

# A-4G Skyhawk

Supplement  
to  
NATOPS  
Flight Manual  
NAVY MODEL  
A-4E/F

International Model A-4G  
AIRCRAFT



## Fleet Defender

NATOPS  
FRONT  
PHOTOS

4 X AIM 9B  
SIDEWINDER



1967



San Diego,  
California

DOUGLAS

*Skyhawk*

USA in Dull Light Dove Grey  
Top/White under & top of  
ailerons & elevators only  
Delivery Paint Scheme

1

2

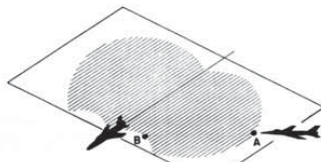
3 & 4

4 X AIM 9B  
SIDEWINDERS  
UNDER WING



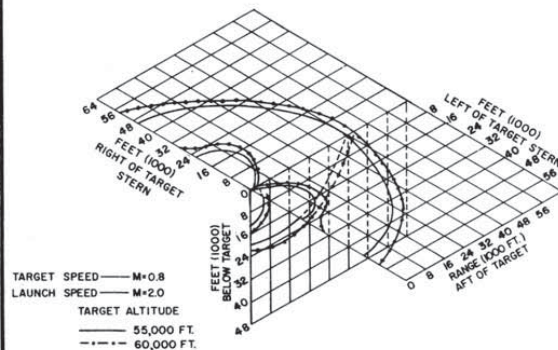
These plots depict the areas within two planes aft of the target wherein a AIM-9B(SW-1A) missile may be launched with a capability of disabling the target. The following sketch illustrates the orientation of these grids.

For example shown, A is the outer most point at which missile may be launched; B the innermost.

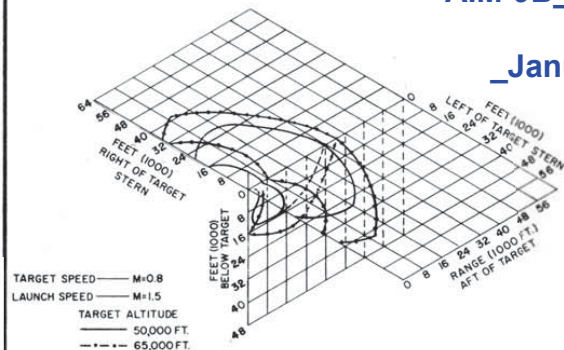


Performance data depicted on page 4 represent samples only of the wide variation of missile performance obtained for different closing rates and altitudes. The data are based on simulator studies and on actual flight testing. Usable envelopes for the F-100, F-104 and F-105 will probably be considerably less, depending on information displayed to the pilot. For actual usable envelopes, F-100, F-104 and F-105 technical orders (pilot's handbooks) contain rules of thumb for determining these envelopes.

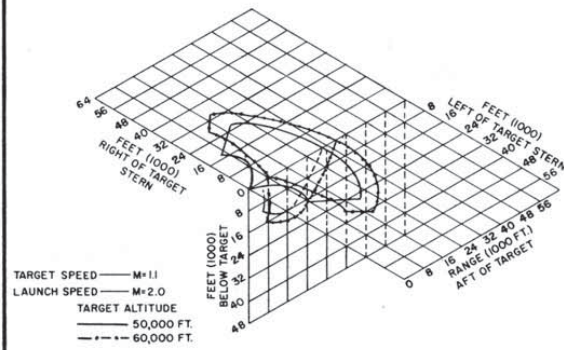
## Firing Envelope Nr 2



## Firing Envelope Nr 1



## Firing Envelope Nr 3



DOWNGRADED AT 3 YEAR INTERVALS;  
DECLASSIFIED AFTER 12 YEARS  
DOD DIR 5200.10



F11246

# Skyhawk Aerial Refuelling

<http://www.awm.gov.au/collection/F11246/>

# 805

SKYHAWK  
FIGHTER  
SQUADRON



Screen Grab from a 1968 movie about  
new A4Gs not long after arrival at NAS



Waiting for official handover with four underwing AIM-9B Sidewinders USofA 26 July 1967

# **RAN FAA Squadron Prefix Changes c.1970 then 1997**

## **805 Squadron History** <http://www.navy.gov.au/history/squadron-histories/805-squadron-history>

**“...By now [1970] the RAN had adopted USN prefixes for its Fleet Air Arm squadrons and 805 Squadron became VF805 Squadron, V standing for fixed-wing and F for fighter....”**

**In 1997 the RAN dropped the USN prefixes that had been attached to FAA Squadrons for the past 28 years i.e.**

**VF-805 (V=Fixed Wing; F=Fighter) and VC-724 (C=Composite [several aircraft types]). H=Helicopter; S=Anti-Submarine; T=Training [I reckon the change was 1969-1970 also].**

## **723 Squadron History** <http://www.navy.gov.au/history/squadron-histories/723-squadron-history>

**“...In 1997 the RAN dropped the prefixes that had been attached to FAA Squadrons for the past 25 [28] years & HC723 Squadron reverted back to 723 Squadron....”**



Captain Cook Graving Dock open  
with HMAS Otway surfacing during  
NAVY WEEK display, 1981

NAVY NEWS 09 October 1981 Cover Photo  
[http://www.navy.gov.au/sites/default/files/documents/Navy\\_News-October-9-1981.pdf](http://www.navy.gov.au/sites/default/files/documents/Navy_News-October-9-1981.pdf)



“Eight British Oberon class submarines were ordered in 1964, to be built in Scotland in two batches of four boats. Only six boats were delivered; the seventh & eighth were cancelled in 1971 to fund the acquisition of ten [extra] A-4G Skyhawk aircraft for the Fleet Air Arm.” 10+10=20 Total  
[http://en.wikipedia.org/wiki/Royal\\_Australian\\_Navy\\_Submarine\\_Service](http://en.wikipedia.org/wiki/Royal_Australian_Navy_Submarine_Service)

NAVY WEEK SYDNEY attracted more than 37,000 visitors over the holiday weekend and one of the popular features was diving and surfacing demonstrations by the submarine HMAS OTWAY at Garden Island during Open Day on Monday. More photographs inside cover.



# Capabilities of the Skyhawk A-4E - RAN 1964 study

The Skyhawk aircraft would provide a counter to reconnaissance type aircraft, stand off missile firing aircraft (Badger with Kennel) and surface attack forces likely to be met when the carrier is engaged in convoy escort duties or anti-submarine patrol work.

2. Operating from HMAS MELBOURNE with BS4 catapult, the Skyhawk can be launched in tropical nil wind conditions in the fighter role carrying two 20 millimetre guns and two Sidewinder Air-to-Air missiles, and in the Strike role with a payload of 1,000 lbs. This is more than the Sea Venom can carry in any conditions.

<http://images.yuku.com/image/ppjegg/d6c1559ee48ae292aa9ce8a82bd60d0d76d9aff.pjpg>

## 3. Fighter Role.

With full internal fuel tanks, two 20 millimetre guns and two Sidewinder air-to-air missiles the Skyhawk can climb to 35,000 feet. Making allowance for the majority of the time it is airborne being at normal cruising speed but allowing for 10 minutes at full power it can remain on station 100 miles from the carrier for two hours and return to the carrier with 20 minutes in hand plus 5 per cent fuel remaining for landing on.

Expressed as an out and back mission against an aircraft the following intercept distances from the force could be achieved:-

35,000 feet	-	366 NM
20,000 feet	-	235 NM
Sea Level	-	132 NM

## 4. Strike Role against surface forces.

With full internal fuel tanks, two 20 millimetre guns and carrying thirty eight 2.75" rocket projectiles or as alternatives to the 2.75" rocket projectiles eight 5" rocket projectiles or four 250 lb bombs it can carry out attacks on enemy surface forces within a radius of 240 nautical miles carrying out a High-Low-High flight path. Allowance is made in this case for 2 minutes at full power and the aircraft would return with 20 minutes reserve of fuel for landing on.

5. The above represents the strike role payload in tropical nil wind. For every 5 knots of natural wind a further 1,000 lb load may be carried.

For striking over shorter distances fuel can be traded for payload and thus show the following gains:-

2,000 lb	-	210 NM
1,000 lb	-	125 NM

## 6. Samples of the above loads could be:-

- 2,000 lbs = 2 x 20 MM, 38 x 2.75" RP 4 x 250 lb Bombs.
- 1,000 lbs = 2 x 20 MM, 38 x 2.75" RP 1 Bullseye.

## 7. Ferry Range.

The ferry range of the aircraft is 2,200 nautical miles.

## 8. Comparison of Skyhawk and Badger B Aircraft.

The Badger aircraft has been selected for comparison as it is the only stand off missile launching aircraft at present in SE Asia, and its performance exceeds that of the Beagle which could be used in the reconnaissance role.

	<u>Skyhawk</u>	<u>Badger</u>
<u>Level Speeds</u>		
35,000 feet	531 (585)'	490
20,000 feet	560 (615)'	530
Sea Level	593	450
		Airframe limit

Note 1. Figures in brackets after Skyhawk speeds represent airframe limitation at Mach 1.02.

2. Badger would probably operate at about 30 knots below quoted limiting speeds.

In delivering the stand off missile (Kennel at a maximum range of 50 miles) the Badger is severely limited in speed and altitude. The release conditions are:-

The aircraft must descend or climb to 15,000 feet and reduce speed to 250 knots. Following release of the missile the aircraft must continue in the general direction of the target to provide guidance data until the missile has acquired the target. Its speed at this time may be increased to the maximum, but its evasive manoeuvring is limited due to the need to maintain guidance. The speed of the Kennel missile is Mach .9.

## 9. Service in USN. <http://images.yuku.com/image/ppjegg/c1e358e69f03e1498d0ae47e9cc64ae4bfff10ef.pjpg>

The A4E Aircraft is in general service in the USN as a strike aircraft and four aircraft of this type are carried in ASW carriers for use in the fighter role against enemy air reconnaissance and in the strike role against enemy surface forces.

## NOTE

As stated in the Navy's Programme narrative statement, the operation of the Skyhawk from H.M.A.S. MELBOURNE is subject to trials, but it is known that the aircraft has been satisfactorily flown from the Canadian carrier BONAVENTURE (a sister ship to MELBOURNE).








SECRET			
COMPARISON OF ESSENTIAL DATA			
	MELBOURNE	NEW ROYAL NAVY CARRIERS FIRST COMMISSION 1971	ORISKANY CLASS
			
DISPLACEMENT.	20,000 TONS FULL LOAD.	53,000 TONS FULL LOAD.	42,000 TONS FULL LOAD.
LENGTH.	700 FEET OVERALL.	580 FEET OVERALL.	580 FEET OVERALL.
SPEED.	24 KNOTS.	28 KNOTS (6 MONTHS OUT OF DOCA.)	31.5 MAX. 30 SUSTAINED.
PROPULSION.	STEAM TURBINE.	STEAM TURBINE.	STEAM TURBINE.
ENDURANCE.	3,400 AT 20 KNOTS.	6000 AT 20 KNOTS.	12000 AT 20 KNOTS.
DECK STRENGTHS (STEAM)	24,000 LB.	70,000 LB.	70,000 LB.
CATAULT.	1 STEAM 103' STAGOE	2 STEAM 250' STAGOE.	2 STEAM 211' STAGOE.
RIACRAFT LIFTS.	2	2 - 70' x 32' DECK EDGE	3 2-50' x 44' DECK EDGE 250' CAN BE FITTED.
RIACRA.	L.W. 0.2	THREE D & E ACTION DATA AUTOMATION	1 - 70' x 44' CENTRALINE
RIACRAFT	12 WESSEX.	30 FIGHTER/STRIKE	3PS-45 LONG RANGE 3 CO-ORDINATE R/A
	6 GANNET	5 A/S HELICOPTER (LARGE)	16 FIGHTER/STRIKE SEARCH/CTOG.
	4 SEA VENDOR.	4 A.E.W.	12 TACSEA. AS A.A.N.
		2 S.A.A. HELICOPTER.	16 WESSEX.
RIACRAFT FUEL.	205,000 GALL. AVCAT.	600,000 GALLS. AVCAT.	2 S.A.A. HELICOPTER.
	5,000 GALL. AVBRS.		550,000 IMP. GALLS. AVCAT
RIACRA PROTECTION.	NIL.	SAFETY PROTECTION ONLY.	71,000 IMP. GALLS. AVBRS.
SHIPS ARMAMENT.	20-40 MM.	ONE SEA CRAFT MISSILE LAUNCHER (RANGE 30 MILES)	5 DECK 3" - 16" HANGAR DECK 3"
AVAILABILITY.	IN SERVICE.	1972-74	SECOND DECK 24" MACHINERY SPACES 1/2"
COST		£(A) 72.5 M. ADMIRALTY ESTIMATE.	STEERING SCAR BOX - 4"
			7-5", 6-3" TWIN
			1960 ON COMPLETION MODERNISATION.
			£(A) 583 U.S.N. ESTIMATE.

