

F111 RECOLLECTIONS 1969 – 1975

by
Tony Wilkinson, NAV

Preamble

In early 1967 I was selected as part of the initial deployment of 2 Squadron from Butterworth, Malaysia to Phan Rang, South Vietnam. A dream posting which involved 6 months in Vietnam (with possibly occasional visits back to Butterworth to visit mum and the kids) then back to Amberley via Butterworth to pick up the family and then onto the USA in 1968 for conversion onto the F111C and finally, ferrying the new aircraft to Australia. It all seemed too good to be true – and it was.

A few weeks before the deployment my posting was cancelled (to be replaced by FltLt Blue O'Neill) and I was off to East Sale for the Advanced Navigator Course on the understanding that the first priority was for me to return to Canberra's for presumably a normal 12 month posting to Vietnam and, of course, no F111 conversion in the USA. Needless to say I was not a happy little vegemite as I stood on the empty tarmac at Butterworth and watched the Squadron fly off to Vietnam.

But, as they say, what goes around comes around. Following the AN Course I remained on staff at the School of Air Navigation and, the following year (1968) spent 14 weeks swanning around the UK waiting for a HS 748 for delivery to Australia. In the meantime the F111 program had ground to a halt with problems in the aircraft's wing carry through box and the RAAF crews, who had completed their training in 1968, came home without the aircraft. Then without warning in July 1969 I was posted to the USA for the first F111 exchange at Nellis AFB, Nevada.

The Exchange Experience

On arrival at Las Vegas in August 1969 I was met at the airport by Flt Lt Ian Westmore who, together with Sqn Ldr Ivan Skipworth and Flt Lt Neil Pollock, was still at Nellis as part of the instructional team sent to help train the Australian crews (who had all since returned to Australia). Flt Lt Bob Bruce was the fourth member of this team but he had returned earlier to Australia on compassionate grounds and was not replaced. Their presence was very fortunate for me since nobody had informed the USAF at Nellis that I was coming.

This became all too apparent on the Monday morning when I presented myself at the 428th Tactical Fighter Squadron and asked to see the Commanding Officer. After I had introduced myself and been invited to sit down we had a great chat for about 20 minutes whereupon he thanked me for seeing him, shook my hand and started to say farewell. Realising there was some misunderstanding I asked him if he was aware of why I was there. He didn't, and when I showed him my copy of the orders he visibly blanched and exclaimed "do you know what squadron this is?" To which I innocently replied "the 428th?" to which he said "yes – but it is also the ALPHA Squadron with first priority for nuclear deployment by Tactical Air Command. The security problems of accommodating a foreign national are such that there must have been a mistake!"

This was not a good start and it only got worse. There was no allocation of on base housing and, more importantly, there was no provision for any training on the F111. However, with Westy's assistance, the housing problem was resolved with a private rental down town and we managed to convince the 4527th Combat Crew Training Squadron to let me start the academic part of the conversion while we all tried to sort out an approval for the flying training. Fortunately for me a vacancy occurred when one of the navigators was suddenly retired (a Lt Col he had reached 20 years service without the requisite promotion) and I was offered the slot. The conversion was made easier with Westy as my flight instructor (no language difficulties) and in December 1969 I finally arrived as the newest Weapons System Operator of the 428th Tactical Fighter Squadron.

My security problems, which had been swept under the carpet during training, now surfaced. But fate stepped in when, only a few days after my arrival, the wing fell off one of the squadron's aircraft, killing the crew, and the entire fleet was grounded. The crew (Lt Cols Tom Mack and Jim Anthony) was recovering from a shallow dive bombing CCIP manoeuvre when the wing separated giving them no chance to safely eject. While I was fortunate to have just completed my training I had had only two F111 flights in the 428th and it was 10 months before I flew another operational training mission.

