squadron logistics officer at the time, and he was somewhat miffed at having to stay behind to ensure that the det firstly departed Cherry Point in good shape and then arrived safely in Cuba. He did eventually join the det, however, which had been administratively detached from the squadron and reassigned to the group at 'Gitmo' soon after its arrival.

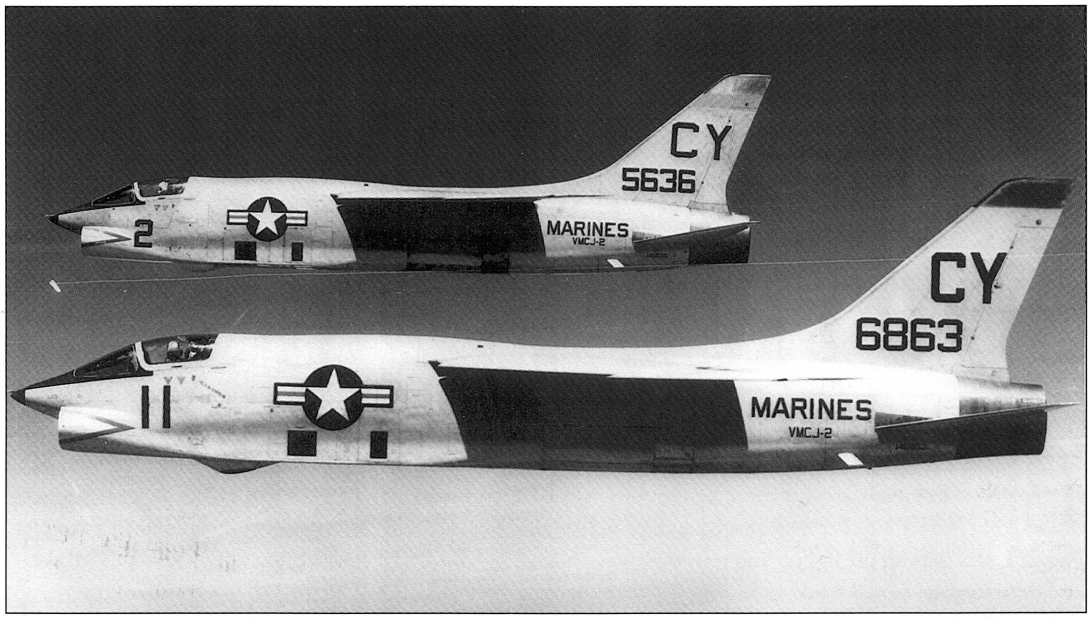
Although the main reconnaissance operation was flown by the combined VFP-62/VMCJ-2 group, the 'Gitmo' Marines did also fly missions – especially several night photo runs. Unfortunately, the man in charge at 'Gitmo' was a non-aviator colonel who did not fully understand air operations, and this quickly became apparent to the Crusader pilots as the following episode shows.

In the wake of the shootdown of a U-2 on 27 October, Capt Austin was tasked with providing high-altitude pin-point photography of the missile site that had hit the high-flying USAF aircraft. The JCS suggested that the RF-8 should fly at 35,000 ft, which not only put it right in the missile envelope, but would also have a detrimental effect on the photographs taken. Austin told the 'ground-pounder' colonel that a high-speed low-level run would give much better coverage, and would also keep him out of the missile's envelope.

The colonel replied that Austin should not worry – there would be four fighters offshore monitoring the photo jet's progress. Of course, there would have been little the escort could have done against a missile except to call out where it hit the reconnaissance Crusader, and where, and if, Austin had ejected. Austin's objections fell on deaf ears, and he flew the mission 'very scared'.

