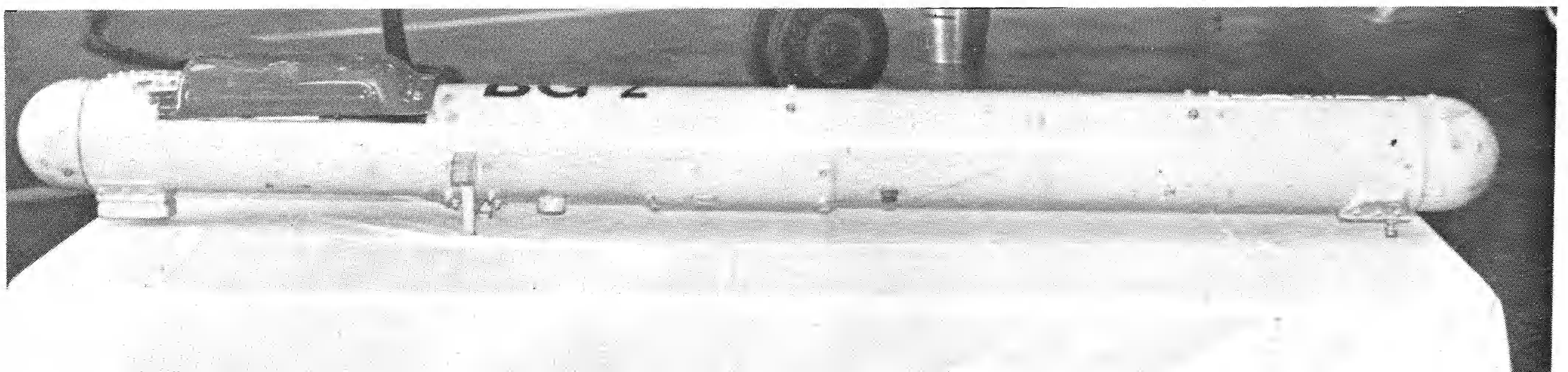
Above, the AIR-2A Genie rocket. Actually this is an ATR-2N used to train personnel on loading procedures and is gloss white with a dark blue band. On the real Genie, the tail fins extend in flight to stabilize the weapon. Here you might be able to see crossed wire tail bracing used on inert examples. Below, an AIM-4D Falcon. Forward section white, rear red. The thin bands on the leading edges of the fins are the detonators.

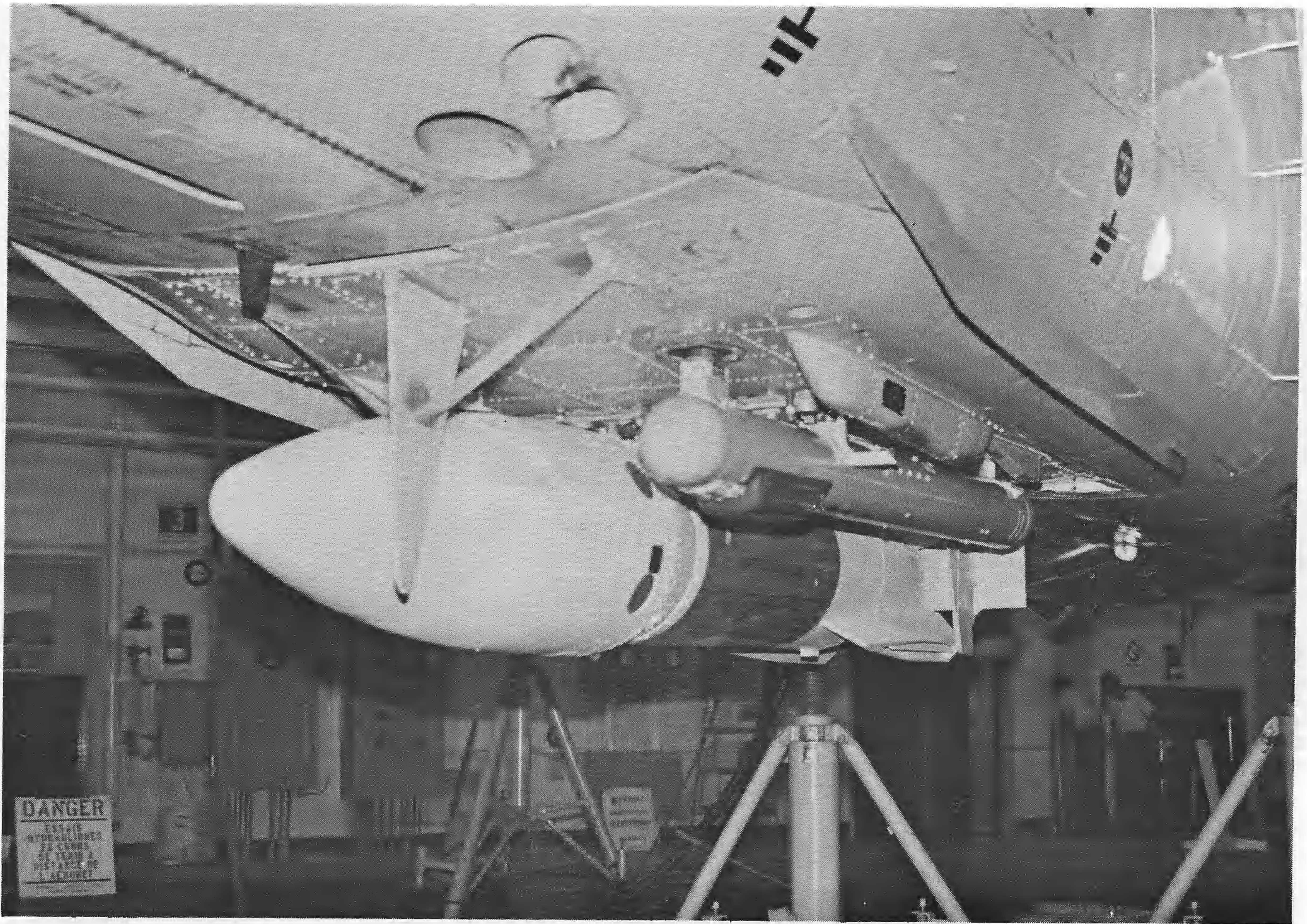


# WEAPONS & SIMULATORS



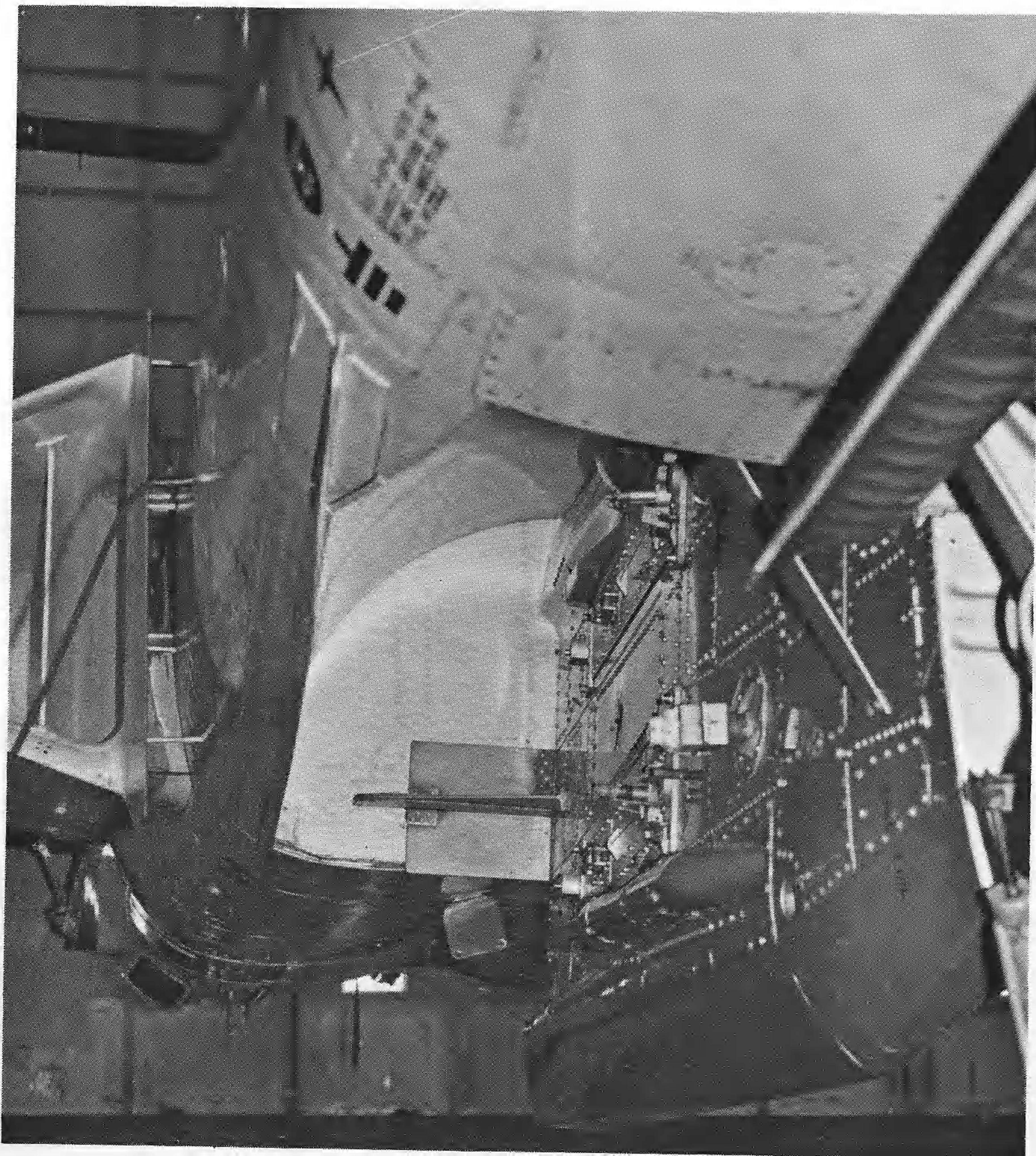
Above, the Falcon substitute is the WSEM (Weapon Simulation Evaluator Missile), all gloss blue with a white warhead. Below, for the Genie we have the MSR (McDonnell Simulator Rocket) used to evaluate the aircraft weapon system. Finished in gloss yellow with a red access door on the front (left side) covering a camera.