While the F111's were undergoing cold proof load testing in the General Dynamics facilities at Fort Worth and Waco, Texas, the F111 squadrons at Nellis were allocated Lockheed T33s. These had been quickly recovered from long term storage in the Arizona desert to enable the pilots to get their AFR 60-1 flying, and hence flight pay entitlements. The navigators had to get theirs in the base flight C54 by flying around for 7 hours at a time in the back of the aircraft reading Playboy magazines. Fortunately I found a USAF Regulation which exempted a foreign exchange officer, and in this particular instance me, from this useless time-wasting requirement. Eventually we were allowed to fly in the back seat of the T33's which was a definite improvement and much more fun since we could now travel cross-country on weekends. As aircraft started to come back into service in the latter months of 1970 my security problems raised their head again and I was only allowed to fly the occasional ferry flight From Fort Worth and Waco, Tx to Nellis and McClellan AFB.. Then I was transferred by the Wing Commander to the recently renamed 442 Trng Sqn without any written orders which meant that the training squadron could not approve any flying for me. However, my copy of the orders governing the exchange position specifically stated that "the incumbent of this position cannot be transferred by any authority other than AF Headquarters". When I quoted this to the Deputy Wing Commander and suggested that unless the situation could be resolved it might be helpful to request the Australian Embassy for clarification he heartily endorsed the idea. The Embassy was not pleased, to put it mildly, saying the exchange was an agreement between governments etc etc, and to leave it with them.

The next morning I reported as usual to the training squadron only to be told that I was to report immediately to the CO of the 428th. There I was informed that I was back in the squadron and, when questioned on what basis, was told I would be crewed with a US pilot, participate in all phases of training etc etc - exactly as per the job description. The CO even said that I need not even bother to come to work when I was not scheduled to fly – and to please not complain to my Embassy again. Apparently the Wing Commander had received a phone call from General Ryan, the Chief of Air Force, at 4

o'clock that morning reminding him that if he could not handle this exchange program he could quickly find a replacement who could.

I never had any more worries and for the remaining 12 months of my tour and enjoyed all the experiences of an exchange – even to the extent of participating in “nofor” exercises.



First flight – 27 Oct 1969

The F111A

The first impression of Nellis AFB in 1969 was overwhelming. Here there were three operational F111 squadrons (the 428th, 429th and 430th) each with some 25 aircraft and a training squadron (the 4527th) for a total in excess of 100 aircraft on the flight line. Added to this was the Fighter Weapons School with a bunch of F4s and F105s and the Thunderbirds Aerobatic Display Team. An awesome display to someone whose past flying experience was the Canberra bomber with no radar and a WW2 visual bombing system.

The transition for a Canberra navigator to the F111 was a huge challenge and could be compared to a pilot converting directly from a Tiger Moth to a Mirage. Once airborne most of the F111 pilot's responsibilities are computer driven and automatic whereas the

navigator's duties are only just beginning. The Inertial Nav System took the hard work out of the basic A to B navigation but mastering the attack radar, which is the heart of the nav/bomb system, takes considerable experience and skill. As somebody who had never operated or interpreted a radar in his life, and was now faced with one that could paint a barbed wire fence and deliver a bomb with unprecedented accuracy, this was more than just a new experience. Noticing other navigators didn't seem to be having much trouble I asked them for the secret. Their answer didn't help much – "it's just like the system in the B58 except it works!" I had a long and difficult learning curve to catch up to these ex SAC weenies. It was only in recent years that I discovered that the earlier RAAF navigators had been given an introductory radar bomb/nav course at Sacramento before transitioning to the F111 at Nellis.

Fortunately for me, but unfortunately for the squadron's performance, most of the aircraft in the 428th were crewed by two pilots who were mostly just waiting to upgrade to the left seat and had little incentive to master the systems in the right seat. This made me look better than I was but, as a result, the squadron had failed a recent Operational Readiness Inspection and was directed to replace its right seat pilots with navigators (as the other more successful squadrons had done). This preference for all pilot crewing was typical of the fighter pilot mentality prevalent in TAC at that time but had been accentuated in the 428th by their earlier deployment to SE Asia in the Harvest Reaper programme. This was not a particularly successful exercise because of its premature deployment of the F111, a lack of understanding of the operation and limitations of the aircraft systems and the technical problems resulting from low level sabotage during initial manufacture by General Dynamics.

