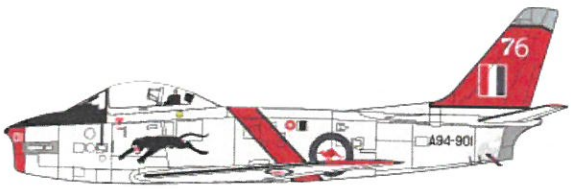
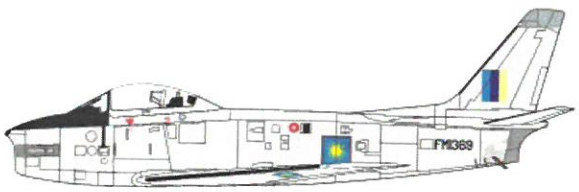
RRR48121

1/48 SCALE AVON SABRE CONVERSION WITH DECALS





Features:
Comprehensive instruction sheet
Injection moulded parts
Detailed decal sheet
Choice of four subjects
Suitable for Academy or Hasegawa Sabre kits

This conversion was produced in partnership with High Planes Models

Suitable for intermediate and advanced modellers.

WEB: www.redroomodels.com EMAIL: redroo@redroomodels.com

RED ROO MODELS CAC AVON SABRE 1/48 SCALE CONVERSION KIT

IN ASSOCIATION WITH HIGH PLANES MODELS

THE AVON SABRE IN RAAF SERVICE

The late 1940s were an important watershed for the Royal Australian Air Force (RAAF). Like other air forces around the world the RAAF was moving into the jet age and coming to grips with the problems associated with maintaining and operating jet aircraft. The RAAF had acquired the British designed Vampire and Meteor fighters. Indeed, the Meteor had been rapidly introduced into service to bolster the RAAF effort in Korea by replacing the Mustang, which was then in service. In air combat the Meteor proved to be out-classed and the search for a replacement began in earnest while the Meteor carved a new niche for itself in the ground attack role. The North American Sabre had a few things going for it, not least of which was a steadily improving combat record being created in Korea. The aircraft was modern and well liked by its American pilots - most of them reckoned that a Sabre with a more powerful engine and heavier armament would be a "hot ship". The design suited Australia well enough, though armament need improvement, and the manufacturer had strong ties with the Commonwealth Aviation Corporation (CAC).

The CAC Avon Sabre was a unique aircraft in Australian military aviation history. It was the first all-metal jet fighter to be constructed in this country. The decision to produce the North American Aviation (NAA) F-86 Sabre, fitted with the Rolls-Royce Avon turbo-jet engine and up-graded armament in the form of the two Aden cannons, saw CAC embark upon a major re-design program. Because the Avon engine was lighter, shorter and of greater diameter than the General Electric J-34 engine which powered the NAA Sabre, CAC incorporated major structural changes in the Sabre fuselage, resulting in a total re-design of almost 40% of the fuselage.

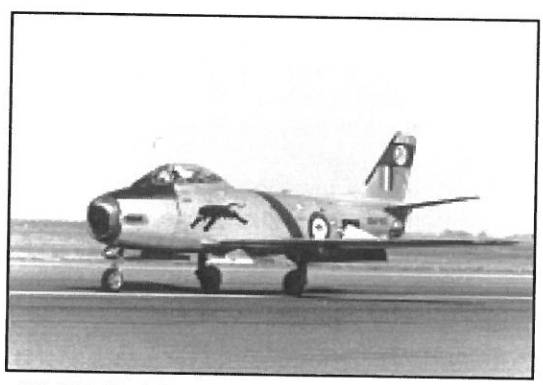
The Avon Sabre gave sports car like performance, as well as packing a quite a punch. In service the aircraft proved to be versatile and although no trainer variant was produced in Australia pilot conversion proceeded with reasonable speed, producing a fairly competent "driver" for the new steed. As NAA produced modifications to the basic design these were incorporated in CAC built aircraft. The slatted wing was replaced with the famous "six-three" wing. Sidewinder missiles were fitted to the aircraft and even ground attack missions were incorporated within the aircraft's repertoire. The adoption of the Sidewinder missiles offered the

RAAF experience with a weapons technology that would reap benefits for the Sabre's replacement, the Dassault Mirage IIIO/D.

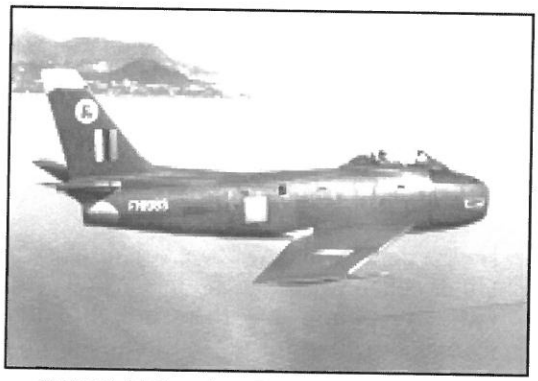
The RAAF operated the Avon Sabre in its front line fighter squadrons, a trials unit, conversion and training units and deployed the aircraft overseas. Early operating incidents, which claimed the lives of RAAF pilots during what should have been clean ejections from stricken aircraft, saw the design and retro-fit of a canopy breaker and modifications to the ejection sequence. Australian Sabres were fitted with rockets of either American or British origin for ground attack missions (some would claim this was a terrible thing to do to a Sabre). Every front line squadron and training unit boasted an aerobatic team and Avon Sabres thrilled crowds around the country with daring flying displays.

Stationed overseas under mutual defence treaties the aircraft never ventured into the hostile skies over South Vietnam. That laurel was reserved for RAAF bombers, transport aircraft and Army light observation machines. As the service life of the Sabre drew to its close numbers of aircraft were provided to Malaysia and Indonesia under military assistance programs. Having passed gracefully, if not prematurely, from the spot-light of front line service Avon Sabres found new homes, as training air frames, gate guardians, museum exhibits.

One aircraft was recovered from Malaya following service with the Royal Malaysian Air Force (RMAF) and lovingly restored to flying condition by the RAAF. The aircraft now entertains crowds at various air shows around the country. Around Australia many aviation museums boast an Avon Sabre in their collections. The prototype Avon Sabre is preserved at the RAAF Museum at Point Cook, the home of the Royal Australian Air Force. CAC has ceased to exist, swallowed up in numerous multinational mergers and acquisitions, gone the way of a faded, cloudy memory, when short sighted, ignorant politicians decided that the government should no longer support an indigenous aircraft manufacturing industry. However, the memory of the Avon Sabre lives strong and brightly in the hearts and minds of many Australians.



A94-901, Black Panthers Aerobatic Team, 76 Squadron.



FM1983, 11 Squadron, Royal Malaysian Air Force.

CONSTRUCTION NOTES FOR THE RED ROO MODELS AVON SABRE CONVERSION

It is intended that this conversion kit is for experienced modellers, most of who will have their own construction methods. The following notes contains general advice and suggestions that you may wish to consider. This conversion kit is produced using low-pressure injection moulding. Note that the conversion parts have two distinct surfaces, the outer surfaces which feature fine details, and the inner surfaces which may be slightly irregular. While all effort has been made to give the modeller an accurately shaped model with well defined surface detail, there are some limitations to the moulding process used and the modeller should be aware of these. Sprues are quite thick and the modeller will need to take care when cutting off items. Various 'cut-outs' on the model are not well defined and will need careful filing to square them up. The thickness of the plastic on the fuselage mouldings is thicker than the host kit and this will need to be taken into account when fitting the wheel wells, cockpit, engine intake and exhaust and, other sundry items from the host kit.

Before you start work:

- Read this instruction pack carefully.
- Remove all parts from the sprue, using a razor saw. Do not try to break the parts off or cut them away with a hobby knife, scalpel blade or sprue cutters.
- Wash all the parts in luke warm water, using a mild detergent to remove all traces of release agent.

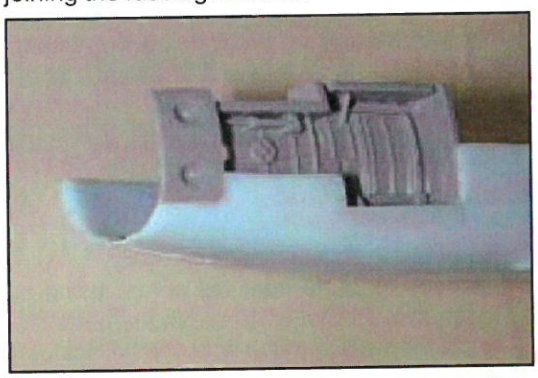
- Carefully flatten the mating surfaces with a large sheet of wet and dry paper and plenty of water.
- Carefully clean up the parts, remove any flash and the remains of sprue gates.
- Test fit all parts together and with the relevant parts from the kit that is being used with this conversion. Having done that and noted where any modifications might be required – test fit them again!
- Note any internal surfaces that require careful thinning and if using a power tool to grind away excess plastic set it to a slow speed.
- Having done all of the above, enjoy a cup of tea or coffee while reading this instruction sheet once more – then get into it! Remember, careful preparation will be rewarded with quicker construction and a superior finished product.

USING THE CONVERSION

Carefully check the kit parts against the conversion parts, making sure that the inner surfaces of the conversion fuselage halves will accept the kit cockpit tub and jet engine air intake. A trial fit is recommended. Remove any excess material on the inside of the fuselage halves or on the kit part where necessary.