# WEAPONS MOUNTINGS

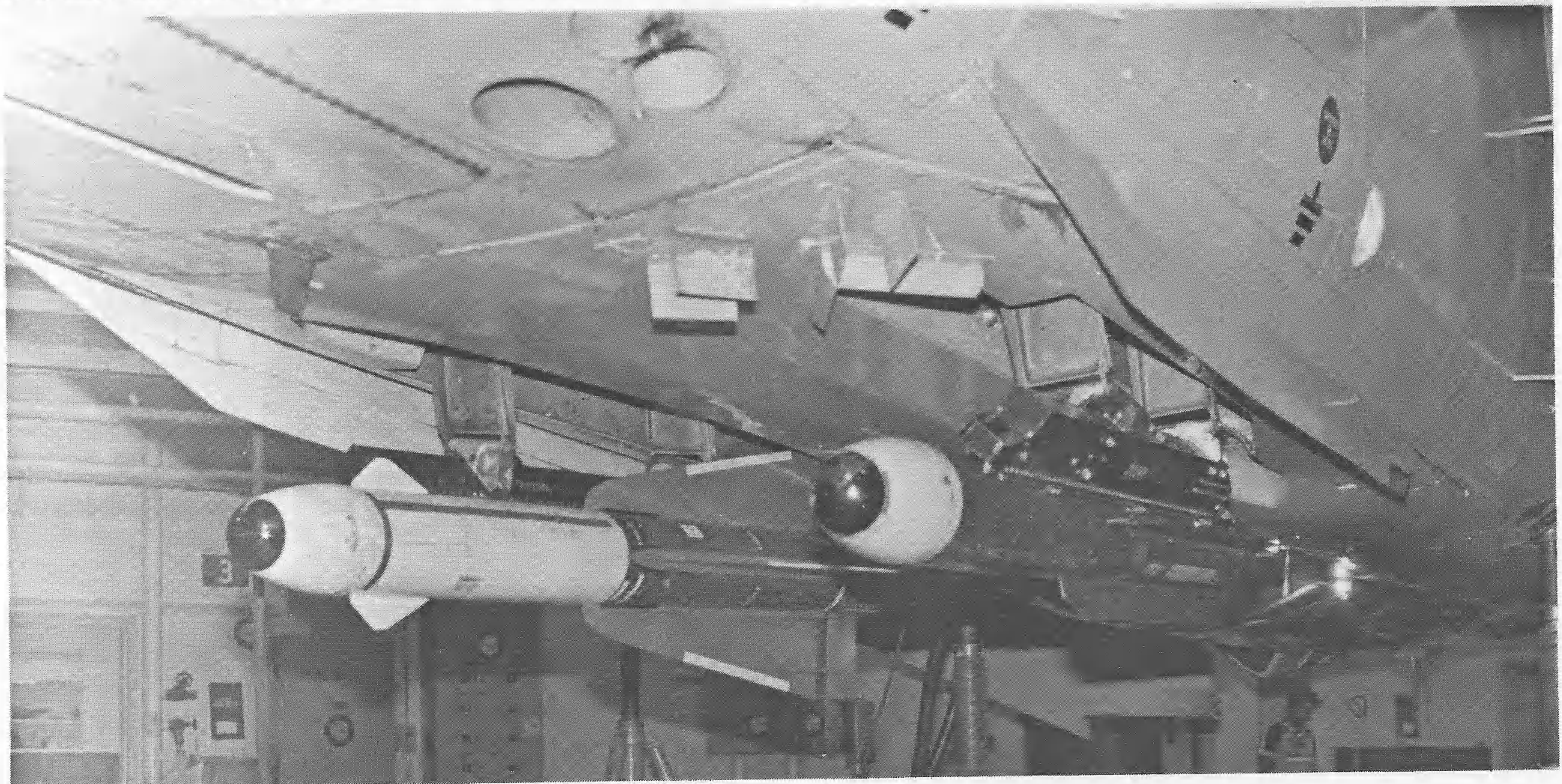
Above, we see the AIR-2 Genie and the MSR mounted on the one side of the rotating weapons bay door. The purpose of the braced triangular fin at the front is unknown. Note the AIR-2 has a slight nose-down attitude when installed.



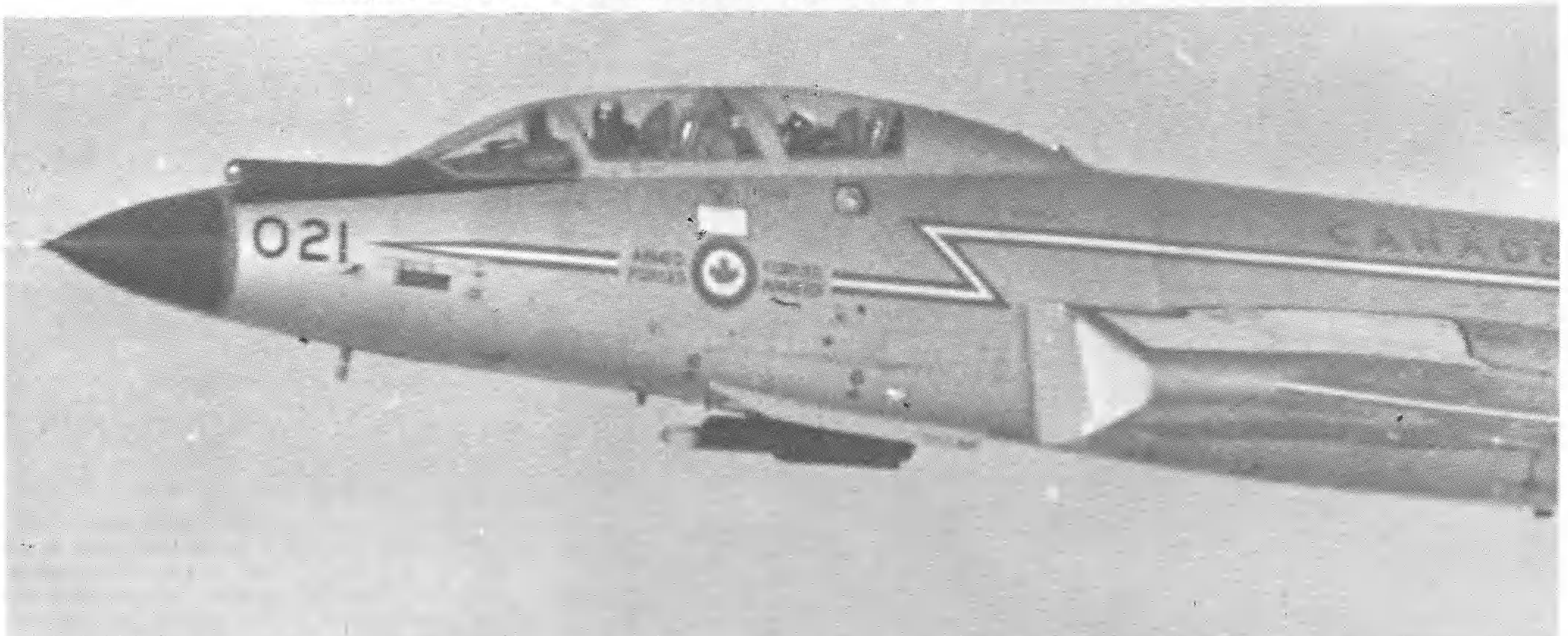
At left, the door rotated and shown without AIR-2 installed. Note the square plate at the rear of the door, which can be discerned behind the Genie in the photo above. Note also how uncluttered is the interior of the weapons bay (gloss white).

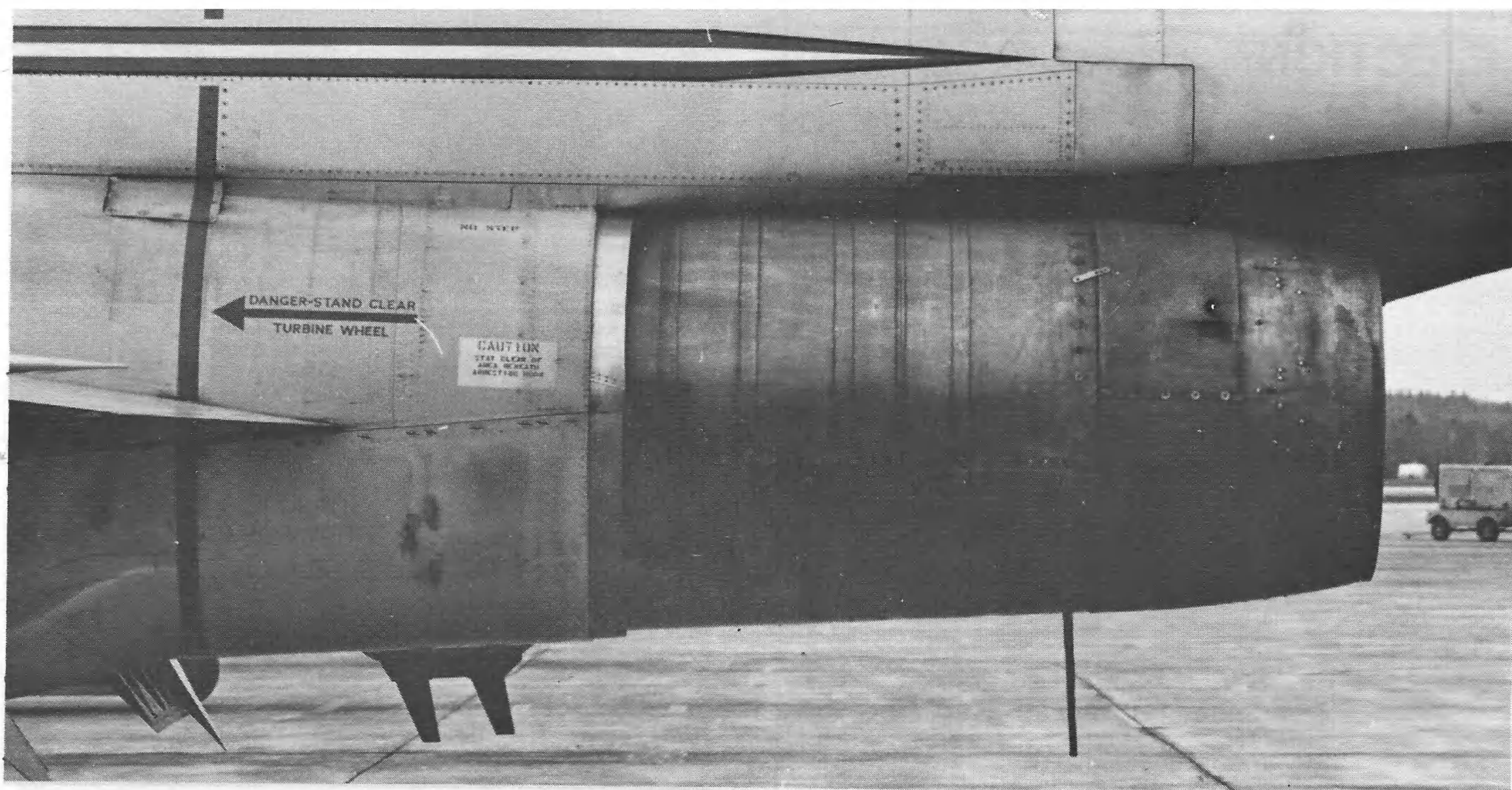


Above, an AIM-4D Falcon and a WSEM installed in their semi-flush mounting on the other side of rotating weapons bay door. Note the series of baffles and deflection plates in front of the port side WSEM. (Editor's Note: As a guess, I'd say the plates are meant to protect the sensing head of the port side Falcon when the first missile is fired from the starboard side. Anybody know for sure?) Below, two missiles deployed for firing. Note nosedown attitude. Rails are black. Also, note the slot visible when nosewheel doors are closed.