An amusing story that highlights the sometimes intense inter-service rivalry during the crisis involves the RF-8 cameras manufactured by

RF-8A BuNo 145646 (which is also shown in the introduction as CY 5 aboard a carrier at an earlier stage in its career, indicating just how often side numbers change) flies over Guántanamo in 1962 just before the crisis flared up. Note the rabbit logo of *Playboy* magazine, which the squadron appropriated to go with its 'Playboy' callsign. They used the callsign throughout Vietnam and into the 1980s, as VMAQ-2. However, political correctness eventually made them give it up – pity



Two Marine RF-8As of VMCJ-2 fly form over the Caribbean during 1962. Unlike many other long-lived tactical jets, the RF-8 was never encumbered with underwing fuel tanks or other paraphernalia. And only two ventral fuselage strakes were added to the aircraft for high-speed directional stability when 73 A-models were upgraded to RF-8G specs in the mid- to late-1960s. The aircraft nearest the camera (BuNo 146863) survived many years of service with VFP-63 until retired (as PP 646) to the 'desert boneyard' at Davis-Monthan AFB, in Arizona, on 15 December 1980 – it is still part of the Aerospace Maintenance and Regeneration Center (AMARC) inventory today. BuNo 15636, however, was lost during a routine flight in the USA on 1 August 1972

Chicago Aerial Industries. The USAF had been having trouble with its McDonnell RF-101A Voodoo (counterpart of the photo-Crusader), which was also a derivative of an original fighter variant of the 1950s – the large and fast F-101A was a single-seat long-range fighter that boasted an impressive straight speed performance, but never flew satisfactorily in its intended role. The RF-101 enjoyed a somewhat more successful career, and saw considerable action during the first five years of the Vietnam War.

However, during those anxious weeks of October 1962, the temperamental photo-Voodoos were down more often than up, and the fact that the jets' cameras were not ready for such a real-world test, simply pointed to the service's unpreparedness.

In an act of desperation, the Air Force asked Chicago Aerial if it could purchase the KA-45 cameras that were an integral part of the RF-8A's suite – the KA-45 was one of three specific camera models fitted in four stations within the Crusader's large fuselage, being mounted in station 1 beneath the RF-8A's large nose intake, looking forward along the aircraft's flight path. This dependable camera gave an excellent view of entry points for bomb runs.

Chicago Aerial told the Air Force that although 22 cameras were ready for shipment, they were already assigned to their Navy purchasers. Ultimately, the colourful USAF Chief of Staff, Gen Curtis LeMay, got involved in the deal and, leaning heavily on the Navy for past favours, got the admiral in charge to split the order with the Air Force.

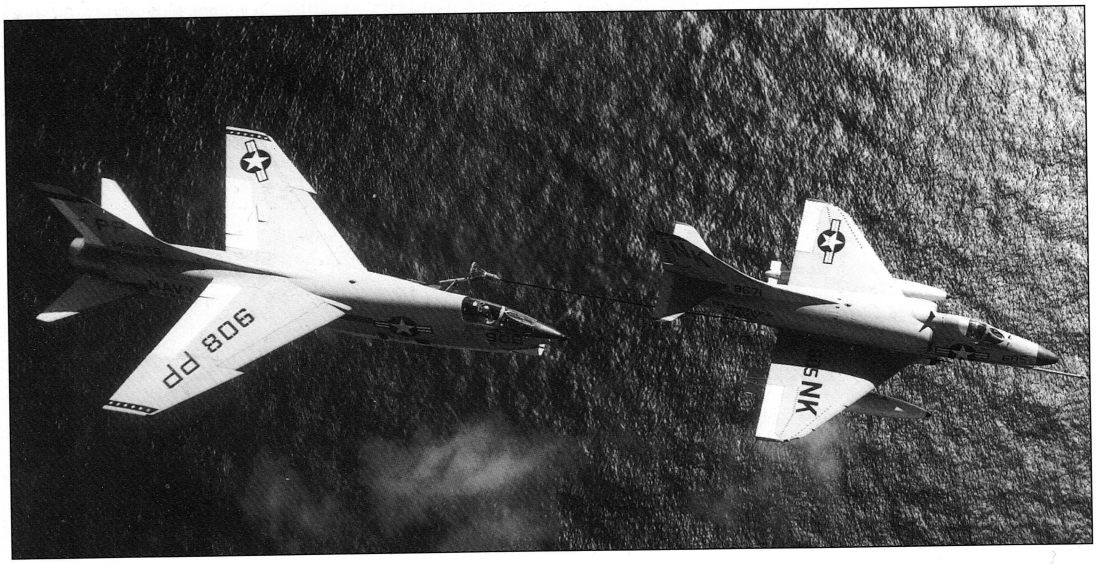
The manufacturer installed the cameras in Voodoos of the USAF's 363rd Tactical Reconnaissance Wing at Shaw AFB, in South Carolina, and finally six RF-101s were ready to assume their roles at MacDill AFB in Tampa, Florida. In truth, however, although the Air Force received a lot of favourable publicity, including being featured in *Life* magazine, its RF-101s sat out most of the vital week of 23-28 October because of problems with their camera systems.