When assembling the fuselage halves there may be a need to adjust the mating surfaces by sanding them again. If this occurs use the kit windscreen as a template and check the width of the fuselage against this kit part frequently to avoid removing too much material. If this occurs, retrieve the situation by simply packing out any gaps with scrap plastic.

Use super glue to join the fuselage halves and the other parts of the conversion to the kit parts. Gap filling super glue may be needed when joining the fuselage halves.



Ensure the nose wheel well fits correctly first. Use the landing lights panel as a template for this step.

Always test fit every part at every stage. It takes a little longer but it is worth the extra effort. Fire up the Dremel and have fun!

This conversion has been engineered around the Hasegawa kit. However, it can be used successfully on the Academy kit as well – it just means slightly more work. These instructions will deal with both kits separately, first the Hasegawa kit and then the Academy kit. There is no claim made of inferred that this conversion will work with any other 1/48 scale Sabre kit available.

For details of the various intakes located on the lower surface of the Avon Sabre fuselage refer to the drawing supplied with these instructions. For details of the cockpit interior refer to the drawing supplied with these instructions.

USING THE HASEGAWA KIT

It is suggested that the modeller follows the simple steps below in the construction of the model.

1. Remove parts from the sprue. To avoid damage to the parts, these should be sawn off using razor saw or motor tool, not cut off using shears.

2. Grind, file or scrape away the interior of the fuselage in the vicinity of the nose wheel well, the cockpit, the main wheel wells and the engine exhaust area, to reduce its thickness to allow the Hasegawa internal parts to fit easily. The alternative is to file down the Hasegawa parts, but this means some detail may be lost.

3. Open up the slots for the tailplanes. The modeller may also choose to replace the moulded gun ports with scratchbuilt versions.

4. Tape the fuselage halves and nose ring together and tape the Hasegawa wing surfaces together. Carefully file the fuselage till the wing fits snugly in place.

5. While the fuselage is taped together, mark out the position of the landing light panel (part A21) and nose wheel well (part B17). Use the Hasegawa kit as guide for shapes and sizes. File the fuselage halves till these are a snug fit. The landing light panel may now be glued to one fuselage half. This will

serve to align the front end of the fuselage for later steps.

6. Separate the fuselage halves. Fit and fix the nose wheel well to the same side you have fixed the landing light panel.

7. Fit the cabin cooling exhaust vent from the Hasegawa kit just behind the cockpit in the left fuselage half.

8. Using plasticard or filler make the exhaust vent just in front of the dorsal fin.

9. Cut away the lower front section of the Hasegawa intake duct and assemble the intake parts (parts G1, G2 and G5) with the new Red Roo lower intake duct. After sanding down the interior of the duct attach the nose ring to it.

10. Glue the cockpit tub to the top of the intake duct (part A11). Try dry fitting this assembly into the fuselage half with the nose wheel well already attached. A little may need to be filed from the bottom of the duct to allow it to sit right down on the nose wheel well. It may also be necessary to slightly reshape the top of the rear cockpit bulkhead to get a better fit in the fuselage. Don't take too much off as the instrument panel may not fit.

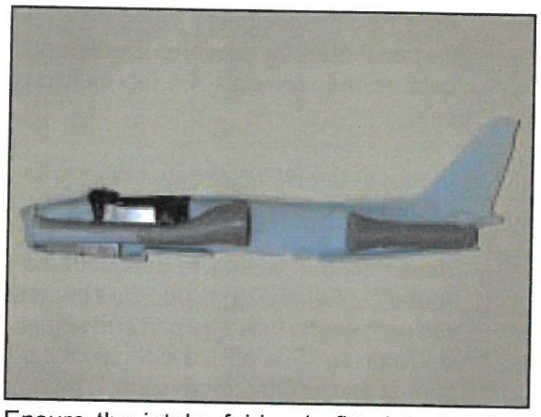
11. Paint and fit out the cockpit. It is recommended that seat and control column are not fitted until after fuselage assembly. The intake and cockpit assembly can now be glued into the fuselage half.

12. Assemble and fit the engine jet pipe (parts G3, G4 and G6) in the same fuselage half. Note that the jet pipe does not extend to the rear of the fuselage.

13. Add ballast weight to the front fuselage above the intake duct and join the fuselage halves together.

14. Assemble the wing and attach to the fuselage. The part supplied in the kit may be used to fair in the lower fuselage to the wing lower surface or, the modeller may prefer to use his own favourite brand of filler.

15. Complete assembly as described in the Hasegawa instructions.



Ensure the intake fairing is fitted to the duct before the sub-assembly is fitted to the fuselage. This will ensure correct alignment.

USING THE ACADEMY KIT

1. Take the Academy kit jet engine air intake/cockpit tub parts (parts D25 and D26) and tape them together. Tape the conversion jet engine air intake fairing to the kit parts and them test fit the parts against the conversion fuselage half. The fuselage halves may need to be thinned around the nose wheel well to obtain the correct fit of the kit parts. It may also be necessary that has to be removed from the kit nose wheel well. Test fit frequently.

2. Cut off the front one third of the upper intake part (D25), then using the remaining portion of this part as a template mark and cut away the same amount on the conversion part. Glue kit parts D25 and D26 together, then glue the conversion part to this assembly. Ensure there are no gaps.

The fuselage prepared for the Hasegawa kit. Note the scratchbuilt gun ports and vent just in front of the fin.

3. Assemble the cockpit and ejection seat as per the kit instructions. Detail and paint to requirements. Fit the ejection seat.

4. Blank off the jet engine air intake with kit part E9.

5. Assemble the jet engine exhaust tube (parts D27 and D28). Check fit against the conversion fuselage part and adjust as required. File off the bottom of the rear support collar remove the location pins from the sides. Blank off the tube with a piece of scrap plastic before painting.

6. Paint the interior of the fuselage halves in chosen colour in the cockpit area. Paint the rear section aluminium. The modeller may elect to replace the moulded gun ports with scratchbuilt versions.

7. While this is drying assemble the canopy rear fairing deck and paint matt black. Leave off the radio compass (G4) until the paint has dried. Then fit and paint part G4 with clear amber.

8. Open out the holes in the conversion fuselage for the cabin cooling exhaust vent and engine compartment main vent. Check frequently against the kit part to ensure a good fit. Remove the surplus plastic from kit part C17 so that only the vent itself remains. When satisfied fix the parts in place. Note: it may be necessary to fit a lip to the openings, made from scrap plastic, to support the kit parts. Be prepared for possible adjustments to the fit when the fuselage halves are joined together. Alternatively, scratchbuild and fit a vent from scrap plastic – the vent fitted to the Avon Sabre was larger than that found on the North American Aviation F-86 Sabre.

9. Fit the jet engine air intake fairing to the modified air intake/cockpit sub assembly. Fill any blemishes and sand flush as required. A good way to do this is to firmly wrap wet and dry paper around a thick knitting needle. Fit the jet engine exhaust tube to the fuselage – use some Blu Tack to hold it in position while gluing it. Use scrap plastic packing to support the tube in the correct position. Check to ensure the alignment is correct.

10. Fit the completed jet engine air intake/ cockpit sub-assembly to the fuselage. Again, use Blu Tack to hold the rear end in place while securing the front, via the intake fairing, to the fuselage half. Pack and glue the rear of the sub-assembly to the bottom of the fuselage where it is closest. Glue kit part C41 to the fuselage to complete the securing of the entire sub-assembly. Once this has dried, test fit the other fuselage half (use kit part G6 as a template) and if satisfied proceed to fix it permanently. Note that depending on how vigorously the mating surfaces of the fuselage halves have been sanded determines if scrap plastic packing will be needed. Add ballast weights to the area immediately in front of the instrument panel, behind the nose wheel well bay and behind the cockpit rear bulkhead to ensure your model will stand correctly on its undercarriage when complete. Test fit the left hand fuselage half again and if satisfied use gap filling super glue to join the fuselage halves. Set the completed fuselage aside to dry.

11. Fill any gaps around the nose wheel well with Ferropree (or any other filler). Fill any gaps on the fuselage halves with filler and allow to dry.

12. Enlarge the slots on the kit lower wing half (part B3) so the fuselage locating tabs will fit. Test fit frequently. This bit gets messy - no apology! Shave off sufficient plastic to ensure a good, solid fit. Note: ensure the wings line up with the lower wing root fillets on the fuselage. Resist the temptation to simply line up the wing centre section with the bottom of the fuselage because this will result in the wrong incidence for the wings. There is a noticeable difference of about 1mm in depth between the kit part and the fuselage. The modeller may elect to <u>either</u> remove the wing centre section and replace it with the new centre section provided in this conversion <u>or</u> the modeller may leave this section intact and fair in the contour of the deeper Avon Sabre fuselage with some Ferropree after the wings are glued in place. Drill out any holes required to help locate underwing stores at this point. Now test fit the upper wing halves (B1 and B2) and if satisfied glue them in place. It may be necessary to clamp or tape the assembly at this stage

and leave it four several hours to thoroughly dry.