Below, a relatively rare shot showing a Voodoo in flight with weapons deployed for firing.

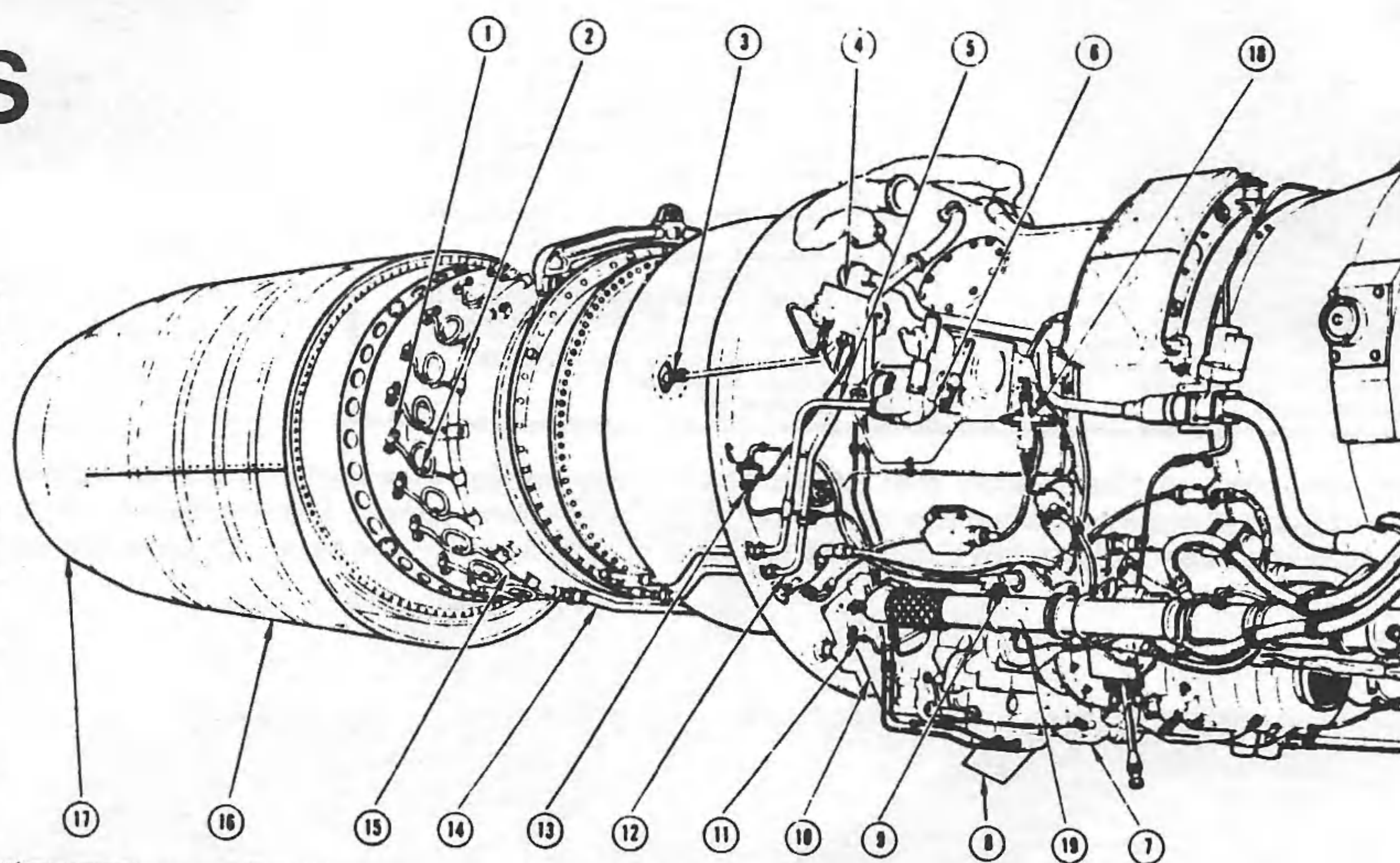




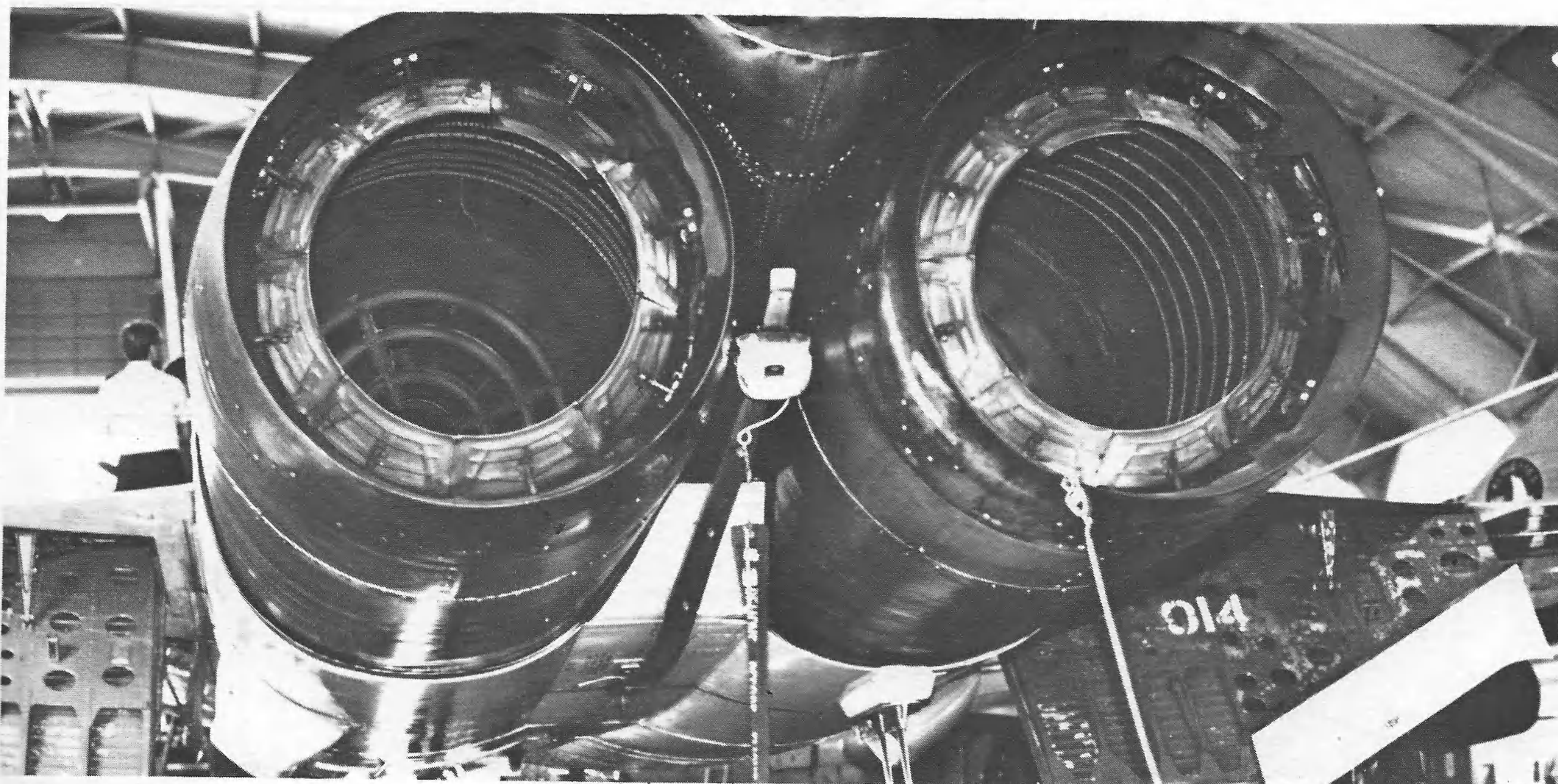
On this port side view of the afterburner can, one can notice a bright metal ring where the can enters the fuselage. There is noticeable heat discoloration and smoke staining of the titanium and stainless steel panelling.