FIG. 9

SECRET



I am much more concerned about the lack of defensive capability. However, it is true that we have no offensive capability, and the bombing of North Vietnam by American carrier-based aircraft is a reminder of what we could not do.

The adequacy or otherwise of our forces varies of course according to the situations in which they might be used.

There are probably five types of war in which we might be engaged. These are:-

- (i) Military operations in Vietnam.
- (ii) Further military operations in and around Malaysia and Borneo.
- (iii) The spread of confrontation to East New Guinea.
- (iv) An all-out war with Indonesia.
- (v) War with China.

In the following pages I shall outline the part that might be played by the RAN in these several situations. Although we cannot be prepared for all these simultaneously, I conclude this section by suggesting the additions to our naval strength over the next few years that this prognosis would seem to demand.

(i) Let us suppose that we are shortly to send combat troops to South Vietnam. The troops would go by air, and the Navy's task would be to protect their material and support units against submarine attack. Enemy submarines if any would be Chinese, for if the war had "escalated" to the point where Australia were sending combat troops, Chinese "volunteer" submarines, anonymous and hard to identify, might well be on the lookout for Australian reinforcements. These reinforcements would be travelling in HMAS SYDNEY (which is virtually unarmed) and in certain chartered merchant ships. There would be a succession of separate convoys.

For this task the RAN has at present six escorts (not counting STUART which is on Ikara trials). Of these, two will normally be refuelling at any one time. Four escorts thus remain available for the convoy.

These four, together with HMAS MELBOURNE and her anti-submarine aircraft, would be adequate to screen the first and fastest convoy, consisting of HMAS SYDNEY, against submarine attack. There would be no provision against air attack other than the guns of the escorts. No ships of the RAN would then be available to escort the second convoy, consisting of a merchant ship or ships. It could be escorted however by Maritime Reconnaissance aircraft of the RAAF for part of the way. In the later stages of the voyage, RAF aircraft from Singapore could take over. The third convoy could again be escorted by the RAN, whose ships would be back by that time.

It perhaps would not matter in this situation that we could give almost no protection against air attack. Air attack on a convoy to Vietnam would be unlikely without considerable escalation of the war.

It does matter, however, that the present strength of our escorts is enough for only one convoy at a time, and we could afford no losses whatever. We cannot afford to be without HMAS MELBOURNE, which as present plans is due to go into dock for a "half-life" refit that will last for no less than two years from the middle of 1967.

(ii) In the event of our sending more troops to Malaya or Borneo, the same conditions would apply to our escorts. They would have to pass through Indonesian waters in the approaches to Singapore, but the risk of submarine attack there, in the "confrontation" phase, would be slight, since hunting and identification would be easy. There might be a risk of submarine attack in open waters; there would seem no risk of bombing.

Our lack of Naval fighter aircraft, however, leaves a serious deficiency in our capacity to give anti-submarine protection. Enemy reconnaissance aircraft whose job is to find the convoy and report its movements to their submarines (or bombers) would be safe from us, for we would have nothing to send in pursuit. Nor is this a deficiency with which the RAAF can help us, either now or in the future, as their fighters do not have the range to cover the critical areas. Even the DGO's, when they arrive, will not fill this dangerous gap. Reconnaissance planes work beyond range of their Tartar missiles, which are designed against the bombers themselves.

(iii) The spread of "confrontation" to east New Guinea would be a possible form of Indonesian retaliation for our help to Malaysia, especially if our land forces were heavily committed elsewhere. In this event the Navy's role would be to escort the soldiers to New Guinea; secondly we would patrol both ends of the north-south border in order to intercept small craft attempting landings by Indonesians or Indonesia-trained Papuans.

For this patrol work we have at present only our six minesweepers (four of them already in Malaysian waters) which are not really suitable, as they are extremely expensive and their engines were not designed to run slowly. We have, however, fourteen patrol craft and two more minesweepers approved in the new three year programme (though not yet ordered). These should be delivered between 1966 and 1968, and will probably be manned by putting some of the minesweepers into reserve.

Even when we have them all, they will be few in relation to the need. This could be serious, because as far as New Guinea is concerned I agree with Admiral Harrington that "we may be expected first to do what we can on our own".

Indeed I would go further. It seems all too likely to me that the Americans would be slow to consider such "confrontation" as coming within the scope of ANZUS, whatever private assurances they may have given on the past. South Vietnam will have given them a great revelation against unprofitable ventures in the jungle. Indonesia for her part would no doubt be careful to avoid an expression so big and blatant that the Americans could not ignore it. By the same token it might be difficult for us, without forfeiting the hope of support through ANZUS, to make any retaliatory attacks on Indonesian naval bases or territory. Perhaps therefore in this context it does not matter very much that neither the Navy nor the RAAF (until the F-111 is delivered) have the offensive capacity to make such attacks anyway.

(iv) An all-out war with Indonesia might escalate from confrontation in Malaysia and New Guinea. This I think would only happen if our allies were so pre-occupied with a major war elsewhere that the Indonesians had no fear of retaliation. Nevertheless the possibility of our having to take on Indonesia alone cannot be discounted.

Since on present rates of stocks and consumption we have enough oil for only six weeks, Indonesia could achieve the fastest results by attacking our tanker traffic in the Indian Ocean. This would be out of range even of the F-111 and far beyond the reach of Canberra bombers. As for the RAN, it has nothing that could

destroy the TRIAN. Enemy submarines could also bring our heavy industry to a halt by interfering with the shipment of iron ore round the coast. We have no escorts to convoy this traffic.

As time passes, we must expect that Indonesia, whose twelve submarines are strictly conventional, will be given Russian submarines armed with cruise-type missiles (i.e. radar-controlled, not ballistic and with a range of 300 miles or so). These the Russians, having moved into the "Polaris" field, no longer require.

It would be pessimistic to assume that Indonesia would be given nuclear warheads for these missiles since the Russians have given none away to their friends as yet. If that happened, however, half a dozen such missiles could, if the submarines achieved a firing position, take out the heart of our capital cities. With conventional warheads they would be destructive enough, though there would perhaps be only one missile per submarine.

The first line of defence against submarine attack on our cities would be to bomb the submarine bases - a task for the F-111 - if only one knew when D Day was. With enough submarines we could also lie in wait for enemy submarines outside their ports and catch them in the narrow straits debouching into open seas.

There could be no invasion without warning, as intelligence and aerial reconnaissance by the F-111 should keep us informed of any concentration of forces. The task of preventing an invasion fleet from reaching these shores would be one for RAN submarines and RAAF bombers and fighter bombers. Any attempt at invasion would of course be supported by its own air cover.

Before finishing this gloomy picture, let me stress again that it pre-supposes that our allies would be occupied elsewhere in a major war, thus presenting Indonesia with the opportunity.

(v) An all-out war between U.S.A. and China could conceivably develop from the war in Vietnam. In that case Australia would be involved not only through ANZUS commitments, but because China would treat us as an enemy for our participation with the Americans in South Vietnam. The greatest threat would then be from China's submarines, of which she has 26 or so, of the conventional type.

We must assume that within a few years China will have nuclear missiles. Whether she would be prepared to use them would depend on how far the war had escalated. American nuclear strikes on Peking would not prevent Chinese missile carrying submarines from slipping out of bases in any nearby countries which by that time had fallen under communist domination, in order to attack Australian cities. Against these there could be no certain defence.

#### Requirements for a balanced Navy.

In the context of the situations discussed above and of their relative probability, we can draw some tentative conclusions about the type of ship and the kind of "offensive capability" that we still need. Here I must emphasize that this is only a personal view, and that these conclusions have not yet been formally discussed with the Naval Board. If they seem unrealistic in view of the manpower difficulties that I shall describe later, it must be remembered that several years elapse between the ordering and the delivery of ships or aircraft, during which interval steps can be taken to get the necessary manpower.

We need more patrol craft to deal with infiltrators along the Malaysian or possibly the New Guinea coast. The fourteen



approved in the new three year programme will not be enough. Of these, five are eventually to be manned by Papua and nine are to replace existing RAN craft.

2. We need more escorts for safeguarding military shipping to Vietnam, Malaysia or New Guinea, and for safeguarding our essential trade. Two more Type 12 frigates are on order and are expected about 1969. We need at least four more escorts, which in the present situation need not be either large or sophisticated.

Unfortunately no escort exists anywhere in the world which completely meets our requirement. To continue building Type 12 would be a possibility, but they are expensive both in money and manpower - nor have they a long range guided missile. A British escort now in the design stage might serve our purpose if it could be adapted to use the Exocet missile (which will be standard in all our escorts) instead of the torpedo-carrying helicopter at present intended.

The RAN will be very interested in the progress of this design, known as the Type 15, as it has the attraction of small size and a small crew (110). Meanwhile in the absence of any suitable small escort one is forced to reopen the question of the fourth DDG. It is expensive, but the ancillary support required will already have been set up for the three DDGs so now on order. It is larger and more complex than we need in a "confrontation" situation, but it would be invaluable if escalation brought in the train the bombing of our convoys.

I therefore propose that we order the fourth DDG (to be delivered about four years from now) and that the remaining three escorts be ordered when a type is available which meets our requirements.

3. We need the continuing use of an aircraft carrier. The decision, taken late in 1964, not to equip MELBOURNE with fighters but to give her a thorough modernisation in other ways will, I think, give us the worst of two worlds.

On the one hand we can imagine the delight of our potential enemies and the dismay aroused at home if MELBOURNE goes into dock for 2 years or more - the most recent estimate - just when her presence is most needed. The proposed modernisation is estimated to cost \$10m. With the present pressure on the economy could be nearer \$15m. It would of course make some very considerable improvements, chief of which from the operational point of view, would be the ability to control supersonic fighters, and the acquisition of self protection sonar. It would also provide air conditioning in living and working spaces, the condition of which in the tropics is quite intolerable - temperatures of 110 to 120 being not uncommon. But this expensive operation would still leave us without the very item of modernisation most needed. This is the provision of fighter aircraft whose principal task would be to shoot down the enemy reconnaissance planes which otherwise would direct submarines or bombers on to our convoys. They could, of course, also be loaded, if required, with bombs and rockets in a strike role.

A majority of Chiefs of Staff in 1964 were in favour of equipping MELBOURNE with American "Skyhawk" aircraft - the only ones found suitable. (They have never yet been tested from MELBOURNE). The Skyhawk is not supersonic but for this purpose a sub-sonic aircraft would do because the aircraft which it would pursue would also be sub-sonic.

To equip MELBOURNE with such fighters would cost perhaps \$15m, whereas to carry out a full modernisation as now projected could cost as much as \$15m. The fighters could be transferred to

another aircraft carrier whereas a replacement is required for MELBOURNE where the money spent on the modernisation now projected is lost when MELBOURNE finally goes out of service.

MELBOURNE could be provided with Skyhawks without herself going out of operation for 2 years. She would need a ~~lesser~~ than normal refit costing perhaps \$5 million to accommodate trackers and could concurrently be provided with some air-conditioning.

In 2 or 3 years of course, we shall have to decide the question of a replacement carrier, but as we could not man patrolcraft, a DDG, MELBOURNE and another carrier, the matter is not urgent. We must investigate now, however, a very attractive offer that we have received from the Americans.

A visiting "Co-operative logistics" team from the United States earlier this month brought the offer of an Essex Class carrier for modernisation in the Oriskany style - in Japan. The rough cost estimate including steaming the carrier to Japan and modernising it in an American-controlled yard under American oversight, plus an allowance of 11 per cent for an escalation of costs, is \$73m.

Just what equipment was included in that price is not yet clear. However by comparison the 1968 estimate, for conversion in the United States, was \$137m, so that the new offer represents a saving of perhaps \$64m, so the earlier proposition in so far as the carrier hull is concerned. Against the total cost too must be set the saving of some \$14 by not modernising MELBOURNE.