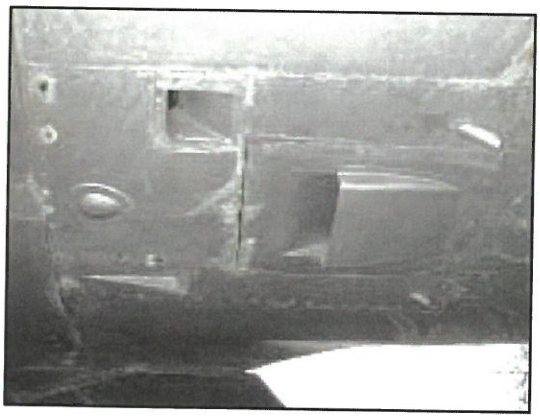
13. Test fit kit part C16 to the underside of the fuselage. It may be necessary to add a lip from scrap plastic to the opening to support the part in position. Glue with gap filling super glue.

14. Test fit the tailplanes. The modeller may either elect to enlarge the slots in the conversion fuselage halves, or the modeller may remove the tabs on the kit parts (C34 and C35) and replace them with locating pins made from brass wire. Once satisfied, glue in place with super glue. We do not recommend using a simple butt joint for this. Do not be concerned about any gaps here because the Avon Sabre was fitted with variable incidence tailplanes.

15. Fit kit part C9 to the fuselage. Fill any gaps with filler. Clean up the model.

16. Complete assembly as described in the Academy instructions.

The Academy wings fitted to the conversion fuselage. The packing in the nose resulted from the modeller's over zealous sanding of the fuselage mating surfaces!



The underside of the Avon Sabre fuselage, showing the position and shape of the various intakes. See drawings for construction details.

DECAL APPLICATION
Thin Film Decals – Please Use Care

1. Ensure model has received a suitable coat of gloss varnish before applying these decals.
2. Cut around the required decal. Do not excessively trim carrier film, it is this film that protects the decal edge and prevents it from chipping.
3. Soak the decal in water for about 60 seconds, then remove the decal from the water and stand on glass or plastic surface.
4. Moisten the application site with your favourite settling solution. Remember, the carrier film on these decals is very thin, test the effect of your settling solution on an unwanted decal if in doubt.
5. Apply decal carefully by sliding off backing paper with a soft, long bristle brush. Position carefully and use tissue paper to absorb excess moisture.
6. Use decal-settling solution to draw the decal down over surface detail. If air bubbles or "silvering" form during drying phase wait till decal is thoroughly dry, then pierce affected area with a pin and re-apply settling solution. Do not try to force decals to conform to surface or express air bubbles – doing this will tear the decals.
7. Apply a coat of gloss varnish over the decals once they are thoroughly dry.
8. Apply a coat of matt varnish over the entire model when the previously applied gloss varnish is thoroughly dry to hide the carrier film.

This instruction sheet is used for both varieties of this conversion; namely with and without decals. If you have purchased the version supplied without decals please disregard the section printed above.

THE AVON SABRE COLOUR NOTES

This section is divided into three parts:

- The RAAF colour schemes supplied with this conversion
- The RMAF colour schemes supplied with this conversion
- The cockpit colour notes

The RAAF Colour Schemes

Refer to the colour illustrations that accompany this instruction pack for decal placement. See the Paint Box for recommended model paints. Cockpit details are dealt with separately at the end of this section.

Option 1: A94-971, 3 Squadron, late 1958. This aircraft is depicted early in its service life and is finished in over-all aluminium lacquer, which gave a beautiful soft satin sheen to the aircraft. Depending upon how far away the viewer stood from the aircraft, as well as the lighting conditions, this gave an impression of either a silver-grey finish or a clean silver finish. The jet engine exhaust was natural metal and fairly dark (we recommend using a paint and polish metalizer like Gunze Sangyo Stainless for this area). The immediate area ahead of it was highly polished natural metal (we recommend using a paint and polish metalizer like Gunze Sangyo Chrome Silver or Aluminium for this area). The fuel dump pipe was painted Post Office Red (BS381:C-538). Note that the fin and rudder tip were not painted light grey on this aircraft. The anti-glare panel, windscreen frame and radar di-electric panel were matt black. The gun ports were natural metal. There was no black high speed protective tape on the aircraft's leading edges and there was no number carried on the nose.

Option 2: A94-901, Black Panthers Aerobatic Team, Number 76 Squadron RAAF, 1965. This aircraft was finished in over-all aluminium lacquer. Gloss red was used to highlight the jet engine air intake fairing, the wing and tailplane tips and the fin. Modellers should ensure that the areas they paint match the fuselage stripe provided on the decal sheet. All areas painted red had a black stripe outlining them. The fuel dump pipe was painted Post Office Red (BS381:C-538). Black high speed protective tape was applied to all leading edges. The gun ports were natural metal. The last two digits of the aircraft serial number were carried on the nose. The fin and rudder tip on this aircraft are finished in light grey (BS381:C-697). The anti-glare panel, windscreen frame and radar di-electric panel were matt black.

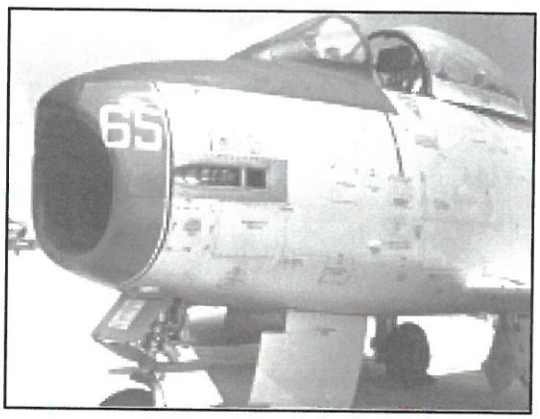
Option 3: A94-922, Marksmen Aerobatic Team, 2 Operational Conversion Unit, 1966. This aircraft is finished in over-all aluminium lacquer, with the usual natural metal gun ports and jet engine exhaust. The area immediately ahead of the jet engine exhaust is highly polished natural metal. The jet engine air intake fairing, wing and tailplane tips and the entire fin, including the fillet, and rudder are painted yellow (BS381:C-356). Black stripes are superimposed on the yellow fin and rudder, but the fin flash was inset into the design. The yellow areas on the jet engine air intake fairing and the wing and tailplane tips are outlined with a black stripe. The anti-glare panel, windscreen frame and radar di-electric panel were matt black. Black high speed protective tape was applied to all leading edges. The fuel dump pipe was painted Post Office Red (BS381:C-538).

Option 4: A94-371, Marksmen Aerobatic Team, 2 Operational Conversion Unit, 1966. This aircraft is identical to A9-922, except that is has been permanently fitted with an external smoke generating pipe for its display work (represented by a black line on the drawing).

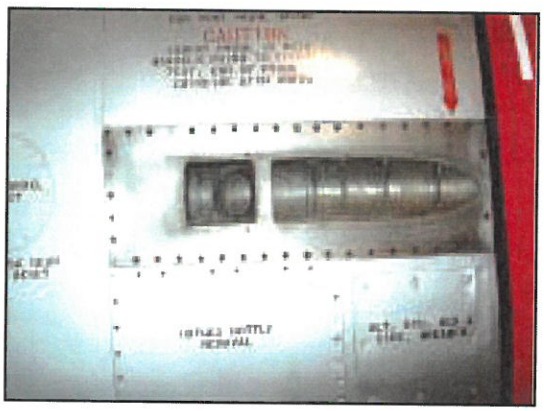
The RMAF Colour Schemes

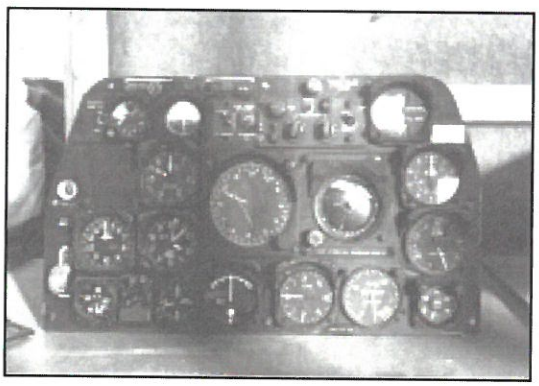
Option 5: FM1369, 11 Squadron, Royal Malaysian Air Force. One of a number of ex-RAAF Avon Sabres provided to Malaysia under a defence aid agreement, this aircraft was finished in over-all aluminium lacquer. The gun ports and jet exhaust were natural metal and the area immediately in front of the exhaust was highly polished metal. The anti-glare panel, windscreen frame and radar di-electric panel were matt black. Black high speed protective tape was applied to all leading edges. The fuel dump pipe was painted with appears to be International Orange (BS381:C-592).

Options 6, 7 and 8: FM1983, FM-1901 and FM-1979, 11 Squadron RMAF. These ex-RAAF Avon Sabres were provided to Malaysia under a defence aid agreement. The aircraft were delivered in an over-all aluminium lacquer but were re-painted later in their RMAF service. The aircraft retained their matt black anti-glare panel, extending onto the windscreen frame, and the matt black radar di-electric panel. The gun ports and jet engine exhaust were natural metal. The area immediately ahead of the jet engine exhaust was highly polished natural metal. The fin and rudder tip were painted light grey (BS381:C-697).

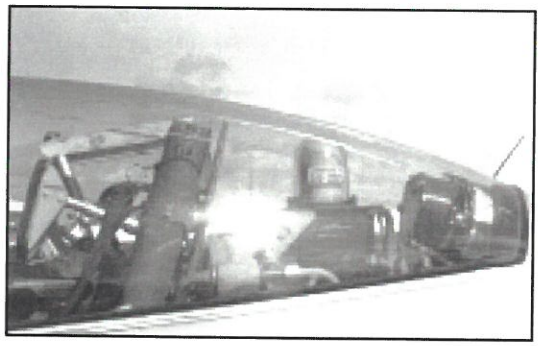


The gun ports on the CAC Avon Sabre.