## AFTERBURNERS

ITEM	NOMENCLATURE
1	SPRAY BARS
2	PIGTAIL FUEL LINES
3	IGNITER VALVE SQUIRT CONNECTION
4	AFTERBURNER IGNITER VALVE
5	EXHAUST NOZZLE CLOSE LINE
6	AFTERBURNER EXHAUST NOZZLE CONTROL
7	FUEL PUMP TRANSFER VALVE
8	DRAIN STRUT
9	ENGINE CROSS-SHAFT
10	AFTERBURNER FUEL CONTROL
11	AFTERBURNER FUEL CONTROL LINKAGE
12	EXHAUST NOZZLE OPEN LINE
13	WEEP VALVE
14	AFTERBURNER FUEL CONTROL FUEL OUTLET LINE
15	AFTERBURNER FUEL MANIFOLD
16	AFTERBURNER SHROUD
17	EXHAUST NOZZLE
18	AFTERBURNER NOZZLE IDLE OPEN CONTROL VALVE
19	AFTERBURNER NOZZLE IDLE OPEN CONTROL SWITCH

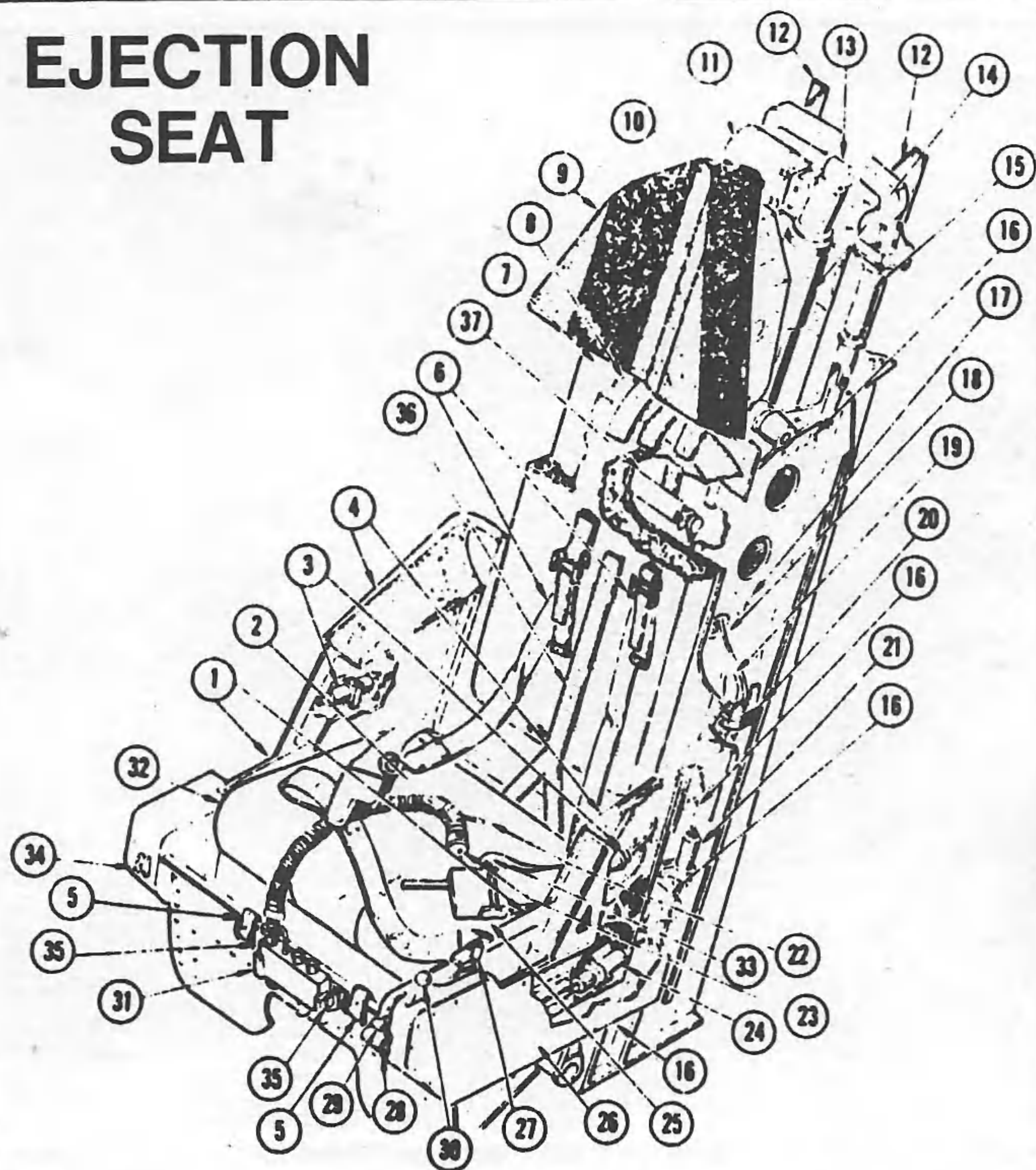


This rear shot of the business end of the engines show the relative complexity of the afterburner pipes, which are not simply hollow tubes as represented in many kits. Note also the red spring leaf type emergency tail hook.





# EJECTION SEAT

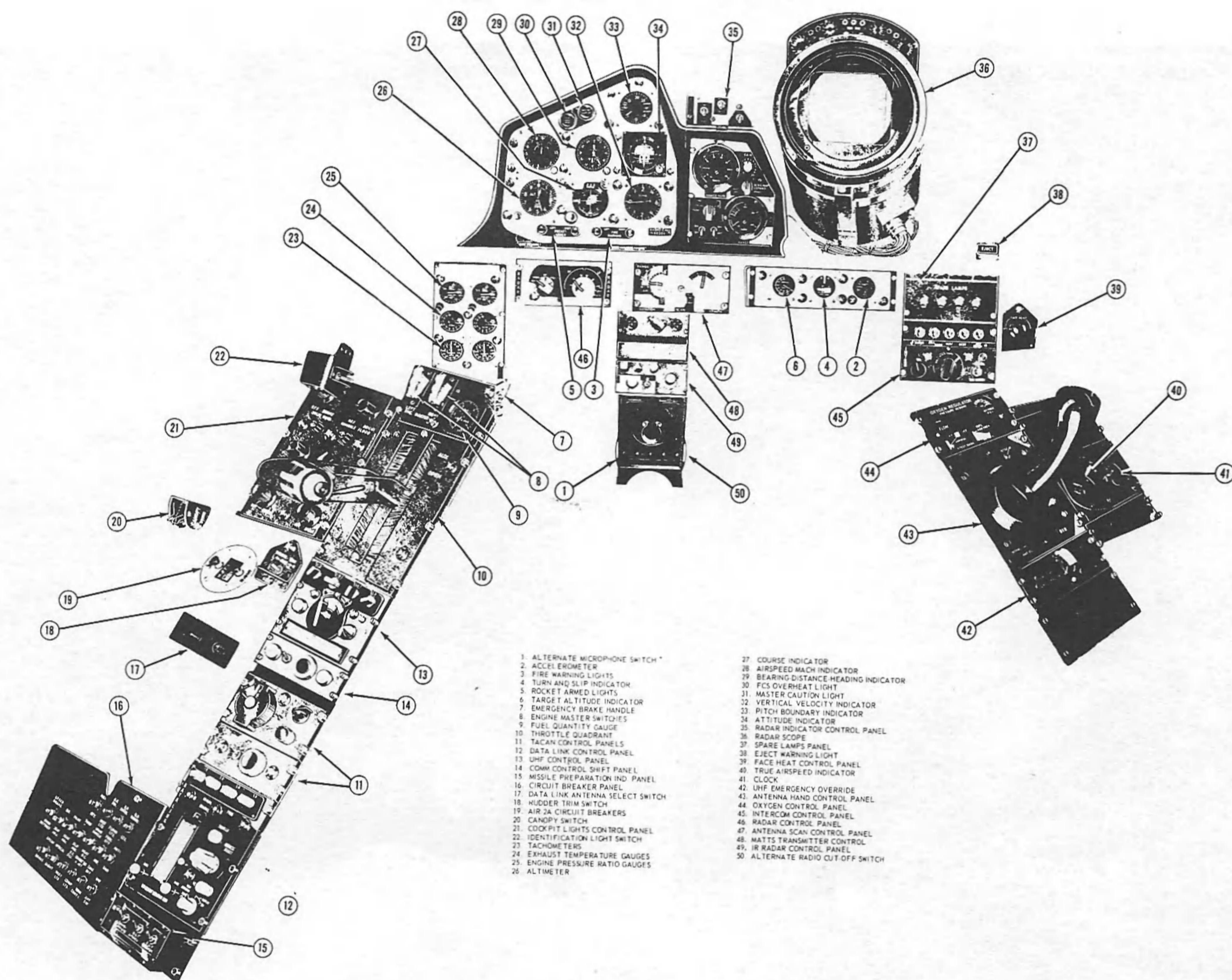
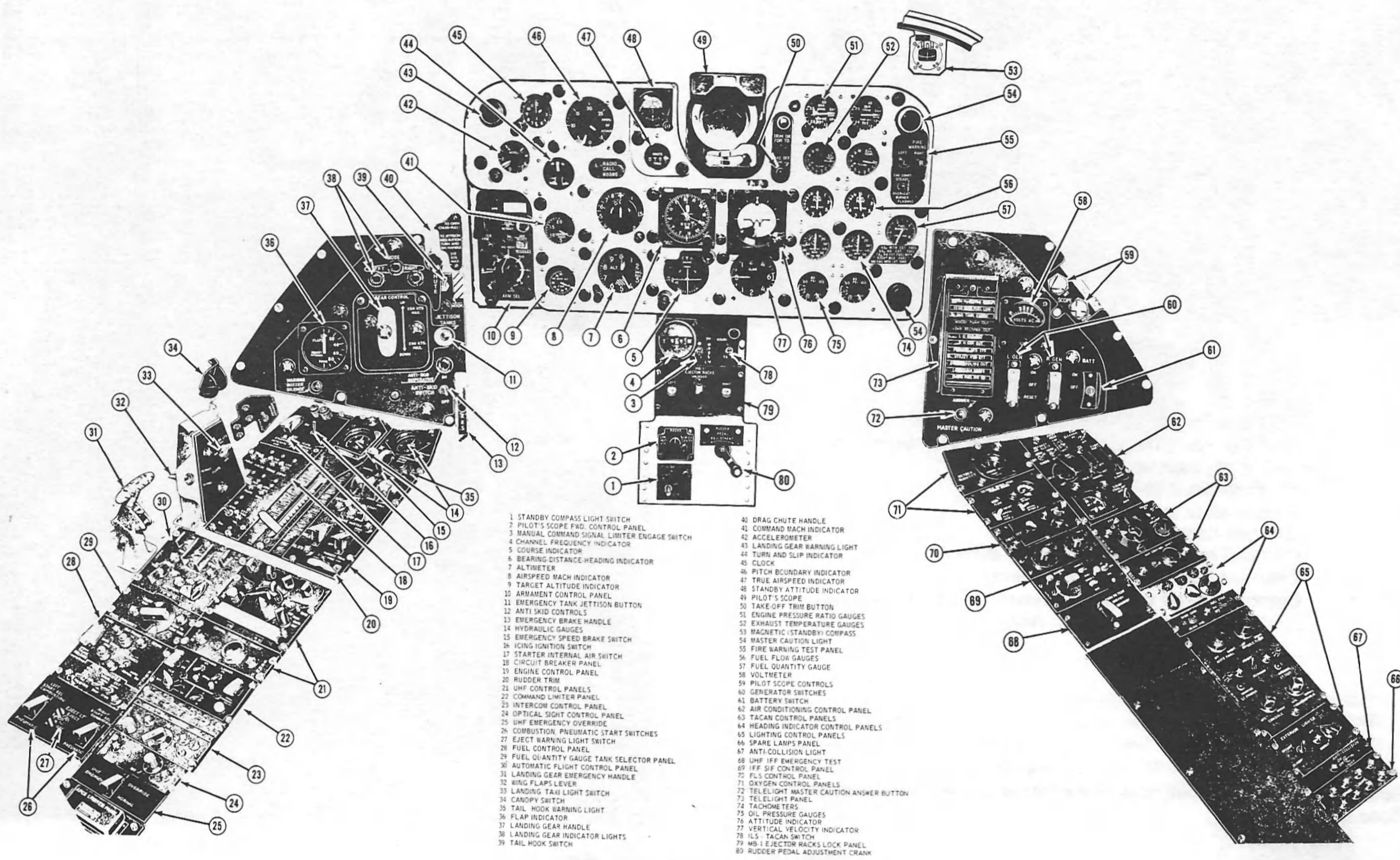