This lack of understanding of the systems was well illustrated as late as 1968 when Flt Lt Pollock initiated an ejection at Nellis because of an extreme aft centre of gravity problem resulting from a faulty fuel gauge. The F111 had an analogue fuel gauge with two pointers – one for each of the two centre fuselage tanks. All the tanks – fuselage, wing and drop tanks -had a selectable digital readout and totalisator for all the tanks. But, in this case, the analogue gauge was unserviceable and the aircraft was cleared for flight on the understanding that the digital readouts were serviceable. Unfortunately no-one realized that the analogue gauge controlled the aircraft's C of G by means of small micro switches on the back of the Fore and Aft pointers. When the pointers get too far apart, or too close together, one set of switches opens, turns off the corresponding fuel pumps until the pointers return to the required separation, the switches close and the pumps resume operating. In this case, since the gauge was unserviceable, all the fuel gradually emptied from the forward tank and the aircraft developed an aft C of G problem. This was not immediately obvious to the crew since the sophisticated flight control system ensured the control stick retained its normal central position and it was only when the pilot select full flap at 400 ft on final approach that the elevator command exceeded its control limit and the aircraft pitched beyond the vertical, rolled some 40 degrees and, at the very last minute, Pollock initiated a successful ejection. Since the pilot was US Navy, and there was no USAF aircrew to blame, all future flight orders were changed to ensure there was always one USAF member on board.

Probably the biggest problem in the early aircraft, and this continued through to the early 70s, was a birdstrike. The forward windscreens were one tenth of an inch thick Venetian glass since this was the only material available at the time to satisfactorily

minimize any visual distortion resulting from the very shallow angle of incidence and curvature of the screens. It was understood that a bird as small as a 10oz swift could penetrate at the normal cruising speed of 480kts. The problem was compounded by the fact that the ejection handles were between the two seats and it was not uncommon for the navigator to initiate the ejection in the confusion following a birdstrike penetration of the cockpit. Eventually thicker plexiglass windscreens, with acceptable visual properties were developed and installed to the great relief of the crews.

In the final days of my exchange the squadron deployed to Holloman AFB in Texas to participate in exercise Coronet Organ V, a precursor to the current Red Flag exercises. This was a declared “no-for” exercise but the CO offered to seek approval for both my recently arrived replacement, Flt Lt Al Pearson, and I to participate. Since such a request could be expected to end up in 12th Air Force’s too hard basket I suggested he write to say that he intended to take us both unless informed otherwise. To my surprise he agreed and, not unexpectedly, the system did not react until we got to Holloman and an RF4 squadron, who had left their RAF exchange pilot behind, complained.

The response from 12th AF was swift – we were to return to Nellis immediately - but after the CO requested that his in-exercise tasking be reduced by 20% (since he was now losing 20% of his crews) we were allowed to stay and participate on the proviso that we were not involved in any of the nuclear oriented missions. That only left the supersonic and heavyweight missions and the exercise was the highlight of my exchange tour and, indeed, my F111 experience.

Such exercises were, and are, extremely realistic. Fake targets were constructed in the Nevada desert with aircraft tasked to destroy them while evading the air and ground defensive forces. My last exercise mission was a typical single aircraft F111 strike with twelve 500lb Mk82 bombs against a no-show SAM site using a radar offset aim point. The mission was real copy book stuff and the stick of 12 bombs all landed inside the Star of David outline of the target. A post strike photo by an RF4 verified the complete destruction of the site and the photo was used as THE PHOTO of the exercise – but only after any mention of my participation in the exercise, since I wasn’t even supposed to be there, had been removed. The CO was very apologetic about this and had kindly requested my permission which, of course, I gave.

Shortly thereafter I returned to Australia and Al Pearson continued the exchange. In 1972 members of the 428th returned for what turned out to be the F111’s final tour in SE Asia and, significantly, they returned while he was still at Nellis. Many of their operations in Vietnam were highly classified and unfortunately the RAAF showed no interest in learning from them so Al Pearson respected the confidences he had received. One story he did relate however, without breaking any confidences, significantly reflected the capability of the aircraft.

