In early February 1943 during the battles around Wau in northern Papua, No 4 Squadron RAAF carried out what is essentially the first recorded Forward Air Control (FAC) mission in the history of military aviation. On the ground at Wau, troops of the Australian 2/6th Battalion and 2/5th Independent Company had contacted a significant Japanese force. Air support was requested and in response Nos 4 and 30 Squadrons RAAF were tasked by No 9 Operational Group RAAF to carry out an attack on the enemy.

No 4 Squadron was a specialist Army Cooperation squadron trained in land reconnaissance, artillery spotting, message dropping, ammunition resupply and other general support tasks. The squadron flew the Wirraway aircraft, which was ideal for ground reconnaissance and observation. The Wirraway’s very low stall speed gave it the ability to fly so slowly that it could almost hover over the battlefield. The Wau task was recorded as a land reconnaissance mission, though a new term—tactical reconnaissance—was created for future missions of this type.

No 30 Squadron was to supply the striking power with its Beaufighter aircraft. Each Beaufighter was equipped with four 20mm cannons and six .303 machine guns that produced a heavy volume and weight of fire. The Beaufighter was one of the fastest aircraft at very-low levels, in contrast to the slow Wirraway. While high speed was an advantage in many tactical situations, it was a disadvantage when trying to visually acquire ground targets for attack. The concept of how this problem could be overcome, and the attack carried out, was contained in the tasking order sent to 30 Squadron.

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WAR.42 3 FEB. 9OG/C1/3. “Flight Beaufighters rendezvous with Wirraway over Wau at 1430L/3 FEB. Follow Wirraway who will indicate target by firing tracers into it. Beaufighters will follow Wirraway in and straffe [sic].”
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At 1320 hours the Australian Army personnel at Wau saw the 4 Squadron Wirraway circling overhead their location, and indicated their positions to the aircraft by firing flares. Once the Wirraway had determined the relative positions of friend and foe it departed and returned at 1439 with three Beaufighters in company. The Wirraway then indicated the target area to the Beaufighters by firing tracer rounds into the enemy positions and the Beaufighters then delivered their attack to the same area.

All the essential elements of the FAC role were present in this mission—communication with the local ground forces, acquisition of friendly and enemy locations, and finally, the indication of the target to the attacking aircraft.

The renowned American air historian, Richard P. Hallion, referred to this pioneering work of the RAAF in his 1989 book *Strike from the Sky* when discussing international efforts to more effectively control close air support missions.

The Australians went further, and developed airborne strike coordinators and controllers, anticipating the post-World War II forward air control system utilized in Korea and Southeast Asia. Using two-seat Commonwealth Wirraway tactical reconnaissance and liaison aircraft, Royal Australian Air Force pilots and observers led strike flights to ground targets. Subsequently, the RAAF introduced the Commonwealth Boomerang, a specialized army cooperation and ground support fighter which operated like a “fast FAC” over the edge of battle, leading strikes and marking targets for attacking aircraft.
After Wau this style of mission became a feature of the operations of Nos 4 and 5 Squadrons, the RAAF’s two army cooperation units in the South-West Pacific Area. The skills acquired by these two squadrons in this specialised role resulted in the RAAF possessing the world’s most advanced method of providing accurate and safe close air support.

In May 1944 the Americans in Italy would develop a similar method of controlling close air support missions. In that theatre a light aircraft, the Piper L-5, was used to locate and indicate targets to strike aircraft. The codename ‘Horsefly’ was given to this type of operation. The marking method usually involved the dropping of a smoke bomb on the target from the Horsefly’s operating altitude of 3000-4000 feet. Horsefly techniques were also used in the invasion and subsequent operations in southern France, continuing until the end of the war in Europe.

The FAC role had to be rediscovered in the Korean conflict in 1950. Strike aircraft speeds had significantly increased since World War II, and a way had to be found to accurately mark targets. L-5 and AT-6 Texan aircraft were modified to replicate the Horsefly operations of WWII. A new radio call sign resulted in these FAC flights being called ‘Mosquitoes’. The Korean conflict also saw the introduction of specialised smoke rockets as target markers and these became the primary tool of FACs in Korea and for the future.

The FAC role figured prominently in the training given to the Vietnamese Air Force in the period 1960 to 1965. The use of FAC grew considerably with the introduction of American combat forces to South Vietnam in 1965 and over the ensuing years. One of the most intense periods of FAC operations centred on the Battle of Khe Sanh in 1968. During the battle 1600 FAC sorties were used to control 25,000 tactical sorties which dropped 95,000 tonnes of ordnance. It is the American use of FAC in Vietnam that usually comes to mind when the term FAC is used.

Although the American use of FAC on such a large scale dominates the history of this important air power role, it is instructive to remember where it originated. The innovativeness, ingenuity, skills, and resourcefulness of RAAF personnel in an under-resourced and overlooked theatre of World War II produced a new concept of operations that was used for the first time with great efficacy.

And the day may not be far off when aerial operations ... may become the principal operations of war, to which older forms of military and naval operations may become secondary and subordinate.

- Field Marshal Jan Smuts, 1917

‘Pathfinder’ is a fortnightly bulletin from the Air Power Development Centre. Its title is a tribute to the Pathfinder Force which operated within RAF Bomber Command from August 1942. The original Pathfinders were an elite navigational group with the role of preceding each raid and accurately lighting up the target area with incendiary fires to permit visual bombing by the main force. The first commander was Group Captain (later Air Vice-Marshal) D.C.T. Bennett, a Queenslander who trained with the RAAF in 1930-31 before transferring to the RAF, and many other Australians also flew with the force.

The emblem we have adopted is ‘Fiery Mo’, the unofficial insignia carried on No. 6 Squadron’s Hudson aircraft in New Guinea during 1943.