ITEM	NOMENCLATURE	ITEM	NOMENCLATURE
1	HAND GRIP L/R	21	LAP BELT INITIATOR
2	PERSONAL LEADS DISCONNECT SAFETY STRAP	22	RADIO CONNECTOR
3	SEAT CATAPULT INITIATOR L/R	23	OXYGEN TUBE
4	PADDED ARMRESTS L/R	24	CANOPY JETTISON INITIATOR
5	SEAT MAN SEPARATOR STRAP L/R	25	AUTOMATIC OPENING LAP BELT
6	SHOULDER HARNESS L/R	26	REMOVABLE SIDE PANELS L/R
7	SEAT BACK	27	GROUND SAFETY PIN
8	BACKSPACER	28	CANOPY JETTISON ALTERNATE CONTROL LEVER
9	HEADREST ADAPTOR	29	CANOPY JETTISON ALTERNATE CONTROL LEVER GUARD
10	PADDED HEADREST	30	INERTIA REEL & SHOULDER HARNESS CONTROL HANDLE
11	SEAT ADJUSTMENT ACTUATOR	31	PERSONAL LEADS DISCONNECT
12	SEAT RAILS L/R	32	SEAT CUSHION
13	CATAPULT BLOCK	33	LAP BELT INITIATOR GAS PRESSURE HOSE
14	CATAPULT TRIUNNION	34	SEAT ADJUSTMENT CONTROL SWITCH
15	SEAT ADJUSTMENT SCREW JACKS L/R	35	SPRING RETAINERS
16	SLIDE BLOCK (4 PLACES EACH SIDE)	36	ROTARY ACTUATOR STRAP ASSEMBLY
17	SEAT UNLOCK CATCH AND SPRING	37	ROTARY ACTUATOR
18	SEAT ADJUSTMENT WIRE BUNDLE	38	SURVIVAL KIT
19	CANOPY JETTISON GAS HOSE		
20	SEAT DISCONNECT		

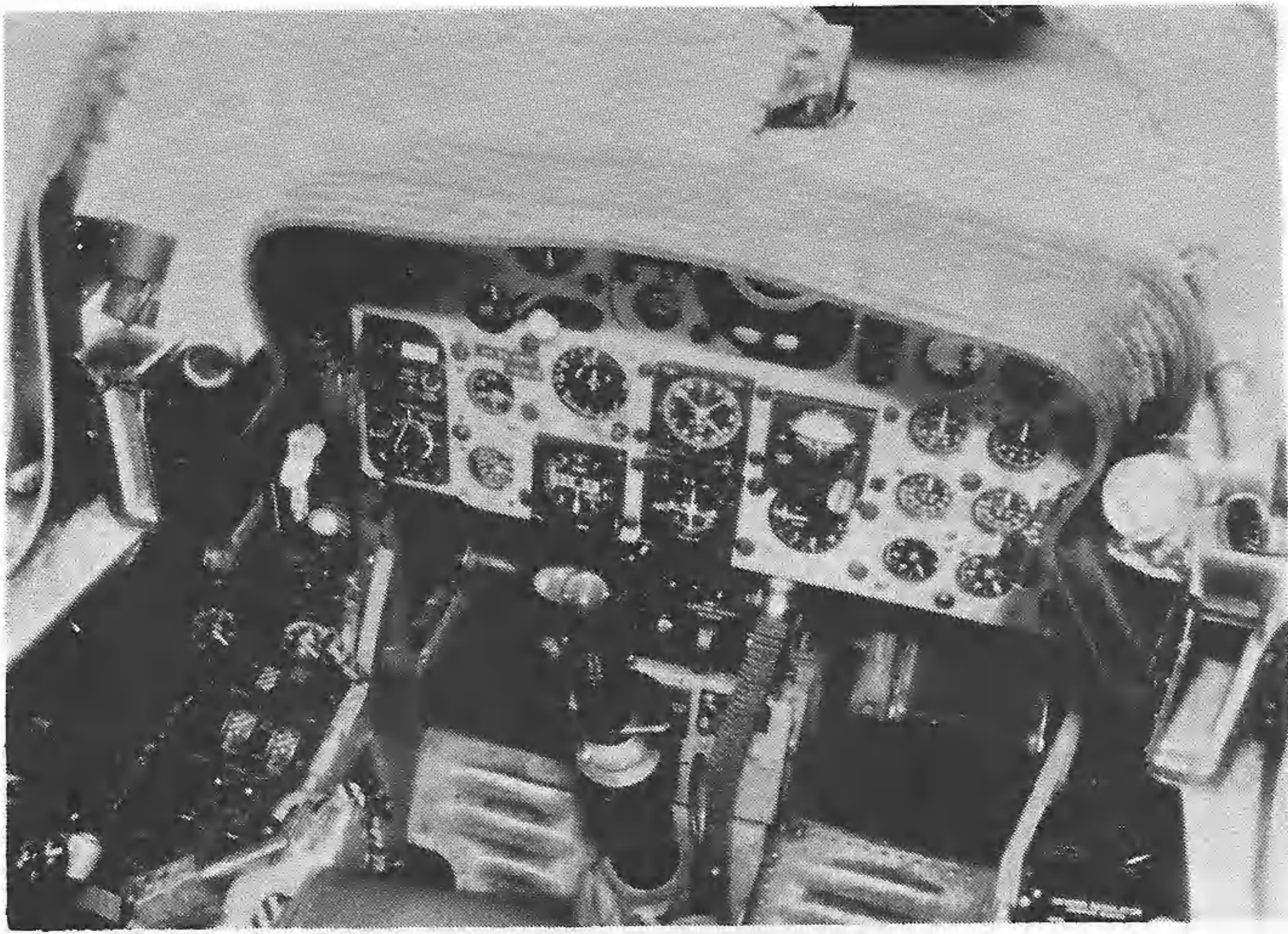
The seat can be adjusted vertically but not forward or aft. Note that the drawing of the seat does not show the Canadian version of the oxygen hose connection correctly, as on ours, it plugs into the lower part of the instrument panel.

This left side view of the cockpit area shows the canopy raising mechanism well, as well as illustrating the identification light beside the radar operator. This projects a beam horizontally and 15° of the lateral axis to illuminate intruding aircraft serial numbers on night intercept missions. This feature has been included in the CF-18's. The crew helmets, by the way, are blue and white with a red triangle on top.



