

# Air America in Laos III – in combat

by Dr. Joe F. Leeker

Last updated on 23 August 2010.

When, in May 1987, during the unveiling of the Air America Memorial at UTD's McDermott Library at Richardson former CIA director William Colby said that Air America aircraft were not combat aircraft, but transport aircraft, that was only true for most of Air America's flights. But in at least three programs Air America crews flew or were to fly combat aircraft in Laos: B-26s in Projects *Mill Pond* and *Black Watch* in 1961 and T-28s as A-Team pilots for the *Tango program*. Already in July 1955, 2 C-47s chartered from CAT had participated in the first post-ceasefire combat jump flown by C-47s of the ANL (*Armée Nationale Laotienne* or Lao National Army), when the aircraft dropped the ANL's airborne battalion, the Seno-based *1<sup>er</sup> Bataillon de Parachutistes*, over the garrison of Moung Peun beleaguered by Pathet Lao forces.<sup>1</sup> Then there was another absolutely unofficial use of Air America transport aircraft as bombers dropping "Hot soup". Finally many Air America aircraft flew combat support missions that brought them very close to the actual fighting: This was true for many missions flown by Air America's helicopters, that is by the UH-34Ds assigned to the *Madraver*-contract and later especially for the Bells and S-58Ts assigned to the AID-439-713 contract; these helicopters were often used in missions that used the "Leapfrog technique", transporting small groups of soldiers from one point of a battlefield to another. Other helicopters like the Chinooks would carry big guns to their actual positions. Other combat support flights made by Air America aircraft were Forward Air Controller missions (*Butterflies*) made before the arrival of the *Ravens*, and especially during the later years of the war, dropping paratroopers from aircraft like the Twin Otters assigned to contract AID-439-713.

## Laos 1961: Project *Mill Pond*:

As the Soviet Union made no attempt to conceal its airlift of arms and ammunition to Kong Le, US President Eisenhower approved an expanded program of CIA responses. Reportedly, already in December 1960, the CIA secretly flew four black B-26s, probably left over from Operation *Haik*, from CEECO stocks at Tainan to Takhli und placed them under Major Aderholt's command.<sup>2</sup> But probably, only 2 B-26s were ferried to Takhli at that time. On 7 January 61, 2 more B-26s were ordered to Takhli, but had not yet arrived by early March 61.<sup>3</sup> "On March 21 [1961], Jenny, Beale, Sutphin, and Barnes ferried heavily armed B-26s to Takhli"<sup>4</sup> – probably the remaining 2 black B-26s. Originally, the aircraft were to be used for air strikes against the center of Pathet Lao support at Vang Vieng, but although Detachment 2 had the bombers ready to go, all air strikes were called off. Then, the target was to become the Plain of Jars. The loss of the critical junction of Routes 7 and 13 at Sala Phou Khoun in early March 1961 had several consequences: The US Government felt it might be necessary to defend the neutral and independent Laos, and so on 9 March 61, President Kennedy approved plans for a major B-26 strike against the Plain of Jars,<sup>5</sup> as the only Laotian combat aircraft at

---

<sup>1</sup> Conboy / Morrison, *Shadow war*, p.16.

<sup>2</sup> Conboy / Morrison, *Shadow war*, p. 45.

<sup>3</sup> Conboy / Morrison, *Shadow war*, pp. 48 + 52.

<sup>4</sup> Interview with Thomas G. Jenny, conducted by Prof. William Leary at Atlanta, GA on 24 May 1988, written resume, at: UTD/Leary/I B13F7. This is not evident from Tom Jenny's log book, which notes only 2 B-26s ("6797" and "8264") test flown at Tainan for one hour each (Tom Jenny kindly sent photocopies of his log book to the author on 22 October 2004). Probably he was not allowed to log the ferry flight.

<sup>5</sup> Conboy / Morrison, *Shadow war*, p. 51.

that time were four armed T-6s received from the Royal Thai Air Force in early January 61.<sup>6</sup>



RLAF T-6 Texans at Luang Prabang in 1962  
(UTD/Leary/I B27F8, photo no. 1WL1-27-8-PC90)

Major Aderholt was charged to work out the requirements of such a task force for an attack to



The *Mill Pond* fleet, taken at Takhli by B.G. H. Aderholt in 1961  
(photo no. 1-WL1-28-23-PB369, preserved at UTD/Leary/I B28F23)

be carried out on 17 April 61, within hours of the Cuban invasion.<sup>7</sup> On 19 March 61, a vast mobilization of US forces in the Pacific was ordered, and on 29 March, the Joint Chiefs of Staff approved a multinational contingency force for Laos. So, in March and April 61, a total of 18 USAF pilots,<sup>8</sup> all volunteers, were discharged from the USAF, given civilian clothes and fake identification, and flown to Takhli, Thailand, home of Project *Mill Pond*, where they were given Royal Laotian Air Force commissions. One of them, Ronald L. Allaire, describes his experience as follows: “I was sent to a hotel in Washington, D.C. where I took a battery of tests [...] Afterwards I was sent to the Pentagon to be interviewed by a small number of

---

<sup>6</sup> The Joint US Military Assistance Group (JUSMAG) at Thailand had offered the Royal Thai Government five T-37s in exchange for Thai-owned T-6s to be transferred to US control and then given to Laos. On 3 January 61, four Lao pilots arrived at Kokethiem, Thailand, and after some days of training, the Lao, including detachment leader Major Thao Ma, on 9 January 61 ferried the 4 T-6s to Savannakhet and then to Vientiane on 10 January for their first mission. By early February 61, the RLAF had received 8 T-6s, but not enough pilots, so that 4 Thai volunteer pilots were selected from the RThAF's 63<sup>rd</sup> Squadron of Don Muang. One T-6 was shot down over Sala Phou Khoun on 17 January 61, one T-6 crashed during a training flight on 11 January, two T-6s collided in midair during operations near Tha Thom on 12 January 61, and one T-6 received ground fire and crash-landed near Tha Thom on 31 March 61 (Conboy / Morrison, *Shadow war*, p. 46, note 52, p. 48, and pp. 50/1).

<sup>7</sup> This chapter is mainly based on the excellent description contained in: Hagedorn / Hellström, *Foreign Invaders*, pp. 132-36; Trest, *Air Commando One*, p.110.

<sup>8</sup> Ronald L. Allaire, Wilson S. Decker, Claude W. Gilliam, Chester Golka, Guy W. Grosse, Richard T. Hardy, William J. Healey, J. William Ingeman Jr., Clarence T. May, Robert A. Maiden, Matt O'Hare, Howard L. Naslund, Earnest C. Parker, Gary C. Prickett, John R. Rowland, Arthur D. Smith, Harold T. Stubbs, and James E. Wright (Letter dated 25 Sept.1990, written by R. L. Allaire to William M. Leary, preserved at: UTD/Leary/ I B5F3).

psychologists. [...] On March 24, 1961 I was reassigned from Griffiss AFB to the Central Control Group, Headquarters USAF, Washington, D.C. with 6 days TDY enroute at Eglin AFB, Florida. [...] One of the Flight Test birds flew me down to Eglin. In a few days I met some of the other pilots involved when we went to Duke Field to get recurrent in the B-26 (now called the A-26). I flew two, day VFR, transition missions on the 29<sup>th</sup> of March and two, hot armament sorties on the 30<sup>th</sup> of March. [...] The type airplane shown on the [...] flight record had to be shown as T-29 for B-26 sorties and as L-20 for Helio Courier (U-10) flights. And Base was shown as Andrews AFB, Washington, D.C. [...] I flew back to Washington and on 31 March 1961 was discharged from the USAF, given a first-class ticket on Pan American Flight 2 to Bangkok, Thailand. [...] There we were put on a USAF C-130 and flown to Takhli Royal Thai Air Force Base, which was about 90 miles north of Bangkok. We were briefed that we would meet a Major “Heinie” Aderholt who would be in charge of our mission.”<sup>9</sup> These pilots were to fly additional B-26s and to augment the detachment’s ground crews at Takhli, while the Air America pilots – Truman Barnes, William H. Beale Jr., Tom Jenny, and Ron Sutphin<sup>10</sup> – were to fly the original four B-26s. But none of the USAF pilots that arrived at Takhli for Project *Mill Pond* had ever flown a B-26, so that the first thing Major Aderholt had to do was to look for a bombing range in the Gulf of Siam.<sup>11</sup> Compared to the situation of one year earlier, the facilities at Takhli had been extended, as Navy Seabees had built barracks with open bays and a small mess hall – facilities that occupants soon called the “Ranch”. So, in the second week of April 61, twelve more B-26s and two RB-26Cs were



A black CIA B-26B of project *Mill Pond*, probably in April 1961  
(photo kindly supplied by Leif Hellström, published with kind permission from Gen. H.C. Aderholt)

flown in from Okinawa.<sup>12</sup> They had been removed from the USAF inventory, most of them

---

<sup>9</sup> Letter dated 25 Sept.1990, written by R. L. Allaire to William M. Leary, preserved at: UTD/Leary/ I B5F3.

<sup>10</sup> Interview with Tom Jenny, dated 1 June 2006.

<sup>11</sup> Trest, *Air Commando One*, p.112.

<sup>12</sup> Ronald L. Allaire recalls: “On the 5<sup>th</sup> of April 1961 Heinie checked me out in the Helio Courier. Then we were flown to Kadena AFB, Okinawa in an Air Force plane. After staying overnight, we flew several B-26s back to Takhli, two pilots per airplane, on April 11, 1961. Our route was over the Pacific Ocean most of the way, east of Taiwan, north of the Philippines, then almost straight west over South Vietnam, Laos, and Thailand. The flight

coming from storage at Davis-Monthan AFB. All B-26s coming from Okinawa were natural metal and devoid of any markings or serials, while the four aircraft coming from Tainan were painted overall black. The additional B-26s arrived at Takhli from 11 April 61 onwards, and while awaiting the order to conduct air strikes, *Mill Pond* operations were limited to reconnaissance missions flying the RB-26Cs.<sup>13</sup> The USAF pilots flew 4 missions near the Plain to familiarize themselves with the area, and then the mixed USAF-Air America fleet began low-level practice flights in cells of 4 aircraft each.<sup>14</sup> On the program, there were also one Helio Courier, believed to be Major Aderholt's "555",<sup>15</sup> used for liaison flights to Vientiane, Bangkok and Udorn: "Most of the Courier flights were between Takhli and Bangkok to pick up the mail and to take pilots down for Rest and Relaxation. I flew to Vientiane, Laos and Udorn, Thailand to deliver people and messages for Heinie."<sup>16</sup> And there were also four "sanitized" C-130As to be used for an invasion of the Plain of Jars. On 16 April 61, all B-26s were loaded with bombs and rockets, and the pilots were given papers identifying them as officers of the Royal Laotian Air Force. Plans to hang napalm canisters on



*Mill Pond* RB-26C "236" taken at Takhli in 1961 by B.G. H. Aderholt  
(photo no. 1-WL1-28-23-PB368, at UTD/Leary/I B28F23)

the wings were dropped at the insistence of Ambassador Brown in Vientiane. Four simultaneous strikes against key targets were planned, each one performed by a group of four aircraft led by an Air America pilot. The planned primary mission of *Mill Pond* was a dawn attack on the airport of Xieng Khouang, with orders for eight B-26s to crater the runway and to destroy aircraft on the ground, while the other 8 B-26s were to attack the Pathet Lao concentrations in the Ban Ban valley and on the southern flank of the Plain of Jars. The following day, on 17 April 61 in the very early morning, the pilots were told by Major Aderholt that Washington had cancelled the strike because of the disaster in the Bay of Pigs in Cuba.<sup>17</sup> All *Mill Pond* aircraft remained on standby at Takhli until August 61: The four "sanitized" C-130s<sup>18</sup> were used to ferry two volunteer Thai artillery batteries to Seno (L-46),

---

took eight hours and thirty minutes, with bomb bay tanks. We maintained complete radio silence all the way." (Letter dated 25 Sept.1990, written by R. L. Allaire to William M. Leary, preserved at: UTD/Leary/ I B5F3).

<sup>13</sup> Trest, *Air Commando One*, pp.109-10, 113.

<sup>14</sup> Conboy / Morrison, *Shadow war*, pp. 52 plus 56, note 29.

<sup>15</sup> "555" was Aderholt's Helio (see William A. "Al" White, interview with William M. Leary, 7-16 February 1988, written version, preserved at UTD/Leary I B14F6).

<sup>16</sup> Letter dated 25 Sept.1990, written by R. L. Allaire to William M. Leary, preserved at: UTD/Leary/ I B5F3.

<sup>17</sup> Trest, *Air Commando One*, pp.114-15.

<sup>18</sup> On 26 August 1960, four C-130As of the 21<sup>st</sup> TCS were transferred to a special detachment within the 21<sup>st</sup> TCS, which is marked "SF" in the official USAF assignment records, preserved at the AFHRA at Maxwell AFB,

Laos, in late April 61, to help repel the Pathet Lao advance, and to carry military supplies for the Royal Lao Army (FAL) to Vientiane,<sup>19</sup> while the two RB-26Cs,<sup>20</sup> were used on reconnaissance missions over Laos since late April 61, especially over the Ho Chi Minh Trail. Some reconnaissance missions had previously been flown by USAF C-47s since late 60, until a specially modified SC-47B dubbed *Rose Bowl*, 44-76330 of the 315<sup>th</sup> Air Division, was shot down over Laos on 23 March 61,<sup>21</sup> and then since 24 April 61 by an unmarked RT-33A based at Udorn (Project *Field Goal*).<sup>22</sup> By early May 1961, in spite of increased US aid and advice to Phoumi Nosavan's forces, the Pathet Lao, then strongly supported by an extensive Soviet airlift operating from North Vietnamese bases, controlled half of Laos. But instead of armed interventions, in May 1961, the US administration of President Kennedy agreed to a cease-fire between the two factions. After the cease-fire announced in May 61, both the *Mill Pond* and the *Field Goal* reconnaissance missions were discontinued, but the B-26s and their crews remained at Takhli until August 61, when they were ordered by an upset US Ambassador to Thailand to leave the country immediately. The B-26s were flown to Okinawa, although three or four of them probably went to the Air Asia stocks at Tainan.<sup>23</sup> Project *Mill Pond* was the last air strike project directed by the CIA, as in July 61, the responsibility for this type of operations passed to the Department of Defense.<sup>24</sup>

### **Laos 1961: Project *Black Watch*:**

The negotiations in Geneva that had started in May 61, were still going on, but the US government suspected that North Vietnam nevertheless continued to deliver troops and military equipment to Laos. So on 4 October 61, the RT-33 flights were resumed, and a little bit later, two RB-26Cs ("236" and "745") still based at Takhli flew photo reconnaissance missions on a demand basis. This project was called *Black Watch*, commanded by Major Aderholt and flown exclusively by Air America pilots, among whom William Beale, Ed Eckholdt, Fred Riley and Al White. White went on the B-26 photo recon project in October 1961. He began training with Beale at Takhli on 4 October, with additional training flights on

---

AL. These were most probably the four C-130As that moved to Takhli (T-05) for CIA scheduling in April 61 (Bowers, *The USAF in South-East Asia*, p.441). They were: 56-490, which was transferred to the control of the 4440<sup>th</sup> Aircraft Delivery Group, Langley AFB, Virginia, on 21 August 61; 56-491, which was transferred to the control of the 4440<sup>th</sup> Aircraft Delivery Group, Langley AFB, Virginia, on 21 August 61; 56-493, which was transferred to the control of the 4440<sup>th</sup> Aircraft Delivery Group, Langley AFB, Virginia, on 2 November 61; and 56-497, which was transferred to the control of the 4440<sup>th</sup> Aircraft Delivery Group, Langley AFB, Virginia, on 9 November 61.

