



In the story of transport aircraft within the RTAF, there are many types that have been used and many that are still in service. However, only the Merlin IVA has been used in a dedicated role as Royal Transport. And it still is. Other aircraft have been used for aerial photo reconnaissance, but owing to the length of time they have been out of service, they have slipped from our memory. The Merlin IVA, or Merlin 4A is such an aircraft. I really should ask to write more articles on this type of aircraft which were published in Airman magazine (Volume 32 Issue 3 – March 1978, page 3-5). Part of that article is below:

“Following on from the RTAF decision to designate a Type 5 Transport aircraft (AVRO 748) as Royal Transport for members of the Royal Family during provincial visits, another Type 5 (a mid-sized aircraft) was used for the transport of palace staff and public officials during these visits. This type of aircraft was regarded as appropriate because of its size, range and ability to use the available airfields.

The RTAF examined the use of aircraft for short distance travel or transport of a small number of Palace officials with the Royal Palace. It was decided that a smaller and more maneuverable Royal Transport than the Type 5 was required.

Therefore the RTAF established a committee to examine the acquisition of the smaller aircraft. The committee decided the aircraft which best met its requirements was the Merlin IV A turbo-prop manufactured by Swearingen Aviation which was a member of the Fairchild Industrial network of the USA.

The RTAF requested to use US \$1,408,150 from the Prime Minister’s budget for the purchase of two Merlin IVA turbo-prop aircraft with spare parts. The actual aircraft purchase included delivery to Don Muang, flying instruments and the necessary paint scheme and was valued at US\$ 1, 342,269.

The first Merlin IVA aircraft arrived at Wing 6 at Don Muang on 10 January 1978. The RTAF designated this Royal Transport as Type 6 Transport aircraft in the Thai aircraft designation system.

The second Type 6 Transport aircraft arrived at Wing 6 on 3 March 1978. The RTAF assigned both aircraft to 601 Squadron of Wing 6.

The Type 6 Transport aircraft was numbered L6 – 1/21 and His Majesty the King allocated the special Royal Transport serial 21-111 to it. The second aircraft L6-2/21 received the Royal Transport serial 29-999. These serials were carried on the base of the aircrafts' vertical stabilizers. His Majesty the King performed special rites on 21-111 on 23 February 1978 on the tarmac in front of Headquarters RTAF. Later His Majesty performed special rites on the second aircraft on 10 November 1978. This prepared both aircraft to be used as Royal Transports for provincial visits. At the invitation of the Palace, the Royal Emblem was painted onto the fuselage above the Wing 6 emblem near the cockpit. The symbol, showing that the aircraft was engaged in Royal activities, was a yellow rectangular area with a red Krut (Garuda) in the centre. In land-based vehicles this would be a removable metal plate, which would only be worn when on Royal activities. In 601 Squadron the two Merlin IVA aircraft were also used for other purposes; for example:

flight training, which consisted of various elements: general flying, night flying, instrument flying, and flight currency assessment of aircrew (both pilots and other aircrew). Apart from this, the aircraft were sometimes used for transporting senior commanders on various important assignments.

Following 6 November 1978, when 21-111 was damaged in a flight flying activity at Sakol Nakhon airfield, it was removed from service. The sole remaining Merlin IV A aircraft (29-999) was used for Royal Transport duties. This aircraft was damaged beyond economic repair while flying to Haat Yai on 20 July 1982, forcing the aircraft to be sold out of RTAF service. The concern about this particular aircraft type being selected as a Royal Transport caused its removal from those duties in 1982.

However, the RTAF still had three Merlin IVA aircraft in service within 603 Squadron. They were purchased following the selection of Merlin IVA as Royal Transport aircraft. They were used as aerial reconnaissance aircraft but they were fitted-out to RTAF specifications: capable of being fitted with aerial cameras for vertical and oblique photography which required the manufacturer to modify the fuselage during manufacture. The modification for vertical photography required square apertures to be made in the mid-wing area with the addition of necessary strengthening of the aircraft structure, and photographically transparent windows fitted on the outside of the apertures. For oblique photography, there was a modification made on the right side of the fuselage behind the cockpit. A transparent window was fitted over the camera aperture in the fuselage. (This was necessary as the aircraft was fitted with a cabin pressure system as a passenger aircraft, and was required to operate at altitudes in excess of 10,000 feet. Therefore any fuselage apertures required strengthening to their surrounds and a gas-tight window capable of retaining cabin pressure. This was different to the in-service Type 2 Photographic Reconnaissance aircraft (RC-47 Dakota) or Type 2 Attack/Administration aircraft (AU-23 Peacemaker) which did not have windows over their aerial camera apertures. This was due to the aircraft not operating at an altitude in excess of 10,000 feet.)