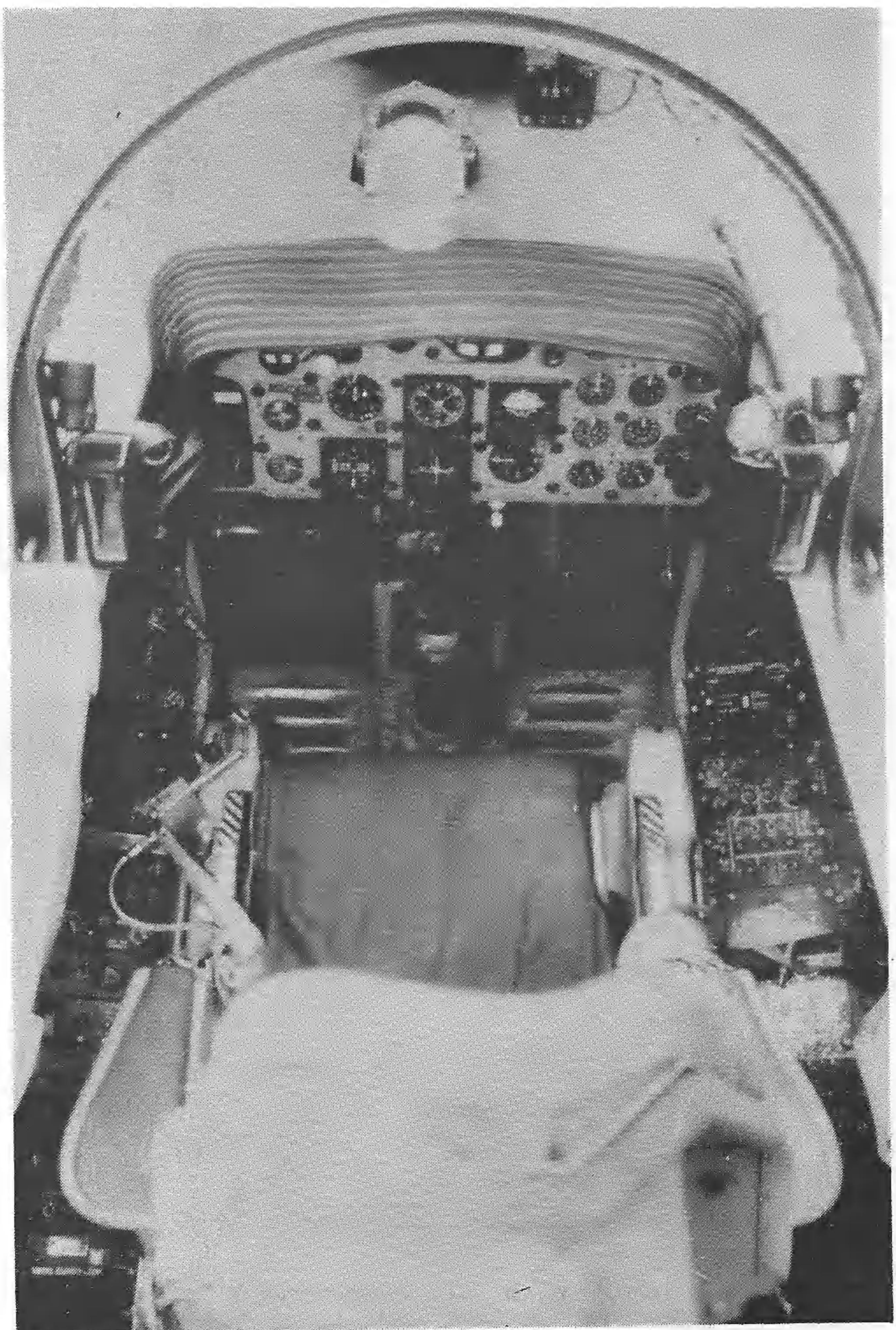


# FRONT & REAR COCKPITS - CF-101F



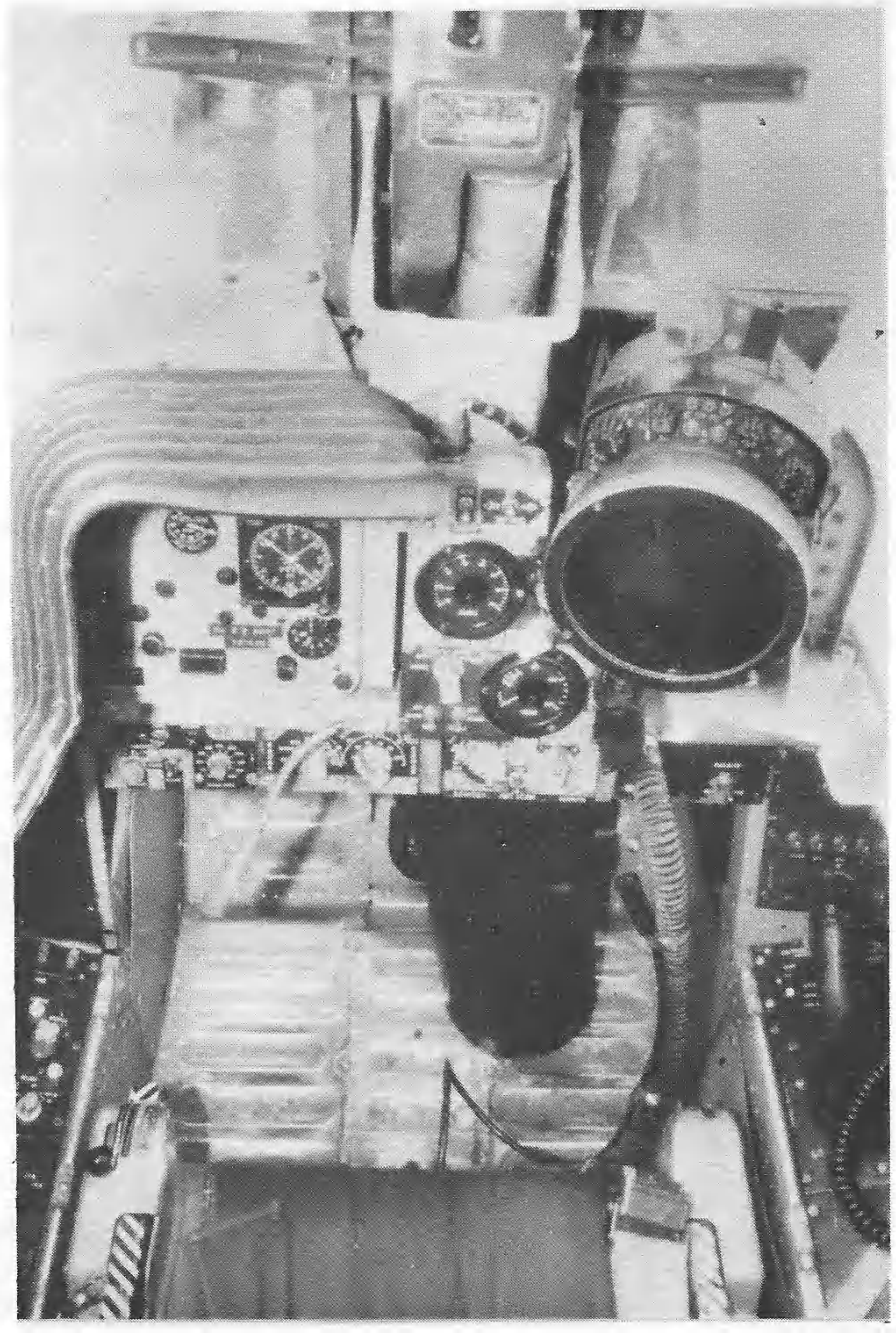
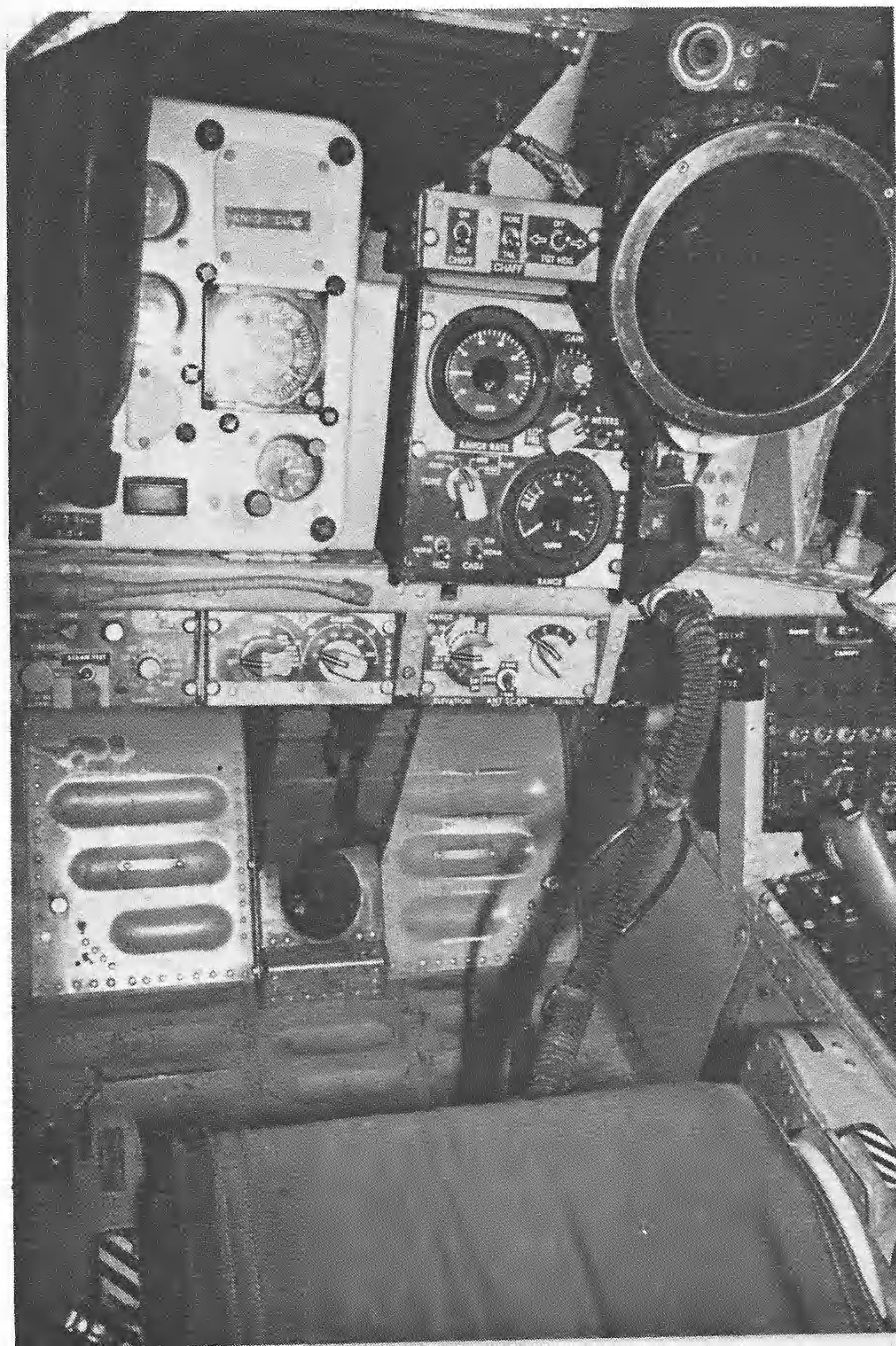
**Cockpit colours**