<sup>19</sup> The USAF C-130 supply flights were named *Hotshot* and began on 26 April 61, and by 27 April, they had brought in 170 tons of military equipment (Conboy / Morrison, *Shadow war*, p. 55 note 26).

<sup>20</sup> These missions were apparently flown by USAF pilots: On or around 1 May 61, USAF pilots Ronald L. Allaire and Claude W. Gilliam were shot at over the town of Nape; although the left horizontal stabilizer and elevator were damaged, the aircraft was able to return to Takhli (Castle, *At war*, p.35). See also the letter dated 25 Sept. 1990, written by R. L. Allaire to William M. Leary, preserved at: UTD/Leary/ I B5F3.

<sup>21</sup> C-47 44-76330 had taken off from Vientiane and was on a flight to Saigon across the Plain of Jars, where it was intended to gather radio intelligence from several Soviet-built airstrips in the Xieng Khouang Ville area. On 23 March 61, it was shot down about 4 miles southwest of Phan Savan airfield. Major Lawrence R. Bailey parachuted to the ground, where he was captured and spent 17 months as a Prisoner of War at the Pathet Lao headquarters in Sam Neua province, until he was released on 15 August 62; the remaining crew of 7 was killed in the crash (Hobson, *Vietnam air losses*, p.5; Castle, *At war*, p.33).

<sup>22</sup> The RT-33 was borrowed from the Philippine Air Force (Castle, *At war*, p.33).

<sup>23</sup> Ronald L. Allaire recalls: "We ferried the B-26s out of Thailand starting on August 5, 1961. Howard Naslund and I flew one of them to Tainan, Taiwan and turned it over to CAT. This was a six hour and ten minute flight. [...] On August 15, 1961 Bill Healey and I flew one of the birds back to Kadena AFB, Okinawa, and eight hour and fifty minute flight. We went right back to Thailand and on August 18, 1961 Matt O'Hare and I flew the last B-26 (I believe) from Thailand to Okinawa in eight hours and 5 minutes" (Letter dated 25 Sept. 1990, written by R. L. Allaire to William M. Leary, preserved at: UTD/Leary/ I B5F3).

<sup>24</sup> Hagedorn/ Hellström, *Foreign Invaders*, pp.132-36

6, 8, and 9, making a total of about 27 hours. His first operational flight as observer was on 10 October 61, with Beale as pilot. White flew again with Beale on the 11<sup>th</sup> and 12<sup>th</sup>, after which Beale left the program. So White then took over as pilot, with Fred Riley and Ed Eckholdt as observers. Al White also had a role in selecting equipment for the aircraft. The B-26 had two 12-inch split vertical cameras in the belly. White asked Aderholt for a 36-inch dicing camera; this quickly appeared, and White had it installed in the nose at a slight down-angle. This camera gave a 9 x 12 blow up with excellent detail. White then asked for and obtained from Aderholt a voice recorder that was synchronized with the cameras so that the observer could make comments during the photo runs. Together with USAF Major Watson, White worked out the intervalometer setting for the B-26's speed in order to provide 60 percent overlap for the 12-inch split vertical cameras, which could identify troops at 12-14,000 feet; the 60 percent overlap was optimum for photo interpretation.<sup>25</sup> Some missions were high-level mosaic work, others involved oblique photography, flying down roads to get pictures of troop movements, equipment, and supplies that were coming down into South Vietnam.<sup>26</sup> The pilots carried T-shirts, cutoffs, combat boots, .357 Magnums, and some gold coins in a plastic bag, but they carried no identification. After Beale had left the program, White flew some recon missions with Fred Riley, that is on 14, 16, 20, 26, 30 and 31 October 61.<sup>27</sup> Others were flown with Ed Eckholdt as observer: So, on 18 October 61, Al White and Ed Eckholdt flew RB-26C "745" in a reconnaissance mission to Saravane. Ed Eckholdt refers to these RB-26Cs as being CEECO aircraft.<sup>28</sup> On 22 and 24 October 61, they flew "236" on similar missions to Tchepone, but on 28 October they had to abort the mission because of technical problems and flew "236" to Udorn for repairs; on 29 October 61, they returned to Takhli. On 1 November 61, they flew another recon mission to Tchepone in "236". But the following day, on 2 November 61, "236", again flown by Ed Eckholdt and Al White, was hit by 40 mm anti-aircraft gun fire in the Nape Mahaxoy Lak Sao area<sup>29</sup> west of the Mu Gia Pass, but returned safely at Udorn. Eight days later, the reconnaissance flights over Laos were taken over by four USAF RF-101s based at Bangkok (Project *Able Mable*). The RB-26Cs were still flying missions over Laos in December 61 or even later – on 2 December 61, Ed Eckholdt and Al White flew RB-26C "745" again on a 4.25 hours reconnaissance mission out of Takhli into Laos, including the Nape area<sup>30</sup> – and in early 1962, Al White was asked to test hop a B-26 at Takhli: White accepted, but then made a belly landing at Takhli.<sup>31</sup> In May 62, both aircraft were returned to the USAF as 44-35585 and 44-35813 and became part of Project *Farm Gate* – the use of USAF B-26s, T-28s and SC-47s in the colors of the South Vietnamese Air Force from 1961 to 1963.<sup>32</sup> The *Farm Gate* detachment had been sent to Vietnam primarily to train the South Vietnamese Air Force in special air operations and to support the Green Berets, but in reality, they flew psywar and resupply missions, and the combat role had even primacy.<sup>33</sup>

---

<sup>25</sup> William A. "Al" White, interview with William M. Leary, 7-16 February 1988, written version, preserved at UTD/Leary I B14F6.

<sup>26</sup> Ed Eckholdt, interview made by William M. Leary on 24 September 1987; the notes of Prof. Leary are preserved at UTD/Leary/ I B6F11.

<sup>27</sup> William A. "Al" White, interview with William M. Leary, 7-16 February 1988, written version, preserved at UTD/Leary I B14F6.

<sup>28</sup> Log book of Ed Eckholdt, in: UTD/Leary/ I B6F12; see the entry that notes his first flight in a B-26 for 18 November 61 in his list "Types flown – date".

<sup>29</sup> Log book of Ed Eckholdt, in: UTD/Leary/ I B6F12. Flak chewed up an engine, part of the nose, destroyed the radio rack, and chewed up the armor plating under White's seat (William A. "Al" White, interview with William M. Leary, 7-16 February 1988, written version, preserved at UTD/Leary I B14F6).

<sup>30</sup> Log book of Ed Eckholdt, in: UTD/Leary/ I B6F12.

<sup>31</sup> William A. "Al" White, interview with William M. Leary, 7-16 February 1988, written version, preserved at UTD/Leary I B14F6.

<sup>32</sup> See Hagedorn/Hellström, *Foreign Invaders*, pp.135/6, and for Project *Farm Gate*: ib., pp.137-47.

<sup>33</sup> Trest, *Air Commando One*, p.123.

### **Increasing pressure from the left and from the right**

In spite of increased US aid and advice to Phoumi Nosavan's forces, however, the Pathet Lao, then strongly supported by an extensive Soviet airlift operating from North Vietnamese bases, gained terrain, as North Vietnamese and Pathet Lao military activities had continued throughout the early months of 1961. By April 1961, a substantial portion of southern Laos, including the cities of "Muang Phin" (= Muang Phine / LS-300) and "Xepon" (= Tchepone / L-38), had been conquered by the Communists. In order to stop the Communist advance, the PEO planned an airmobile assault that was to take a stretch of Route 13 north of Moung Kassy and then await reinforcements. So, on 5 April 61, after part of the airborne force had been flown there by RLAFC C-47s and parachuted 16 kilometers northeast Moung Kassy, the remaining troops were flown there by Air America UH-34Ds. Although this heliborne infiltration went smoothly, H-Q, one of Air America's UH-34Ds, was lost on that occasion, when a deployed parachute became entangled in the rotor blades, resulting in substantial damage to the aircraft, which made an emergency landing in an insecure area; on 6 April 61, Air America's helicopter H-Q was abandoned on customer's advice.<sup>34</sup> Also during that period, the airfield at Tchepone (L-38) was rebuilt by North Vietnamese forces,<sup>35</sup> and by early May 61, the Communists controlled half of Laos. That month, however, not only marked the beginning of the Geneva Conference that first met in May 1961 and where everybody agreed to a neutral Laos, although there was a strong disagreement as to the means by which it should be assured, but also produced the first casualties among Air America helicopter pilots, when Walter L. Wizbowski and Charles H. Mateer died in a landing accident of UH-34D H-G at Pa Doung (LS-05) on 30 May 61, while trying to land supplies to the Hmong forces.<sup>36</sup>

In spite of this support by Air America, Vang Pao was driven from Pa Doung and moved his headquarters to Pha Khao (LS-14) in June 1961, marking the beginning of a pattern of the war that was to repeat itself over the years: a continuous migration of Hmong troops and non-combat Hmong from one place to another. At that time, more than 9,000 Hmong had been equipped for guerrilla operations within a year. They blew up bridges and supply dumps or shot at Neutralist or Pathet Lao troops on the Plain of Jars.

However not only the Pathet Lao threatened the neutrality of Laos, but also the rightist military: So, when in February 62, the rightists had gone on raising obstacles, the United States withdrew most of its aid from the Vientiane government. In rare cases, mutiny inside the Royal Laotian troops resulted even in "converting" Air America's transport helicopters into gunships: When in early February 1962, a Royal Lao Army company commanded by Lt. Hongsee Thong entered the camp at Xieng Lom and immediately placed the White Star team working there (FTT 2) and Major Khuang, the commander of battalion BV 17 that was being trained in the camp, under arrest, back at Luang Prabang, Major Patrick Marr, the commander of the White Star teams working on that area, assembled 12 Special Forces members for a rescue mission. Then 3 Air America UH-34Ds got machine guns sandbagged at the doors. The assault force entered 2 of the helicopters, while the White Star commander and the Royal Lao Army commander for northern Laos went aboard the third UH-34D. After offloading the 2 commanding officers on a hill behind the White Star compound at Xieng Lom, the 3 helicopters orbited over the town, guns plainly visible in the doorways. But the 2 commanding officers managed to end the confrontation without bloodshed, released the imprisoned team, and all flew out in a waiting helicopter.<sup>37</sup> Nevertheless, North Vietnamese

---

<sup>34</sup> Aircraft list of June 62, corrected to Sept. 1963, in: UTD/Kirkpatrick/B1F1; Aircraft destroyed or lost, in: UTD/CIA/B49F2; Aircraft accidents 1961, in: UTD/CIA/B49F2; for the historical background see Conboy / Morrison, *Shadow war*, p.53.

<sup>35</sup> Toperczer, *Air war over North Vietnam*, p.7.

<sup>36</sup> List "Operational casualties in SEA" (in: UTD/CIA/B29F1); Memorial file (in: UTD/LaShomb/B16F3); Leary, *CIA Air Operations in Laos*, p.58.

<sup>37</sup> Conboy / Morrison, *Shadow war*, pp.69/70.

support to the Pathet Lao continued all the time: During the spring of 1962, the 919<sup>th</sup> ATR of the North Vietnamese AF supported military activities around Louang Nam Tha (L-100) in northern Laos. Na San and Dien Bien in northern North Vietnam and Vinh in southern North Vietnam were used as operational bases. An-2s, Li-2s and Il-14s flew troops and supplies into northern Laos throughout 1962. Some Mi-4 helicopters were based at Moung Sai (L-27) in 1962 for use by the military commanders.<sup>38</sup> The withdrawal of US aid meant that, when Communist forces began to besiege Nam Tha (L-100) in March 62 and attacked Royal forces at Houei Sai (LS-284) in May 62, they could not sustain the assaults without US supplies. So, General Nosavan and Prince Boun Oum capitulated and in early June agreed to a coalition with Souvanna Phouma that was supposed to content all political sides and to assure a political balance in Laos.<sup>39</sup> A new coalition government was installed by the king on 24 June 1962, thus allowing the Geneva Conference to sign an Agreement on 23 July 1962 that conceded great parts of the territory of Laos to the Pathet Lao and guaranteed the neutrality of the entire Kingdom of Laos. All foreign troops and paramilitary personnel had to leave within 75 days and stay out of Laos. An International Control Commission (CIC) made up by Indians, Poles, and Canadians was established to supervise the observance to be paid to the agreement, and the Sikorsky UH-34Ds used by the CIC members were furnished and serviced by Air America, but mostly flown by French pilots.