In 1979, the three Merlin IV A aircraft arrived in Thailand, with an unofficial arrival ceremony conducted on 29 November 1979. Following inspections, the aircraft entered service the following month. The aircraft type was designated Type 6 Observation/ Transport and entered service with 603 Squadron of Wing 6 at Don Muang. The aircraft were numbered 60301 (TL.6-1/22), 60302 (TL.6-2/22) and 60303 (TL.6-3/22). The official ceremony was conducted with the reception ceremony for the final six aircraft of the T-37B 'Tweety Bird' fleet on 17 October 1980.

In October 1982, an order was received to cease the aerial photographic flying program of the military aerial photographic group which was an agency of the Military Mapping Department, Supreme Command Headquarters. The responsibility for this mission became shared between the RTAF and the Military Mapping Department with eight borrowed aircraft fitted with aerial photography equipment, which the RTAF were able to utilize. The RTAF received orders to raise a squadron to conduct this mission. 605 Squadron was raised as part of Wing 6. In the early days it was regarded as an auxiliary squadron until May 1985 but then an order was raised making 605 Squadron a regular squadron with RTAF. In June 1985 all three Merlin IV A aircraft were loaned from 603 Squadron to 605 Squadron. The mission of 605 Squadron was the provision of support to map making, aerial survey, and aerial reconnaissance. When they came on strength with 605 Squadron, they needed their tail numbers changed and 60301 became 60501, 60302 became 60502, and 60303 became 60503.

The Type 6 Observation/Transport aircraft were capable of carrying a number of different aerial cameras, for both vertical and oblique photography. For vertical photography, the camera suite included HRB and RMK type cameras. For oblique photography, Type K-38 and KA-1 cameras fitted with telephoto lenses. Flying at 20,000 feet the oblique cameras could capture imagery at a considerable range. In addition, a type AA-3500 IR scanner could be used to capture IR imagery.

From a historical perspective, the Type 6 Observation/Transport aircraft could be seen as the principal equipment in aerial photography in 605 Squadron owing to the loan from the Military Mapping Department of quite dated equipment. This created problems with repairs and spare parts. Coupled with wasteful flying and high levels of maintenance, the mission of mapping and aerial survey which actually occurred was hindered by the loaned equipment from the Military mapping Department. The equipment was simply incapable of doing the task. The necessity of the mission required a change and the Type 6 Observation/Transport aircraft were used. The Type 6 Observation/Transport aircraft was intended for tactical aerial reconnaissance work for the RTAF. Although 605 Squadron received the Type 12 Observation/Transport aircraft (Learjet 35A) in 1988, and this aircraft had greater capabilities than the Type 6 aircraft, it was primarily used in the tactical reconnaissance role. This was different to the Type 6 aircraft which had a range of duties – taking aerial photographs for aerial survey, mapping, and tactical reconnaissance which missions had previously been very common.

In 1999, there was a change in aviation strength, with 605 Squadron being taken off the order of battle (ORBAT) and the Type 6 Observation/Transport aircraft, Type 7 Observation/Transport (Arava) aircraft and Type 12 Observation/Transport (Learjet 35A) being allocated to 402 Squadron of Wing 4 in Takhli in place of the Type 15 Training (SF. 260 Marchetti) aircraft which was taken out of service. (The Type 9 Observation/Transport aircraft (Nomad) were returned to 461 Squadron of 46 Group in Phitsanulok.) However, only two Type 6 Observation/Transport aircraft made the move as the third aircraft was no longer airworthy with engine problems and the RTAF had declared that the Type 6 aircraft would be taken out of service in 2001. However as there was an extant operational level requirement, the aircraft would remain in service for an extended period. So 60501 was identified as a spare parts source for the two other aircraft: 40202 (OT 6-2/22) and 40203 (OT 6-3/22).

Finally, in 2003 the order was issued to cease operations of the Type 6 Observation/Transport aircraft as a result of maintenance problems especially an on-going concern with engines. This was considered very important as it endangered the safety of those aircrew operating the Type 6 Observation/Transport aircraft. This was because of the design characteristics in that the fuselage was very long but the wingspan was quite short. An inflight

engine problem might not be able to be resolved quickly enough and a violent accident might result.