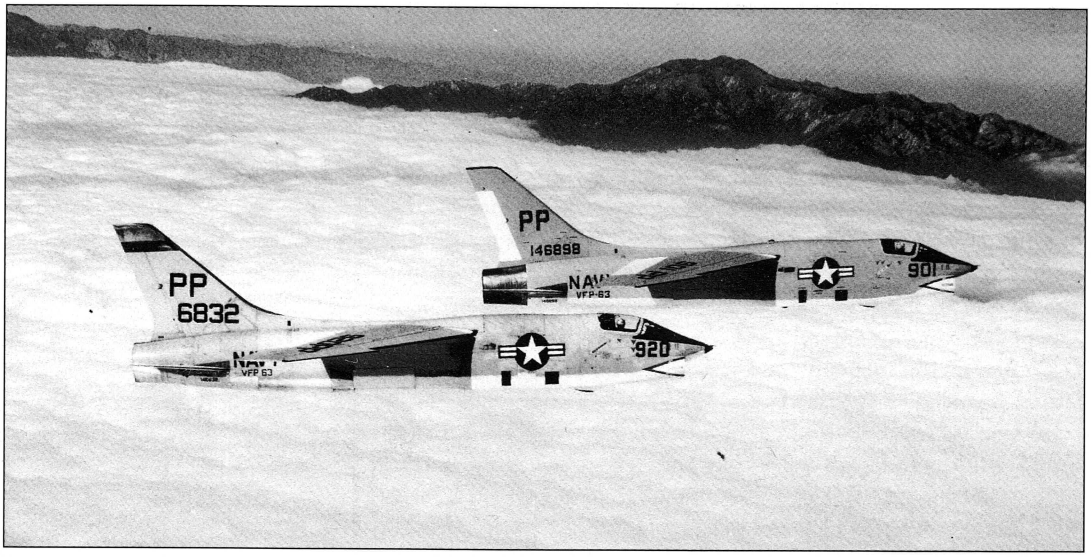
With his engine still turning, this photo-recce pilot is directed into his carrier's hangar bay after completing a mission

Crusaders in South-East Asia marked the first use of Marine Corps fixed-wing jets in Vietnam, the five-pilot det having made its way from Iwakuni, Japan, to Cubi Point, in the Philippine Islands. 1Lts Denis Kiely, John Sledge and Alexander Carter and Capts Lloyd Draayer and Russ French then received orders to fly out to the carrier, where they met Lt Cdr Ben Cloud, the OINC of the carrier's photo detachment, and one of the Navy's few black aviators at the time. The 'Romeo-Mike' Crusaders (referring to the Marines' RM tailcode letters) landed aboard *Kitty Hawk* on 22 May 1964. Most of the young aviators had not seen a carrier since March, a few since the previous December. Regulations dictated no more than a six-month break to be properly qualified to land aboard ship, so the Marines were legal, but stretching it in this exacting arena.