Main instrument panel fitted to the CAC AVon Sabre. Note that this was a front fitted panel. The small fairings above the instruments housed the combat lighting.



Side view of the rear cockpit fairing showing the position of the ejection seat headrest, canopy breaker, radio compass and cabin pressure relief valve.

Light grey high speed protective tape was applied to the wing and fin leading edges. The Malaysian national markings were carried in a similar pattern to those of the RAAF. The aircraft serial was white. The upper surfaces were painted matt Olive Drab (close to BS381:C-285), with a very low demarcation. The Olive Drab finish extended inside the jet engine air intake to a point equidistant to the start of the gun ports. Thereafter, the intake was natural metal. The under-surfaces were finished in an egg shell blue colour (close to FS 24585). The 11 Squadron badge, consisting of a cobra, poised to strike, superimposed on a red "11" on a white disc, was carried on both sides of the fin.

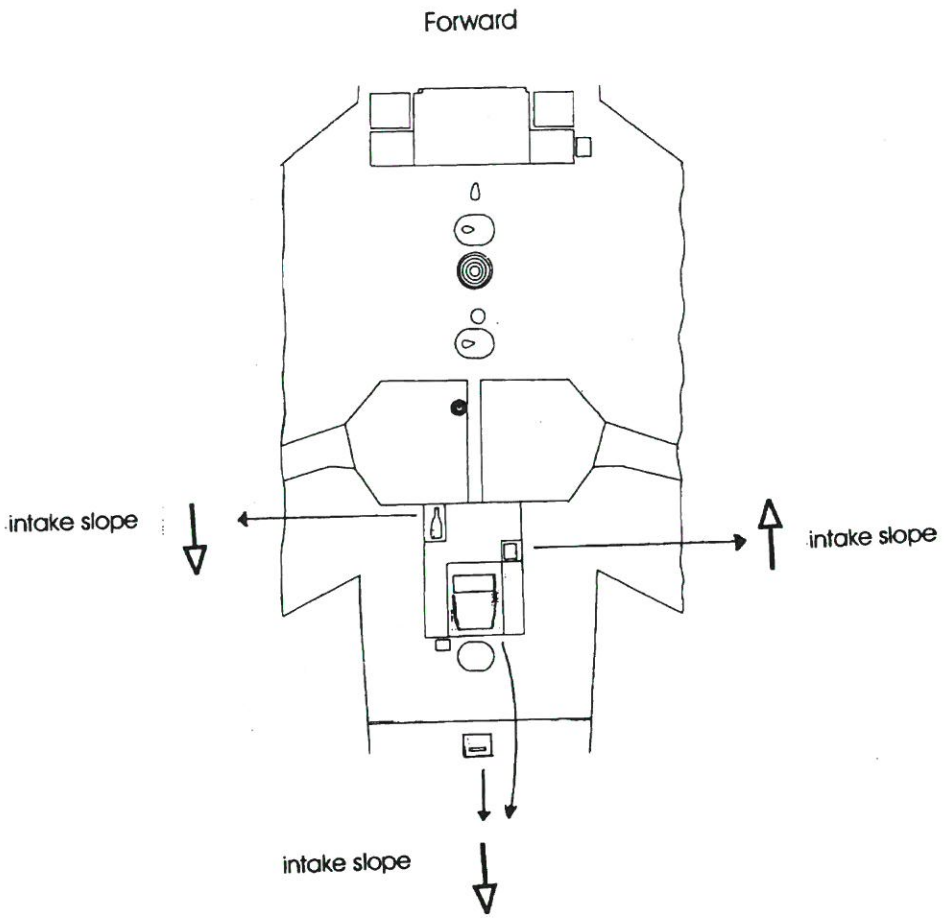
The Cockpit Colour Notes

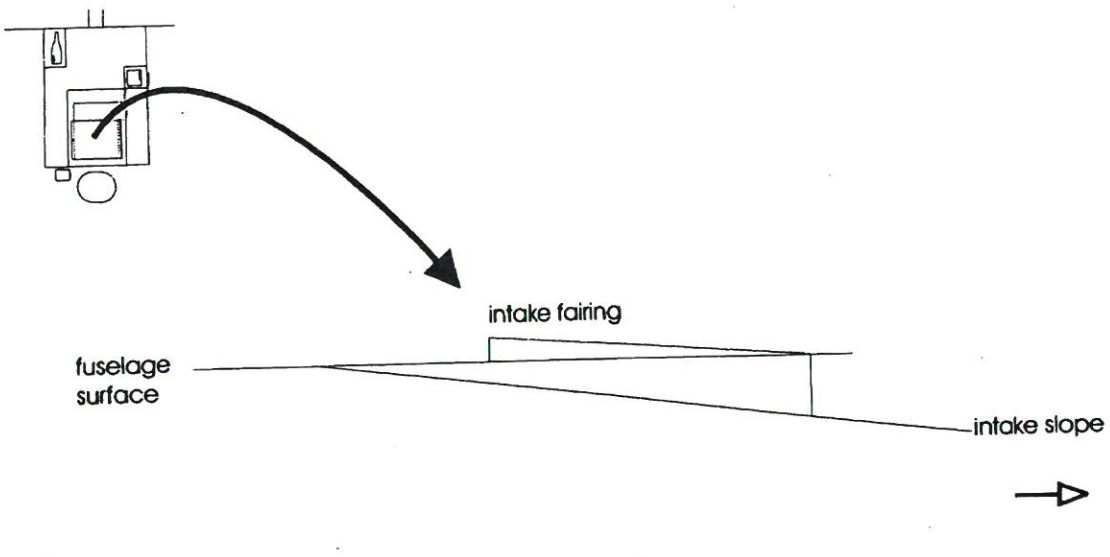
Read and use this section in conjunction with the drawing of the cockpit details.

Generally speaking within the Avon Sabre cockpit all consoles and panels, including the main instrument panel, were matt black. The main instrument panel in the CAC Avon Sabre was front fitted (the instruments stood proud of the panel). All circuit breaker and radio control panels were matt black with white lettering and silver switches. The throttle quadrant was matt black. All instruments had black faces with white markings under glass. The canopy and windscreen interior fame was matt black. The seat was finished in aluminium lacquer. All other areas were primer grey, which was a non-metal base paint (approximately BS 381:C-631 or – 386).

Some kits suggest that you paint the cockpit interior primer grey, with a matt black instrument panel and matt black side console faces. Restored Avon Sabres appear to be finished in this scheme. We recall that Avon Sabres in the sixties seemed to have completely matt black cockpit interiors. Certainly, this would be the most reasonable situation with aircraft of this ilk and period – Meteors, Sabres and Mirages. Those Avon Sabres that have undergone restoration and are currently on display feature a primer grey cockpit, with black panels. In any case we have hedged our bets and mentioned both - check your references thoroughly and decide what you will do.

Avon Sabre Intakes
Lower surface, fuselage





THE CAC AVON SABRE PAINT BOX

The paint specifications for the CAC Avon Sabre operated by the RAAF are:

Paint	BS 381:C	FS595a/b	Remarks
Aluminium lacquer		17178	See Note 1
Matt Black		37038	
Primer Grey	631		See Note 2
	386		
Light Grey	697		
Post Office Red	538	11136	
Golden Yellow	356	23538	FS # is poor match for colour
	BS		

The paint specifications for the CAC Avon Sabre operated by the RMAF are:

Paint	BS381:C	FS595a/b	Remarks
Aluminium lacquer		17178	See Note 1
Matt Black		37038	
Primer Grey	631		See Note 2
	386		
Light Grey	697		
Olive Drab	285	34130	Close match to these numbers
Egg Shell Blue		24585	Close, but lighter