But for the strain it would place on manpower, to modernise an Oriskany would seem a far better proposition than to modernise MELBOURNE, for the following reasons:-

- The Oriskany could take over HMAS MELBOURNE's role, with all the additional potential of an attack carrier.
- There would be no period when we were without a carrier.
- The hulls of the Oriskany and of MELBOURNE would be of approximately the same age, so to modernise either is to put new wine into an old bottle. The Oriskany is a bigger and better bottle. It has not been subjected to the stresses and strains of ten years operating at sea.
- The Oriskany when converted is promised a longer life than MELBOURNE when converted: 1967 to 1983 for the Oriskany and 1969 to 1976 for MELBOURNE.
- The Oriskany might be as valuable politically as it would be in defence. The Government, instead of incurring odium for leaving the RAN without a carrier during two dangerous years, would have proved its aliveness in waiting for the Japanese conversion at a bargain price.

The problem of manning an Oriskany would not be as insoluble as it might seem at first sight. MELBOURNE could become a fast troop carrier instead of the older SYDNEY, the cost of whose maintenance is high. SYDNEY would have to go into reserve if, as seems almost certain, we could not man her too. The extra call on manpower would then be limited to the extra men required for the Oriskany as compared with MELBOURNE. If the carrier were fully equipped with modern aircraft - i.e. Skyhawks as well as Trackers and helicopters transferred from MELBOURNE, the extra manpower required would be about 750, at a guess.

Even so, I cannot see the possibility, short of declaration of war, of manning an Oriskany in less than 4 years. The decision therefore is not an urgent one.

Nor would I put forward such a proposition without a thorough and independent survey of the hulls, machinery, and wiring of whatever Essex class might be offering. It would also be necessary to establish in the closest detail exactly what would be included in the modernisation recently offered. I would, however, strongly urge that these matters be investigated as soon as possible since if a converted Essex is out of the question we must turn our minds to an alternative replacement for HMAS MELBOURNE in the 1970's.

So seriously do I view the prospect of being without any carrier at all that I would give higher priority to the purchase of a fourth DDG than to the modernisation of MELBOURNE. The extra cost of the DDG over the modernisation of MELBOURNE would be about \$10m, and for that we should have a new ship with defence against air attack - which under the existing plans for her modernisation, MELBOURNE still would not have. And MELBOURNE herself would be still in operation, looking, one can only hope, more formidable than she is. Her Gannets would have been replaced by Trackers and her Wessex helicopters are good for another ~~several~~ years. The Venoms, however, would have gone without replacement.

4. Ultimately we need more submarines. We have four Oberons on order and expect delivery between 1967 and 1969. This number would not be enough if a conflict with Indonesia developed into war, and we required submarines in the operational role. As ours are almost the last "conventional" submarines being built, we would probably be unwise to continue with this type when the rest of the world is going nuclear. This problem is under study.

\* \* \*

In the new naval programme that was announced at the end of 1964, the only ship that was promised to the RAN was a Fleet Replenishment ship. This was included in the list of requirements presented by the RAN, but it was a long way down the list in the terms of priority. It was chosen however because the items that the RAN most wanted had been rejected, and the Fleet Replenishment Ship had the merit - it seemed a merit at that time - of being suitable for building in Australia.

Not being a member of the Board I was not consulted and had no say in the programme. Let me say now that I think it unwise when we are so short of fighting ships, to spend our money on yet another non-combatant ship. It would seem logical to acquire the Fleet before we acquire the ship to replenish it.

**SKYHAWK**

**See Next Page 'POWEEAN'S FIGHTER'**

The proposed modernisation is estimated to cost £10m but with the present pressure on the economy could be nearer £15m. It would of course make some very considerable improvements, chief of which from the operational point of view, would be the ability to control supersonic fighters, and the acquisition of self protection sonar. It would also provide air conditioning in living and working spaces, the condition of which in the tropics is quite intolerable - temperatures of 110 to 120 being not uncommon. But this expensive operation would still leave us without the very item of modernisation most needed. This is the provision of fighter aircraft whose principal task would be to shoot down the enemy reconnaissance planes which otherwise would direct submarines or bombers on to our convoys. They could, of course, also be loaded, if required, with bombs and rockets in a strike role.

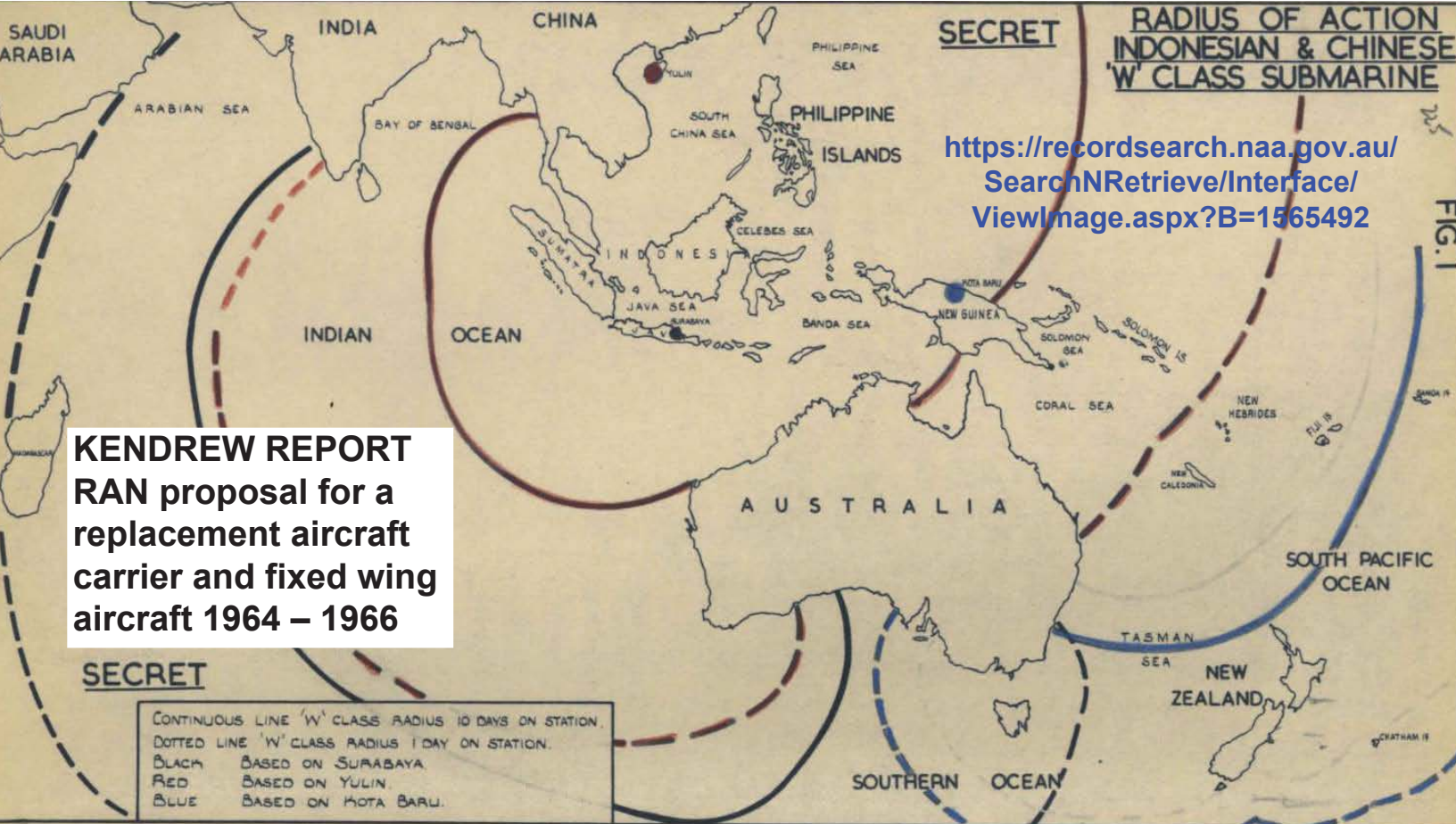
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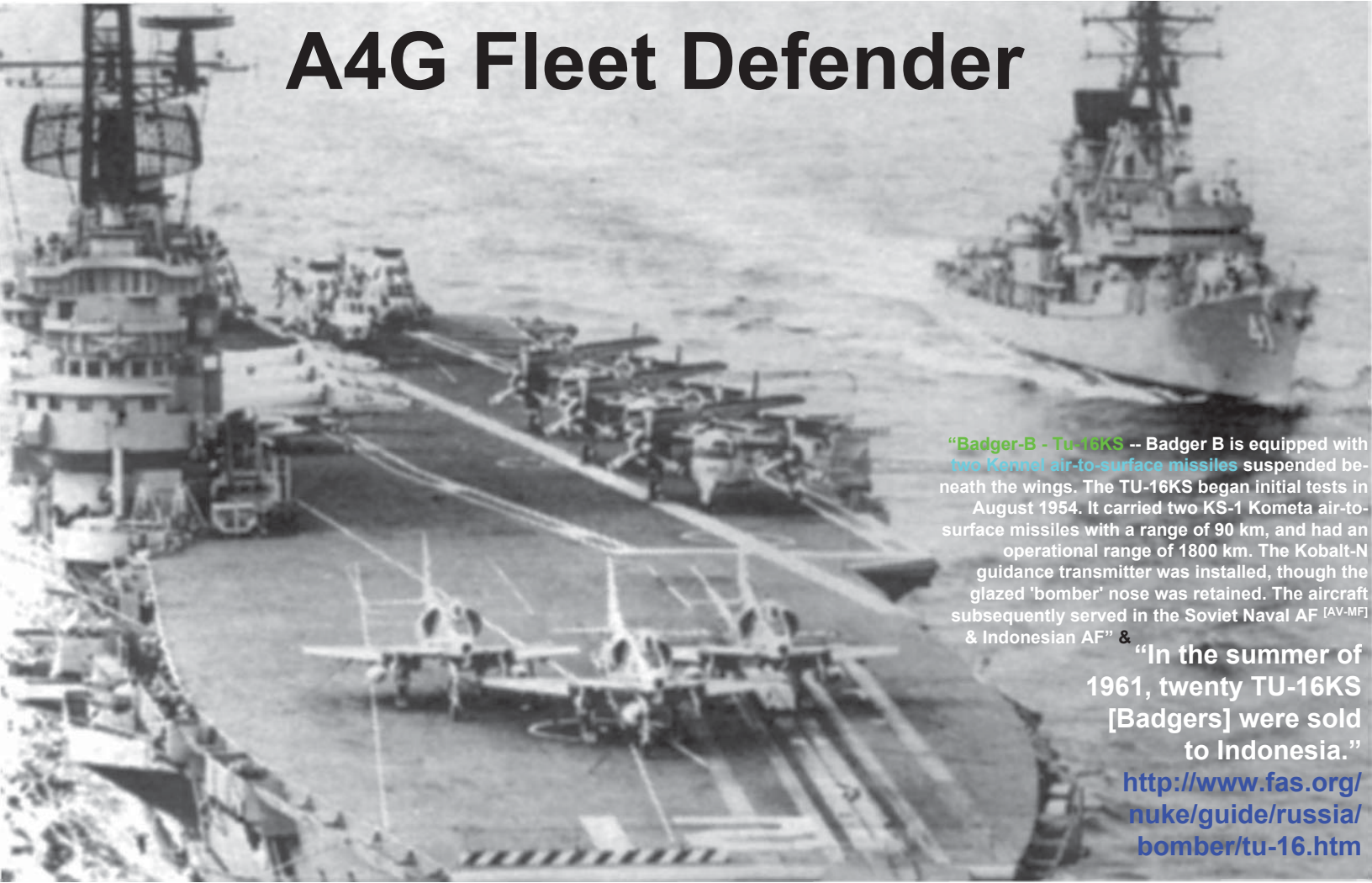






<https://recordsearch.naa.gov.au/SearchNRetrieve/NAAMedia/ShowImage.aspx?B=1565492&S=13&T=P&R=0>  
&  
<https://recordsearch.naa.gov.au/SearchNRetrieve/Interface/ViewImage.aspx?B=1565492&S=13&R=0>

# A4G Fleet Defender



“**Badger-B - Tu-16KS** -- Badger B is equipped with **two Kennel air-to-surface missiles** suspended beneath the wings. The TU-16KS began initial tests in August 1954. It carried two KS-1 Kometa air-to-surface missiles with a range of 90 km, and had an operational range of 1800 km. The Kobalt-N guidance transmitter was installed, though the glazed 'bomber' nose was retained. The aircraft subsequently served in the Soviet Naval AF <sup>[AV-MF]</sup> & Indonesian AF” &

“In the summer of 1961, twenty TU-16KS [Badgers] were sold to Indonesia.”

<http://www.fas.org/nuke/guide/russia/bomber/tu-16.htm>



'Australian Flying'  
Magazine Nov 1973



# SKYHAWKS-

story overleaf

## AIR DEFENCE FOR NAVY



Ten miles out to sea, the four aircraft dump some of their fuel before coming in to land at Nowra.