Billeting was a minor problem aboard the crowded ship, and friction between the Marine det and the regular Navy ship's company initially cropped up. However, the Marines soon settled in and began flying train-

Photos of early Vietnam RF-8s in-theatre are rare, this view showing one such jet (RF-8A BuNo 146855 from VFP-63's Det F aboard *Constellation*) refuelling from an A-4C of VA-146 in August 1963 – less than a year before the first RF-8A was lost to enemy action. A survivor of countless Vietnam sorties, and later upgraded to G-model specs, this aircraft earned the dubious distinction of being the last Crusader to crash in Navy service when its pilot, reservist Cdr David Strong (XO of VFP-206), was forced to eject due to power loss soon after taking off from NAS Miramar on 11 March 1985





Two early RF-8As of VFP-63. Because neither jet carries the name of a CVA over the rear-fuselage *NAVY* marking, it is probable they are from the squadron's 'home guard' at Miramar. Note the differing applications of the serials on the fins of each RF-8, the painted rear fuselage area on the Crusader nearest the camera, and the fin band on the latter aircraft. BuNo 146832 was lost on 13 June 1963 during an operational flight in the USA, whilst BuNo 146898 remained in service until the mid-1980s, when it was retired and placed on display in the aircraft park alongside the battleship USS *Alabama* in Mobile, Alabama – the jet is on loan from the National Museum of Naval Aviation at NAS Pensacola, Florida

ing, followed by operational missions over Laos, sometimes in Navy Crusaders – the dets pooled their aircraft, thus making the most of their limited resources. Navy pilots flew Marine RF-8As, and vice versa, although the Marines had yet to change to cameras that used the larger 4.5-in format film. The Navy pilots and intelligence teams did not care for the older 70 mm format, saying it did not offer the larger, sharper, negatives of the newer film.

By this time the Navy pilots were encountering increasing amounts of flak as the photo-birds flew along the Mekong River and over the Plaine des Jars, often in bad weather mixed along with heavy anti-aircraft fire from the ground. Early on the morning of 21 May, two RF-8s launched for a road reconnaissance, and during the course of the sortie one of them was hit by ground fire and began to burn fiercely. Its pilot, Lt Charles Klusmann, managed to return to his carrier, however – his jet was again struck by flak five days later.

When the 27C-class carrier *Bon Homme Richard* sailed into the South China Sea in early May 1964, it brought with it three more RF-8As and two RA-3Bs.

Meanwhile, aboard *Bonnie Dick*'s sistership *Hancock* (CVA-19) which was also steaming west towards the action, Lt(jg) Richard Coffman (a member of the VFP-63 det embarked) was amused as he explained to a senior lieutenant commander how far north their mission would take them. The fighter pilot expressed disbelief – none of the fighter squadrons had known that the reconnaissance aircraft had gone so far into enemy territory. Coffman assured him the route was accurate and the hop fairly routine.

The pace had accelerated by mid-May, with photo pilots remaining constantly on call and often flying several missions a day. Ejection and survival procedures in this new area of operations were still in the early stages of development, and occasionally the Navy would bring an 'expert' out to lecture on how to survive in case of being shot down.

1Lt Kiely (he and John Sledge had been selected for captain by this stage) and his friends remembered one special visitor in particular – a

scruffy old veteran who alighted from an A-3. The grizzled lieutenant commander had been in South-East Asia since World War 2, and he proceeded to give his young audience his impression of what they should and shouldn't do. He ended his lecture with a story about how he had once gone out into the jungle to retrieve a wounded soldier. However, a tiger had found the hapless serviceman first and was enjoying a rather gruesome meal when the lecturer arrived. Normally, when someone dies in battle, he is noted as KIA (killed in action). In this case, though, how the soldier died was not clear – before the tiger's attack, or as a result of it. So, the lieutenant commander noted, he wrote down 'EIA' for *eaten* in action!

On 2 June 1964 1Lts Carter and Kiely were scheduled as wingmen, the latter flying with Lt Cdr Bill Lott as the primary section, while Carter acted as Lt Jerry Kuechmann's number two, filling the role of 'spares' in case the primary section couldn't fly the mission.