The F111 normally operated as a single aircraft at night and at low level. On this particular sortie the crew had a target in downtown Hanoi which was reputedly one of the most highly defended targets in the world. The briefing was to make “just the one pass and haul ass” regardless of whether the target was acquired or not. The crew missed the target on the first pass and, contrary to orders, made not one but two further passes before delivering the ordnance. On climbing out, and passing into safe territory,

they discovered that the rotating red anti-collision beacon had accidentally been left on the whole time - and there was not a single hit on the aircraft. This deployment to SE Asia was a resounding success and finally laid to rest any lingering criticisms of the capability of the F111.

Return to Australia

Back in Australia the interim loan of 24 replacement F4s had been negotiated, the RAAF crews had completed their training in the USA and, by September 1970, the last of the 24 aircraft had been delivered to Amberley. While I was in transit with my family across the Pacific my posting was changed from flying duties on Canberras to flying on F4s. This necessitated an impromptu conversion at Amberley which I shared with Lyall Klaffer and Neil Pollock. We three were the only additional aircrew to be trained on the F4 in Australia and all the F4 aircraft were returned to the USAF by June 1973.

The first six F111Cs, led by Gp Capt Jake Newham and Wg Cdr Trevor Owen in A8-125, finally arrived in Australia as the last of the F4s was leaving. These initial ferry crews had returned to the States earlier in the year for training and I, for whom full training was considered unnecessary, had to wait until the first aircraft had arrived and I could get a cheaper refresher from Ian Westmore. And then, with Sqn Ldr John Emery, I was part of the third ferry flying A8-139 via Honolulu and Pago Pago.

This was certainly far different to my earlier experience with the HS 748 which was a single aircraft taking 10 days and landing at London-Rome-Athens-Luxor-Bahrein-Karachi-New Delhi-Calcutta-Bangkok-Singapore-Djakarta-Bali-Darwin-Alice Springs-East Sale. For that we were just given a bunch of maps, money and diplomatic clearances, told to use BOAC facilities when required and GO! The F111 ferry should have much simpler since it only involved three stages, only overflew and landed in US territory and was in a formation of six aircraft. But every man and his dog became involved with everything briefed ad nauseam down to the finest detail. We even had to carry the 500gal drop tanks on the fixed outer pylons which limited the wing sweep in flight to 26 degrees. The drag on these tanks was immense and barely increased our range but they were considered necessary to fill a small 200 mile dead zone if an engine was lost, provided the tanks were jettisoned, midway between McClellan and Honolulu. And, of course, the tanks could only be jettisoned off the fixed outer pylons. Commonsense eventually prevailed in later years and I don't believe these tanks were ever used again for transit across the Pacific.

Despite all the planning and briefings the ferries did not go as planned. We were 500 miles out of McLennan when John Emery noticed that one of the drop tanks was not feeding. So back we went to a not so friendly welcome since they thought they had finally gotten rid of us. But we had just settled back into the BOQ when we were roused and told to try again – the tank was considered to be just a slow feeder which would eventually empty. So off we went again, watching the fuel flow like a hawk, until the tank finally emptied three quarters of the way across the pond. Arriving late we only had time for a couple of quick beers before a feed, bed and early get up to depart for Pago. Once again we were left behind with a different unserviceability on start up and we returned to the BOQ. This time we thought we might get an extra day in Honolulu (whoopee!) but once again we were speedily fixed and on our way. Arriving late at Pago

it was again just time for a quick beer, feed, into bed and early start for the final leg to Amberley. This time everything went as planned and all aircraft arrived safely and together.

Subsequent ferries were routed by Fiji and one arrival in a thunderstorm was reportedly very hairy with the aircraft running very low on fuel. But that story is for others to relate.

Conversion courses back at Amberley were quickly up and running. No 82 Wing was officially disbanded and an Air Staff established in Base Headquarters. I was transferred from 82 Wing Training Officer to Air 2A and, finally, to 6 Sqn as the Nav Officer. When I departed in December 1975 the F111 was in full operational service and we had yet to lose our first aircraft.



Last flight -10 Dec 1975