USN A-4B configured with 2 Sidewinders for CAP  
(Combat Air Patrol) only 2 wing pylons on an A-4B



## VSF-1 "War Eagles"

Provided detachments to each antisubmarine warfare aircraft carrier and was responsible for combat air patrol over the carrier. The VSF detachment was also to be responsible for the light attack mission. Disestablished in mid-1960s.

[http://home.att.net/~jbaugher4/newa4\\_23.html](http://home.att.net/~jbaugher4/newa4_23.html)

## VSF-3

Provided detachments to each antisubmarine warfare aircraft carrier and was responsible for combat air patrol over the carrier. The VSF detachment was also to be responsible for the light attack mission. Disestablished on February 9, 1968, assets to VA-152.

VSF-76, NAS New Orleans, LA. VSF-86, NAS New Orleans, LA.

# VC-5 A-4F Skyhawk intercepting a Tu-16 Badger 1970s





**“A Fleet Composite Squadron 5 (VC-5) A-4M Skyhawk aircraft intercepts a Soviet Badger reconnaissance aircraft near the west coast of Japan, ca. 1981. While considered an attack aircraft, the Skyhawk's agility and performance made it a formidable opponent in air combat once its ordnance was dropped. Intercepting Soviet "snoopers" was no problem. DoD photo”**





“In the summer of 1961, twenty TU-16KS [Badgers] were sold to Indonesia.”

<http://www.fas.org/nuke/guide/russia/bomber/tu-16.htm>

Badger-B - Tu-16KS -- Badger B is equipped with two Kometa air-to-surface missiles suspended beneath the wings. The TU-16KS began initial tests in August 1954. It carried two KS-1 Kometa air-to-surface missiles with a range of 90 km, and had an operational range of 1800 km. The Kobalt-N guidance transmitter was installed, though the glazed 'bomber' nose was retained. The aircraft subsequently served in the Soviet Naval AF [AV-MF] & Indonesian AF: <http://www.fas.org/nuke/guide/russia/bomber/tu-16.htm>

**Anti-Submarine Warfare  
Fighter Squadron One  
VSF-1 War Eagles  
Administration and Personnel  
Offices**



**USS Shangri-La Mediterranean Cruise  
September 29, 1966 - May 20, 1967**



**Author  
CDR Robert R. 'Boom'  
Powell  
(Retired)**



## The VSF Story Part I of 2

**THE A-4 EVER - Skyhawk Association,  
Spring 2006, Volume 12 - Number 2**



Designed to deliver one bomb over long distances, by 1961 the Douglas Skyhawk had proven itself as a capable ground attack aircraft. While maintaining a nuclear strike capability, Navy and Marine VA and VMA squadrons' primary role had become destruction of land and sea targets with conventional ordnance. That year, the A-4's talents as an air-to-air fighter were first used in the VSF mission.

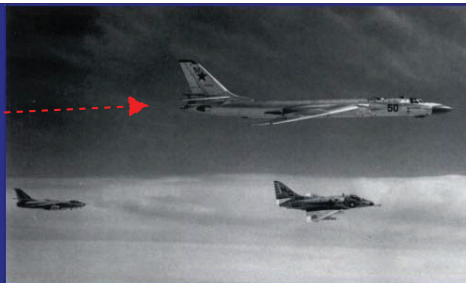
VSF = ASWFitRon = a mission that would provide fighter aircraft to protect the specialized anti-submarine aircraft carriers (designated CVS from 1955 - 1973) from enemy air attacks. Although used officially for only a brief period, "VSF" is a convenient

# VSF = ASWFitRon

[http://www.ebdir.net/vsf1/  
boom\\_powell\\_part\\_1.html](http://www.ebdir.net/vsf1/boom_powell_part_1.html)

# Why VF-805?

way of saying "fighters operating from an Anti-Submarine Warfare (ASW) aircraft carrier" and will be used in this article. As some wit said, "Vee Ess Eff must mean Very Small Fighters."



VA93 Det Q Skyhawk escorts a Soviet Tupolev Badger C while a VQ-13 EA-3B comes along for a look. (USN/Krall)

Carrier-based ASW did not begin as a specialty. During WW2 all aircraft were used for Anti-Submarine patrols; even the fighters. By the Korean War, the increased capabilities of submarines demanded specialized aircraft to detect, track and combat them. The Grumman Avenger, which began life as a torpedo bomber, was heavily modified to become the first dedicated carrier-based ASW airplane. The large and short-lived AF Guardian, which operated in a team requiring two aircraft, followed before the multi-crew, multi-engine Grumman S2F Tracker dominated ship-based ASW for the next two decades.

Specialized carrier air wings, CVSG, consisting of two YS (S2F) and an HS (helicopter) squadron plus detachments for early warning and ECM were created. A CVS with surface combatants and friendly submarines formed an ASW Task Group and usually operated far from air protection from shore or attack carriers, CVA. The threat from Soviet long-range maritime aircraft was significant and fighters as part of the CVSG was the answer.

The concept was developed on three deployments. VF(AW)-4 Det 50 operated F9F-5 Cougars from Antietam (CVS-36) in late 1956 before that carrier became the full-time training carrier in Pensacola. VA-44 had later model Cougars (F9F-8s) on Wasp (CVS-18) in late 1957 and Det N of VF-92 flew F2H-3 Banshees from Yorktown (CVS-10) October 1958 to May 1959. The fighter detachments worked well, and more were planned. However, the new, more capable fighter aircraft in the Navy inventory were also larger, heavier and faster. In 1960 all eight CVS had hydraulic catapults and limited deck space; they were simply not able to operate fighters like the *Demon*, *Skyray* or *Crusader*. Enter the A-4 Skyhawk.

The nicknames of the Douglas A-4, "Scooter," "Tinker Toy," and "Heinemann's Hot Rod," reflected its small size, light weight and agility. VA-34 provided the first detachment of Skyhawks (A4D2/A-4B) during Essex (CVS-9) 1961 Atlantic deployment. The "Blue Blaster" Skyhawks carried a centerline fuel tank, two AIM-9 Sidewinders, and their two 20mm cannon for use in the air defense role. This load-out would remain standard. Eleven more detachments with A-4s on CVS followed.

VA-64 had a detachment of A-4Bs in Wasp February to June 1962 before the whole squadron embarked in *Independence* (CVA 62) for the Cuban quarantine.



VA-113 was the first of four A-4B *Skyhawks*, six pilots and forty-eight enlisted men (a typical VSF det size) aboard *Kearsarge* (CVS 33) June to December 1963. Highpoint of the Pacific deployment was recovery of space capsule *Faith 7* and astronaut Gordon Cooper.

The Marine Corps had their first det in 1963. Unfortunately, *Essex* was in a horrific storm returning from the Med and the steel mast broke off the top of the island. One of the yardarms punched a hole through a H&MS-32 Det *Skyhawk* and the wooden flight deck. A plane load of jet fuel splashed over the flight deck and drained down into the hangar bay. Fortunately, there was no fire.

On the same deployment a Soviet Tu-

95 *Bear* made several low altitude runs on *Essex*, misjudged a turn and crashed spectacularly into the sea within view of everyone on deck.

The "Black Sheep" of VMA-214 went to WestPac in *Hornet* (CVS-12) as part of CVSG-57 October 1963 to April 1964, with A-4Bs.

The VA-34 "Blue Blasters" had overlapping detts in *Randolph* (CVS-15) and *Intrepid* (CVS-11) from late 1963 into 1964.

The *Skyhawks* turned out to be useful in the ASW role as well. With their speed they could search wide areas, or speed out to a contact much faster than the S-2. Nor did submarines expect a threat from high altitude. The *Scooter* pilots carried cameras and became proficient at low passes to rig ships.

VA-93 had Det Q in *Bennington* (CVS-20) February to September, 1964. Bob Krall (who later was assigned to NARF Alameda and flew 637 different *Skyhawks* 1961-68) said, "The deployment at Yuma shooting at a banner towed by a T2V *Seastar* didn't produce any results that the det pilots could brag about at a fighter pilot bar. Regardless of boresighting, the A-4 guns were not suited for air to air gunnery."

VA-153 Det R in *Kearsarge* made a fast turn in December 1964 to join the parent "Bluetail" squadron for deployment to WestPac in *Coral Sea* (CVA-43).

The "Stingers" of **VA-113 formed Det Q** for *Bennington* in 1965. Marc Pierce, who later would join VSF-1, remembers training with the RAG, VF-124, in Miramar; A-4s against F-8s with a TF-9 *Cougar* that towed the target for air-to-air gunnery. "Even with a fixed gunsight, the *Skyhawk* pilots did better than the *Crusaders* with lead computing sights, although experienced pilots versus replacements new in the aircraft may have had something to do with it."



CDR Charlie Waring is shown holding the hawk "Charlie Eagle" in VSF-1 Ready Room at NAS Alameda, 1965

Like all the CVS (except *Intrepid*) at the time, Bennington had hydraulic catapults restricting the A-4 to only a 150 gallon centerline tank with two AIM-9 missiles. During the deployment to WestPac, VA-113 Det had the unique opportunity to be the first *Skyhawk* to land aboard the Australian aircraft carrier, HMS *Melbourne*. (Later, the Australian navy operated A-4 squadrons of its own.) With the situation in Vietnam getting tense, VA-113's Det also did a fast turn to go aboard *Kittyhawk* (CVA-63) with the rest of the squadron in October 1965, for early strikes into North Vietnam.

The same year VMA-223 "Bulldogs" Det T of A-4Cs finished a deployment in *Yorktown* and immediately moved to the new Marine base at Chu Lai.

Marine Air Group 15's Headquarters and Maintenance Squadron deployed to the Tonkin Gulf in *Hornet* as 1965 became 1966. The six pilots flew bomb strikes from *Ticonderoga* (CVS-14), *Midway* (CVA-41) and *Ranger* (CVA-61) as well as their carrier protection mission, and all became *Hornet* centurions. On a wry note, their A-4Cs were named for ladies of dubious reputation: Fanny Hill, Polly Adler, Ko Sisters and Mamie Stover.



Boeing B6B Madge intercepted by LCDR Randall on 16 July, 1964. As a spoof, VA93 Det Q painted their noses black as if they had radar. The tail below the horizontal stab was also painted black to look like tail-warning radar. Note the A-4B is nose high to stay with the conventional engine madge. (USN/Krall)

The first VSF commanding officer was CDR Charles E. Waring who had been a flying midshipman out of the V12/V5a program. He had flown sixty-five missions in F4U-4 *Corsairs* in Korea in VF-54 from both *Philippine Sea* (CVA-47) and *Valley Forge* (CVA-45) when the ships swapped airwings. He made *Midway's* round-the-world cruise in VF-174 flying F9F *Cougars* and was XO of VA-155 with A-4A/Bs in WestPac in *Coral Sea*. Recently promoted after 2 1/2 years in Izmir, Turkey,

with the Sixth Allied Tactical Air Force, the commander detailer assured him that VSF was a "good deal."

The first pilots went through an abbreviated syllabus in Lemoore (Since Waring was already A-4 qualified, he left VA-125 after only two refresher hops) and included a former P2V

## HMAS Melbourne & VA-113 Detachment Demonstration Arrest & Catapult May 1965



"Ko Sisters" coming out of a parking spot on Hornet during the August 1965- March 1966, WestPac deployment. The name is faint either because it was done in grease pencil prior to painting or had been partially erased, due to some command sensitivity. (Hook/USN)

rest of the squadron was painted green.

Aircraft side numbers were two digits beginning with the CO's 70 and eventually reaching into the 90s while the letter code was NA. Squadron jokesters claimed it stood for "Not Applicable."



A rare photo of BuNo 145002 which, after modification, should have become the YFA-4B. Late on 28 Oct 1966, Clay Jansson took one photo then was asked to not shoot that airplane, so he moved to the next and kept "Rudolf" in the frame. The sensitivity was probably more about the unapproved modifications than any classified equipment.



Neptune pilot who did not go through the RAG at all. (He was later killed in a ramp strike after finessing orders to a VA squadron.) Later pilots went through the entire attack/nuke delivery syllabus with the bonus of earning per diem while in Lemoore as their final orders were to NAS Alameda.