## **The 1962-68 period**

### **Air America in combat**

#### **Supporting the “Secret War” on the ground**

As Hanoi continued to send more troops into Laos in spite of the Geneva Agreements, the United States tried to counter the Communist expansion by beefing up the military of the Lao government. Since 1963, the Royal Laotian armed forces, totaling some 60,000 men, were equipped by the United States with everything from helmets to boots, from rifles to jeeps, from maps to airplanes. Former US Special Forces, the “Green Berets”, highly experienced in jungle warfare, were hired by the CIA to lead Lao guerrillas deep into enemy-held areas. The US gave advice to Laotian forces through military attachés assigned to the US Embassy, the extent of which was kept secret by US and Lao officials. The man in charge of all US military activities in Laos was the US Ambassador, who, for his part, delegated responsibility for the tactical conduct of the war to his CIA station chiefs – James W. Lair and, since 1968, Lloyd (“Pat”) Landry. Their headquarters were on the Royal Thai Air Force Base at Udorn, adjacent to the Air America parking ramp. This was possible due to their excellent rapport with the commanding officer at Udorn, General Vitoon Yasawatdi, who, for his part, had direct, private access to both the Lao and Thai prime ministers.<sup>40</sup> As to the Hmong army, US President Kennedy authorized the CIA to increase its number, and by the end of 1963, some 20,000 of them were armed. The new base of General Vang Pao’s Hmong troops was Long Tieng (LS-98, later to become known as LS-20A or just “The Alternate”), which had been built in 1962 to support military activities in the northeast. Situated about 6 miles south of Sam Thong (LS-20) by straight line, but 15 miles by mountain road, Long Tieng became the busiest US (CIA) base in Laos and the headquarters of General Vang Pao, for whose army it provided logistic and communications facilities. It was situated in an area that was considered to be secure and only some minutes of flight away from the battlefields of the Plain of Jars. And what had been “an abandoned opium poppy field in a bowl-like declivity high in the

---

<sup>38</sup> Toperczer, *Air war over North Vietnam*, p.7.

<sup>39</sup> Kirk, *Wider war*, pp.207/8.

<sup>40</sup> Leary, *CIA Air operations*, p.61.

mountains” in 1962, became the second largest city in Laos in 1970, “bigger than the royal capital of Luang Prabang and almost as large as the political capital of Vientiane”.<sup>41</sup>

Of course, this military expansion also signified more work for Air America. And more work does not only mean more military supplies, more fuel, and more food to be flown into Laos to maintain the troops on the ground, but also combat flying, that is supporting small units besieged by enemy forces, moving Vang Pao’s soldiers from one place to another, picking up wounded, and evacuating places that risked to be overrun. Much of the combat flying was done by Air America’s UH-34Ds, which were all based at Udorn, but which all worked in upcountry Laos under the provisions of contract AF62(531)-1674, then AF62(531)-1758, and later AF62(531)-1841, that is of the *Madrivier*-contract, which, as has been shown in the files *Air America in Laos II – military aid* of this database, covered flying services in the interest of National Defense. These helicopters mostly moved troops of *L’Armée Clandestine*, that is of General Vang Pao’s irregular forces, which was trained by several CIA specialists, several Green Berets and about 100 Thai PARU officers. Most of Vang Pao’s irregulars formed local defense units, also called *Auto Défense de Choc* (ADC)<sup>42</sup> or *Auto Défense Ordinaire* (ADO)<sup>43</sup> forces,<sup>44</sup> but ten thousand were formed into *Special Guerilla Units* (SGUs).<sup>45</sup> The SGU was a battalion made up of three line companies and a HQ unit, armed with bazooka and mortars, and later 75mm and 105mm howitzers, which moved from hilltop to hilltop by Air America helicopters.<sup>46</sup> These SGUs were a sort of strike force that reported to Vang Pao and were used for major offensive and defensive purposes. But although the SGUs made up of Hmong warriors are perhaps the most famous Special Guerilla Units in the meantime, the Hmong were far from being the only tribesmen who fought as SGUs in Laos: “The SGU was composed of many ethnic groups, including ethnic lowland Lao. In the NE, VP’s turf, the SGU was Hmong, Lao Thueng, and Lao, for the most part. In central Laos is was mostly Lao. In the south, Lao and some odds and ends of ethnics. In the NW, out of Luang Prabang, it was Lao Thueng and some Hmong. Further west to 118A it was mostly Lao Thueng and Yao/IuMien, with other smaller ethnics.”<sup>47</sup>

However, the overall strategy was the same in the whole country of Laos: During the rainy seasons the SGUs were often transported by Air America UH-34Ds into areas controlled by the Communists, where they could harass enemy positions and supply lines.<sup>48</sup> This type of flying was very dangerous, and many times, Air America’s helicopters were hit by ground fire, and some Air America helicopters were even destroyed during such flights – for example UH-34D H-42, which was hit by gunfire while landing troops northeast of Bouam Long (LS-32), Laos, in the Moung Hiem (LS-48A) area on 19 May 66. In this accident, the pilot, Captain John W. Wilmot Jr., and 8 passengers were killed, while Flight Mechanic Matthew Luca was severely burnt, but escaped together with 2 passengers; the aircraft was destroyed

---

<sup>41</sup> Don Schanche, quoted by Kirk, *Wider war*, pp.234/5.

<sup>42</sup> The ADC units received some training and weapons and salaries of 1,000 to 2,000 kip – \$2 to \$3 – per month; they were organized by zones and paid by the Royal Lao Government; they were full-time defenders (Conboy / Morrison, *Shadow war*, p. 23; Hamilton-Merritt, *Tragic mountains*, p.177).

<sup>43</sup> The ADO units were not trained or salaried, but were provided with weapons and ammunition for village defense; they were part-time village defenders (Conboy / Morrison, *Shadow war*, p. 23; Hamilton-Merritt, *Tragic mountains*, p.177).

<sup>44</sup> Actually, the concept of AD corps had already been introduced in 1955, then was disbanded by 1958, and finally resurrected in mid-1959 as an ambitious countrywide village defense network (Conboy / Morrison, *Shadow war*, p. 23).

<sup>45</sup> The SGUs were funded directly by US government appropriated funds, probably at ten US cents a day per man. They were paid by CIA advisors (Hamilton-Merritt, *Tragic mountains*, p.177) and were directly under Vang Pao’s headquarters (Castle, *At war*, p.80).

<sup>46</sup> Castle, *At war*, p.165 note 14, quoting D. Blaufarb; Robbins, *Ravens*, p.108.

<sup>47</sup> E-mail dated 15 November 2005, kindly sent to the author by MacAlan Thompson.

<sup>48</sup> Castle, *At war*, p.80.

by fire. H-42 had been one of 7 Air America helicopters involved in a “passenger movement” from LS-48A to “T” pad at UH-3301.<sup>49</sup>

This type of combat flying remained essentially the same during the whole period of the “Secret War” in Laos, although in later years, sometimes bigger and more modern equipment was used. What changed, were the political climate and the military situation. A first change already came in the spring of 1963, when the Neutralists were split into a leftist and a neutral wing in March 63 and when, in April 63, as a consequence to the murder of the leftist minister Pholsena, all Pathet Lao ministers established their headquarters at Khang Khay. This new situation meant an expansion of the Company’s activities, as Air America now moved some Royal Laotian Army troops of General Phoumi Nosavan from positions in Southern Vientiane province to areas on the edge of the Plain of Jars. So since April 1963, heavy fighting started in the Plain of Jars between Kong Le’s Neutralists, supported by the rightist Phoumi Nosavan, and the Pathet Lao, supported by the leftist group within the Neutralists and by North Vietnamese troops. At least since then, Souvanna Phouma was aligning himself closely with the Western-supported right wing, so that Air America planes now supported Kong Le’s Neutralists, the troops of the rightist Phoumi Nosavan and the Royal troops obedient to the government of Souvanna Phouma. As the fighting on the Plain of Jars continued, clashes between Pathet Lao and Royal army forces occurred in the southern provinces of Attopeu and Saravane, necessitating other Air America supply missions to be flown to the south, where the United States were building up a military complex on the Bolovens Plateau.<sup>50</sup>

In mid-1964, the political and military situation in Laos escalated: When talks between Souvanna Phouma and Souphanouvong, held at Khang Khay in April 64, failed,<sup>51</sup> the Pathet Lao began new attacks against Kong Le and his Neutralist forces on 16 May 1964, and within a week, Kong Le was driven to the western edge of the Plain, where he established the Neutralist headquarters at Moung Soui. By now, the “Secret War” in Laos had really started. As to the northern and central parts of Laos, supported by Air America planes, Royal Lao forces launched a monsoon counter-offensive in July 64 that undid many earlier Pathet Lao gains. The government not only opened Route 13 between Vientiane and Luang Prabang, but also set up new positions in Phong Saly and Sam Neua provinces, long regarded as Pathet Lao terrain. Most important among the towns abandoned by the Pathet Lao on Route 13 were Vang Vieng (L-16), 50 miles north of Vientiane, and Sala Phou Koun (LS-260), another 50

---

<sup>49</sup> “Sikorsky Helicopter UH-34D, H-42, crewed by R/Captain J. W. Wilmot and Flight Mechanic M. J. Luca departed LS-20 at 0545 Local 19 May for LS-48A. From LS-48A R/Captain Wilmot was instructed to carry passengers to coordinates UH 3301, approximately 5 miles south-west of LS-36. After making one uneventful round trip to an alternate landing zone at UH 3702, H-42 was again approaching the alternate zone with 10 passengers, when at an altitude of approximately 10 feet, the aircraft was observed going out of control, pitching up and to the left, over a line of trees, then contacting the ground on its left side heading 180° from the original approach heading. An explosion and fire followed almost immediately, destroying the aircraft and fatally injuring the pilot and 8 passengers. Flight Mechanic Luca and two indigenous passengers were able to evacuate the aircraft suffering minor to serious injuries. [...] H-42 was one of 7 Air America Helicopters which were involved in a passenger movement from LS-48A to “T” pad at coordinates 3301. Shortly after the shuttle began, “T” pad closed in due to cloud cover. Captain Wilmot in H-42 noticed an open rice paddy close by “T” pad and to the East and radioed back to LS-48A asking permission to discharge his passengers on this rice paddy. Permission was granted, and H-42 and 4 other helicopters deposited their passengers at the paddy without incident. On the second trip into this paddy H-42 was hit by ground fire by unfriendly elements. [...] As of this writing, the tactical situation in the area of H-42’s crash site will not permit an actual on site investigation” (Accident report for this accident, in: UTD/CIA/B58F9); see also the Minutes of Meetings of the Executive Committee of Air Asia Co Ltd and Air America Inc. of 25 May 66 in: UTD/CIA/B8F1; Leary, *Outline - Air America in Laos*, 1966, p.5; and Davis, *Across the Mekong*, pp.129-30; the Memorial file preserved in UTD/LaShomb/B16F3 gives Thamla as location, as does the report of the Board of Review, dated 28 June 66 (in: UTD/CIA/B34F1).

<sup>50</sup> Kirk, *Wider war*, pp.208-10.

<sup>51</sup> Castle, *At war*, pp.63/4. On 3 June 64, Souphanouvong declared that the Pathet Lao no longer recognized Souvanna as prime minister (ib., p. 65).

miles north at the junction of Routes 7 and 13, recaptured by Kong Le in August 64. North Vietnam immediately increased their troops in the northern part of Laos that were estimated to number over 30,000 men later in 1964.<sup>52</sup> This was the beginning of a pattern of fighting which, since 1964, was to repeat itself over the years: Communist, i.e. Pathet Lao and North Vietnamese forces advanced regularly during the winter dry season, which lasted from October to May, as they were moving on foot and later using wheeled vehicles to move heavy weapons and could easily drive back the Royal Lao troops when it was possible to walk thru the jungles. During the monsoon rains of summer, they always retreated, because when the jungles were drenched, the rivers at flood level, and the lowland rice-paddies shoulder-deep in water, the government always had the advantage of transportation on US supplied or Air America helicopters and aircraft. So, during the dry winter season, Air America planes had to support the Royal Lao troops and tribal SGUs during their retreat to the west, while during the rainy summer season, which lasted from June to September, Air America planes not only delivered supplies to the same troops, but transported them back to more eastern parts of Laos.<sup>53</sup>

But in a more general way, 1965 marked the beginning of major military activities in Laos. When in 1965, the North Vietnamese troops operating in Laos were increased to about 40,000, they not only tried to protect the construction of the Ho Chi Minh Trail system, but they also attacked Laotian government forces in the south. Supported by Air America, Royal Lao Government troops were able to repel these assaults: On 9 March 1965, Communists attacked a reserve officers' school at Dong Hene, 30 miles east of Savannakhet (L-39), but were stopped by Royal Lao troops and Royal Lao AF T-28s; then, in November 65, at the beginning of the next dry season, Lao soldiers repelled several mixed North Vietnamese and Pathet Lao battalions 2 miles outside of Thakhet (L-40). Still more encouraging was the success of General Vang Pao in the northeast, where, once again supported by Air America planes, he recovered small outposts in Sam Neua and Xieng Khouang provinces for the Royal Lao government in the 1965 monsoon counteroffensive. In 1966, these military successes of the pro-Western forces in Laos could be repeated: In spite of intensive road construction work carried out by Chinese workers in the north-eastern regions of Laos since 1962, Royal Lao troops, supported by Air America planes, drove into the Nam Bac valley, some 20 miles east of Moung Sai in August 1966, during the monsoon season. For a year and a half, the Lao forces loosely held the valley, thru which ran an old trail leading east to Sam Neua.<sup>54</sup>

In 1967, however, there was a stronger resistance on the Communists' side: As the Nam Bac valley could have been used as a base to extend Lao rule into terrain controlled by the Pathet Lao (Sam Neua) and the Chinese (Phong Saly, Moung Sai), the Communists reinforced positions surrounding the valley in July and August 1967. So Air America planes supported the Royal Lao troops sitting there to defend the valley. Some of the rockets delivered to northern Laos by Air America also came from the USAF stocks at Nakhon Phanom, as the USAF's 56<sup>th</sup> ACW was ordered to use them on their A-26s and T-28s, although they were needless. So Colonel Aderholt had them send up to Vang Pao's guerrillas, who launched them off the ground.<sup>55</sup> At about the same time, the Communists sent reinforcements east of the Ho Chi Minh Trail in the vicinity of the towns of Saravane (L-44) and Attopeu (LS-10), north and south of the Bolovens Plateau. These activities meant that Air America planes also had to support the Royal Lao defenders in the south. Both movements later proved to be the opening of the Lao phase of the Communists' winter-spring Tet offensive, although the aims were different from the Tet offensive in South Vietnam, as in Laos, its main purpose was to defend

---

<sup>52</sup> Kirk, *Wider war*, pp.210-14.