SUGGESTED MODEL PAINTS

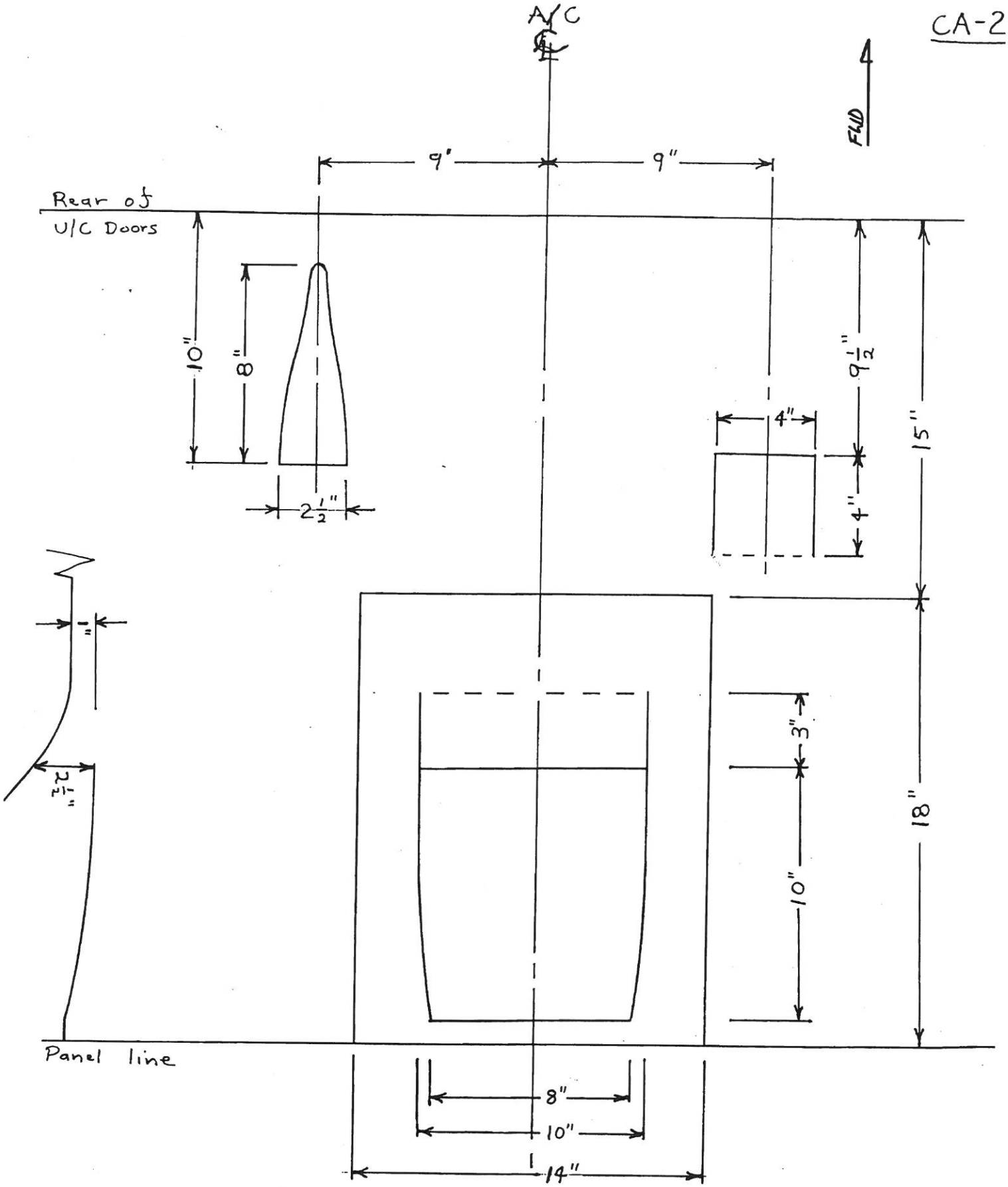
The following notes cover our recommendation for what we think are the best model paints to use in this project. You may well have your own favourites but for those who may not have modelled an RAAF subject of this era before we offer the following suggestions.

A really important part of the model is replicating the beautiful aluminium lacquer finish applied to the Avon Sabre during its RAAF service. There are two paints that are recommended for replicating this finish, remembering that it is not a natural metal finish. Either Humbrol's Fox Silver (number 11) or Floquil's outstanding Railroad Colors Platinum Mist (number 110144) are best. If you use Floquil's Platinum Mist make sure that you undercoat the model first, with any enamel light grey, because the Floquil paint will etch the plastic. It is well worth the extra effort to use this paint – if you are uncertain about its use, prime a piece of scrap plastic and spray a coat of Platinum Mist onto it to check the result before applying it to your model.

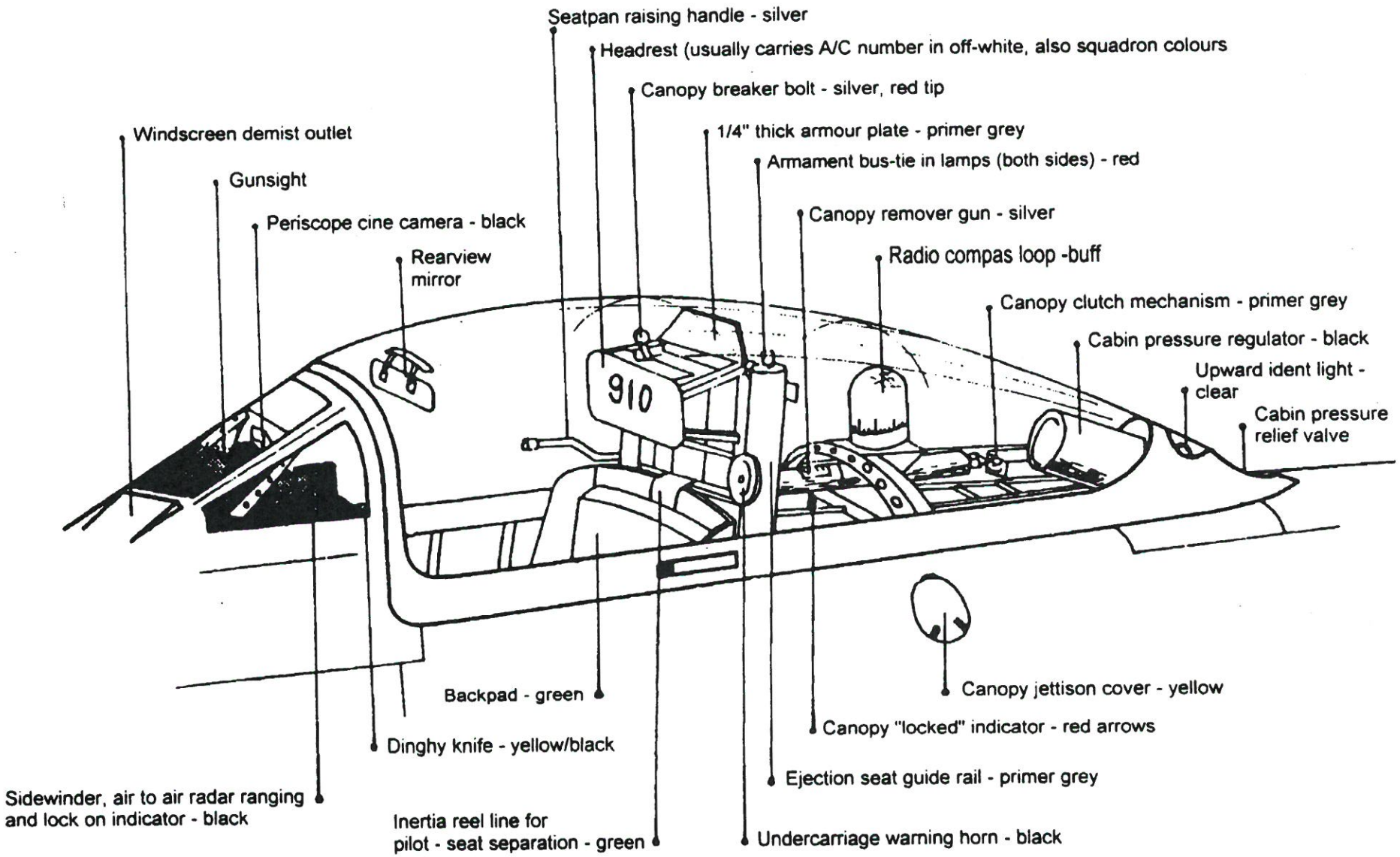
For the natural metal areas around the jet exhaust and gun ports we recommend Gunze Mr Metal Stainless, which can be buffed to the right sheen once it is dry. For the highly polished metal section of the fuselage immediately ahead of the jet exhaust either Gunze Mr Metal Chrome Silver or Aluminium will be an excellent choice. Of course, if you have your favourite product (such as Sn'J or Alclad II), you may wish to use it instead. Please ensure that these are the last areas to be painted, after all decals have been applied, the model sealed with matt/satin varnish and the surrounding areas well masked before application and buffing.

With regard to the RMAF colours we can only offer the following suggestion. XtraColor manufactures a NATO Green (BS381:C-285)(X19), which the Malaysian Olive Drab is very close to. We know of no suitable paint available to represent the Egg Shell Blue (close to FS24585) applied to the under-surfaces. It is a case of mixing your own or trying to get away with Gunze H31 White Green (Weiß Grün) as a substitute.