The eagle head in the squadron insignia was adapted from the Waring family silverware with green slashes added to match the painted portion of the A-4's rudder. Waring argued that as a fighter squadron, VSF-1 should have red as the squadron color. Although the powers-that-be decreed otherwise, the skipper's airplane always seemed to have red where the

Waring was a skipper from the old school. Howie Fowler, Fred Kasch and YHS (Powell) all arrived in Alameda from VA-125 at the same time. Waring welcomed us nuggets by putting us on the next day's flight schedule. No chase, no old hand, just the three of us. We took turns leading. Howie's family was from near Mt Shasta so we flew up to say hello. Fred and I were tucked in tight when over the radio came, "On count of three we pull up." I looked forward to see green trees and steep cliffs filling the Scooter's windscreen.

A SAR helicopter crew had rescued an injured Red-tailed Hawk (*Buteo jamaicensis*) and taken the bird back to NAAS Fallon. Navy corpsmen removed the birdshot, but its wing was damaged and sustained flight impossible. Since the hawk could not be released to the wild, the folks at Fallon kept it. As with all large

birds, there were sanitary and feeding problems.

The Commanding Officer of Fallon, Capt Oliver, was wondering what to do with his charge when the brand new VSF-

"...Once in WestPac, although Intrepid picked up a **VFP-63 Photo-Crusader** detachment and YF-111 provided three F-8Cs and pilots to fly photo escort, VSF-3 was considered the resident fighter squadron. The squadron color was red, Ready Room 1# (nearest the flight deck) was assigned – to be shared with the 'Sader pilots – and flight deck alerts during ship transits were stood by an A-4B with a centerline fuel tank and a pair of AIM-9 Sidewinders...."

[http://www.ebdir.net/vsf1/boom\\_powell\\_part\\_2.html](http://www.ebdir.net/vsf1/boom_powell_part_2.html)



1 arrived for weapons training. Emblazoned proudly on flight jackets and A-4B airplanes was the squadron patch inspired by the first CO's family crest-an eagle head *en profile on fesse vert*.

A hawk looks like an eagle, especially a stylized one. And the squadron flew Skyhawks. Perfect. A small ceremony was arranged, with photographers, and the hawk was officially presented as the mascot for VSF-1. How could the CO, Charlie Waring, refuse?

The sex of the bird was never determined, but it was soon named "Charlie Eagle." The airframes shop built a large cage and placed it at the back of the ready room on the second deck. Charlie's diet was typically raw liver with an occasional lizard that Maintenance Officer Phil Dougherty's nine kids caught. Charlie's gory mouse meals became a part of initiating new men into the squadron.

The door to his cage was usually left open and Charlie





H&MS-15—front row, from the left: Cpl R. T. Ledford, Sgt C. A. Rhynne, Sgt D. A. Miller, Sgt J. J. Farrington, Cpl J. Jones, Cpl G. D. Bush, and SSgt J. C. Willems. Standing, same order: LCpl J. A. Heinemann, LCpl B. A. Chamberlain, LCpl G. F. Gabriel, LCpl C. E. Goodhead, LCpl D. K. Clark, LCpl D. S. Nichols, and LCpl R. W. Ingram.

*Marines of H&MS-15 Det in Hornet with A4C "Fanny Hill," showing unusual (and seemingly "research proof") VMA-22 marking on the fuselage. (A4 Assoc/USN)*

Eager to develop the fighter mission, Charlie Waring arranged weapons detachments to NAAS Fallon and MCAS Yuma, set up ACM practice, fired AIM-9 *Sidewinders* and had "Rudolf" built. Rudolf was an A-4B (BuNo 145002) that had an F-8 air-to-air radar "borrowed" from the China Lake Weapons Center and installed by NARF Alameda. The unique, longer nose (modified from a F-11 *Tiger's*) was painted red and the name followed soon after.



VA93 Det Q OinC LCDR Tom Randall is shown flying A-4B over Mt Fuji, 1 May 1964. (USN/Krall)

*Next time: How it all changed—and changed again. The two VSF squadrons (four, counting Navy reserve squadrons) deployed only one detachment in its intended role, but went to sea as normal AtkRons. Later, the "Blackbirds" of VA-45, a Fleet Replacement Squadron, came closest to the original VSF concept on the last CVS cruises. Stay tuned for Part 2 in the following issue of the A-4Ever!*

would hop onto chair backs and up to the top of the cage. From there he would occasionally launch for the front of the room, hit the waxed linoleum deck and skid into the wall. These "flights" went into the squadron log as "arrested landings" for Charlie. At even odder times, Charlie would target the SDO at his desk. Looking up into the outstretched talons of a hawk was a thrill most of the junior officers were subjected to. Mercifully there were no injuries to bird or JO.

What was intended as the prototype for future VSF fighters had not been approved by higher authority. Nor was taking Rudolf on the CarQual sessions the pilots of VSF-1 had on *Kearsarge* and *Hornet*. Waring himself flew Rudolf's first trap. Six pilots and the maintenance crew of the first detachment were ready to go aboard *Yorktown* when the deployment was cancelled in the spring of 1966.

## Anti-Submarine Warfare Fighter Squadron One VSF-1 War Eagles Administration and Personnel Offices



USS Shangri-La Mediterranean Cruise  
September 29, 1966 - May 20, 1967



**Author**  
**CDR Robert R. 'Boom'**  
**Powell**  
**(Retired)**



## The VSF Story Part II of 2

**THE A-4 EVER - Skyhawk Association,**  
Spring 2006, Volume 12 - Number 2

### SKYHAWKS & SUBMARINES

— Part Two, the *finale* —

By Boom Powell



### Vee Ess Eff Skyhawks Part II

After a dozen deployments of A-4s as fighters (VSF) aboard ASW carriers (CVS) by Navy VA and Marine VMA and H&MS detachments, a specialized and dedicated VSF squadron had been formed and was based at NAS Alameda. By 1966, the first VSF-1 detachment was within days of deploying in *Yorktown* when the all-stop message arrived. The war in Southeast Asia was intensifying and more Skyhawks as attack aircraft were needed. An Atlantic Fleet VA squadron would go to WestPac in a swap for VSF-1 deploying to the Med in November, 1966, as a normal attack squadron. With a large number of pilots and aircraft in the pipeline for VSF-1, a second attack squadron would also be formed, although both would keep the VSF designation.

The shift to becoming an attack squadron began immediately with a weapons Det to NAS Fallon and bombing and rocket practice at NALF Crows Landing, just across the mountains in the San Joaquin Valley. VSF-1 also used Crows Landing for FCLP before heading east to join CVW-8 at NAS Cecil Field, FL.

Four pilots including ex-NavCad [Al Cartwright](#) went to Billy Phillip's Airwing 19 to replace pilots he was less than happy with. Cartwright said leaving VSF-1 was hard; not because he was headed to WestPac, but Waring was so good to work for. Several "combat limited", ie, combat deployment veterans, arrived to fill the vacant slots.

## VSF-1 in the Med

After six weeks of workups on the East Coast, *Shangri La* departed Norfolk on 29 September 1966. On board were the 'War Eagles' of VSF-1 with fourteen A4B Skyhawks. The tail code was now the AJ of Airwing 8 and nose numbers began with 570-- this did cut down on repainting, at least on the port side. The sister light attack squadron was the Sunliners of VA-81 with A-4Es.

The maintenance department had a one-legged warrant officer. Griff Hudson had been struck by a broken wire while working the flight deck on *Constellation* and had worked to pass the physical tests necessary to return to sea duty.

Other than a junior pilot landing hard enough to break the wing of an A-4 during a dive-for-deck at night, the time in the Med was typical in support of 6th Fleet operations. All the pilots became *Shang* centuries. Cdr Donald K. Wilson assumed command while in Palermo, Sicily, 14 April, 1967. Soon after, CVA-38 returned to Norfolk, and VSF-1 flew back to NAS Alameda.

## VSF-3 is Formed

While VSF-1 was at sea half-a-world away, VSF-1 Det Alameda had grown larger than its parent organization. The result was administrative mayhem. The problem was solved in March, 1967, when VSF-3 was established, and Cdr Leslie C. Hofto went from XO of VSF-1, to OlnC of Det Alameda, to CO of VSF-3.

Les Hofto began his flying career in AD Skyraiders and was assigned to CVG-7 staff as LSO. He made a Med deployment before going to combat in Korea in *Bon Homme Richard* (CVA-31). He then extended for three months to assist CVG-15/*Princeton* (CVA-37) LSOs who were unfamiliar with jets. Hofto later was senior LSO in *Bennington* for the legendary recovery of three carriers' aircraft with no divert and lousy weather in the North Atlantic during Operation Mariner. He first flew A-4s in VA-22. After a DC tour he found himself in the doldrums, but with a fun assignment as the director of the Navy/Marine Corps Exhibit at the 1964 New York World's Fair. His detailee's call with assignment to VSF-1 was as confusing as it was for most. (As a red-hot jet pilot with shiny new wings, the author's heart stopped in the pause between hearing "Vee Ess" and "Eff One" for my first squadron.)

VSF-3 was on the TV news and made headlines, "Navy Bombs Oakland!" after a Mk-76 practice bomb fell into one of the few vacant lots in the city. A flight of four had taken off from NAS Alameda and as 3# closed in, he asked, "Two, how many bombs did you have when you took off?"

"Six." Pause. "Why?"

"Well, you only have five now."



VSF-1 deployed to the Mediterranean on *Shangri La* from November 1966 to May, 1967 as an attack squadron with sixteen A-4B Skyhawks. Side numbers at first began with 570 and were later changed to a conventional 500 series; the squadron color remained green.



VSF-1 division overflies *Shangri La* in 1966



Red-tailed VSF-3 and VA-34 and VA-15 Skyhawks on the bow of *Intrepid* during CVS-11's second deployment as the attack carrier to the Tonkin Gulf.



Additional proof of VSF standing for "Very Screwy Fellas" was assignment to CVW-10 and *Intrepid* (CVS(A)-11), Airwing Ten, the "Valions" of VA-15 and VA-34

"Blue Blazers"--A-4C squadrons-- were at NAS Cecil Field. *Intrepid* was in Norfolk.

Lessons learned in Vietnam dictated increased ECM capabilities and the "Shoehorn" installation had been developed for the A-4. Aptly named for the difficulty of finding space for the magic black boxes (The hump was added to later A-4s to make room for the avionics), the modification took out the port cannon and left the other only 40 rounds. BuNo 154002 was among the Skyhawks reworked at NARF Alameda. It came out as a standard A-4B and "Rudolf" was no more.

With the parent squadron now deployed, VSF-1 Det made two ten day visits to Fallon for weapons practice and had a CarQual session in *Bon Homme Richard*. After becoming VSF-3, there was a CQ in *Kearsarge* before joining *Intrepid* in Norfolk. Work-ups continued for the next two months with little chance for time in Alameda. Finally, the squadron airplanes were taxied down roads from NAS Norfolk to the naval base and hoisted aboard *Intrepid* for the voyage to war--the long way.

## VSF-3 Deployed

Middle East tensions were high, and Jordan had signed a treaty with Egypt while *Intrepid* was in the Eastern Mediterranean. Aircraft were armed and crews put on alert. After several days of uncertainty, CVS(A)-11 entered the Suez Canal. All hands were restricted from the weather decks for the transit. Although there were overflights by Egyptian fighters and troops



seen, the worst of the Egyptians did as they pulled banners and shake their shoes at the ship. The Arab-Israeli Six Day War began two days later. *Intrepid* became the last warship to go through the canal until it was reopened in 1975.

The two week transit was filled with All Pilot Meetings for training and briefings. Two a day was the norm and for VSF-3, usually ended the same way. The new squadron needed an insignia and sketches of half a dozen would be presented and discussed. The selection would be whittled down to two with a final choice to be made the next day. By the next day, the choices were back up to five or six. The final compromise was a knight chess-piece on a checkered field with red jags to match the airplane tails. The agreed on name was "Chessmen." The callsign had been "Nevada City" from the beginning and was used by both VSF-1 and VSF-3. There is a Nevada City in the Sierra foothills, and pilots from both squadrons would fly low levels to check out the namesake.

After a brief stop in Cubi Point, VSF-3 entered combat for the first time on 21 June, 1967. The veterans of VA-15 who had been in *Intrepid* the previous year for her first Vietnam deployment (she would make three), assumed operations would again begin on Dixie Station and eventually work north. They were wrong. The air war the summer of 1967 had VSF-3 over North Vietnam for their first missions, over the Haiphong suburbs by the end of the first line period and over the Big Hs (Hanoi and Haiphong) themselves by the second line period.