<sup>53</sup> Moody, *The great adventures*, Prelude, p.7; Castle, *At war*, p.80.

<sup>54</sup> Kirk, *Wider war*, pp.214-18.

<sup>55</sup> Trest, *Air Commando One*, pp.198/9.

the trail system and divert and disperse Lao forces in the north.<sup>56</sup>

In 1968, the whole pace of the secret war in Laos changed. Impatient with the progress of the Pathet Lao, North Vietnam introduced new troops and opened its campaign in Laos with an attack on government positions in the Nam Bac valley on 13 January 68. Supported by artillery in the mountains, within two days, the Communists dispersed some 2,000 government soldiers, most of whom fled or surrendered. The battle of Nam Bac (LS-203) was the most important in northern Laos that year, but North Vietnamese and Pathet Lao forces also obtained some minor victories. On 12 January 68, two An-2s of the North Vietnamese AF (919<sup>th</sup> Air Transport Regiment) attacked the US TACAN installation, opened in 1966 at Phu Pha Thi (LS-85) in Laos to guide bombing missions over North Vietnam, with 120mm mortar rounds converted to “bombs”, 57mm rockets and machine guns; the TACAN site sustained only little damage and remained in operation, but two soldiers and two female civilians were killed and two soldiers wounded. An Air America UH-1D, XW-PFH, crewed by Captain Theodore H. Moore and Flight Mechanic Glenn Woods, happened to be in the vicinity, delivering food and ammunition to various Hmong villages and defensive positions located around LS-85. When Captain Moore saw the An-2s, he chased them in his UH-1D, while flight engineer Woods began firing an AK-47 rifle at the fleeing biplanes. One of the An-2s, apparently hit by Woods’ gunfire, dropped and then crashed into a mountain ridge, followed, only a few minutes later, by the second An-2 which hit the side of a mountain some three miles further north of the first crash. As a political consequence, Captain Moore was immediately fired by Air America for “causing an international incident”, but later rehired by the Company upon request of the CIA.<sup>57</sup> But this was only the beginning, as the military situation in Laos changed completely at the time of the Tet Offensive in South Vietnam.

### **Air America in air combat**

#### **A new bombing mission scheduled for 1964**

In February 1964, a number of Air America pilots were again sent to Tainan for flight training in the B-26. Most of the training was done in TB-26B “B-888”: Joe Hazen flew it on 22, 24, and 28 February 64,<sup>58</sup> Tom Jenny on 22 and 23 February 64,<sup>59</sup> and on 26 February 64, Ed Eckholdt<sup>60</sup> and Bob Abrahms were checked out by Truman Barnes as instructor pilots in a 2.00 hours flight, Ed Eckholdt making one landing, and Bob Abrahms 2 landings. As an instructor pilot, Ed Eckholdt then made two 2.00 hour flights in B-888 from Tainan to Tainan on 27 February 64: In the first flight, Ed checked out Chuck Cameron and Russ Krieg, and in the second one Morrie Kenstler.<sup>61</sup> Among the “hard nose” B-26Bs, “797” is known to have been flown several times out of Tainan during that period, that is by Tom Jenny on 24 and 25 February 64,<sup>62</sup> and by Joe Hazen on 24, 25, and 27 February 64.<sup>63</sup> The reason for this training

---

<sup>56</sup> Kirk, *Wider war*, pp.223-25.

<sup>57</sup> Kirk, *Wider war*, pp.224-226; Castle, *At war in the shadow of Vietnam*, pp.94/5; Castle, *One day too long*, pp.76-78; this version is based on interviews given to Castle by Captain Moore; a different version, based on William Colby’s book, is given by Robbins (*Ravens*, p.42), who speaks of 3 An-2s participating in the attack.

<sup>58</sup> E-mail dated 7 June 2004, kindly sent to the author by Joe Hazen. “The only person I flew with in February 1964 was Truman Barnes and that was in 888 on the 22nd for 1.7 hours, four takeoffs and landings plus some air work. [...] To complete my time in Tainan in February 1964, I flew 888 on the 24th for 1.3 hours and one takeoff and landing and the 28th for 0.7 hours (night) and 5 takeoffs and landings.” (E-mail dated 19 June 2009, kindly sent to the author by Joe Hazen).

<sup>59</sup> Log book of Tom Jenny, who kindly sent photocopies of those pages to the author on 22 October 2004.

<sup>60</sup> Ed Eckholdt, interview made by William M. Leary on 24 September 1987; the notes of Prof. Leary are preserved at UTD/Leary/ I B6F11.

<sup>61</sup> Info extracted by Ed Eckholdt from his log book and sent on 11 March 1992 to Leif Hellström, who kindly e-mailed it to the author on 11 July 2004.

<sup>62</sup> Log book of Tom Jenny, who kindly sent photocopies of those pages to the author on 22 October 2004.

<sup>63</sup> E-mail dated 7 June 2004, kindly sent to the author by Joe Hazen. “On 24 February I was in 797, but had some trouble at run up, possibly engine, so had to return to the ramp. I did log 0.8 hours as required. Whatever

seems to have been a bombing mission that was scheduled to strike Vang Vieng. But as the US Navy began flying air strikes after the Gulf of Tonkin incident, that mission never came off.<sup>64</sup>

### ***Water Pump***

The first US T-28s in South East Asia were those of Detachment 2A of the 4400<sup>th</sup> CCTS that became operationally ready at Bien Hoa Air Base, South Vietnam, on 16 November 61: At the request of the US Ambassador in Vietnam, these USAF aircraft were painted in the colors of the South Vietnamese Air Force on 26 December 61, while operating in Project *Farm Gate*, although they were actually flown by pilots of the USAF's 1<sup>st</sup> Air Commando Group.<sup>65</sup> The following year, in 1962, Major Harry C. ("Heinie") Aderholt proposed to the CIA to deploy an air commando detachment to Thailand to support Vang Pao and the Special Forces in Laos; this became urgent when the cease-fire broke down in the winter of 1962/63, as there was constant gunfire in northern Laos.<sup>66</sup> So, in July and August 63, the US Government gave the Souvanna government in Laos 8 T-28s taken from the Royal Thai Air Force inventory,<sup>67</sup> and provided a USAF Mobile Training Team (MMT) for initial instruction and maintenance at Wattay airport, Vientiane. Before that, 5 RLAf pilots had been trained in the US.<sup>68</sup> A message sent by the US State Dept to Ambassador Unger on 26 October 63, allowed the T-28s to be used to attempt intercept and down any NVA illegal supply flights, but did not allow them to drop bombs for cratering Route 7, because it would have been a violation of the Geneva Agreements. To make sure that the Lao could not conduct bombing operations without US authority and to use the T-28s in *coups d'états*, the US Embassy at Vientiane retained the fuses for the T-28 ordnance. The problem was, however, that only 3 of these T-28s were flyable at the same time.<sup>69</sup> At that time, B/Gen. Thao "Ma was the titular RLAf flying leader. Please bear in mind that Ma was trained as a Dassault transport pilot and then transitioned into the C-47. He never felt comfortable with dive bombing and behind his back was referred to as a 'Thirty-degree bomber pilot.' The accepted dive bomb angle in a T-28 was sixty degrees. In fact, 1st Lt. Prayoon Khamvongsa routinely led the RLAf T-28s once they were airborne. He was one of five USAF Basic Pilot trained RLAf T-28 pilots who had been trained at Moody AFB, Georgia. Ma was usually in Lt. Prayoon's flight of four as the Number Four pilot enroute to and in the bombing of the assigned target. After the bombing mission had been completed, Ma flew back to Savannakhet in the Number One slot."<sup>70</sup>

On 6 December 63, CINCPAC recommended a detachment of the 1<sup>st</sup> Air Commando Wing, Eglin AFB, FL, deployed to Udorn to help the RLAf, and on 13 March 64, 38 USAF officers and soldiers of Detachment 6, 1<sup>st</sup> Air Commando Wing – code-named *Water Pump* –,

---

the problem, it was fixed and I flew 797 on 25 February for 1.9 hours and made three takeoffs and landings. I again flew 797 on 27 February for 1.1 hours and two takeoffs and landings." (e-mail dated 19 June 2009, kindly sent to the author by Joe Hazen).

<sup>64</sup> Ed Eckholdt, interview made by William M. Leary on 24 September 1987; the notes of Prof. Leary are preserved at UTD/Leary/ I B6F11.

<sup>65</sup> Dorr/Bishop, *Vietnam air war debrief*, p.19; Hagedorn/Hellström, *Foreign Invaders*, p.138.

<sup>66</sup> Trest, *Air Commando One*, p.139.

<sup>67</sup> According to Anthony / Sexton (*The War in Northern Laos*, pp.87-89), the 8 original T-28s delivered to the Royal Laotian Air Force in 1963 were transferred from the inventory of the Royal Thai Air Force. Three of them were delivered on 25 July 63 and the remaining 5 aircraft on 29 August 63.

<sup>68</sup> "The five RLAf T-28 pilots trained in the USAF Basic Pilot Training program, Moody AFB GA, which ended in the summer of 1963 were: Lt. Prayoon Khamvongsa, Lt. Boun Leuam (Henri) LeGay, Lt. Phou Kong (surname forgotten), Lt. Chanthasone (sp?) (surname forgotten), and Lt. Phumano Nosavan (son of Lao General Phoumi Nosavan) (Phoumano never flew a single combat mission upon his return to Laos from the US)." **Error! Main Document Only.**(E-mail dated 14 June 2009, kindly sent to the author by Col. Al Shinkle).

<sup>69</sup> Castle, *At war*, p.65 + p.162, note 13 + p.66.

<sup>70</sup> E-mail dated 14 June 2009, kindly sent to the author by Col. Al Shinkle.

commanded by Major Drexel B. Cochran, departed Hulbert, arriving at Saigon in mid-March in a C-135.<sup>71</sup> Half of them assembled 4 crated T-28s which had arrived at Bien Hoa in C-130s, the others flew to Udorn. On 1 April 64, Detachment 6, 1 ACW with 4 T-28Cs and 41 personnel arrived at Udorn, where the detachment established a T-28 maintenance facility using Air America equipment. This *Water Pump* training facility for RLAF T-28 pilots was located at Udorn adjacent to the Air America parking ramp,<sup>72</sup> and they immediately began a T-28 ground-and-flight school for Lao pilots.<sup>73</sup> When, on 24 March 1964, a USAF T-28 had lost its wing on a bomb run in South Vietnam followed by another loss on 9 April 1964, all American T-28s in South Vietnam were replaced by the A-1E Skyraiders in May 1964.<sup>74</sup> In this way, after some modifications, additional T-28s became available for operation in Laos. In April 64, a major Pathet Lao offensive ensued, sweeping across the Plain of Jars and threatening Royalist forces to the east. In preparation for a counteroffensive that was to become known as *Operation Triangle*, the *Water Pump* detachment opened a forward operating location at Wattay airport, Vientiane, and began training Laotian aircrews to fly T-28 combat missions.<sup>75</sup> The T-28D-5 attack version could carry 3,500 pounds of ordnance, was armed with two flush mounted forward-firing 50-caliber machine guns.<sup>76</sup> As to the use of T-28s in Laos, from the very beginning, US Ambassador Unger had a larger general tactic in mind. In his telegram no. 942 to the Dept. of State, dated 3 March 1964, he recommended: "Our guidance to FAR and neutralists for use of T-28s, to be discussed and agreed in advance, would continue to emphasize use of aircraft, bombs or not, for defensive purposes only, but defining defense to include both reprisal for aggressive actions and interdiction of build-up for attack. [...] As general proposition, believe we should initially stress step-up of visual and photo reconnaissance and a substantial road-cratering effort on principal lines of supply from North Viet Nam into Laos. Road cratering (principally routes 7, 8 and 12) commends itself [...]. Other targets or operations that are currently appealing include. A) Three known artillery positions used in occasional harassing fire against Kong Le headquarters at Muong Phan; B) Support of guerrilla operations (cover/ diversion) principally in Xieng Khouang province and designed, as road-cutting, to reduce front-line pressure; C) In-bound convoys; D) Supply depots in combat areas (one such located east of Khang Khay cannot be touched with rockets due surrounding anti-aircraft but could be taken out by low-level bombing); E) Armor, wherever found; F) Phou Khe and adjacent artillery positions, in connection with possible operations for its recapture. [...] Expansion in use of T-28s will require active role by AIRA and ARMA personnel in advisory capacity with respect to target selection, mission planning, and coordination. It will probably require a kind of on-the-spot surveillance of work of

---

<sup>71</sup> The function of the *Water Pump*-Detachment is described in footnote 5 of telegram no. 942, sent by the US Embassy Vientiane to the US Dept. of State on 3 March 1964: "The Special Air Warfare Detachment was a proposal of the Joint Chiefs of Staff to deploy four T-28s and pilots and 30 to 40 support personnel in Thailand. The detachment could augment the Royal Lao Air Force in the event of a serious offensive by the Pathet Lao/North Vietnamese, assist the Lao Air Force's maintenance training, provide advice for planning and employment of T-28s in Laos, and give impetus to Thai up-country development programs and counterinsurgency efforts. It would also serve as an adequate cover to justify the presence of US T-28s in Thailand" (in: US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 13: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/01\\_24.html](http://www.state.gov/www/about_state/history/vol_xxviii/01_24.html)).

<sup>72</sup> Moody, *The great adventures*, Prelude, p.2.

<sup>73</sup> Castle, *At war*, p.66; Trest, *Air Commando One*, p.140; Leary, *Outline...*, 1964, pp.6+8.

<sup>74</sup> Dorr/Bishop, *Vietnam air war debrief*, pp.30+32. On 24 March 64, T-28D 53-8362 crashed near Soc Trang, on 9 April 64 T-28D 53-8361 crashed in South Vietnam's Military Region IV (Hobson, *Vietnam air losses*, p.8).