Sure enough, as Lt Cdr Lott tried to tank from one of the A-4s, his RF-8 lost its generator and he had to return to the ship. By this stage 1Lt Kuechmann was already 'riding' his jet down on an elevator into the hangar bay, leaving 1Lt Carter up on the flight deck aft of the catapults.

The squadron immediately launched Carter to join up with 1Lt Kiely who, years later, remarked, 'Now there were two dumb lieutenants in the air – the stage was set'. The two young Marine photo pilots quickly set off on their mission before anyone could recall them. Besides, their radios had suddenly 'broken', and they couldn't have heard a recall anyway.

Heading over the Mekong River in the direction of for the Plaine des Jars (they could see Da Nang to the south), they knew they were forbidden to cross into North Vietnam to avoid antagonising the already skittish North Vietnamese. Taking advantage of breaks in the ever-present cloud layers, they spotted checkpoints that would hopefully lead them north to their target – a newly-constructed airstrip.

The two Crusaders were already encountering flak, but the black puffs were between them, with Kiely in the lead and Carter in loose trail. Kiely dutifully noted the guns' location on his knee-board for future reference as they descended below the base of the cloud deck at 2000 ft.

'By dumb luck', he said, 'we were almost on our first target. We used what we'd been taught – 500-550 knots, all cameras ready. The initial run took care of the low obliques, and a quick high-G turn brought us back for a repeat on the other side, all topped off with a very low forward-fire of some of the bulldozers and other ground equipment'.

Continuing up the road to a small village, the two Marines again picked up tracer fire, but they were going much too fast for the gunners to aim accurately – its high speed was, after all, the RF-8's only defence. Reaching the northern end of the plain, they photographed another airfield and two columns of military vehicles, which, according to the flags on the trucks, apparently belonged to the Pathet Lao.

'We took their pictures and scared the hell out of them', Kiely recalled, 'then turned back north-west for higher ground and another airfield target.'

They spotted an aircraft making an approach, and headed toward the field. At first the Marines thought the silver transport was a Soviet-built AN-8 'Camp' twin-engined turboprop. However, inspection of their

photos later showed the aircraft to be an Air America C-123 Air America was the in-country 'airline' of the Central Intelligence Agency, which meandered around the hinterlands of South-East Asia throughout the war.

Nearing the end of their mission, the Marines checked their fuel. Kiely's aircraft (BuNo 146838) had been written up by another pilot for problems with its fuel-registering system, which effectively meant that he had no way of clearly monitoring his fuel flow, except to watch for a warning light on his panel. When this illuminated, it would indicate that Kiely's jet was down to 2500 lbs of fuel in the wing tanks.

Reaching 'bingo fuel' first, Kiely knew it was time to head home, but he was not prepared for a sharp drop of 1200 lbs on his main gauge. What was happening? This would leave him with just 300 lbs of fuel when they arrived at the ship – no cushion at all. Of course, this was all conjecture because of the malfunctioning gauge on the wing tanks, and he had to decided whether to keep heading for the carrier or divert to Da Nang. The latter choice was the least desirable because of the red tape in getting clearance to leave. There was also the mission requirement to get their pictures from this sortie back to the ship.

Calling the carrier to get a tanker airborne, the RF-8 pilots headed back over the water. They finally spotted a speck in the distance – *Kitty Hawk* – which radioed it was ready to recover them, and that there was an A-3 tanker standing by if needed.

With only an estimated 700 lbs of fuel left on board, Kiely took the first shot at landing.

'Calling the ball with 500 lbs showing, man, but that thing floated! I was way back on power, trying to get on speed. In close, I looked OK, but was still fighting a tendency to float.'

But his aircraft hit the deck hard, skipping all four arresting cables, and Kiely found himself bouncing back into the air. Now fuel was critical. He needed that A-3, *now*.