Many aircraft came back with battle damage, but only two aircraft were lost. LTJG Fred CDR was also the squadron's only fatality. In early July, he was hit by AAA over Hai Duong and crashed while trying to glide his flamed-out *Skyhawk* to the safety of the Tonkin Gulf. His wingman, ex-NavCad Dick Harriss, heard him call, "I'm at 500 feet," and told him to get out, but there was no apparent ejection. The Navy listed him as MIA until his remains were returned in 1989. Kasch was flying 145002, the A-4B that was once "Rudolf."

In October, LTJG Al Perkins was hit by AAA while on a flak suppression mission over Haiphong. Perkins was wounded in the leg and could barely control his airplane. He jettisoned his canopy in an attempt to clear the dense smoke which was keeping him from seeing his instruments and was either hit again or his engine exploded. He ejected and landed in Haiphong Harbor. An HU-2K helicopter from HC-1 picked him up yards away from an enemy ship. At the time, it was the deepest rescue from the harbor.

Once in WestPac, although *Intrepid* picked up a VFP-63 Photo-Crusader detachment and YF-111 provided three F-8Cs and pilots to fly photo escort, VSF-3 was considered the resident fighter squadron. The squadron color was red, Ready Room 1# (nearest the flight deck) was assigned to be shared with the 'Sader pilots--and flight deck alerts during ship transits were stood by an A-4B with a centerline fuel tank and a pair of AIM-9 Sidewinders.

On 5 October, 1967, the *Skyhawks* of CVW-10 encountered MiGs in force. A 27 plane Alfa strike had launched against a target near the airfield of Kien An. During egress half the strike group ran into MiGs. Dick Harriss was first aware of the MiGs when he saw tracers coming down at him. He fired at the overshooting MiG, but saw no hits and out of ammo, headed for the water. The official account of the action is typically confused, but at least six different MiG-17s were involved.

CDR Georges LeBlanc, XO of VSF3, maneuvered close behind a MiG and squeezed the trigger. His one cannon fired once and jammed. He called for his wingman, LTJG Dan Swinford, to close in, but Swinford had no radio. They broke off and cleared the area. The Airwing 10 operations officer, Ed Gilreath, was flying VSF-3's AK107 and when he heard the MiG warnings he held the rockets he had for flak suppression and headed for Kien An.

His wingman, LTJG D. 'Huey' L'Herault in AK105, had fired all his rockets and continued...

at the assigned target and describes what followed:

*As we circled behind the strike group of Intrepid A4s to follow them "feet wet", I made the initial visual of a single MiG 17 at about 10:00 low....we were at about 300 kts. and 5-6000ft. As I was in trail on Ed at full power he called to arm up our guns and he turned hard left and initiated a dive toward the MiG. It then turned hard right and as we made a reversal to follow I glanced behind me and there were 3 MiG 17s, flying a loose formation, directly behind me firing tracer cannon fire directly at me. I called Ed to break hard right and from there I ended up in a one v. three for three reversals, somehow avoiding their bullets. In the midst of this engagement I saw Ed only one time and it was to see a stream of 2.75" rockets, fill the air (AK107 had fired eight Zuni 5" rockets and 20mm cannon earlier) as he made an almost head-on pass at the three guys concentrating on me. When the MiGs split with 2 guys going high and one going low Ed called to jettison all externals (fuel tanks, racks and rocket packs) and we headed directly out to sea. At full speed with about 1500# of gas left we went right down on the deck and I remember seeing an airspeed of over 550 knots.*

Last missions were flown the end of November, 1967. Most of the flight crews would fly home on a "Magic Carpet" airliner from Clark AFB. A few unlucky officers and most of the men would remain onboard for the month-long voyage across the Indian Ocean, around the Cape of Good Hope, across the South and North Atlantic to Norfolk. Due to a jurisdictional quirk, those pilots due to airlift back could not depart until *Intrepid* chopped back to the Atlantic Fleet somewhere in the Indian Ocean. They spent a boring week at Cubi playing touch-football early in the morning before it got too hot, followed by swimming and afternoon naps. At least, they could go to the club for a legal drink and... they were not getting shot at.

## 1968

The decision to stand-down VSF-3 was made while the squadron was in the Tonkin Gulf, and all the pilots guessed that they would be sent to A-4 or A-7 fleet squadrons since they had only the one combat deployment. However, BuPers considered all the time in VSF, including time at Alameda for those who were VSF-1 or the Det, as sea duty and distribution was varied with about half going to seagoing squadrons. Alameda-based VA-152 had returned from WestPac in *Oriskany* (CVA-34) and was transitioning from A-1 *Skyriders* to A-4 *Skyhawks*. A cadre of pilots transferred from VSF-3, and at one point, VA-152 owned a dozen Spads and a mix of fourteen Bravo and Charlie *Skyhawks*. Other ex-VSF-3 A-4Bs went to the Navy Reserves, and many were reworked and sent to Argentina where they flew in the Falklands War.

## VSF-1 Med Deploy II & III



Pilots of VSF-86 during carquels on Tico. L-R: John "Monster" Parks, Ed Moir, Dave Griggs (later astronaut and Rear Admiral), Dale Sissy.



CDR Donald K. Wilson assumed command of VSF-1 on 14 April, 1967, while in Palermo, Sicily. Soon after, CVA-38 returned to Norfolk, and VSF-1 flew back to NAS Alameda.

By August, VSF-1 was transitioning to the A-4C. The second cruise began in April 1968 with CDR Marty Asbacher as the new CO. The "War Eagles" spent their second Christmas deployed—in Athens this time—but still were consistently the flying-est squadron aboard *Independence*.

In late 1968, *Wasp* was operating in the Mediterranean, and VSF-1, as well as VA-76, provided a temporary detachment which was never very far from the parent squadrons. One wonders what the pilots used to *Independence* thought when they went to the much smaller *Hornet* with hydraulic catapults.

Blair Stewart became the next—and last—CO of VSF-1. Back in Alameda early in 1969, there was a 50% percent turnover of pilots and a batch of new *Skyhawks*. The training situation was complicated because VSF-1 was to revert to its original mission in January, as well as remaining committed to CVW-7 in a contingency status. During work-ups with *Independence* the squadron received extra



VA-45 Det-1 Humpbacked A-4 Echo on final approach, 1972. [USN/Alvarez]

personnel to accommodate the *Yorktown* detachment. *Independence* and *Yorktown* left together for NATO exercise "Operation Peacekeeper" in the North Atlantic. The VSF-1 Det intercepted a Soviet *Bear* two days before the actual exercise, and the only deployment of VSF in its intended role was underway.

During the subsequent visit to Portsmouth, England, in September, word of VSF-1's disestablishment arrived. The Det stayed out until 11 December. With VSF-3 stood down two years before, by the first day of 1970, no ASWFitRon existed as a frontline unit.

## Reserves as VSF

VSF-11X1 and -11X2 were created on paper in July, 1968, at NAS New Orleans as part of the reorganization of the Naval Reserve. Flying A-4B *Skyhawks*, these squadrons were to be full-sized, but then were cut to only four pilots. They went through another shake-up of the Reserves and another set of designations before settling on VSF-76 and VSF-86, to be fully manned with A-4C/L "Scooters." While no full deployments were made, the "Flying Saints" and the "Gators" did two-week AcDuTra cruises in *Wasp*, *Ticonderoga* (recently designated CVS-14) and *Randolph* in 1971.



VA-45 DET ONE

## Ed Moir and that group

Our squadron was stood up as VSF-86, part of NAS North Island-based CAG 80 (CDR Tom Stanley). Our "fighters" were A-4Cs, with high-temperature J-65 engines. We flew with centerline tanks only or sometimes "slick". Not bad performance for a Scooter, but it weren't no fighter. Anyway, we had fun and the mission was super, hassling and more hassling. The flight deck on *Tico*, despite no recent jet experience, did a great job.

We held our change of command ceremony in Ticonderoga at sea in the San Diego operating area. Sierra Hotel! The first Navy Reserve change-of-command held at sea. Incidentally, the incoming CO, Tammy Etheridge, later made rearadmiral, as did a squadron member, Dave Griggs.

The embarrassment of a Cuban airliner landing unannounced at New Orleans Airport, prompted the local congressman to get both reserve VSF squadrons six F-8H *Crusaders* the first fighter in the VSF role since VF-92 *Banshees* in 1959. The powers that be decided not to CarQual the reserves in the F8, and with approximately one pilot for each *Crusader*, it was a flying club of the first order. The fun lasted a little over a year, but with the CV concept in effect and no CVS left, VSF-76 and VSF-86 were disestablished in 1973. Personnel and aircraft became the core for today's VC-13.

## Blackbirds as ASWFitRon

Unlike most pilots, LT Larry "Worm" Elmore was not confused by orders to "VSF" (a simple term and easy to use) duty. After cruising with the notorious Youthly Puresome as a "Snake" (VA-86), he had left active duty, tried the airlines in the hire-to-fast-furlough era, joined the reserves where he, "... was flying my buns off in A4Cs from Los Al and Point Mugu," when he got a call from CDR John Paganelli, his OpsO in VA-86 and then the skipper of VA-45. He asked Worm to come back on active duty to be the LSO and Ops O of the A-4C Det that was going to deploy in *Intrepid*. The original OinC cancelled and Elmore had the job. As he says, "It turned out to be the best deal I had in 20 years in the Navy."

*Intrepid* and VA-45 Det-11 left Norfolk in April and returned mid-October, 1971. She made only one run into the Mediterranean. Most operations were in the North Atlantic, including "Blue Nose" forays above the Arctic Circle-stomping grounds for the Soviet Northern Fleet. Ports of call were Lisbon, Kiel, Naples, Cannes, Barcelona, Hamburg, Copenhagen, Greenock, Rosyth, Portsmouth and Bergen. Det-11 made over 125 intercepts on Russian *Bears*, *Badgers*, *Blinders*, several Soviet fighters and bagged more hours and traps than a typical pilot on a Med deployment. A best deal indeed.

There were so many intercepts that some of the snoopers became familiar. Worm joined on a Bear (Tu-95) whose tail gunner was friendly and would wave and hold up the box lunch he was eating (yes, Elmore was that close). He once held up a sign in English that said, "How do you do?" A few days later, Elmore held up a sign in Russian that said, "Come on back with me." The Russian had a good laugh.

Det-11 was doing so well that in August, 1971, VA-45 Det-1 was established with A-4Es for a follow-on *Intrepid* deployment. LCDR Raoul Alvarez was the OinC. Det-11 returned in November, turned in their seven A-4 Charlies and disbanded the following month. At the start of 1972 an increase in size was authorized with the intention of splitting off Det-2 for deployment on the remaining PacFit CVS, *Ticonderoga*. This did not happen.

After a CarQual session on CVT-16 *Lexington*, Det-1 took five A-4Es to sea in *Intrepid* in March and April of 1972 for an exercise with the Spanish and Portuguese navies. At Cecil,



command of the mother squadron went from Paganelli to Joe Gilmore. The Det left 9 July as part of CVSG-56 with three S-2 "Stoof" and a helo squadron.

While some pilots worried about "missing the war", Al Alvarez had flown *Skyriders* in combat as a VA-145 *Swordsman* in *Intrepid*. Interestingly, considering his assignment to the VA-45 VSF Detachment, VSF-3 was also onboard *Intrepid* as part of CVW-10. He then instructed in VT-21 as it transitioned to the TA-4 before joining the *Blackbirds*.

A major change came in August, 1972. During October and November of the previous year, on the way home after a Med cruise, *Saratoga*



VSF-3 A-4B on fighter alert with two Sidewinders during *Intrepid* transit to or from Yankee station in 1967.

added VS-28 and HS-7 to Airwing 3 and operated in the vicinity of Bermuda. The combined airwing was tasked with anti-submarine duty, convoy escort and short and long range strikes against sea and land targets. Although *Saratoga* was designated CV-60 on 30 June, 1972, the practical transition from CVA to CV was interrupted by final efforts in Vietnam. To support *Linebacker II*, LantFit carriers *Saratoga* and *America* (CVA-66) made emergency deployments to the Tonkin Gulf. In order to meet the requirement for two carriers with attack squadrons in the Mediterranean, ComNavAirLant, ADM Michaelis, boosted VA-45 Det-1 to a sixteen airplane unit with the missions of conventional and nuclear attack, all while continuing task group air defense. The Chief of Naval Personnel authorized new CDR Alvarez, who had screened for an A-7 squadron, to wear the Command-at-Sea insignia since his position was the equivalent of a squadron command. And a difficult one at that.