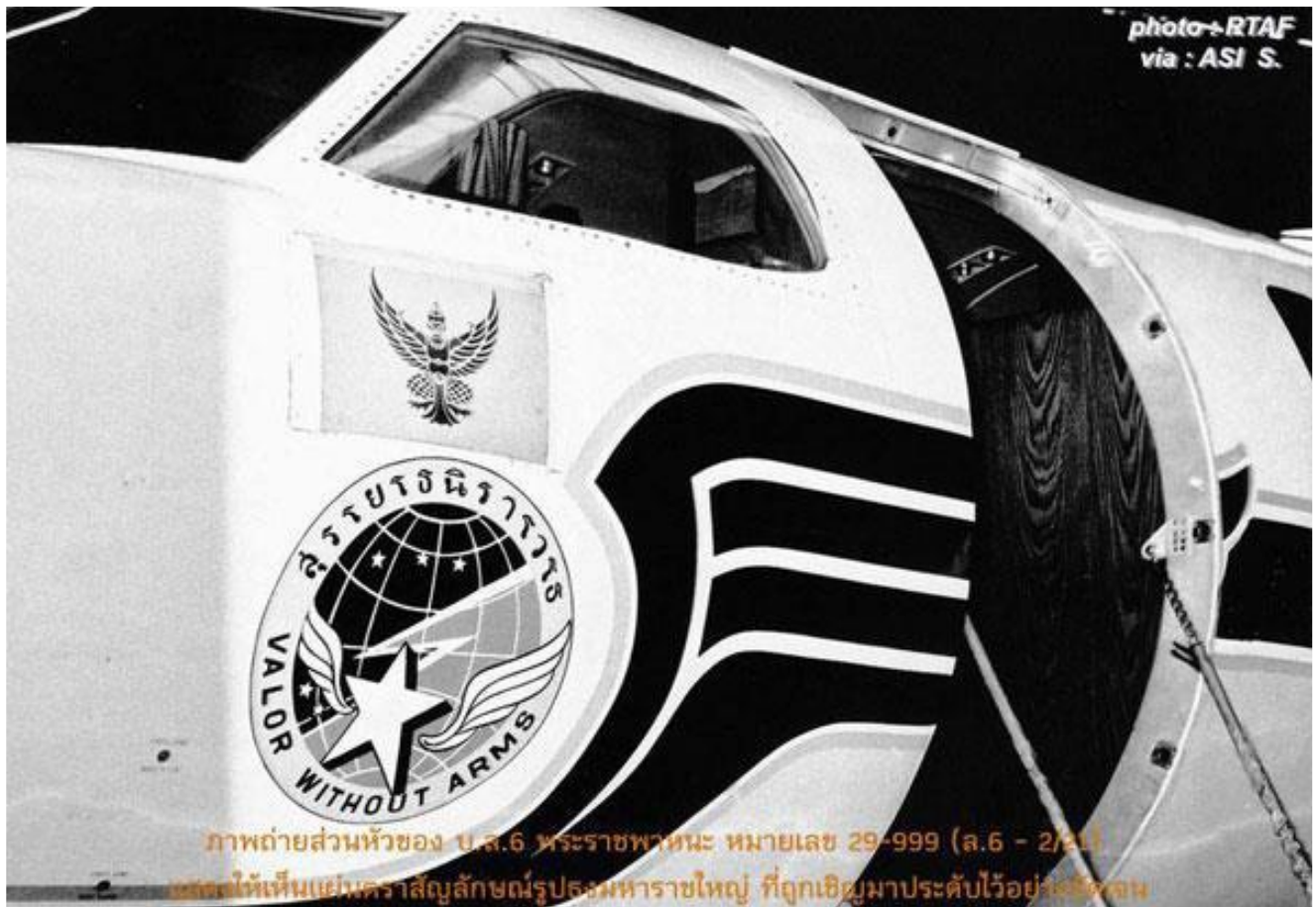
So that is the abridged story of the Merlin IV A aircraft in Royal Thai Air Force service. It served as a short-haul Royal Transport, and as a photographic reconnaissance aircraft. Although one aircraft was kept it is not displayed in the RTAF Museum so not many people know of its service or important missions in the past. It served the nation well, regardless of the fact that it left service many years ago.

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by Tony Rigby



Type 6 Transport aircraft 21-111 as a Royal Transport. This aircraft had a very short life in the RTAF.



Detail photo of the nose of a Type 6 Transport aircraft 29-999 showing the symbol designating that it is on Government business. This symbol was bestowed by His Majesty the King.



Acceptance Ceremony of the Type 6 Observation / Transport aircraft on 17 October 1980.



Merlin IV A or Type 6 Observation / Transport aircraft which arrived in Thailand at the end of 1979.



Type 6 Observation / Transport aircraft 60502 of 605 Squadron while preparing to take off.