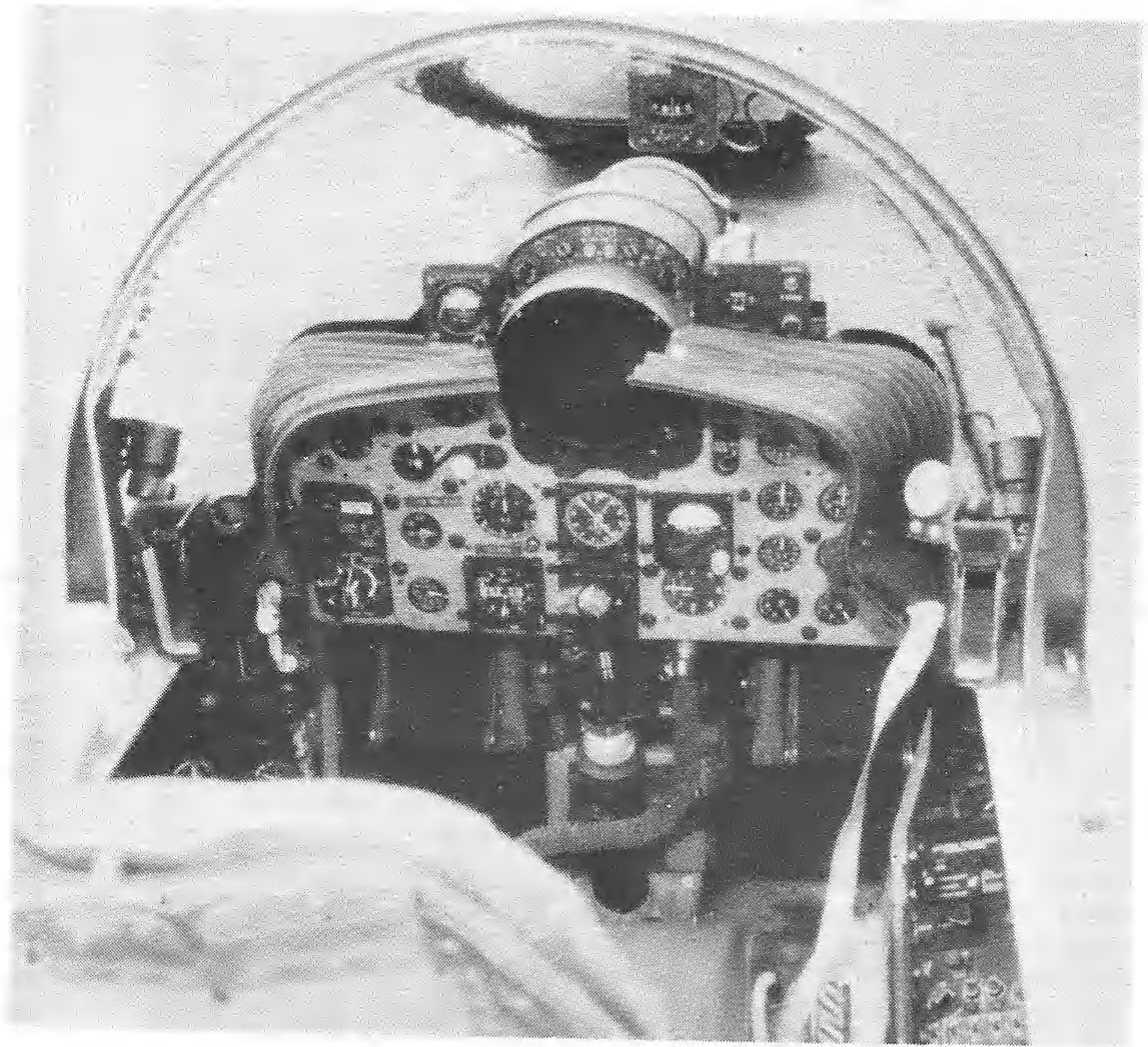
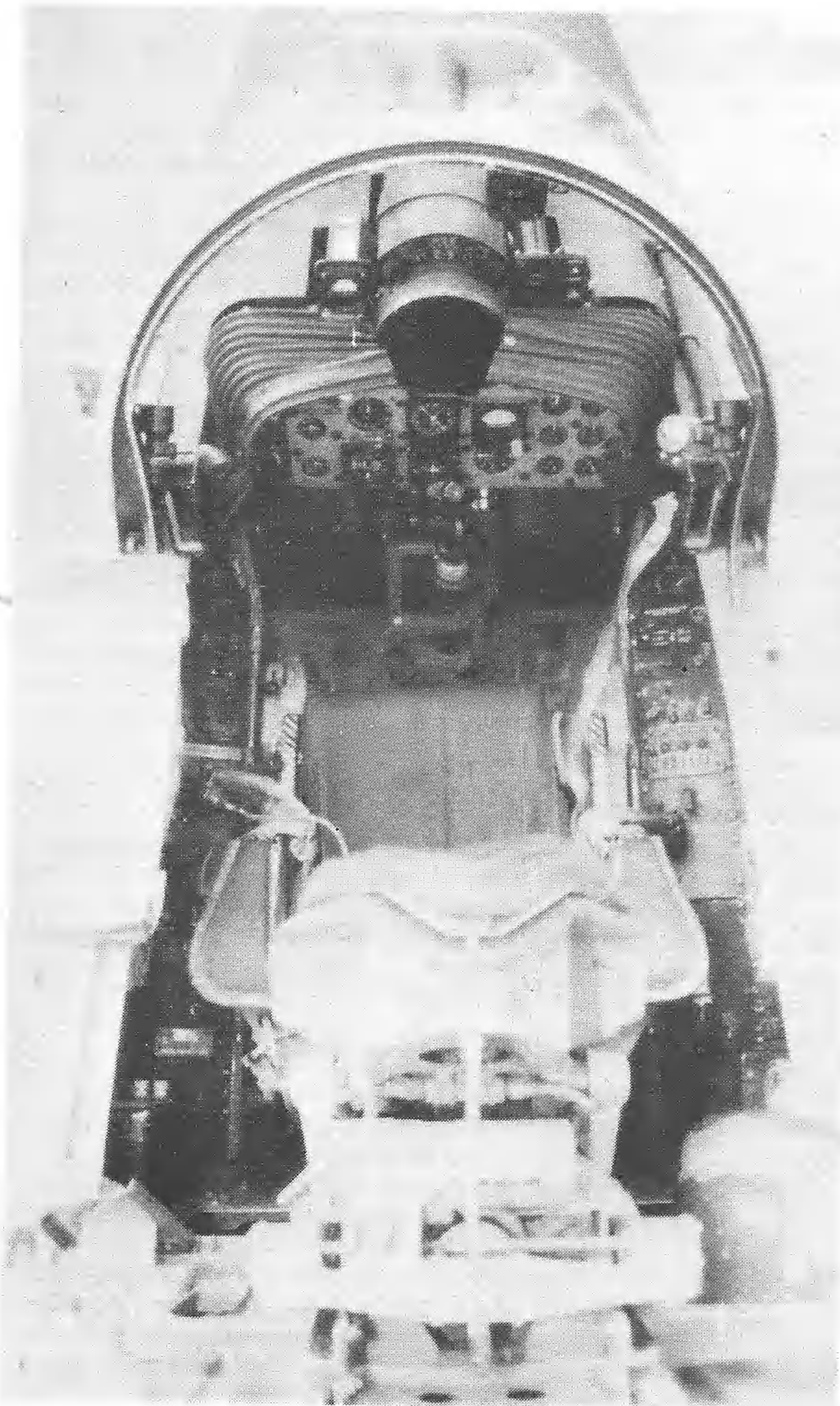
- Cockpit, seat, floor and rudder panels: matt grey
- Instrument panel: matt grey
- Panel shroud: matt black
- Straps: pale gray
- Oxygen hose: dark green
- Control stick: black with gray shroud at base
- Ejection hand grips: yellow and black
- Cartridge type canopy remover: metal, gray base
- Protective floor covering: pale brown



Note also at lower right, the radar scope shroud, here stored on the floor instead.

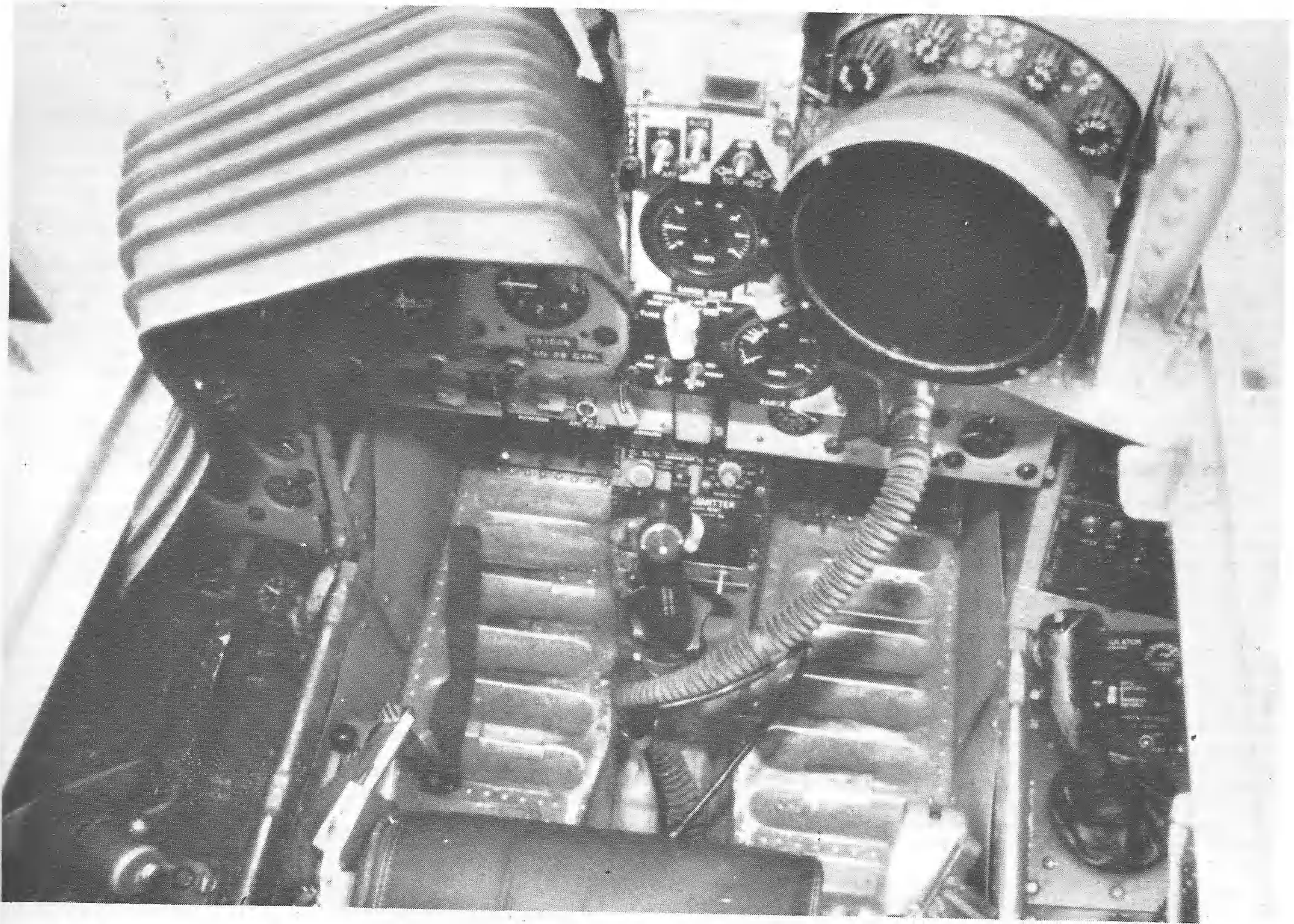
# CF101B





The 'F' version is used for training and is equipped with flight controls in the rear cockpit. Generally interior colours are the same as for the B. Both 'B' and 'F' versions are American machines revised by Bristol Aerospace in Winnipeg with Canadian modified equipment for the ejection seats, survival kits, communication and navigation systems, as well as the engines and afterburner systems.

## CF101 F



clear concerning the assembly, but quite confusing in the historic "resumé" of the machine, the translation in French and English being both different and wrong. We obtained not only 56F-101Bs, but also 10F-101Fs, and when we exchanged them, it was surely NOT for 66 CF-101Fs exclusively . . . the majority indeed being B models.