*Intrepid's* North Atlantic deployment was cut short and Det-1 was back at Cecil on October 19. As CDR Alvarez later wrote:

*The unique situation under which this unit made its transformation from a 7-officer, 65-man, 5-plane VSF Detachment to a 27-officer, 210-man, 16-plane multipurpose command in 10 weeks shows again that the Navy still "Can Do". Again, it was the American Bluejacket, with his bitching and swearing about 18-hour days and 7-day work weeks, that got the job done. To say that this command is unique is only saying that not since WWII has one unit been asked to build up so fast and take on the full bag of missions in such a short time.*

The commanding officer of parent-squadron VA-45, Paganelli and his successor, Joe Gilmore, also deserve credit for the transition. At NAS Cecil, VA-45 began training pilots and acquiring A-4Es for the build up while the small Det was still at sea; all while continuing instrument and transition training with sixteen TA-4FJs. Remarkably, by June 1973, the squadron had achieved 34,000 accident-free flying hours. The expanded Det-1 was ready when *Intrepid* deployed again November 29, 1972. VA-45 Det-1 returned in May, 1973, from Sixth Fleet operations on what was the swan song of VSF.

The *Kittyhawk* (CV-63) went to a peacetime WestPac cruise in 1975 with the last two fleet squadrons of S-2s. From then on S-3 *Vikings* were an integral part of all airwings. Two VF

squadrons of F-4s or F-14s would provide the task force. VSF was no more.

*Ed. Note: Part 1 of this article was included in the Spring 2006 issue of the A-4Ever. To order a copy of that issue (\$5 shipping and handling), email the editor at hickers@beecreek.net. Members have access to electronic copies of the journals through the Ready Room Private Pages (www.skyhawk.org).*

## Sidebar: VA-45 Fly-off

Al Alvarez, who had led VA-45 Det-1 on a three month deployment with a small detachment and again as a full size squadron to the Med for six months in *Intrepid*, wrote this about the fly-off and return to Cecil Field in May 1973:



The picture was taken 10 miles west of NAS Cecil Field by the number 15 man who dropped into the open slot after photo was taken.

It was a very rewarding day. The USS *Intrepid* fly-off destination was NAS Quonset PT. Admiral Cassell, our former CARGRU commander, had every fuel truck on the field waiting for us. We fueled and filed and were on our way in less than an hour. The flight south was uneventful and Jax approach joined up the divisions west of Cecil for the flyover. We broke from the wedge on the fly-over pass and landed sequentially in order by aircraft side number. Then we taxied in, fifteen aircraft, in column, and turned into our parking spots "Blue Angels" style.

I was especially proud of Det 1 that day and will always keep it in my memories.

On the launch we lost the 16th aircraft due to a catapult malfunction. Halfway down the starboard cat track, the bridle dropped off the aircraft. The A-4 veered left and went overboard at the corner of the port bow. Unfortunately, the aircraft carried overboard one of the flight deck bridle-runners and he was lost at sea.

The pilot ejected as the aircraft was about to go over the side and landed on the flight deck with a fully deployed parachute. Thank God for explosive spreaders [to open the parachute giving the Escapac seat a better than zero-zero ejection capability --Ed]. The next problem was that he was being dragged down the flight deck at thirty knots. Fortunately, AE1 Gary Gardner (our flight deck troubleshooter) had the presence of mind to race into the blossomed parachute and collapse it three-quarters of the way down the flight deck.



<http://a4skyhawk.org/>

VC-4	Det 39	F4U-5N	USS Antietam (CVS-36)	15 Feb-29 Mar 1954	Feb-29 Mar 1954	*Atlantic	<a href="http://www.ebdir.net/vsf1/">http://www.ebdir.net/vsf1/</a>
VC-4	Det 50	F4U-5N	USS Antietam (CVS-36)	12 Apr 1954-Aug 1955	12 Apr 1954-Aug 1955	WestPac	<a href="http://boom_powell_part_1.html">boom_powell_part_1.html</a>
VC-3	Det N	F4U-5N	USS Princeton (CVS-37)	2 Nov 1954-31 May 1955	2 Nov 1954-31 May 1955	Atlantic/Caribbean	
VC-4	Det 51	F4U-5N	USS Lyte (CVS-32)	1 Sep-25 Sep 1955	1 Sep-25 Sep 1955	† Atlantic/Mediterranean	
VFAW-4	Det 50	P9F-5	USS Antietam (CVS-36)	25 Sep-22 Dec 1956	25 Sep-22 Dec 1956	Caribbean	USN
VA-172	Det 38	F2H-2	USS Tarawa (CVS-40)	3 Sep-22 Oct 1957	3 Sep-22 Oct 1957	North Atlantic	A-4
VA-44	Det 48	F9F-8	USS Wasp (CVS-18)	3 Sep-22 Oct 1957	3 Sep-22 Oct 1957	WestPac	VSF
VA-92	Det N	F2H-3	USS Yorktown (CVS-10)	31 Oct 1958-22 May 1959	31 Oct 1958-22 May 1959	Caribbean	DETS
VA-34		A4D-2	USS Essex (CVS-9)	3-29 Apr 1961	3-29 Apr 1961	North Atlantic	
VA-64	Det 48/18B	A4D-2	USS Wasp (CVS-18)	18 Feb-6 Jun 1962	18 Feb-6 Jun 1962	WestPac	
VA-22	Det R	A-4B	USS Kearsarge (CVS-33)	19 Apr-3 Dec 1963	19 Apr-3 Dec 1963	Caribbean	
VA-83	Det 18	A-4B	USS Wasp (CVS-18)	22 Apr-3 May 1963	22 Apr-3 May 1963	Atlantic	
H&MS-32	Det 1	A-4B	USS Essex (CVS-9)	1 Oct-23 Dec 1963	1 Oct-23 Dec 1963	WestPac/Vietnam	
VMA-214	Det N	A-4B	USS Honet (CVS-12)	9 Oct 1963-15 April 1964	9 Oct 1963-15 April 1964	† Caribbean	<a href="http://www.ebdir.net/vsf1/">http://www.ebdir.net/vsf1/</a>
VA-34	Det 11	A-4C	USS Intrepid (CVS-11)	3 Dec 1963-13 Feb 1964	3 Dec 1963-13 Feb 1964	WestPac/Vietnam	<a href="http://boom_powell_part_2.html">boom_powell_part_2.html</a>
VA-153	Det R	A-4B	USS Kearsarge (CVS-33)	19 Jan-16 Dec 1964	19 Jan-16 Dec 1964	Atlantic	
VA-34	Det 15	A-4C	USS Randolph (CVS-15)	22 Jan-14 Feb 1964	22 Jan-14 Feb 1964	WestPac	
VA-93	Det Q	A-4B	USS Bennington (CVS-20)	20 Feb-11 Aug 1964	20 Feb-11 Aug 1964	WestPac/Vietnam	
VMA-223	Det T	A-4C	USS Yorktown (CVS-10)	23 Oct 1964-17 May 1965	23 Oct 1964-17 May 1965	Atlantic	
VA-76	Det 9	A-4C	USS Essex (CVS-9)	8-20 Feb) 1965	8-20 Feb) 1965	WestPac/Vietnam	
VA-113	Det Q	A-4B	USS Bennington (CVS-20)	22 Mar-7 Oct 1965	22 Mar-7 Oct 1965	WestPac	
H&MS-15	Det N	A-4C	USS Honet (CVS-12)	12 Aug 1965-23 Mar 1966	12 Aug 1965-23 Mar 1966	Mediterranean	
VSF-1	CVW-8	A-4B	USS Shangri-La (CVS-38)	29 Sep 1966-20 May 1967	29 Sep 1966-20 May 1967	WestPac/Vietnam	
VSF-3	CVW-10	A-4B	USS Intrepid (CVS-11)	11 May-30 Dec 1967	11 May-30 Dec 1967	Atlantic/Med	
VSF-1	Det 18	A-4C	USS Wasp (CVS-18)	20 Aug-19 Dec 1968	20 Aug-19 Dec 1968	Mediterranean	
VSF-1	CVW-7	A-4C	USS Independence (CVA-62)	30 Apr 1968-17 Jan 1969	30 Apr 1968-17 Jan 1969	North Atlantic	By
VSF-1	Det 10	A-4C	USS Yorktown (CVS-10)	2 Sep-11 Dec 1969	2 Sep-11 Dec 1969	Mediterranean	'BOOM'
VA-45 Det 11	CVSG-56	A-4C	USS Intrepid (CVS-11)	16 Apr-15 Dec 1971	16 Apr-15 Dec 1971	EastPac	Powell
VSF-86	CVSGR-80	A-4C	USS Ticonderoga (CVS-14)	24 Jul-8 Aug 1971	24 Jul-8 Aug 1971	Atlantic	
VSF-76	CVSGR-70	A-4C	USS Wasp (CVS-18)	17-26 Aug 1971	17-26 Aug 1971	North Atlantic	
VA-45 Det 1	CVSG-56	A-4E	USS Intrepid (CVS-11)	11 Jul-20 Oct 1972	11 Jul-20 Oct 1972	NATO	
VA-45 Det 1	CVSG-56	A-4E	USS Intrepid (CVS-11)	24 Nov 1972-4 May 1973	24 Nov 1972-4 May 1973	Mediterranean	



When the status of USS INTREPID was changed from Attack Carrier (CVA-11) to ASW Support Carrier (CVS-11), detachments of four A-4E Skyhawks were assigned to the carrier to provide air defense. What is interesting about this photo, taken at NAS Jacksonville in 1976, is that it shows two A-4E Skyhawks from VA-45, one from DET I and one from DET II. The markings, modexes, and tail codes are all different, and one has the electronics hump and one does not, yet both were assigned to INTREPID. (Copyright photograph by L. B. Sides via Flightleader from the Detail & Scale Collection)

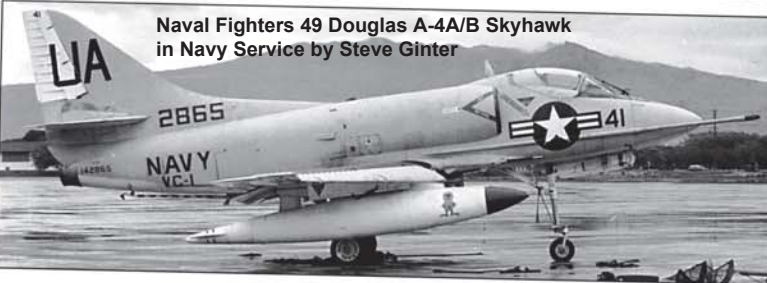


# COMPOSITE SQUADRON ONE (VC-1), NAS BARBERS POINT, HI



Composite Squadron One was originally established as Utility Squadron One (VU-1) on 20 July 1951. It was redesignated VC-1 on 1 July 1965. A long time user of the Skyhawk, VC-1 received its first A-4E in March 1971. Four-to-five A-4Es were on hand through 1975 as well as 2 TA-4Js. From January 1977 through 1986, the unit only operated TA-4Js. In 1987, A-4Es once again joined VC-1, this time as adversary aircraft. The A-4Es were operated alongside the TA-4Js until the unit was disestablished.

At top, A-4B 142735 turns onto final at NAS Barbers Point in 1967. The tail was deep red. (Nick Williams) Above right, red-tailed A-4B 142112 in 1967. (Nick Williams) At right, A-4B 142842 takes off in 1968 in grey and white scheme. (Nick Williams) Below, A-4B 142865 on 2 August 1969. (B. Stainer via Norm Taylor)



Naval Fighters 49 Douglas A-4A/B Skyhawk in Navy Service by Steve Ginter

# ANTI-SUBMARINE FIGHTER SQUADRON ONE "WAR EAGLES/WAR HAWKS"



Anti-Submarine Fighter Squadrons were originally conceived to provide four-plane detachments (Dets) to each CVS/ASW carrier. This would give the CVS carriers a limited air defense and combat air patrol ability. For this mission the Skyhawks were equipped with two wing-mounted Sidewinders and two 20mm cannons. This role was expanded to include a full light attack capability prior to the first deployment.

VSF-1 was established on 1 July

1965 at NAS Lemoore, CA. They moved to NAS Alameda, CA, while equipped with the A-4B Skyhawk. The squadron's first deployment was aboard the USS Shangri-La (CVS-38) from 29 September 1966 to 20 May 1967. On 1 April 1967, VSF-1 was split in two and VSF-3 was established. In August 1967, the squadron re-equipped with the A-4C Skyhawk. VSF-1 was disestablished on 1 January 1970.