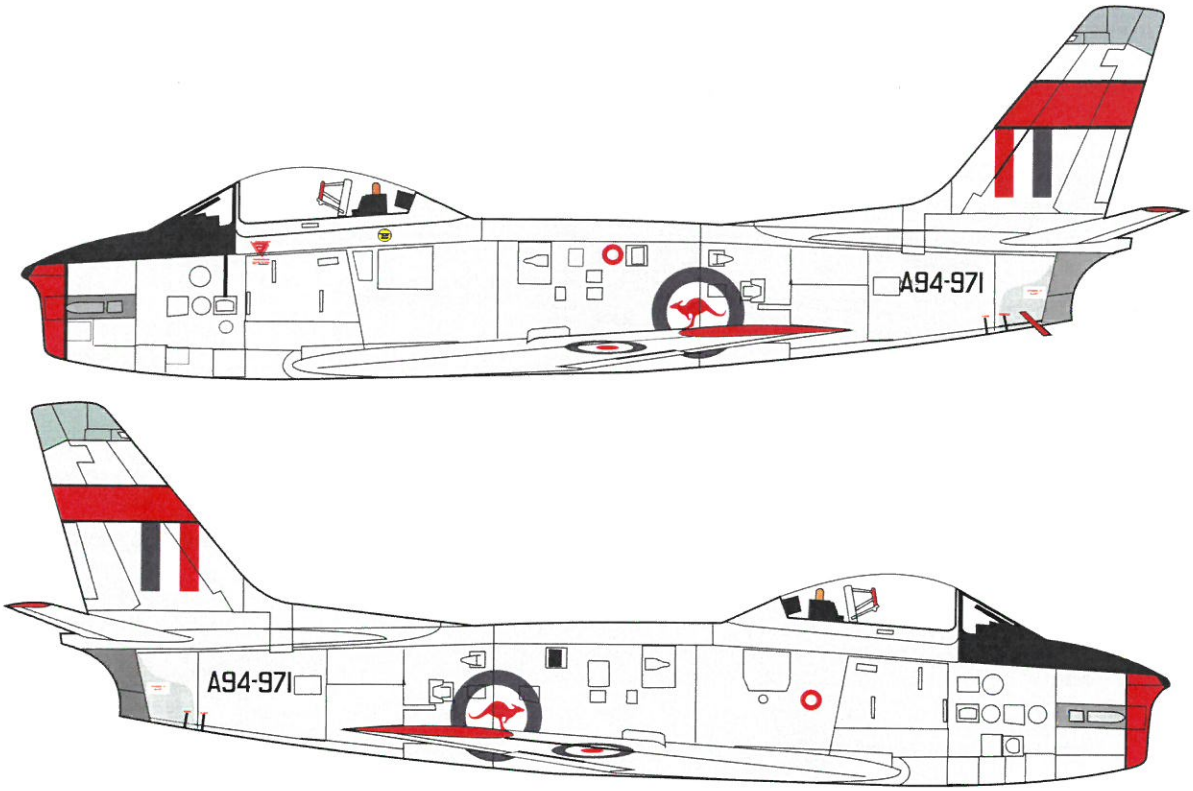
CA-2


A/C
FWD
9"
9"
Rear of
U/C Doors
10"
8"
2½"
4"
9½"
4"
15"
¼"
¼"
3"
10"
18"
Panel line
8"
10"
14"

COCKPIT DETAILS

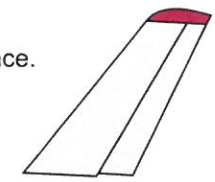


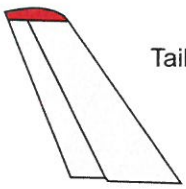
CAC AVON SABRE DECAL AND COLOUR GUIDE



A94-971, 3 Squadron RAAF, late 1958.

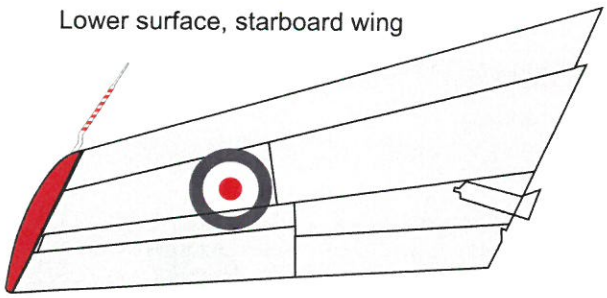
Tailplane, upper surface.



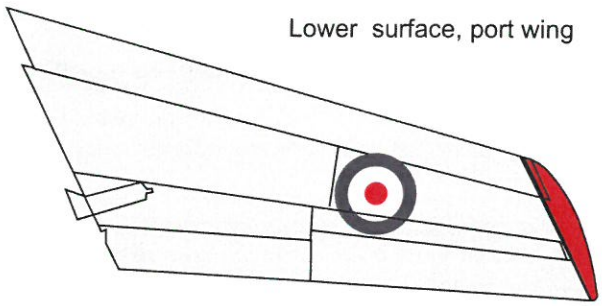


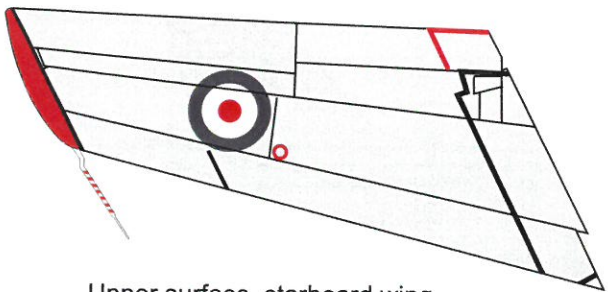
Tailplane, lower surface.