<sup>75</sup> Between 1964 and November 66, 42 Lao T-28 pilots were trained by *Water Pump*, but only 24 remained in November 66 as a result of combat and training losses and the flight of 10 pilots to Thailand with General Ma (Telegram dated 9 November 66, from the Embassy at Vientiane to the Dept. of State, document 268, in: US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/266\\_285.html](http://www.state.gov/www/about_state/history/vol_xxviii/266_285.html)).

<sup>76</sup> Moody, *The great adventures*, Prelude, p.3.

aircraft armorers, by RO personnel.”<sup>77</sup> The next step was the plan to augment the fleet of the RLAf: In his telegram no.1023 of 19 March 1964, Ambassador Unger tells the US Dept. of State that “I asked what he [scil. the Laotian Prime Minister Souvanna Phouma] would think of augmenting present T-28 fleet with additional planes painted with Lao markings flown by South Vietnamese, perhaps with Lao passports. Souvanna indicated his readiness consider something of this nature if situation should deteriorate badly.”<sup>78</sup> Already on 29 April 64, the Assistant Secretary of State for Far Eastern Affairs recommended the “Positioning of some additional T-28s in Thailand. These could be useful in the event of further major Communist drives in Laos.”<sup>79</sup> This expansion plan makes clear why, shortly after training began, about 16 T-28s with Vietnamese markings were flown in by PACAF pilots that had been trained by the Air Commandos. Most of these aircraft were photo reconnaissance aircraft. After training was completed, RLAf markings were painted on the aircraft and they were turned over to General Ma, commander of the Royal Laotian Air Force. He then left for RLAf headquarters at Savannakhet.<sup>80</sup>

Then, a second group of pilots showed up, probably in May 64. These were Thai flying sergeants who were to be trained to fly in Laos as mercenaries.<sup>81</sup> They had flown T-28s, but had little weather and gunnery experience.<sup>82</sup> These pilots belonged to the Royal Thai Air Force, but were on loan to the Royal Laotian Air Force because of pilot shortage – a program that was to be continued until 1975.<sup>83</sup> They were mainly based at Vientiane, where they officially worked for the RLAf, and the T-28s they flew probably belonged to the USAF, that is to the covert Military Assistance Program for Laos.<sup>84</sup> The first T-28s delivered to the RLAf

---

<sup>77</sup> US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 13: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/01\\_24.html](http://www.state.gov/www/about_state/history/vol_xxviii/01_24.html).

<sup>78</sup> US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 17: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/01\\_24.html](http://www.state.gov/www/about_state/history/vol_xxviii/01_24.html).

<sup>79</sup> A memorandum dated 29 April 64, sent by the Assistant Secretary of State for Far Eastern Affairs (Bundy) to the Under Secretary of State for Political Affairs (Harriman), document 42 in: US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/35\\_44.html](http://www.state.gov/www/about_state/history/vol_xxviii/35_44.html).

<sup>80</sup> Leary, William M., *Outline - Air America in Laos*, 1964, p.8/9.

<sup>81</sup> Although Robbins (*Ravens*, p.118) states that the *Water Pump* program had 4 T-28s in April 64 and was aimed to train Thai and Lao pilots, the inclusion of Thai pilots into the program seems to go back to an idea of the US Dept. of State as an alternative to the US pilots requested by Ambassador Unger. This is evident from telegram no.1011, sent by the Dept. of State to the US Embassy in Laos on 17 May 1964, which states: “We believe use US pilots in T-28s represents excessive risk at this time. [...] In view ineffectiveness Lao pilots, believe substantial operational advantages would be realized if Thai prepared to furnish pilots and [scil. the US Embassy at] Bangkok should approach RTG [scil. the Royal Thai Government] urgently with this suggestion [...] However, pending receipt such permission, Vientiane authorized to turn over aircraft at once to Lao for operations dispatched through Vientiane. USAF unit at Udom being instructed accordingly” (US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 50, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/45\\_55.html](http://www.state.gov/www/about_state/history/vol_xxviii/45_55.html)).

<sup>82</sup> Leary, *Outline - Air America in Laos*, 1964, p.8/9.

<sup>83</sup> Because of pilot shortage, Royal Thai Air Force personnel, with their governments approval, were trained and joined the Laotians in flying operational missions. Already on 3 November 66, the US Departments of State and Defense asked the US Embassy at Vientiane, if they still needed Thai pilots in Laos, and on 9 November 66, Ambassador Sullivan cabled to the Dept. of State, that they would be required at least “until about July 68” (US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 268, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/266\\_285.html](http://www.state.gov/www/about_state/history/vol_xxviii/266_285.html)). But the program was indeed continued until 1975, when all training operations were brought to an end (Moody, *The great adventures*, Prelude, p.3).

<sup>84</sup> In the papers of Clarence J. Abadie (in: UTD/Abadie/), a nice story is reported. “A documented case of Ghost removal was when some Thailand Air Force pilots were to fly some U.S. 28’s (T-28) they refused to do so. These aircraft presumably belonging to Air America with the customer the US Air Force in this case paying the bill. The refusing pilots said the aircraft had Ghosts, so out comes the local version of the witch doctor and for the value of about \$ 7.50 of US type products, cigarettes, soap, tooth paste and the like he removed the Ghosts. Pictures of this very moving occasion were taken. These along with the \$ 7.50 bill were presented by Air America to the “customer”, for payment probably under miscellaneous expenses. After the ghost removal the

bore the Erawan, that is the insignia of the Royal Laotian Air Force consisting of three white elephant heads in a red roundel, a red line circling the rear fuselage between the Erawan and



John Wiren standing on the wing of one of the original RLAF T-28s (“8162”), at Savannakhet in August 1964  
(UTD/Wiren/B2)



MAP T-28Ds in RLAF colors, including “0-13470”, taken by Ed Eckholdt in 1965  
(photo kindly submitted by Joe Hazen)

---

Thai pilots had flown the aircraft with no complaints. The ghosts in this case as had been requested were transferred across the field to the US side of the airfield and to their aircraft.”

the fin, and RLAf-style four-digit serials that normally consisted of the last four digits of its former USAF or US Navy serials,<sup>85</sup> and in the early years, it seems that these RLAf T-28s were only based at Savannakhet and Vientiane.<sup>86</sup> In later years, T-28s loaned to the Royal Lao Air Force under a Military Assistance Program bore the Erawan, but no red line around the rear fuselage and maintained their full USAF serials.<sup>87</sup> The Erawan these aircraft bore was detachable, so that the aircraft could also be used elsewhere.<sup>88</sup> After Pathet Lao forces had attacked Kong Le on 27 April 64, the Thai and Lao pilots of *Water Pump* were allowed to begin a stepped-up bombing and reconnaissance campaign against communist positions in the Plain of Jars.<sup>89</sup> By mid-May 64, more than a dozen graduates flew daily bombing and reconnaissance missions over Laos. The targets these Thai-piloted T-28s attacked could be in the Plain of Jars – as in July 64, when Thai-piloted T-28s from Vientiane attacked Pathet Lao positions west of the Plain of Jars in Operation *Triangle*<sup>90</sup> –, but they could also be in the panhandle,<sup>91</sup> for which, normally, the Lao-piloted RLAf T-28s of Savannakhet were responsible. So, on 28 October 64, Thai-piloted RLAf T-28s bombed and strafed North Vietnamese villages in the Mu Gia Pass area.<sup>92</sup>

Former Air Intelligence Officer Lt./Col. Al Shinkle, who served in Laos from 13 October 64 - 10 August 66 with the Royal Lao Air Force at Savannakhet and wherever B/Gen Thao Ma went in Laos,<sup>93</sup> recalls: “When I arrived in Savannakhet in Oct 64, the RLAf had about twelve T-28s on the flight line. Maybe that was because of the planned beginning of RLAf bombing attacks on twenty-two targets that B/Gen Thao Ma, AIRA Colonel Robert L. F. Tyrrell, and USAF Air Commando Captain Don Randle had researched at meetings in the AIRA Office, Vientiane over the previous two weeks. B/Gen Thao Ma was the one who made the final decision as to which targets to hit. He started with Mu Gia Pass. Please bear in mind that before he attended a French flying school in Morocco, Ma had been a Force Armee Royale (FAR) paratrooper and his last combat duty had been a combat jump into the NVA-held Mu Gia Pass area. The ceasefire of that time halted the FAR paratroopers about one hundred meters from the top of Mu Gia Pass. Ma was and was not a superstitious man.... depending on the subject. He may have chosen to begin the fight against the NVA enemy where he had last fought them at Mu Gia Pass. Regardless, on 14 Oct 64 Ma led twelve RLAf T-28 fighter-bombers on the first RLAf major attack against the Ho Chi Minh Trail. This

---

<sup>85</sup> Four T-28s that bore this type of serials are known: “1234”, “8146”, and “8162” are documented by slides taken by John Wiren probably in 1964/5 (Air America Archives), and “2346” can be seen on the video by Ed Eckholdt (at 0.02.37 and 1.23.11 minutes). None of these aircraft is still current in April 1972.

<sup>86</sup> In his e-mail dated 20 July 2001 to the author, former Air America T-28 pilot John Wiren notes: “At that time, General Ma kept a few T-28s there, but the main base was in Savannakhet.”

<sup>87</sup> The example of “0-17616” is illustrated by the slide of John Wiren (Air America Archives), the example of “0-13470” is on the video tape made by Ed Eckholdt (at 1.23.16 minutes), and T-28s “0-13476” and “0-17610” were flown by Allen Rich on 13 January 66 and on 16 April 65 respectively, as is documented by his log book (in: UTD/Rich/B1).

<sup>88</sup> See the photos of T-28s wearing a detachable Erawan on the side of the fuselage and the explanation in Davis, *Laos: The Secret War*, in: <http://www.preservingourhistory.com/Laos.html> . A photo of USAF T-28s lined up at Udorn and wearing USAF insignia can be found at <http://members.tripod.com/chancefac/Laos/AirCraft/t-28sUdorn.htm>.

<sup>89</sup> Trest, *Air Commando One*, pp.141/2; Castle, *At war*, p.67; Leary, *Outline - Air America in Laos*, 1964, p.5.

<sup>90</sup> Castle, *At war*, p.74.

<sup>91</sup> During a meeting held at Udorn on 18 August 64, Ambassador Unger “reported that General Ma, Chief of Lao Air Force, has examined twenty military targets suggested by MACV, GVN [that is by the Government of South Vietnam], and CAS [that is by the CIA], in corridor area south Mugia Pass and expressed willingness attack them with Lao T-28 force. Was willing to assign ten planes to this action, and felt that, with good weather, could accomplish task in ten days of operations” (Telegram sent by the US Embassy Saigon to the US Dept. of State on 20 August 64 in: US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 123, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/111\\_130.html](http://www.state.gov/www/about_state/history/vol_xxviii/111_130.html)).

<sup>92</sup> Leary, *Outline - Air America in Laos*, 1964, p.40.

<sup>93</sup> E-mail dated 13 June 2009, kindly sent to the author by Col. Al Shinkle.

preceded his taking responsibility for the Royal Kingdom of Laos Government to request of the US Govt that we ‘assist’ him in attacking the enemy in Laos. Neutralist Prime Minister Souvanna Phouma violently and verbally abused Ma for having done this, but from this ‘authority’ the US began Operations Barrel Roll, Rolling Thunder, Steel Tiger, etc. Ma was used by the US to provide this ‘authority’ and then abandoned by the US in deference to the CIA wanting the RLAF for its own uses.”<sup>94</sup>

But the arrival of the *Water Pump* detachment at Udorn did not only mean an improved air power for the Royal Laotian Air Force. The Air Commandos had the tradition of also organizing civic programs to help the civilian population. So, when the *Water Pump* detachment arrived at Udorn in 1964, they began to run a medical service for the Thai villages surrounding Udorn, transporting medical supplies to the villages and ill people to the Udorn hospital by a truck. The second *Water Pump* team, which arrived at Udorn in late 64, brought still more medical personnel to Udorn, and they even operated as medical doctors in Laos, for example at Savannakhet (L-39). Then, the *Water Pump* detachment arranged the shipment of 5000 pounds of free medical supplies from the World Medical Relief of Detroit, MI, for shipment into Laos. By early 1968, the civic action program of the 56<sup>th</sup> ACW was run by 84 officers and men, most of whom were doctors and medical technicians, and included the introduction of a floating medical center on the Mekong River to help the tens of thousands of people who were completely isolated during the rainy season. At the same time, the insurgent cells that had been active along the Mekong River for years could be countered successfully.<sup>95</sup>

### **Air America’s T-28s**

A further step in extending the strength of the RLAF and its T-28s was taken in May 64, when US Ambassador Unger convinced Prime Minister Prince Souvanna Phouma also to allow USAF T-28s from the *Water Pump* unit, piloted by US civilian pilots, to fly attacks against Pathet Lao and North Vietnamese positions. These USAF T-28s would be painted in RLAF colors to make them indistinguishable from the Lao T-28s,<sup>96</sup> and the civilian pilots would be individually hired by the Royal Lao Government.<sup>97</sup> On 18 May 64, the US Government cabled to Ambassador Unger that they still did not allow US military personnel to fly T-28s attacks in the Plain of Jars, but that they proposed to turn over the 4 *Water Pump* T-28s to the RLAF, “fly them up to Vientiane with bombs [...] and let them be operated by US civilian pilots.”<sup>98</sup> On 20 May 1964, Ambassador Unger officially requested the authorization to use US civilian pilots for T-28s “not only for road cutting but in broader framework. [...] Utilization of these civilian pilots would require 10 additional T-28 aircraft [...] being transferred from COMUSMACV.”<sup>99</sup> The authorization was given the same day. Immediately, 5 Air America pilots – Rick Byrne, Ed Eckholdt,<sup>100</sup> Joe Hazen, Thomas G.

---

<sup>94</sup> E-mail dated 14 June 2009, kindly sent to the author by Col. Al Shinkle.

<sup>95</sup> Trest, *Air Commando One*, pp.142, 163/4, and 210/1.

<sup>96</sup> In telegram no.1329 of 17 May 1964, Ambassador Unger told the US State Dept.: “I referred to US-piloted T-28s in Udorn which I said could be promptly converted to be indistinguishable from Lao T-28s and flown with considerable effectiveness in sorties against PL/VM in present situation. I said I had been assured this could be done without American involvement becoming known. Souvanna concurred in this action” (in: US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 48, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/45\\_55.html](http://www.state.gov/www/about_state/history/vol_xxviii/45_55.html)).