Above, A-4B 144956 at NAS Alameda on 10 April 1966. The squadron's tail code was "NA", which would be changed to the respective Air Group's tail code when deployed aboard ship. (Larry Smalley via William Swisher) Below, YA-4B 145002 "Rudolph the Red Nosed Skyhawk" on 15 December 1966. "Rudolph" had an F-11A Tiger radar nose grafted on. Note white eyeball with black pupil painted on the red nose. (Larry Smalley via William Swisher)



See  
Next  
Page

"A rare photo of BuNo 14002 which, after modification, should have be-come the YFA-4B. Late on 28 Oct 1966, Clay Jansson took one photo then was asked to not shoot that air-plane, so he moved to the next & kept 'Rudolf' in the frame. The sensitivity

[http://www.ebdir.net/vsf1/powell\\_pt1\\_pg3\\_rudolf2.jpg](http://www.ebdir.net/vsf1/powell_pt1_pg3_rudolf2.jpg)



was probably more about the unapproved modifications than any classified equipment."

<http://images.yuku.com.s3.amazonaws.com/image/jpeg/ba73506e91d2d92d62e5908a56e76fd62e5908a56e76f3aa6c8bd0.jpg>



[http://www.ebdir.net/vsf1/boom\\_powell\\_part\\_1.html](http://www.ebdir.net/vsf1/boom_powell_part_1.html)

"...During the deployment to WestPac, VA-113 Det had the unique opportunity to be the **first Skyhawk to land aboard the Australian aircraft carrier, HMAS Melbourne**. (Later, the Australian navy operated A-4 squadrons of its own.)...

...Eager to develop the fighter mission, Charlie Waring arranged weapons detachments to NAAS Fallon & MCAS Yuma, set up ACM practice, fired AIM-9 Sidewinders and had "Rudolf" built. Rudolf was an A-4B (BuNo 145002) that had an F-8 air-to-air radar "borrowed" from the China Lake Weapons Center & installed by NARF Alameda. The unique, longer nose (modified from a F-11 Tiger's) was painted red & the name followed soon after.

What was intended as the prototype for future **VSF fighters** had not been approved by higher authority...."







Above, VSF-1 A-4B 144967 at NAS Alameda on 28 October 1966. Rudder markings were green and white. (William Swisher)  
 Below, VSF-1 A-4B 142126 at Alameda on 23 November 1966. Note squadron insignia on the fuselage aft of the intake. (Larry Smalley via William Swisher)  
 Bottom, VSF-1 A-4B 142872 after returning from its cruise aboard the USS Shangri-La on 23 May 1967 with "AJ" tail code and SXK modex. (William Swisher)



Above, VSF-1 A-4B 145022 from the Shangri-La after returning to NAS Alameda on 22 June 1967. (Smalley via Swisher)  
 Below, VSF-1 A-4B 142772 had been painted with the USS Intrepid's "AK" tail code on 7 January 1967 in preparation for deployment. By the time the squadron deployed, it had been split into VSF-3 and was deployed as such. (William Swisher)  
 Bottom, VSF-1 A-4B 144929 also slated for usage on the Intrepid as a VSF-3 aircraft on 31 March 1967. (Smalley via Swisher)



# ANTI-SUBMARINE FIGHTER SQUADRON THREE "CHESSMEN"



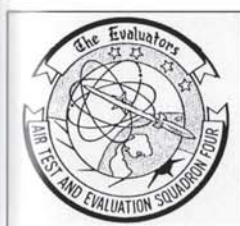
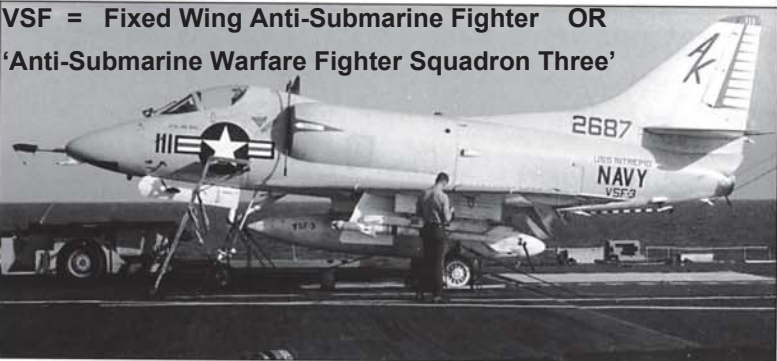
VSF-3 was established on 1 April 1967 at NAS Alameda from elements of VSF-1. The squadron deployed aboard the USS Intrepid (CVS-11) from 11 May through 30 December 1967. Aircraft still at Alameda were exchanged for A-4Cs starting in August 1967. VSF-3 was disestablished on 9 February 1968.

Below, A-4B 142772 at Alameda on 6 April 1967. (Smalley via Swisher) Bottom, VSF-3 A-4B 142687 on board CVS-11 in 1967 while armed with Sidewinder missiles. (USN via Roos)

The Intrepid spent the cruise on station off Vietnam. The combat line periods were: 21 June to 13 July 1967; 30 July to 27 August 1967; 15 September to 12 October 1967; and 1 November to 23 November 1967. On 2 July 1967, LTJG Fredrick Kasch was killed in 145002 by AAA while attacking targets in North Vietnam. Another pilot, LTJG A. D. Perkins, was also shot down by AAA. Luckily, he was recovered after being lost in 142114 on 3 October 1967. Finally, 142742 was lost on 26 November 1967, but the pilot was rescued.



VSF = Fixed Wing Anti-Submarine Fighter OR  
'Anti-Submarine Warfare Fighter Squadron Three'



Air Development Squadron Four was established on 15 September 1952, at the Naval Missile Center, Point Mugu, CA. The squadron's mission was to conduct projects dealing with the evaluation of air-launched guided missiles. VX-4's mission evolved into the development of a missile or missile component and its best use as a weapon, to conduct tests and evaluations of aircraft weapons systems and support systems in an operational environment, and to develop all-weather intercept tactics for air-launched missiles.

VX-4 would eventually operate every version of the Skyhawk in its research and development projects.



Three views of A4D-1 142417 on 27 May 1958 while testing the Bullpup weapon system. (USN via Barry Miller and Vance Vasquez) At bottom 142417 is seen in flight with Bullpup-armed FJ-4B 143495. Wing tip trim on both aircraft was blue and fin tip was blue with white stars and a thin red stripe on the bottom.





# NAVAIRESFOR: Qualification at Sea

VFS-76 'SAINTS' and VFS-86 'GATORS' were two NAS New Orleans, Louisiana, based squadrons tasked with the mission to provide fighter cover for the anti-submarine carriers. Previously flying early-model A-4 Skyhawks, the squadron transitioned to the F-8H in 1971.

01 SEP 1973:  
VF-753 absorbed VSF-76 and VSF-86 and the conglomeration was redesignated Fleet Composite Squadron Thirteen (VC-13).



LCDR. A. F. CIANCITTO discusses flight with fellow pilot in Intrepid ready room.



LCDR. J. L. ROBL, member of a composite group from four Reserve air stations, taxis his A-4 toward the starboard catapult aboard Lexington in the Caribbean near Guantanamo.



COMMANDER MASSA, left, CVSGR-80, discusses progress of Reserve carrier qualifications with Commander Toy, CVSGR-70.



LEXINGTON'S flight deck crew prepares an A-4 for one of nearly 300 launches during carrier qualification flights.

<http://www.history.navy.mil/nan/backissues/1970s/1970/jun70.pdf>

USN 'Naval Aviation News' Magazine June 1970

<http://a4skyhawk.org/3e/vsf76/vsf76.htm> & [3e/vsf86/vsf86.htm](http://a4skyhawk.org/3e/vsf86/vsf86.htm)

Naval Air Reservists demonstrated the state of their readiness recently when pilots and ground crew personnel operated aboard three aircraft carriers. USS *Intrepid* (CVS-11) operating off Pensacola, Fla., was host to VSF-76, VSF-86 and HS-80X1 – all NAS New Orleans-based squadrons – and HS-66R1 from NAS New York. Eighteen VSF pilots made ten carrier landings each while SH-3A *Sea Kings* of HS-80X1 and HS-66R1 provided plane guard service. On hand to observe these activities were the air group commanders of the newly formed CVSGR-70 and CVSGR-80, Commander Frank Toy, USN, and Commander Emidio Massa, USN.

Meanwhile, the deck of USS *Lexington* (CVT-16), at sea near Guantanamo Bay, Cuba, was the site of 279 arrested landings made by a composite group of Naval Air Reserve A-4 pilots from NAS New York, NAS Los Alamitos, NARTU Alameda and NARTU Jacksonville.

USS *Gaam* (LPH-9), in the Atlantic at that time, provided helicopter crews from NARTU Lakehurst and NARTD Quonset Point an opportunity for at-sea training. HS-74 and HS-75 of CVSGR-70 earned their carrier qualifications while attaining higher combat-ready status.



A-4 SKYHAWK from NAS New Orleans is catapaulted from Intrepid in Gulf of Mexico.



SH-3A SEA KING of HS-80X1, above, stands by as plane guard for aircraft flown from Intrepid. New Orleans-based A-4, right, catches #1 wire.





1981, a VF-805 A4G as seen from an RAN HS748 window when simulating a KELT missile for an exercise attack against our RAN ships 'at sea'



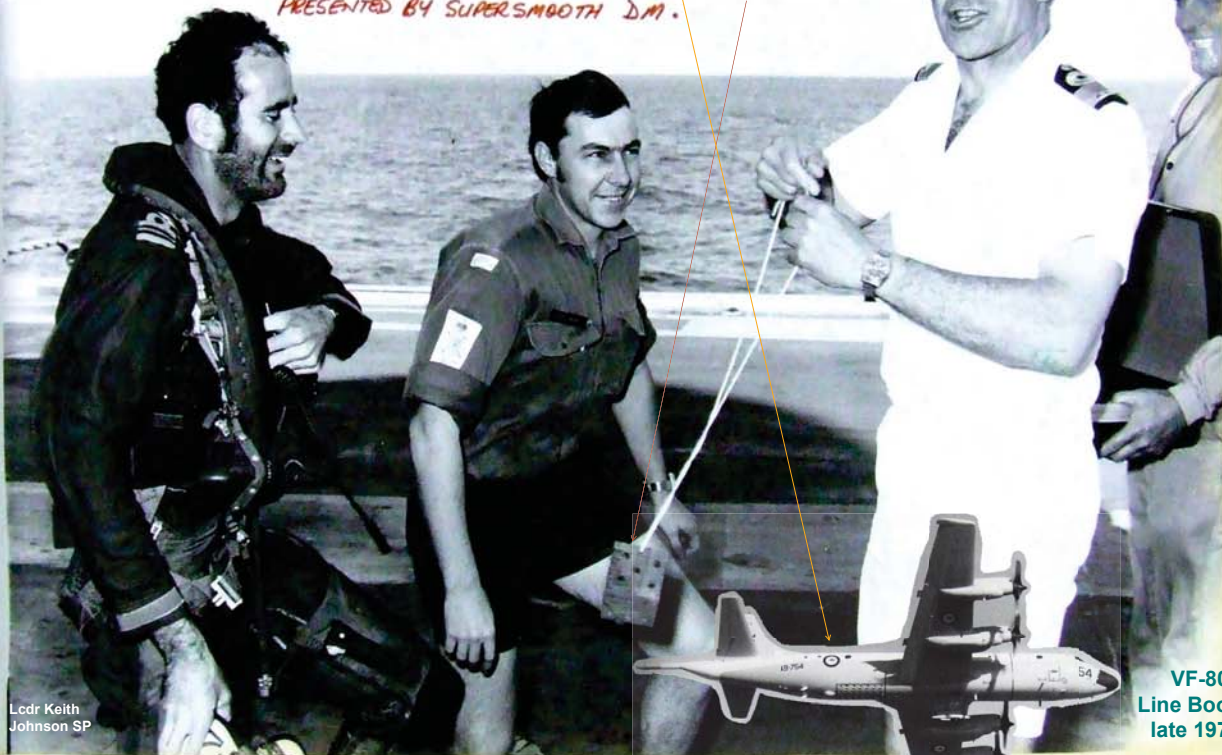
**KELTEX**





AFTER 36 CAP SORTIES VF805 CHALKS UP ITS FIRST K3 KILL—  
THE CUNNING OF AIC PO THORPE & THE FEROCITY OF  
OUR BELOVED S.P. CATCH AN ORANGE P3 SHADOWER  
WITH ITS PANTS DOWN 80NM FROM THE FORCE.  
SP RECEIVING 'ORDER OF THE BULLET' & BILL THORPE 'ORDER OF THE DICE'—  
PRESENTED BY SUPERSMOOTH DM.

Commodore David Martin  
Captain HMAS Melbourne



Lcdr Keith  
Johnson SP

VF-805  
Line Book  
late 1979