The tanker was right there, and although the ship called for another pass, Kiely knew his priorities and plugged in. The A-3 crew then left for an 'important' mission ashore. It was only after Kiely's saviour returned and suffered a hard landing that the truth came out – the A-3 began leaking *scotch* from one of its camera bays.

'Those jerks would have rather seen me take a dunking than hold up the booze run', he declared.

The young Marine aviators were brought down to the hangar on elevators, their jets' engines still turning. Although the air wing commander required an explanation as to why Kiely ignored the air boss's instruction to make a second pass, he was eventually satisfied, and the pilots went to see the intelligence officers who would debrief them.

The most important bit of information gleaned from the sortie was the placement of radar-controlled guns, which the intel officers did not believe. Of course, the pilots knew what they had seen. Some time later, they were called down to the photo-interpreter spaces, where they found the CarDiv Seven commander, Rear Adm William 'Bush' Bringle, and a variety of officers pouring over their photos, including the 70 mm film which, as mentioned earlier, was not considered to be of very good quality by the Navy.

It turned out that the two Marines had obtained first-class coverage of an important area, and they beamed as the admiral complimented them in front of everyone. Their forward-fire film was also good, and all things told, it was a stellar performance.

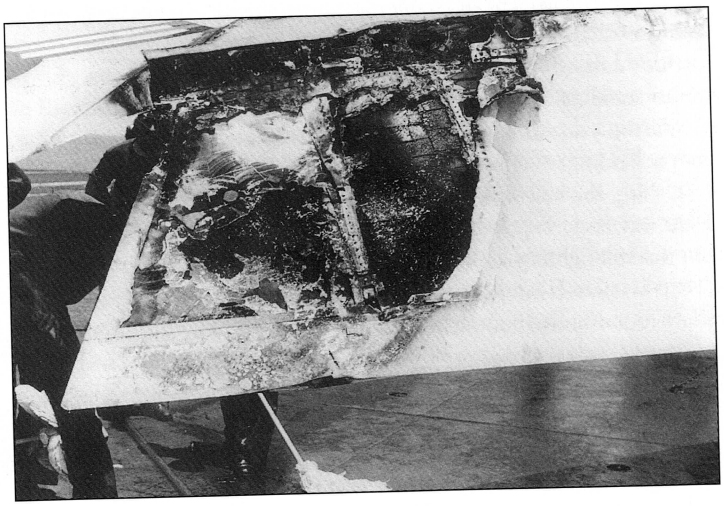
Capt Draayer, the det OINC, crowed, 'This was the masterpiece! The first flight to come back with some great photo work. When the Navy air wing commander heard two Marine lieutenants had been launched, he was fit to be tied, but I told him they could handle it'.

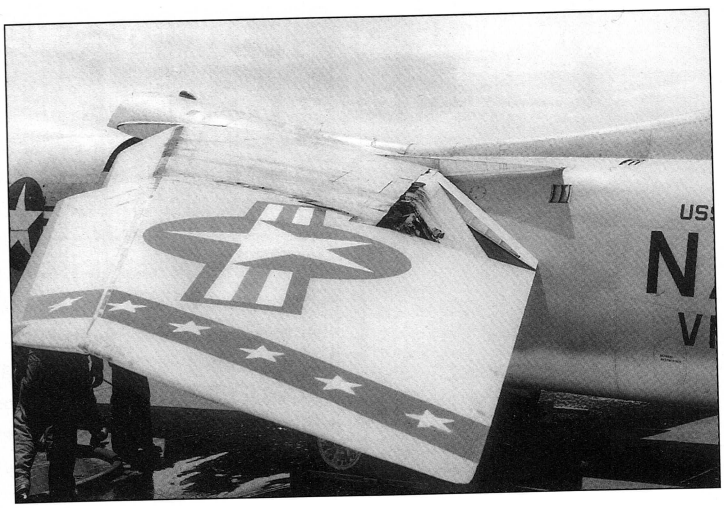
On 6 June Lt Klusmann's aircraft (BuNo 146823) was again hit by anti-aircraft fire, but this time the damage was too severe for a safe return, and Klusmann ejected from his RF-8A, becoming the first individual to make a combat ejection from a Crusader. This aircraft was also the first of 20 photo-Crusaders lost to enemy action, although none fell victim to MiGs.