<sup>97</sup> Leary, *Outline - Air America in Laos*, 1964, pp.11/2.

<sup>98</sup> Castle, *At war*, p.69.

<sup>99</sup> Telegram no.1373, sent by Ambassador Unger to the Dept. of State on 20 May, 1964, in: US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 54, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/45\\_55.html](http://www.state.gov/www/about_state/history/vol_xxviii/45_55.html)).

<sup>100</sup> After 2 days of training out of Udorn on 22 (with Joe Potter) and 23 (with Bill McShane) May 64, Ed Eckholdt flew only 7 T-28 missions – air strikes and cover for rescue missions – until 9 June 64; then he left the T-28 program (Log book of Ed Eckholdt, in: UTD/Leary/ I B6F12; Ed Eckholdt, interview made by William M. Leary on 24 September 1987; the notes of Prof. Leary are preserved at UTD/Leary/ I B6F11.).

Jenny, and John C. Wiren, who were joined by Don Romes<sup>101</sup> shortly thereafter<sup>102</sup> – were recruited to fly RLAf marked T-28s on CIA controlled attack missions. Most of them had prior experience in the T-28 and close air support training. “On acceptance, we were asked to resign from Air America Inc., our personal records were sanitized in the event we were shot down and captured. We would then be classified as mercenaries for the Royal Laotian Air Force to protect the US government from violating the Geneva Accord Agreement. The rationale for this program was that there was evidence of a big enemy build-up massing to come down highway 7 from North Vietnam to gain as much territory as possible before the monsoon season. The road needed to be cut and the bridges to be destroyed to halt the advance, but the Laotians just did not have the experience at that time to do the job.”<sup>103</sup>

These Air America pilots, called the A-Team flying for the *Tango program*,<sup>104</sup> were based at Vientiane, but would go to Udorn to pick up the T-28s, then return to Vientiane, where USAF ground technicians would load on ordnance (bombs, rockets, and 50 caliber, later napalm),<sup>105</sup> and then go on a mission designated by the US Embassy and Air America’s Flight Information Center.<sup>106</sup> The T-28s themselves that were flown by Air America pilots were based at Udorn, and some of them were unmarked, as it seems.<sup>107</sup> On 20 May 64, the State Department approved that the 6 Air America pilots would fly the T-28s, officially being civilian technicians hired individually by the Royal Lao Government. The same day, the 4 former *Water Pump* T-28s were turned over to the Laotians,<sup>108</sup> and the same day, they were replaced by 5 T-28s and 5 RT-28s<sup>109</sup> that CINCPAC transferred from MACV to the *Water Pump* unit. Here at Udorn, they were immediately painted in RLAf markings, probably retaining their full USAF serial, and they were loaned to the RLAf the same day,<sup>110</sup> probably to allow Lao students to attack targets within Laos, as only RLAf pilots were allowed to fly strike missions inside Laos.<sup>111</sup> On 22 May 64, the *Water Pump* unit began T-28 refresher training for the six Air America volunteers for 2 days,<sup>112</sup> and the program included training

---

<sup>101</sup> Donald R. Romes was at Bangkok in May 64, when he heard about the T-28 program. He immediately went to Udorn and talked to Earl Jones. Five pilots had been training for two days and were ready to go on a mission. Jones said that it was too late for him to join, but he agreed to let Romes fly a photo recon T-28. This part of the program never worked out, but Romes was then allowed into the regular T-28 operation (Donald R. Romes, telephone interview made by William M. Leary on 19 May 1990; notes of Prof. Leary preserved at UTD/Leary/ I B14F6).

<sup>102</sup> Ed Eckholdt, video tape, at 01.23 hours; letter dated 18 April 2002, sent by John Wiren to the author.

<sup>103</sup> Wiren, “It takes five to Tango”, in: *Air America Log*, vol.17, no.4, p.5.

<sup>104</sup> The name *Tango program* is testified for the early years by the article of John Wiren (“It takes five to Tango”, in: *Air America Log*, vol.17, no.4, p.5), while William Leary notes that in 1966, the T-28 fighter operation was called the “Alpha program” (Leary, *Outline - Air America in Laos*, 1966, p.1).

<sup>105</sup> Letter dated 18 April 2002, sent by John Wiren to the author. The bombs for these T-28s were carried to their take-off sites by Air America transport planes (Robbins, *Air America*, p.132).

<sup>106</sup> Letter dated 18 February 2001, kindly sent to the author by John Wiren.

<sup>107</sup> See Davis, *Across the Mekong*, p.77, and Robbins, *Ravens*, pp.117/8, who calls the program “Class A”: Air America pilots flew T-28s on combat missions out of Udorn. “When you came out of the barracks you had your gloves on so nobody could see the color of your skin and question your nationality, and you had to wear your helmet with dark glass visor down so nobody could see who you were and maybe identify you later”, one pilot said. “You crawled into an unmarked T-28 and launched”.

<sup>108</sup> Castle, *At war*, p.69; Leary, *Outline - Air America in Laos*, 1964, p.7. Moody (*The great adventures*, Prelude, p.3) points out that in 1964, T-28s from Detachment 6 were temporarily loaned to the RLAf, giving them a total of seven aircraft.

<sup>109</sup> The T-28Ds sent to Laos were attack aircraft, while the RT-28 was the reconnaissance version (Castle, *At war*, p.162, note 12; Bowers, *The USAF in South-East Asia. Tactical Airlift*, p.825).

<sup>110</sup> Moody, *The great adventures*, Prelude, p.3, notes that on 20 May 64, 10 more T-28s from South Vietnam were loaned to the RLAf.

<sup>111</sup> Moody, *The great adventures*, Prelude, p.3.

<sup>112</sup> Some of these Air Commandos of Udorn - like Joe Potter and Bill McShane - later joined Air America (Wiren, *Tango*, p.5).

for bombing, strafing, and napalm drops.<sup>113</sup> Some of *Water Pump*'s new T-28s continued to be used to train new pilots,<sup>114</sup> while others were picked up by Air America or (Thai) RLA pilots and flown to Vientiane, their official base. It seems that sometimes, Air America pilots also flew some of the original RLA T-28s, as is documented by some photos,<sup>115</sup> but most of the time, they used *Water Pump* T-28s based at Udorn.<sup>116</sup> Former Air America T-28 pilot

---

<sup>113</sup> Castle, *At war*, p.70; Leary, *Outline - Air America in Laos*, 1964, pp.7+13; Trest, *Air Commando One*, p.142.

<sup>114</sup> *Water Pump* T-28s known to have been used for training and believed to have been delivered ex MACV in May 64 are: "0-37679"; it bore the Erawan (photos in: Don Moody, *The great adventures of Bob and Don*, Prelude, p.4, in: <http://www.aircommandos.org/BobAndDon/Episode0000.htm> and in <http://www.geocities.com/Pentagon/Quarters/9553/tld28.jpg>); it was not current on 1 April 72, but went to the Royal Thai Air Force as "0-37679" in ?, and to the Philippine AF as "137679" in 74 (?); a photo taken in July 77 at Villamor Air Base is in Anido/Austria-Tomkins, *Pictorial history of the Philippine Air Force*, p.34; "0-40456"; it was already flown by Joe Hazen in the early days (e-mail by John Wiren, dated 11 October 01); a photo showing its training role in 1965 can be seen in: <http://www.ravens.org/kham/Kham1965TrainingUdorn.jpg>; on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and on 1 April 72, it was still but flown under the command of the USAF Attaché, Vientiane and maintained by Air America, Udorn (List of Assigned and maintained aircraft at Udorn as of 1 April 72, in: UTD/CIA/B49F2); it was sold to the Philippine AF as "140456" in 1974 (?), and to Business Air Charter, Portland, OR, as N2065J in August 89; "0-40482"; a photo showing this MACV aircraft in VNAF colors is published in Dorr/Bishop, *Vietnam air war debrief*, p.19; it was flown by Joe Hazen as (e-mail by John Wiren, dated 11 October 01), but not current on 1 April 72, as it went to the Congolese AF as FA-482 around 1965; and "0-46244"; a photo showing this MACV aircraft in VNAF colors as "46244" can be seen in: <http://vnaf.net>; it was flown by Joe Hazen (e-mail by John Wiren, dated 11 October 01) and crashed at Udorn on 7 November 66, killing a student pilot (see: Telegram dated 9 November 66, from the US Embassy to the Dept. of State, in: US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 268, in: [http://www.state.gov/about\\_state/history/vol\\_xxviii/266\\_285.html](http://www.state.gov/about_state/history/vol_xxviii/266_285.html)); a photo of *Water Pump* T-28 "0-46244" after its crash ("Bad day at Waterpump") can be seen in: Don Moody, *The great adventures of Bob and Don*, Prelude, p.4, at: <http://www.aircommandos.org/BobAndDon/Episode0000.htm>. From 14 to 20 April 65, Air America pilot Allen Rich received his T-28 training at Udorn on T-28D "0-17610", T-28B "0-38137", T-28B "0-38357", and T-28B "0-37724" according to his log book (in: UTD/Rich/B1).

<sup>115</sup> A slide of the John Wiren collection shows him standing on T-28 "8162", and on a photo on the video made by Ed Eckholdt (at 0.02.37 and 1.23.11 minutes), Ed is seen standing in front of what seems to be T-28 "2346". John Wiren, however, does not believe that this was one of General Ma's T-28s: "That picture of me standing on the wing of the T-28 was taken at Savannakhet [...] We were dispatched from VTE to make some strikes down in Southern Laos. Those particular aircraft were not General Ma's but ones that we had been flying" (E-mail dated 8 August 2001 to the author).

<sup>116</sup> The following T-28s can be seen on the video tape by Ed Eckholdt: "0-13470", del. on 4 March 65 ex 51-3470; "2346", that is probably BuA 138346, believed to be one of the original RLA T-28s; from Ed Eckholdt's Log book T-28Bs "044" (probably "0-40044", msn 219-43), flown on 22 and 23 May 1964, "741" (probably "0-17741", msn 174-594), used on 24-26 May and 6, 8, and 9 June 1964, as well as "446" (identity unknown) flown on 7 June 64 can be added; others appear in the log book of Rich Crafts: "310-716" (probably "0-13716", msn 174-254), flown on 10 September 64; "113-554" (identity unknown, but not 51-3554), flown on 11 September 64; "018-219" (probably "0-38219", msn 200-290), flown on 12 September 64; "14-313" (identity unknown, possibly BuA 140513, msn 226-90), flown on 14 and 17 September 64; "0-13776" (msn 174-314), flown several times between 15 September 64 and 23 June 65; "344" (probably "0-38344", msn 200-415), flown several times between 21 November 64 and 3 May 65; "338" (probably "0-38338", msn 200-409), flown several times between 21 November 64 and 28 March 65; "0-13771" (msn 174-309), flown several times between 28 December 64 and 21 May 65; "706" (probably "0-13706", msn 174-244), flown on 26 February 65; "0-13777" (msn 174-315), flown several times between 12 March 65 and 18 April 66; "0-17617" (msn 174-470), flown several times between 29 March 65 and 10 April 66; "0-17869" (msn 174-722), flown several times between 31 March and 26 December 65; "0-13698" (msn 174-236), flown on 4 and 25 April 65; "0-38352" (msn 200-423), flown on 5 April 65; "0-13656" (msn 174-194), flown on 21 and 30 April 65; "0-17610" (msn 174-463), flown on 21 April 65; "0-17741" (msn 174-594), flown on 20 and 22 April 65, and 8 June 65; "0-13518" (msn 174-56), flown several times between 19 December 65 and 14 January 66; "0-13470" (msn 174-8), flown on 28 December 65, 31 January, and 17 and 18 February 66; "0-17753" (msn 174-606), flown on 29 and 30 December 65; "UDN-1" (identity unknown), flown on 6, 15, and 16 January 66; and "UDN-2" (identity unknown), flown on 8 March and 20 June 66; still others were identified from the log book of Allen Rich: "0-13476", del. ex 51-3476 on 18 Oct. 65; "0-13511", del. ex 51-3511 on 4 March 65; "0-13656", del. ex 51-3656 on 4 June 64; "0-

John Wiren recalls: “The aircraft we used were based and maintained at Udorn, Thailand. The normal routine was to depart Udorn and fly to Vientiane, where ordnance was put on the aircraft by US Air Force personnel dressed as civilians.<sup>117</sup> We were given our mission assignment from the Embassy, that came through Air America Flight Information Control (FIC).”<sup>118</sup>

On 25 and 26 May 64, the Air America strike force of the A Team first attacked targets on the Plain of Jars.<sup>119</sup> And on 25 May 64, the first strike mission was flown out of Udorn, using ex US Navy T-28s, which had stronger engines. Each plane was armed with two 500-pound bombs with contact fuses (flown in from the Philippines) and two 260-pound fragmentation bombs. The pilots had been briefed at AB-1 on the evening of 24 May.<sup>120</sup> The target was the Ban Ken Bridge near Ban Ban on the route leading from North Vietnam thru the Plain of Jars to Luang Prabang. Dutch Brongersma was in a PC-6 Porter north of the target to observe the results and to call in a rescue helicopter, if necessary. The road was cratered, but the bridge was missed. The call-sign “Eagle” was used for strike missions. After the mission, the T-28s returned to Vientiane.<sup>121</sup> “In the next mission, they hit some trucks, but Hazen took a round

---

**17610**”, del. ex 51-7610 probably in May 64; **“17678”**, del. ex 51-7678 probably in May 64; **“0-38352”**, that is ex BuA 138352, del. probably in May 64; **“710”**, that is probably “0-17710” msn 174-563, probably del. in 64; **“724”**, that is “0-13724” msn 174-262, del. on 4 June 64; **“758”**, identity unknown, probably del. in 64; **“137”**, that is “0-38137” ex BuA 138137, probably del. ex RThAF in 64; **“357”**, that is “0-38357” ex BuA 138357, probably del. ex MACV in 64; **“0-40044”**, that is BuA 140044, probably del. ex RThAF in 64; this aircraft is still current on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002); more T-28s were identified from the log book of **Joe Hazen**, information kindly supplied by John Wiren in his e-mail to the author as of 11 October 2001): **“751”**, that is probably “0-37751” ex BuA 137751, believed del. ex MACV in 64; **“346”**, that is probably “0-38346” ex BuA 138346, believed del. ex RThAF in 64; **“0-40456”** ex BuA 140456, believed del. ex MACV in 64 and still current in April 72; **“650”**, identity unknown, believed del. in 64; **“791”**, that is probably “0-13791” msn 174-329, believed del. in 64; **“042”**, that is probably “0-40042” ex BuA 140042, believed del. ex MACV in 64; **“0-13743”**, del. to MAP/Laos on 18 October 65 ex 51-3743; **“0-13478”**, del. to MAP/Laos on 29 April 65 ex 51-3478; **“0-46244”**, probably del. ex MACV in 64 (it crashed while with *Water Pump*; see the photo in: Don Moody, *The great adventures of Bob and Don*, Prelude, p.4, in: <http://www.aircommandos.org/BobAndDon/Episode0000.htm>); and **“482”**, that is probably “0-40482” ex BuA 140482, probably del. ex MACV (photo in Dorr/Bishop, *Vietnam air war debrief*, p.19) in 64; and from the slides made by **John Wiren**, the following T-28s were identified: **“0-17616”**, del. on 17 March 65 ex USAF 51-7616; **“1234”** probably ex BuA 138234, del. ex RThAF in 64; **“8146”**, that is BuA 138146; and **“8162”**, that is BuA 138162, probably three of the original RLAF T-28s.