First, if you are a disciple of the "scribing way of life", you'll sand off and rescribe all those raised lines, taking care to correct and add some panels.

The cockpit must be completely revised and since it would take too long to indicate all the modifications, we will only mention the most important. After adding the rudder bars, control stick and instrument panel for the pilot and side consoles for both crew members, you'll turn your attention to the radar equipment of the navigator and the blast screen between the cockpits. Ejection seats should be scratch built and the pilot's one moved forward to permit the installation of the navigator equipment. It is imperative to refer to the photos to do a good job and remember . . . B and F version have different cockpit arrangements. The boarding ladders are too thick, too wide, too angular, and their fuselage protecting pads are missing. They are perhaps best replaced by scratch built items.

The transparent parts are clear despite their thickness but wrong in shape. The windshield is too steep, which gives an incorrect profile to the model. The canopy and rear fairing lines are also incorrect, and this is impossible to correct except by vacuforming new parts. If you still want to use the original clear parts, note that the external canopy frames are too prominent and will need sanding down and polishing with your favorite method (Brasso, toothpaste, etc.). Matchbox forgot to indicate the hinges of the canopy in the fairing behind it, thus you will have to scribe them or glue plastic bits at the rear if you opt for an open assembly. The base of the front windscreen sits higher than the adjacent side panels. Don't forget to install mirrors (2 for the pilot, one for the navigator), the hydraulic jack, and canopy latch. If you have chosen to glue the transparency open, file the bottom front corners to a curved shape, filling with putty the angular base of the rear windscreen frame. Add a clear light and a bigger red one on rear canopy fairing; on many American planes there is also a blade antenna (normally painted in grey) in front of these lights and a similar but smaller one a few feet back on the fuselage spine. Check to see if your subject has a radio compass sense antenna located over the navigator's position inside the canopy. You will then discard and scratch build a new pitot tube. The infra-red sensor must have its hemispheric forward part well defined by a scribed line. This sensor is only on the late model Voodoos. The second option, the RF-101B nose, lacks the sensors and antennas. It would have been more useful to mould this part in transparent plastic which would have given a clear and clean finish for the camera windows rather than waste material in moulding a useless pedestal. As for the third option, ignore it if you build a Canadian "one-o-wonder", since they were never provided with an in-flight refuelling probe, so keep these doors closed, smoothing the surface with putty.

The identification spotlight under the port side of cockpit should be cut out and replaced with clear plastic. The fuselage flow fences, which are far too thick and the wrong shape, will be replaced by new ones in thin plastic card, keeping in mind that they are vertical. Referring to the photos you'll note that behind the circular grill on the port side of the fuselage and the rectangular one on starboard, there are two round grills one upon the other, which are missing in the kit. Also a trapezoidal grill is missing on each side, about 34 mm (scale) forward of the rectangular and circular grills mentioned earlier (ref. Det. & Scale, p. 25, middle photo). On the port side just over the nosewheel door, you will drill and carve in a cooling inlet if you chose a late model of "Voodoo", or scratchbuild a projecting intake scoop as appears on early models. Also install angle of attack transmitter(s), an alpha probe each side of the nose (second series only), and a temperature probe. Drill the location of the fuselage position lights, giving the peculiar shape to the orifice with a very pointed blade; this opening will be later filled up with "Micro Kristal Kleer" to make the lens. Certain F models have a TACAN blade antenna just behind the radome that you will add if necessary. Farther back two more blade antennae must adorn your model, a UHF one in front of the nose wheel well and an I.F.F. just behind it. Farther back under the belly, you'll position an anti-collision red light, fill the two rectangular holes moulded in the fuselage halves with putty, and add fuel dump masts.

The air intake guide vanes must be replaced by plastic card since they are too large horizontally and too small vertically. Cut away each inside vane which is moulded in two halves, resulting in a clumsy fit, and replace the whole with a single piece of plastic card. Check your references to determine if your intakes have one or two vanes, both arrangements being possible. Thin pins fixed previously to the inside of the fuselage shells and protruding slightly to touch the splitter plates will provide the mounting rods. You will also have to spread some putty around the corners of the intakes because they are much too angular. To prevent "seeing through", glue a blanking plate at the back of the intakes. If you intend to "wall" your main wheel wells, forget this step.

Afterburners seem too conical in shape with badly moulded raised lines circling them which will have to be sanded away and scribed with a sharp point. The exhaust outlets are slightly too small in diameter and the lips must be thinned down to scale size with details added inside. Afterburner cooling intake scoops furnished in the kit are useless, so new scoops should be carved, drilled out, and moved forward in reference to the photos. A scratch built TDDL antenna should be installed under the right engine if necessary. Afterburners are best installed after the overall painting sequence is finished. Completely ignored by the mould maker is the zone between the blow torches that needs a complete rework, as well as the addition of the emergency arrester hook which is absent and the trapezoidal metal plate behind it.

The airbrake wells are too shallow because they are curved rather than flat inside. The best way to remedy this problem is to cut the wells out

completely, backing the resulting hole with a flat sheet of plastic. The airbrakes themselves must be thicker, which can again be achieved by using flat plasticard to eliminate the concave shape of the pieces, and holes should be drilled to match the prototype accordingly. The hydraulic jacks are correct and need only the thinning down of the collar joint. On the ground the airbrakes are generally closed but be advised that the fit in this position lacks precision and needs some puttying and sanding. Sometimes, when the hydraulic pressure has fallen, the airbrakes open slightly.

The tail assembly is overly complex, making a precise fit of the parts quite difficult. Watch particularly the dihedral of the stabilators, which is 10° from horizontal. The rectangular fin fairing above rudder doesn't reach its full thickness in cross section immediately, a narrow section being the same width as the rudder and discernible just at the top of it on the photos. The rear part of the top fin fairing must be cut away and replaced with clear plastic. With the stabilator set at a negative angle of incidence, as often seen on the ground, a triangular hollow portion will be cut right through the fin in the fan shaped stabilator hinge. The bottom part of the fan shaped affair always remains natural metal. One of the best shots of a Voodoo tail to appear in recent publications is the one in colour on the back of AIR FAN magazine No. 24. Carve with the tip of an X-acto knife a small intake on the right side of the fin, located approximately a meter above the rear of the airbrake on the real interceptor. Note also that the vent masts on the tail boom are NOT the same length, the left one being longer than the right one. At the extreme rear end, the hemispheric parachute door could be positioned open by cutting the tip of the boom and gluing it open. Add two outlets just below this cone and a thin drain pipe. Finally, examine your references to see if your subject has the aft compartment cooling vent or if it has been faired over.

The trailing edge of the wing should be thinned down. Cut away the fences, which are too small and badly shaped, making new ones from thin plasticard. Remember that the outboard fence projects beyond the leading edge. Separate ailerons allowing these surfaces to be angled would be a good idea if only they were moulded accurately. Unhappily it's not the case and they will have to be reworked, particularly the hinges which are misrepresented. The flaps are also incorrect; looking at the undersurface, you'll note that the flap leading edge is straight which is not correct, the line actually being slightly broken. Worse than that, the small portion of the flaps visible on the upper surface doesn't match its corresponding under surface scribing, this being 4 mm too far inboard! Wing tip shape is incorrect and needs re-shaping. As the navigation lights are missing, the more talented of us will replace them with tinted plastic (toothbrush handles are perfect for this job); the others will at least use a drop of glue painted the appropriate colours. Incidentally, the starboard "green" light appears medium blue when off. For the less patriotic of us note that the American "Voodoos" are often striped with electroluminescent "tape lights" on wing tips, each side of nose, and each side of the center fuselage above the wing, as well as on the fin.

Displaying your model "gears up" will help you avoid a lot of frustration. The only problem is that most of us prefer to display our birds with the legs down. Well, let's face it: the gear is simply awful. The wheel covers are wrong in shape. You could use Hasegawa components to replace the small door at 90° angle from the leg and the upper strut cover or scratch-build them, as you will have to do with the wheel cover, which is not supposed to be flat as in the kit, but bulged due to the bigger 101B tires. Matchbox wheels look like "hot wheels" and aren't wide enough. Hasegawa has a better rendition but it's certainly not exact. Remember, Voodoos are heavy beasts so flattening the tires will give a better look. You could improve your model by swapping your main gear struts with the Hasegawa's ones. Even those are not perfect, their lower portions not being canted slightly rearward as they should be. Add a retraction jack, an auxiliary strut behind each leg and the brake lines. Cement the tire covers (hinged near the fuselage) but take care to first file a curved depression on their inner surfaces, adding also the retraction mechanism. The purist will fully detail the wheel wells, but if you are still reasonably sane you will limit your effort to the most apparent piping and wiring to give the illusion of a "complicated affair".

The nosewheel leg is quite crude and too thin. Scratchbuild a new one or cannibalize the Hasegawa kit which has an excellent rendition of this component. The leg will also be enhanced by reinforcement struts at the upper part, as well as springs, wires and the very apparent landing and taxiing lamps that could be made in clear plastic "sprue". Wheel hubs in the kit are good. We also noted a different model of hub on some American machines. Carve out the nosewheel well which is too shallow, adding details to your taste. Nosewheel doors need details on their inside faces.

The auxiliary tanks or "jugs" as they are commonly called, can be improved by rounding up the nose lines and sharpening their rear points. The Hasegawa's RF-101C tanks are perfect with a slight sanding of their rear end. Tanks need the scribing of the gas cap. It's worth noting that Voodoos also used longer ones. An asymmetric installation is sometimes seen, the starboard then being normally installed.

Now let's talk of the weapons bay . . . a seemingly obscure portion of the interceptor because there are absolutely no details, not even lines, indicating the presence of such a vital part of any war machine! Scribing the contours of the bay and carving recession holes for the AIM-4 is mandatory (normally when the bay is closed, the "FALCON" missiles are on the outside and the "GENIES" in). Usually the rotary door is left open half rotated to the vertical when on the ground, so both sides are visible, which obliges the modeller to "wall" the cavity with plastic card. Referring to the photos add all the details of the rotary door, not forgetting to drill out the three vents in front of it on the left side. After all these corrections, you are now ready to finish your model.

As for the decals, they are of good quality and accurate except, unhappily, for the Canadian roundels which have a poorly shaped leaf and will need replacement.

To summarize, an interesting subject, but poorly treated, forcing the modeller to expend great effort. That's probably the reason why so many of us are hoping to see one day a super detailed 1/48 scale Voodoo . . . do you hear us, Monogram?