Lower surface, starboard wing

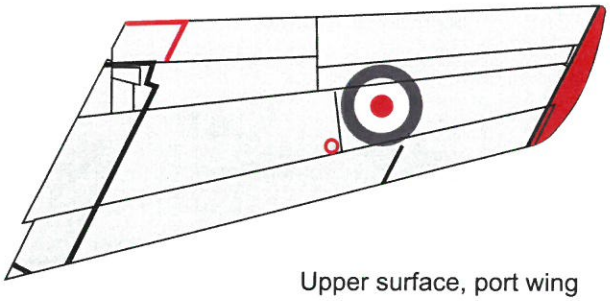


Lower surface, port wing



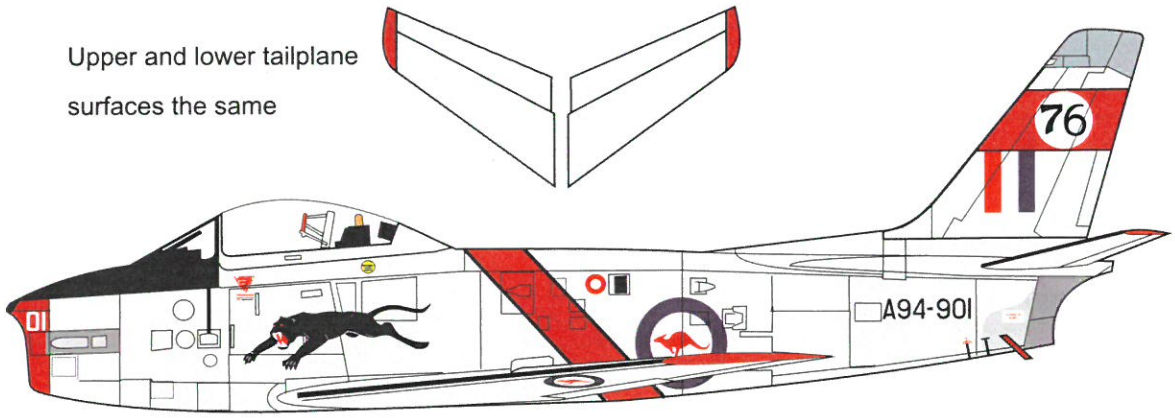


Upper surface, starboard wing

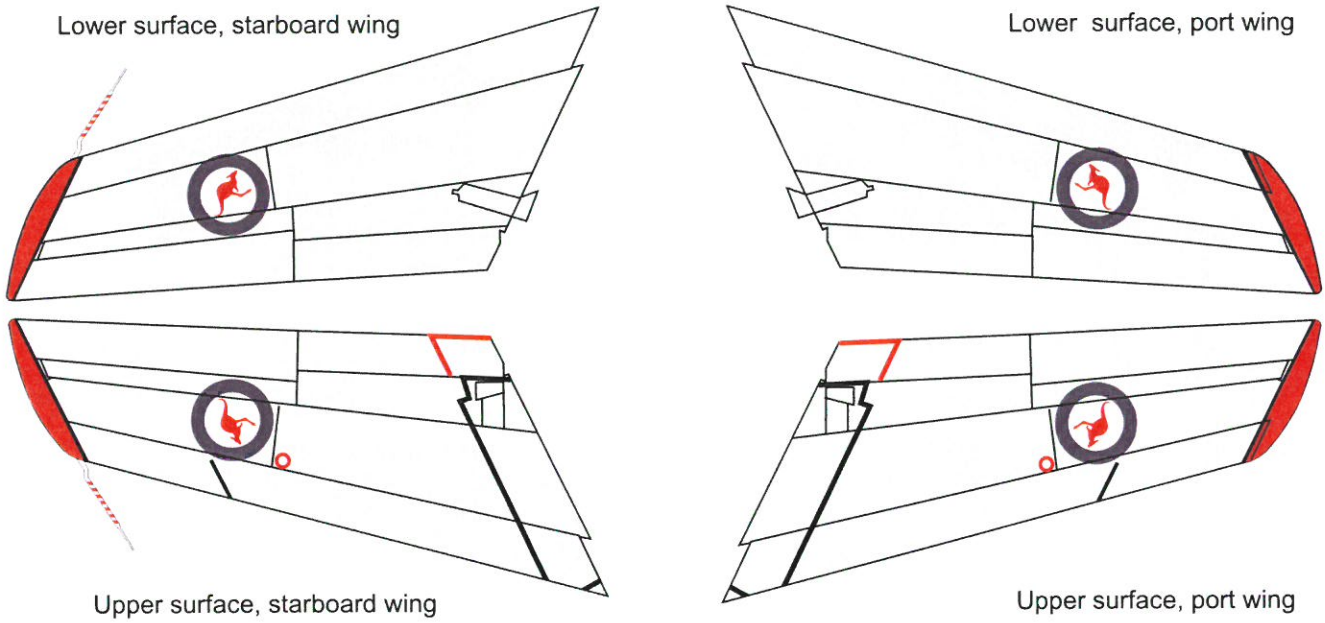


Upper surface, port wing

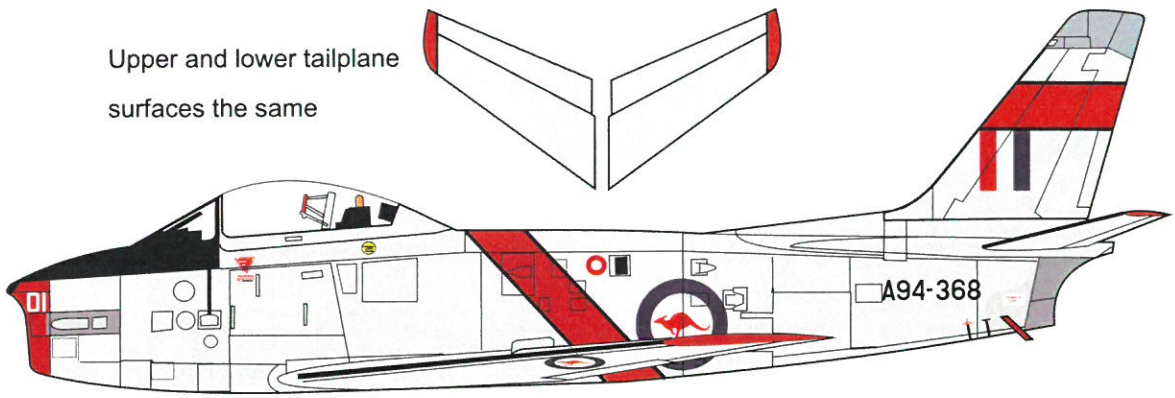
Wing and tailplane tips similar on all aircraft and painted with squadron colour, use fuselage profile as guide.

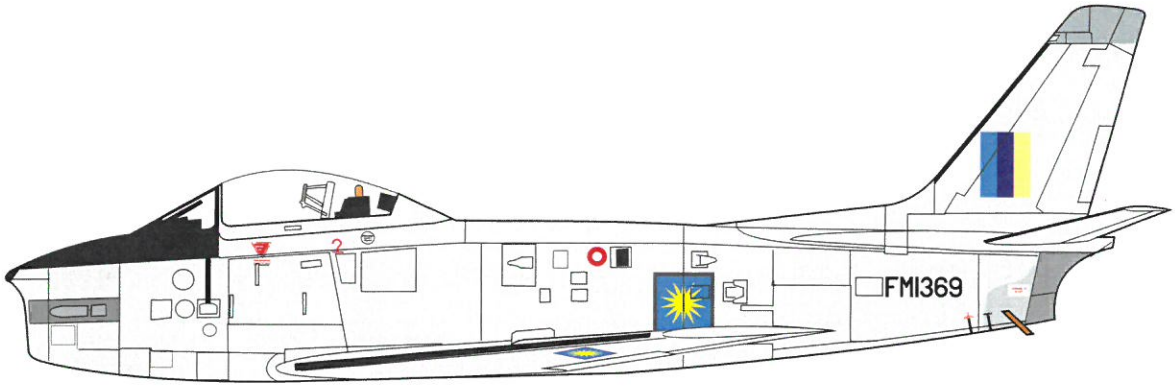


A94-901, Black Panthers Aerobatic Team 76 Squadron, 1965.

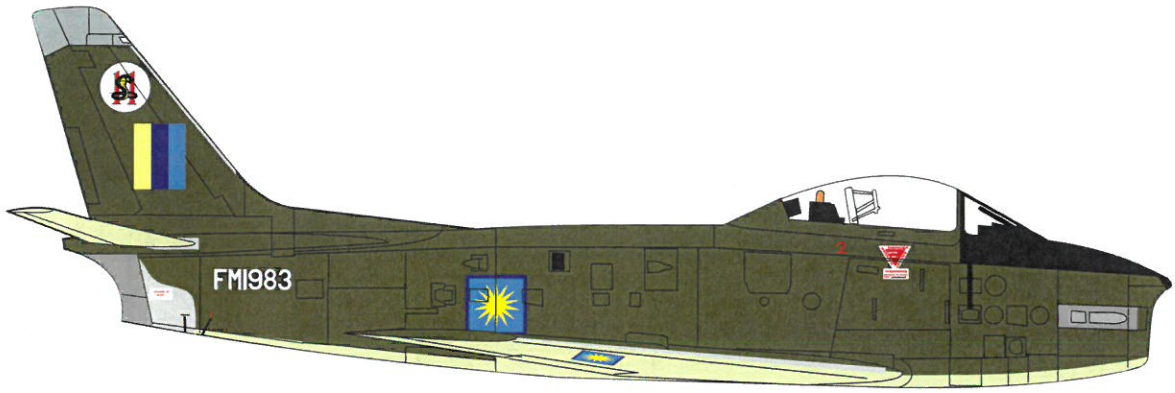


Use these drawings as a guide for placement of kangaroo roundels on wings and wing tip colours where appropriate.





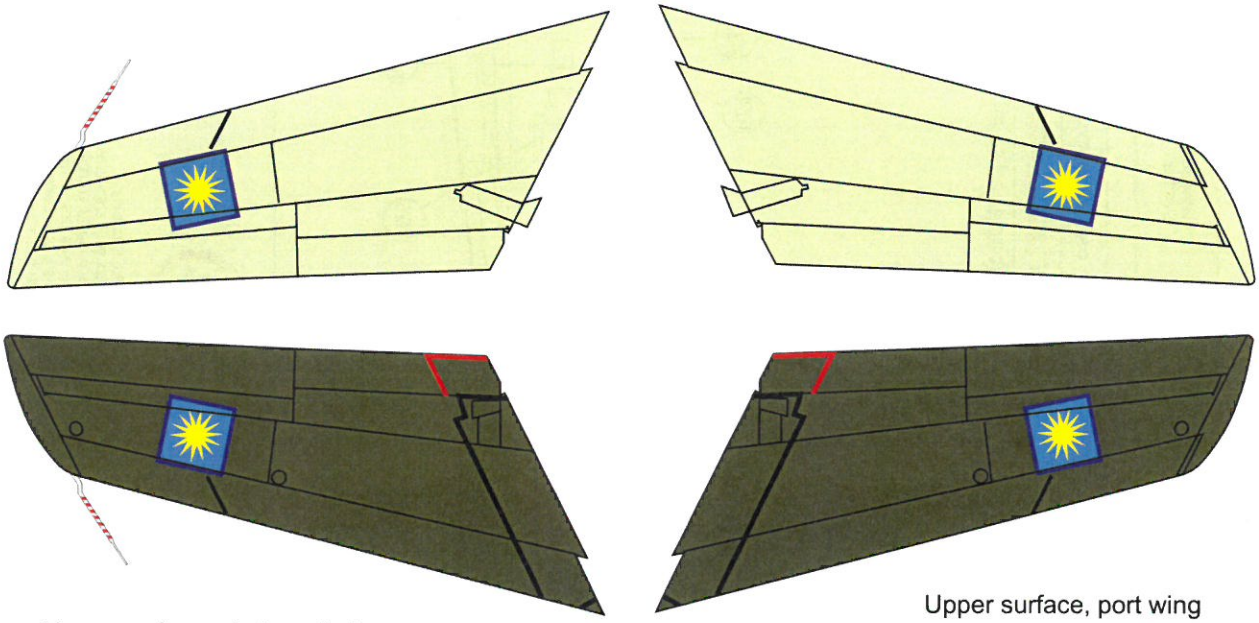
Fm1369, 11 Squadron Royal Malaysian Air Force, 1971



FM 1983, 11 Squadron Royal Malaysian Air Force, 1971

Lower surface, starboard wing

Lower surface, port wing



Upper surface, starboard wing

Upper surface, port wing

Use these drawings as a guide for placement of national markings on wings of RMAF aircraft.