<sup>117</sup> In his Memorandum of 1 October 64 addressed to the Secretary of State, Dean Rusk, the Deputy Assistant Secretary of State for Far Eastern Affairs (Green) notes the number of USAF men working for the Air Attaché Office at Vientiane. “Authorized complement - three officers, one of which is stationed at Savannakhet with the RLAF. In addition, there are five (previously nine) officers on temporary duty as Assistant Air Attaches assisting in T-28 activities. Some 25 USAF ground personnel in civilian clothes arm and service the T-28s at Vientiane airfield but return to Udorn, Thailand, every night” (in: US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 135, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/131\\_150.html](http://www.state.gov/www/about_state/history/vol_xxviii/131_150.html)).

<sup>118</sup> E-mail dated 20 July 2001, kindly sent to the author by John Wiren.

<sup>119</sup> On 24 May 1964, Ambassador Unger sent the following telegram (no.1411) to the Dept. of State. “Souvanna called me on telephone this morning regarding threatening situation around Muong Kheung-Ban An-Muong Soui and asked for T-28 strikes in area. [...] Accordingly I am authorizing US pilots (Air America civilians) to undertake T-28 flights tomorrow for two purposes: 1) help to hold PL advance on Ban An-Muong Soui area (Muong Kheung has reportedly been evacuated); 2) cratering Rte 7 east of Ban Ban. Pilots will be briefed very carefully on known enemy dispositions and AA batteries. On a selective basis I am relaxing certain long-standing prohibitions: 1) Air America, particularly choppers, being permitted carry military personnel in hill areas and also war material; 2) Dept. already aware presence here US T-28 technicians; 3) closer ARMA and AIRA participation with FAR and RLAF in targeting for T-28 strikes and more direct USAID/RO participation in supply arrangements” (in: US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 59, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/56\\_75.html](http://www.state.gov/www/about_state/history/vol_xxviii/56_75.html)).

<sup>120</sup> Leary, “T-28 Chronology”, in: UTD/Leary/I B15F3.

<sup>121</sup> Castle, *At war*, p.70; Leary, *Outline - Air America in Laos*, 1964, pp.13/4; Trest, *Air Commando One*, p.142.

through the cockpit and Jenny took eight rounds in the fuselage.”<sup>122</sup> Other strike missions followed: So they flew over the PDJ looking for trucks and tanks. Ed Eckholdt also recalls an attack on a pickup truck loaded with fuel drums north of Xieng Khouang.<sup>123</sup> In a recent article, John Wiren recalls these first missions flown by Air America T-28 pilots: “On our first mission, we departed Udorn at ‘zero dark thirty’ to Vientiane. Air Force personnel had been placed there as civilian technicians to the Lao government. Point in fact, they were really ordnance specialists there to load and hook us up. We were now armed and ready for action, and off we went on our first mission to destroy a bridge on highway no. 7 east of the PDJ and



Weapons of a RLAf T-28 flown by Air America pilots in Laos in 1964/5  
(UTD/Wiren/B2)

Ban Ban. We were carrying 500 lb. bombs, rockets, and 50- cal. ammo. We made our dive runs from east to west targeting the bridge. We didn't get the bridge, but we must have scared the hell out of it. We did, however, crater the road. [...] Later the same day, we returned to the same area and caught a truck convoy of 10 coming down the road from Vietnam. [...] The very next morning at the crack of dawn, we launch again for an assault mission on the PDJ. [...] As we skirted the north side of the PDJ we slipped down a pass at very low level letting us out on the plain itself, it was a complete surprise attack for targets of opportunity. Tom Jenny selected an armored vehicle and got into a shoot-out with it. As a result he sustained 8 holes across the leading edge of his wings. Joe Hazen and Rick Byrne went after a flat bed truck with 55gal. drums of fuel. [...] I spotted a jitney bus chock-full of the enemy hanging on as it traveled east down the dusty road, took aim at it and pulled the trigger. [...] The road forked and in the middle was an abandoned Russian tank. The driver was so intent on me that he plowed full speed into the tank making human Frisbees out of the occupants. Scratch one jitney bus! [...] We returned to Vientiane and for some unknown reason, General Ma, commander of the Laotian air force, wanted us to leave the aircraft there instead of going on to Udorn. Joe Hazen said to tell the general to go get his own holes. After landing back at Udorn later that evening it was found by the maintenance crew that all five of our aircraft had taken hits.”<sup>124</sup>

---

Ed Eckholdt, interview made by William M. Leary on 24 September 1987; the notes of Prof. Leary are preserved at UTD/Leary/I B6F11.

<sup>122</sup> Interview with Thomas G. Jenny, conducted by Prof. William Leary at Atlanta, GA on 24 May 1988, written resume, in: UTD/Leary/I B13F7.

<sup>123</sup> Ed Eckholdt, interview made by William M. Leary on 24 September 1987; the notes of Prof. Leary are preserved at UTD/Leary/I B6F11.

<sup>124</sup> Wiren, “It takes five to Tango”, in: *Air America Log*, vol.17, no.4, p.5.

The USA, that is Ambassador Unger at Vientiane, now exercised control over an American- and Thai-piloted combat aircraft squadron. The American flyers were called the “A Team”, the Thai flyers were the “B Team”, and the Lao were the “C Team”.<sup>125</sup> During the summer of 1964, Ambassador Unger also urged the US Government to authorize him to use Air America pilots flying A-1Hs out of South Vietnam, but this proposal was refused.<sup>126</sup> To coordinate the T-28 activities, the State Department established a primary Air Operations Center (AOC) at Wattay and a secondary AOC at RLAf headquarters at Savannakhet. The *Water Pump* team provided the AOCs with communications equipment and map, targeting, and pilot-briefing rooms. *Water Pump* personnel in civilian clothes also staffed the Wattay and Savannakhet AOCs; initially, they were required to return to Thailand every evening, but later they were allowed to reside in Vientiane. “Civilian” *Water Pump* personnel also assisted the RLAf at Wattay and Savannakhet with maintenance and bomb-loading tasks,<sup>127</sup> and later, some of *Water Pump*’s sheep-dipped pilots or some of the USAF commanders of the AOCs also flew combat missions in support of Royal Lao Government forces and Vang Pao’s guerrillas.<sup>128</sup> As to the number of targets, it was constantly growing. At a meeting held by President Johnson’s major advisers at Honolulu on 1-2 June 64, Brigadier General Lucius D. Clay, Director, J-3, Joint Chiefs of Staff, “discussed ‘Punitive air strikes in support of the Laotian situation.’ He said there are four fixed targets in the north, and 3 in the Panhandle (only good ones, Ban Ban and Khang Khay in the PDJ). CIA identified 17 bridges. Also 5 sod-type airfields, as potential targets if air resupply used.”<sup>129</sup> As a consequence, an expansion of the T-28 operations in Laos was recommended.<sup>130</sup> The Laotian Prime Minister Souvanna Phouma also wanted to make a maximum use of the T-28s, as he stated on 11 June 64, but always according to the principle: “act, but don’t talk about it”, as he was very conscious of the necessity to “maintain internationally his neutral position and to maintain the Geneva Accords.”<sup>131</sup>

---

<sup>125</sup> Castle, *At war*, p.66.

<sup>126</sup> In an undated Memorandum written to the Secretary of State probably in July 64, Assistant Secretary of State for Far Eastern Affairs William P. Bundy states: “Unger has been urging this [that is an operation against Route 7] for some time, with a proposal for Air America pilots using the A-1Hs out of Vietnam. Although the JCS came out for this [...], we have all felt that the better way to do this would be through the Air America pilots in T-28s” (US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 116, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/111\\_130.html](http://www.state.gov/www/about_state/history/vol_xxviii/111_130.html)).

<sup>127</sup> Castle, *At war*, pp.70+66.

<sup>128</sup> See the detailed story entitled *The great adventures of Bob and Don*, written by Don Moody, former commander of the AOC of Luang Prabang.

<sup>129</sup> Summary record of the meeting held at Honolulu, 2 June 64, in: US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 69, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/56\\_75.html](http://www.state.gov/www/about_state/history/vol_xxviii/56_75.html).

<sup>130</sup> Memorandum dated 5 June 64, in: US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 73, in: [http://www.state.gov/about\\_state/history/vol\\_xxviii/56\\_73.html](http://www.state.gov/about_state/history/vol_xxviii/56_73.html). The proposal made by William E. Colby, Chief of the CIA’s Far East Division, to use US military pilots on the T-28s (see document 71, in: US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/56\\_75.html](http://www.state.gov/www/about_state/history/vol_xxviii/56_75.html)) was not taken up, however.

<sup>131</sup> Telegram no.1587, sent by Ambassador Unger to the Dept. of State on 11 June 64: “When I called on PriMin Souvanna this morning he told me [...]. Souvanna then volunteered that he wished make maximum use T-28s to support RLG forces, to interdict supplies arriving over routes to Xieng Khouang (No.7) to Thakhek and Savannakhet (nos. 8 and 12) and to destroy on the ground what supplies Pathet Lao/Viet Minh have in place. They must be so crippled that they will be able to mount no further attacks on RLG forces and so that possibly in due course RLG may be able to retake Plaine des Jarres. He asked that my attaches be in touch with appropriate RLG officers to work out plans for T-28 program which will really punish PL/Viet Minh. I told Souvanna of Lao-American targeting group already in operation and other forms of cooperation which I said we would be happy to augment. Throughout our conversation Souvanna kept returning to theme ‘act but don’t talk about it’” (US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 92, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/91\\_110.html](http://www.state.gov/www/about_state/history/vol_xxviii/91_110.html)).

### **A good example of cooperation: Operation *Triangle***

In reality, however, it is not possible to clearly separate the contributions of the individual partners that participated in a military operation, as in these operations several partners worked together. While beefing up the Royal Lao Air Force was a primary task of the Air Commandos,<sup>132</sup> Air America provided transportation of troops and arms, but also medevac services like flying out wounded or picking up downed airmen, and this could also include cover and later even air strikes carried out by Air America's T-28s. A good example of such a cooperation was Operation *Triangle*. "In telegram CX-291, the US Army Attaché in Vientiane reported on a June 23 meeting with the Lao General Staff and Souvanna to discuss a FAR offensive against Pathet Lao strongholds at the Junction of Routes 7 and 13 north of Vientiane and west of the Plain of Jars. The ultimate objective of this extensive three-pronged offensive would be to relieve pressure on Muong Soui."<sup>133</sup> While the Department of State rejected Souvanna's idea "to include use American pilots with T-28s and armed US recce," they agreed to furnish additional T-28s and to ask for additional Thai pilots.<sup>134</sup> In a first Memorandum dated 27 June 64, Rear Admiral J.W. Davis of the Joint Chiefs of Staff, exposes to Secretary of Defense McNamara the numbers of T-28s and pilots that could be added,<sup>135</sup> and in a second Memorandum of the very same day, he reports to McNamara what has already been done: "Fifteen T-28s have been made available from resources in the Republic of Vietnam. [...] Should the operation be approved, Air America pilots should be authorized to fly T-28 aircraft as necessary to exploit available aircraft and assist in maximizing the effectiveness of the air effort." The Joint Chiefs of Staff further recommend that "The United States support the plan for relieving pressure on and providing for the defense of Muong Soui, by 1) Providing three additional C-123 and three additional Caribou aircraft, subsequent to further validation of the requirement for such aircraft; 2) Providing necessary logistic support for the planned air and ground operations; 3) Authorizing Air America pilots to fly T-28 aircraft in support of the operation required; 4) Authorizing the use of napalm against appropriate military targets; and 5) Providing reconnaissance support, as requested by Vientiane, on a timely basis."<sup>136</sup> In his telegram dated 27 June 64, US Secretary of State Rusk cabled to the US Embassy at Laos that "we do not believe US civilian pilots required for T-28s in support of operation", but "if Muong Soui [is] subjected to major attack [...] in this event we authorize US civilian pilots in T-28s and also direct US Navy and USAF

---

<sup>132</sup> Moody, *The great adventures*, Prelude, p.1.

<sup>133</sup> Telegram no. 1250, sent by the State Dept. to the US Embassy at Vientiane on 24 June 64 (US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 101, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/91\\_110.html](http://www.state.gov/www/about_state/history/vol_xxviii/91_110.html)).

<sup>134</sup> Telegram no. 1250, sent by the State Dept. to the US Embassy at Vientiane on 24 June 64 (US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 101, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/91\\_110.html](http://www.state.gov/www/about_state/history/vol_xxviii/91_110.html)).