In this early stage of the conflict, there were many areas of operational concern for the photo pilots, including survival techniques and the lack of armed escorts that could shoot back and protect the unarmed RF-8s. At this early stage in the conflict two photo-Crusaders would usually perform a mission, with one being the designated escort – primarily to look out for flak – and the second being the mission leader and picture-taker.

'Initially', Klusmann later said, 'we didn't know that everything was being planned and approved in Washington. We also didn't know how little Washington planners knew of how combat flights should be flown. After all, we were just learning, ourselves . . .' His words were tragically indicative of how the long war would be fought – at the expense of many US airmen.

On 6 June 1964 Lt Klusmann and his wingman, Lt Kuechmann,





Above and right: On 21 May 1964, 'Corktip 918', with Lt Charles Klusmann aboard, was hit over Laos. The fire and blast from the 37 mm and 23 mm flak put holes in the wing and droops, allowing fuel to pour out. This was rapidly ignited by more 37 mm hits, the resulting fire burning for 20 minutes before going out as Klusmann climbed to 42,000 ft. He then recovered safely back aboard the *Kitty Hawk*

prepared for their mission as they had for several others. They launched from *Kitty Hawk* at 1030 and headed for their targets near the Plaine des Jarres. The weather was typically cloudy, with limited visibility, the former being heavy enough to hide many of the ground checkpoints they required to fly their route.

Trying to find a ground reference point free from clouds, Lt Klussman flew south and descended toward an area he knew had flat terrain along the Mekong River. For a while, he had the river in sight and again turned north, but the weather deteriorated once more, requiring the two Crusaders to drop down almost to tree-top level.

Flying toward the small town of Ban Ban, the American aviators knew they were heading toward an area known as 'Lead Valley', in reference to the heavy concentrations of flak occasionally encountered. The clouds were too thick, and once more Klusmann turned his flight toward another objective. His Crusader had valuable colour film, and he took pictures of the terrain.

Turning back to Ban Ban, the two RF-8 drivers stabilised at 1500 ft and 550 knots, and as Kuechmann flew off his right side, Klusmann headed for the town. Flak began popping up, but even with the tracers flying past him, Klusmann stuck to his run. As the Crusaders flashed past the enemy sites and broke right, Klusmann felt his aircraft shudder and yaw to the left, before straightening out. He knew he had been hit, probably by a small-calibre, perhaps 12.7 mm (.50 cal), shell.

'Almost immediately, I started losing pressure in my power-control systems, and Kuechmann, trailing some distance behind, said my left landing gear was hanging down. At this time, both power-control systems went off line, and the plane started handling erratically.'

With his jet now rolling right, and without any feeling in the controls, Klusmann knew he had to get out. He ejected at 10,000 ft and 450 knots.

As he descended, Klusmann saw a flash when his Crusader crashed in a canyon. For a moment it seemed that people were shooting at him from the ground. He hit a tree and fell the last 20 ft, twisting his right knee on landing.

Discarding his 'chute and flight gear, he tried making his way through the dense jungle. He heard Lt Kuechmann overhead, but soon his

PP 916 (BuNo 146825) was the only Det C aircraft that wasn't hit by flak during *Kitty Hawk*'s lively 1964 cruise. Luck deserted the jet the following year, however, for it was shot down by AAA on 8 September whilst serving with VFP-63 Det G aboard *Oriskany*. Its pilot, Lt(jg) R D Rudolph, was killed in the action – the det had lost Lt H S McWhorter to AAA just ten days earlier. In an uncanny twist of fate, RF-8A BuNo 146826 also failed to return from a mission over North Vietnam on 9 September 1965 whilst flying with Det D aboard *Coral Sea*, its pilot, Lt(jg) C B Goodwin, being posted Missing In Action