R1 GUN TEST PROBE DATUM
CAUTION
INSERT PROBE IN BOTH BARRELS PRIOR TO CIRCUIT TEST. END OF PROBE TO COINCIDE WITH ARROW

R2 HYDRAULIC ALTERNATE SYSTEM RESERVOIR

R3 OXYGEN BOTTLES

R4 FRONT GUN MT

R5 HYDRAULIC ALTERNATE SYSTEM PUMP

R6 OXYGEN CHECK VALVE

R7 OXYGEN FILLER

R8 FRONT GUN MT

R9 HYD UTILITY ACCUMULATOR

R10 HYD BRAKE CYL

R11 HYD BRAKE CYL

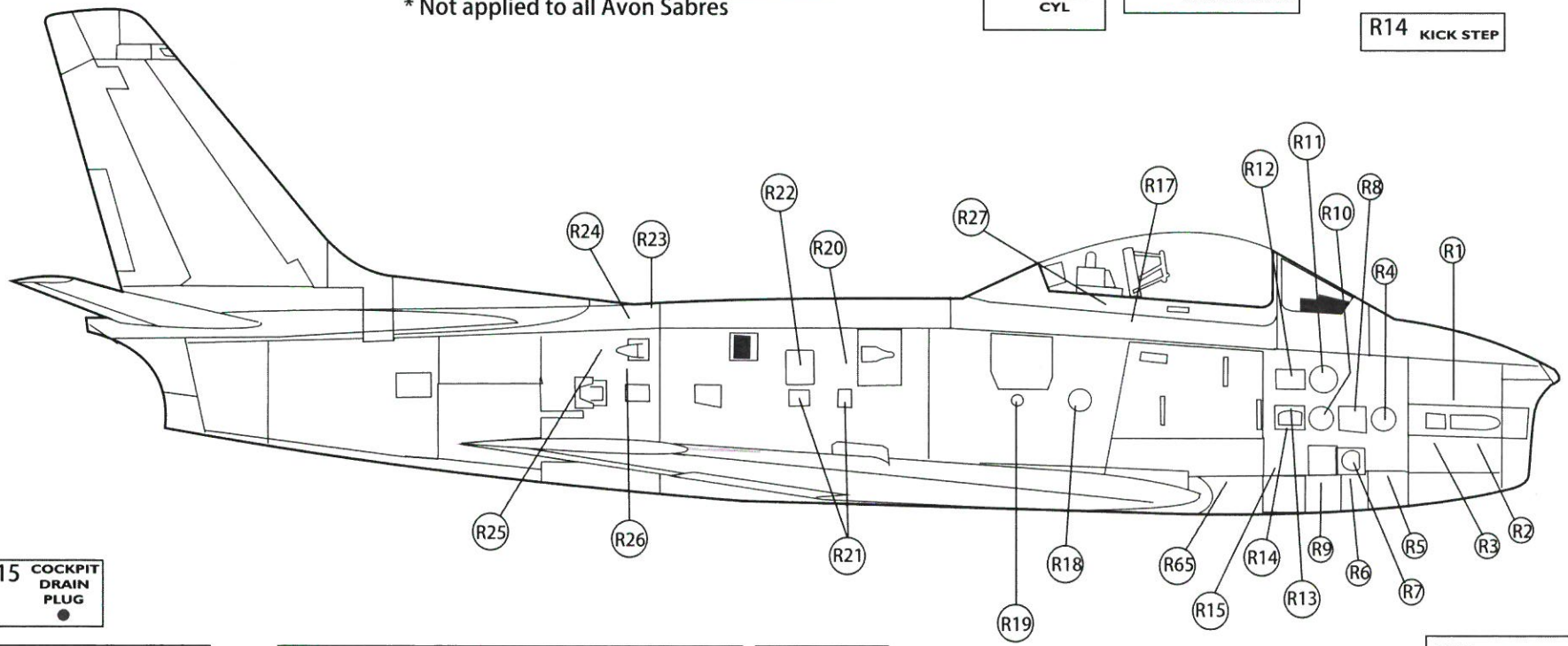
R12 HYD EMERG CHANGEOVER

R13 FRONT GUN MT

R14 KICK STEP

R27* BREAK THRU PERSPEX CANOPY FOR EMERGENCY RESCUE

* Not applied to all Avon Sabres



R15 COCKPIT DRAIN PLUG

R16 AMMUNITION ACCESS LOWER DOOR FOR STEP

R17 SLINGING OR HOISTING POINT
INSERT ANGLE

R18 FUEL FILLER 100 IMP GALL
CAUTION
FUEL CELL FILLING
(1) FORWARD FOR CENTRE WING CELL
LEAVE OFF CAPS UNTIL REAR FUEL CELLS FULL
(2) OUTER WING CELLS REPLACE CAPS
(3) REAR FUS CELL UNTIL FORWARD FUS CELL FULL
REPLACE ALL CAPS

R19 GROUND HERE

R20 BORESITE FIXTURE INSIDE

R21 FRONT ENGINE MOUNT

R21 FRONT ENGINE MOUNT

R22 HYD EMERG CHANGEOVER

R23 HYD DISCONNECT COUPLING CONTROL CABLE ADJUST

R25 TELEFLEX & HYD COMP DISC

R24 TIGHTEN ONLY TO 2500 ADFGH INNER BEARINGS

R26 BEARING COUPLING DISCONNECT
FUEL LEVEL TRANS
FUEL VENT CONNECT

L1 GUN TEST PROBE DATUM
CAUTION
INSERT PROBE IN BOTH BARRELS PRIOR TO CIRCUIT TEST. END OF PROBE TO COINCIDE WITH ARROW

L2 LIQUID STARTER CONTROL BOX

L3 OXYGEN BOTTLE REMOVAL

L4 TRUNNION PIN ACCESS

L5 GUN BARREL MT

L6 FIRE DETECTION RELAY AND HYD ACCESS

L7 HYD BRAKE CYL

L8 FRONT GUN MT

L9 KICK STEP

L10 1 IMP GAL

L11 SERVICE THIS FILLER WITH K5/1000 FUEL

L12 COCKPIT DRAIN PLUG

L13 AIR SPEED LINE DRAINS

L14 OXYGEN BOTTLE COUPLING

L15 LIQUID STARTER EQUIP

L16 AMMUNITION ACCESS LOWER DOOR FOR STEP

L17 GUN ACCESS CABIN PRESSURE CHECK INSIDE

L18 WARNING
AVOID CONTACT WITH CONTROLS MARKED

L19 SLINGING OR HOISTING POINT
INSERT ANGLE

L20 STICK STOP ACCESS

L21 SPEED BRAKE DUMP VALVE

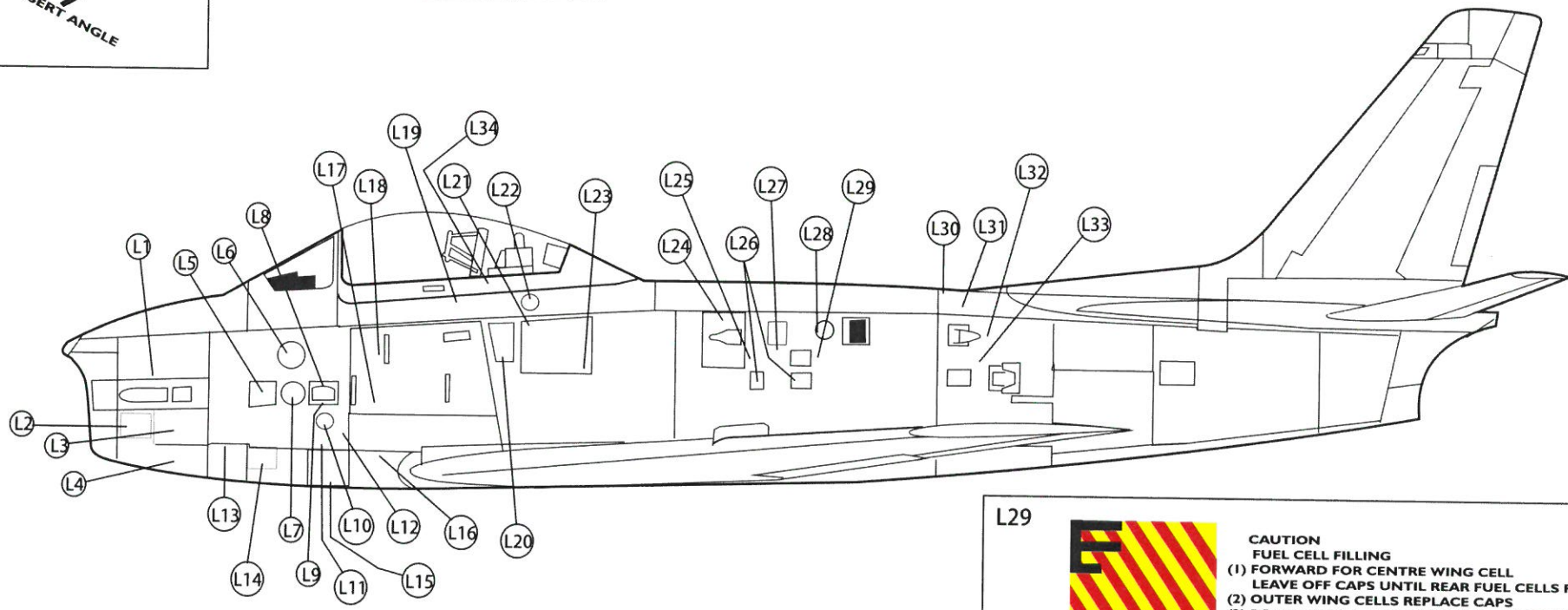
L22 EMERGENCY CANOPY RELEASE
RESCUE

L23 RADIO AND FUEL LEVEL CONTROL VALVE INSIDE

L24 STARTER ELECT DISC &ENGINE CONT

L25 BORESITE FIXTURE INSIDE

L25 BORESITE FIXTURE INSIDE



L29
CAUTION
FUEL CELL FILLING
(1) FORWARD FOR CENTRE WING CELL
LEAVE OFF CAPS UNTIL REAR FUEL CELLS FULL
(2) OUTER WING CELLS REPLACE CAPS
(3) REAR FUS CELL UNTIL FORWARD FUS CELL FULL
REPLACE ALL CAPS

L34* BREAK THRU PERSPEX CANOPY FOR EMERGENCY RESUCE

*Not applied to all Avon Sabres

L27 GROUND HERE

L28 EXT PWR
28 VLT DC
BATTERY LOCATION
& NOSE RADAR
COMPARTMENT
FUEL FILLER 100 IMP GALL

L30 HYD DISCONNECT COUPLING
CONTROL CABLE ADJUST

L31 TIGHTEN ONLY TO 2500 ADFGH INNER BEARINGS

L32 TELEFLEX & HYD COMP DISC

L33 BEARING COUPLING DISCONNECT
FUEL LEVEL TRANS
FUEL VENT CONNECT