<sup>135</sup> "In response to the reference, an estimate of the quick augmentation capability (e.g., within three to seven days) to expand the Royal Lao Armed Forces (FAR) T-28 force as a possible response to an early Pathet Lao (PL) move against Muong Soui is outlined as follows. a. Aircraft: The Royal Lao Air Force (RLAF) has 20 T-20s available in Laos or at Udorn. It is estimated that 15 T-28s can be made available from RVN [Republic of Viet Nam] resources as a result of the conversion from T-28s to A-1H aircraft without detriment to the RVN war effort. [...]b. Pilots. The RLAF has 13 qualified T-28 pilots augmented by ten Thais. Six Air America pilots have also been checked out and are available. [...] The Joint Chiefs of Staff recommend that in any augmentation plan the four T-28 aircraft of the USAF SAW Detachment, Udorn, remain in place to continue to provide the only source of trained RLAF T-28 pilots, and that efforts be made to encourage the Thais to provide the required additional assets." Telegram no. 1250, sent by the State Dept. to the US Embassy at Vientiane on 24 June 64 (US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 102, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/91\\_110.html](http://www.state.gov/www/about_state/history/vol_xxviii/91_110.html)).

<sup>136</sup> US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 103, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/91\\_110.html](http://www.state.gov/www/about_state/history/vol_xxviii/91_110.html).

strikes against forces attacking Muong Soui”.<sup>137</sup> Two C-7A Caribous were received on 29 June 64: “393” and “401”, and three C-123Bs were received on 30 June 64: “525”, “530”, and “575”. They were all assigned to the AID-439-342 contract.<sup>138</sup> These Air America aircraft airlifted the Royal Laotian Army’s *Groupement Mobile 16* (GM-16) from Attopeu in southern Laos to Muong Soui and provided “continuing resupply of operation as required”.<sup>139</sup> Operation *Triangle* began in early July 64: Royal Lao and neutralist troops attacked the Pathet Lao positions west of the Plain of Jars near the junction of Routes 7 and 13. On 4 July 64, Air America airlifted 6 Thai 105mm guns from Korat to Muong Soi. The operation, involving 10 government battalions against 3 Pathet Lao battalions, began on 8 July 64. Air Commando Joe Potter, who joined Air America about a year later, flew in an Aero Commander loaned by the USAF to the RLAf (U-4 “2714”) and acted as a Forward Air Controller who directed the T-28s. Other US Forward Air Controllers were also brought into Laos to direct the attacks. Air America transports (3 Caribous; 3 C-123s) airlifted troops and supplies, including bombs and rockets for the T-28s and arms and ammunition for the troops, all coming from the *Peppergrinder* warehouse at Udorn. Reconnaissance missions were flown by US jets and by B-Team T-28s, carrying Lao observers in the back seat, but the B-Team T-28s also flew strike missions, involving 4-8 T-28s per day. Air America T-28s, however, were specifically excluded from the operation, although it seems that some of them did fly in these combat operations. The US T-28s were flown by *Water Pump* pilots, departed Udorn, staged thru Vientiane, made their air strikes in Northern Laos and returned to Udorn at night.<sup>140</sup>

Operation *Triangle* had been conceived by the Royal Lao Government to relieve pressure on neutralist forces located at Muong Soui on the Plain of Jars, as since 16 May 1964, Pathet Lao had attacked Kong Le and his Neutralist forces and driven them to the western edge of the Plain, where he had established the Neutralist headquarters at Mounng Soui. During Operation *Triangle*, since July 64, trained *Water Pump* personnel flew as combat controllers with Air America pilots over Laos to direct air strikes in support of friendly forces, using the “Butterfly” call sign, and in mid-August 64, Ambassador Unger approved the first air strikes in Laos by F-105s. Especially heavy fighting occurred on 14 and 18 August 64: On 14 August, T-28 missions were flown against a very lucrative object, a 110x20 foot bridge across the Nam Mat at UG 6066 on Route 7, but enemy fire downed one Thai-piloted RT-28 and damaged another one. The other Thai-piloted reconnaissance RT-28s made good pictures of the bridge, so that the plan was that one flight of four T-28s would dive bomb the bridge to get the guns pointed upward. Then another flight of four would come in low and drop their 500-pound bombs with delay fuses at a low angle on the supports under the bridge. But because of the RT-28 that had crashed, that day 25 T-28 sorties were flown in support of the Search And Rescue operation around UG 025528, that is the place where the RT-28 had crashed.<sup>141</sup> On 18 July 64, Route 7 was effectively cut by RLAf T-28s, when they knocked out three of five spans of a 40x12 foot wooden bridge across the Nam Mat River. But on 18 August 64, a RT-28 piloted by the well known Thai Lt. Iriyapong Tavashi, Chief of Staff, base commander at Udorn and nephew of the Prime Minister of Thailand, was shot down at a 4000 foot elevation near route 42 north of Phong Savan (LS-21) and Ban Peung (LS-95) at the southeastern corner of Plain of Jars, while he was engaged in close air support of Neutralists in the Plain of Jars. Covered by four USAF F-100s from Takhli, Air America UH-34D H-19, piloted by William A. Zeitler, was sent out to pick up the Thai pilot. He already

---

<sup>137</sup> US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 104, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/91\\_110.html](http://www.state.gov/www/about_state/history/vol_xxviii/91_110.html).

<sup>138</sup> Aircraft status report as of 7 July 64 in: UTD/Kirkpatrick/B1F1.

<sup>139</sup> US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 104, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/91\\_110.html](http://www.state.gov/www/about_state/history/vol_xxviii/91_110.html).

<sup>140</sup> Leary, *Outline - Air America in Laos*, 1964, pp.22+7+24-26; Castle, *At war*, p.73/4.

<sup>141</sup> Castle, *At war*, p.74; Trest, *Air Commando One*, p.142/3; Leary, *Outline...*, 1964, pp.27-29.

had him in the sling and was hovering over the site, when the Pathet Lao opened fire, so that H-19 crashed. Pilot William A. Zeitler escaped, but Flight Mechanic Cornelio N. (“Pappy”) Pascual was killed by gunfire aboard H-19, as was the Thai pilot, and H-19 blew up on the ground. Six T-28s, including 3 Air America-piloted T-28s, escorted a second UH-34D, H-20, which was piloted by Jack Connors and Stan Wilson. One of the T-28s crashed in bad weather. On that occasion, even the Air America-piloted T-28s were authorized by Ambassador Unger to use napalm. The whole rescue operation was coordinated by Fred Walker circling over the site in Air America Caribou “443”. At 17.20 hours local time, Billy Zeitler, who had received a bullet hole in his foot and burns over 25% of his body, was picked up by H-20, while H-19 was in flames. So on that day, two T-28s and an Air America UH-34D were lost.<sup>142</sup> But a diplomatic success was to follow: When Ambassador Unger had sent in Air America-piloted T-28s on this rescue mission, he had done it without authority; but his explanations cabled to Washington convinced the US Administration, so that on 26 August 64, State Department officially allowed to use Air America pilots on T-28 SAR operations.<sup>143</sup> And as, despite of flying hundreds of search-and rescue support missions and a handful of ground attack sorties over the next few years, the A Team suffered no casualties and just lost two aircraft, the communists were never able to prove the existence of this State Department/CIA “air force”.<sup>144</sup> In this way, fighting continued until mid-September and extended its range, as sometimes even North Vietnamese villages near the Laotian border were attacked by T-28s,<sup>145</sup> and Operation *Triangle* was able to undo many earlier Pathet Lao gains. So government forces not only opened Route 13 between Vientiane and Luang Prabang and recaptured the towns of Vang Vieng (L-16) and Sala Phou Koun, but also set up new positions in Phong Saly and Sam Neua provinces.

### **The continued success of Air America’s T-28 pilots**

The success of the Air America-piloted T-28s flying in the colors of the Royal Lao Air Force encouraged the Company to train a second group of Air America pilots in September 64 to fly T-28 missions. Among the pilots of this second group were Rich Crafts,<sup>146</sup> Earl Jones,<sup>147</sup> Bill McShane, Dick Nolan, and Joe Potter, and others like Allen Rich joined the program even in 1965.<sup>148</sup> Tom Jenny recalls Abrams, Blalock, Burke, Tom Crews, Tony Durizzi, and Tom Gullett.<sup>149</sup> Leary also mentions Lyons and Jim Rhyne.<sup>150</sup> The chief pilot of

---

<sup>142</sup> Robbins, *Air America*, pp.146/7; Leary, *Outline - Air America in Laos*, 1964, p.15+27-31+35; Castle, *At war*, p.74; lists “Aircraft accidents 1964” (in: UTD/CIA/B49F2) and “Aircraft destroyed or lost” (in: UTD/CIA/B49F2).

<sup>143</sup> On 26 August 64, Secretary of State Dean Rusk cabled to Ambassador Unger: “We agree with your assessment of importance SAR operations, that Air America pilots can play critically important role, and that SAR efforts should not discriminate between rescuing Americans, Thais of Lao. You are hereby granted as requested discretionary authority to use AA pilots in T-28s for SAR operations when you consider this indispensable to success of operation and with understanding that you will seek advance Washington authorization wherever situation permits” (US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 127, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/111\\_130.html](http://www.state.gov/www/about_state/history/vol_xxviii/111_130.html)).

<sup>144</sup> Castle, *At war*, pp.73-76.

<sup>145</sup> On 1-2 August 64, Thai-piloted T-28s bombed and strafed North Vietnamese villages near the Laotian border. Additional strikes were made on 16, 17 and 28 October 64 (Leary, *Outline - Air America in Laos*, 1964, p.28).

<sup>146</sup> Richard B. Crafts flew no less than 71 T-28 missions between 10 September 64 and 20 June 66 (Log book of Richard B. Crafts, in: UTD/Leary I B6F2).

<sup>147</sup> Earl Jones flew T-28s even until 1968-9, when the program just petered out (Leary, *Outline - Air America in Laos*, 1964, p.18).

<sup>148</sup> According to his log book (in: UTD/Rich/B1), Allen Rich joined the T-28 program in April 65 and flew T-28 missions until early 1966. For the other pilots see Leary, *Outline - Air America in Laos*, 1964, pp.13, 15, 16, and 37.

<sup>149</sup> Interview with Thomas G. Jenny conducted by Prof. William Leary at Atlanta, GA on 24 May 1988, written resume, in: UTD/Leary/I B13F7.

<sup>150</sup> Leary, “T-28 Chronology”, in: UTD/Leary/I B15F3.

this second group was Tom Jenny. The T-28s they flew were B and C models, most of whom had Lao markings, while some of them were unmarked, although there was no difference in the mission.<sup>151</sup> In cooperation with the RLAF, which was headquartered at Savannakhet (L-39), Air America pilots flew attack and rescue missions, although, in later years, the SAR-missions predominated. On 10 December 64, there were 20 T-28s at Udorn for strikes in the north, and the success of the missions flown by these propeller-driven aircraft was so great, that US Ambassador Unger even proposed that A-1Hs should be given to Air America. Although this idea was not taken up directly, in an indirect way, however, it was taken up, as since 1965, Air Commando A-1Es from Thailand supported the US military and Air America rescue and special operations in Laos and Vietnam.<sup>152</sup> At the same time, attack missions flown by Air America-piloted T-28s continued in the north – such missions being conducted, for example, onto the Plain of Jars in August 65, January 66, February 66, and March 66,



RLAF T-28 “0-91526” with Air America pilot Richard Byrne in front and Berl King in the rear seat, taken at Udorn, reportedly in 1964, but probably in 1966 (UTD/Leary/I B27F11, photo no. 1WL1-27-11-PB163)

<sup>151</sup> Leary, *Outline - Air America in Laos*, 1964, p.18. Sometimes, those T-28s even bore Royal Thai Air Force insignia, especially when they had to land at Vientiane. Robert Campbell, former technician of Det.1, 606 ACS, recalls the 1967/8 period: “I flew in the aircraft on two separate occasions while I was assigned to Udorn. Both times we stayed within the borders of the country. Both times the aircraft did not display any insignia [...]. Additionally, the pilots were Americans. No rank was displayed. Since no rank was displayed I assumed they were Air America pilots although I suppose they could have been D1, 606ACS pilots. But the aircraft themselves were parked in the D1, 606ACS parking area. I understood that the aircraft were rotated in and out of Laos so phase maintenance could be done at Udorn. Sometimes the aircraft left Udorn armed, other times unarmed. I understood that when the aircraft flew to Vientiane they had Thai insignia. Upon arrival the insignia was removed. Sometimes a RLAF insignia was inserted, other times the holder was left empty. As I recall, all the T-28's that flew from Savannakhet did not display insignia. They were flown by RLAF pilots. The exception to that was when an aircraft returned from phase maintenance. An American pilot did a test flight within sight of the base and when the RLAF pilots were watching. A Buddhist priest blessed the plane, the test run was made, and then the RLAF pilots would pilot the plane.” (E-mail dated 06 July 2006 kindly sent to the author by Robert Campbell)

<sup>152</sup> Leary, *Outline - Air America in Laos*, 1964, p.47; Castle, *At war*, p.165, note 68.

while, in the summer of 1966, RLAf General Thao Ma's T-28s bombed the Pathet Lao forces near Attapeu in the south.<sup>153</sup> The success of these attack missions flown by Air America's T-28 pilots was so great that in June 65, Ambassador Sullivan proposed to have two RLAf T-28s with Air America pilots based at Long Tieng to intercept transport planes that airdropped supplies to the Pathet Lao and North Vietnamese forces sitting in the Xieng Khouang and Sam Neua areas. For political reasons, however, this plan was rejected.<sup>154</sup> But there was another way that allowed Air America pilots to fly attack missions. Tom Jenny recalls: "There were a lot of missions. Most were only nominally SAR. Often, Lair and Landry would be in a Twin Beech. The target would be identified, helicopters would report incoming fire, and T-28s would attack. They often would get secondary explosions. The T-28s received mainly small arms fire. Once, with Wiren, he was attacking trucks between Ban Ban and the NVA border when he saw large orange baseballs coming at the aircraft. Wiren called out 37mm fire."<sup>155</sup>

### **Reinforcing the Royal Laotian Air Force The Air Commando advisors**

As Don Moody states, "from the beginning, the Royal Laotian Air Force (RLAF) had enjoyed a symbiotic relationship with the Air Commandos. In fact, it could be argued that the RLAf of the mid to late 60s was a reflection of the spirit and dedication of those who answered the call for building an Air Force."<sup>156</sup> This relationship started in 1964 with the *Water Pump* training program described above, whose personnel were the Detachment 6 of the 1<sup>st</sup> Air Commando Wing. In 1966, the US Department of Defense set up "Project 404" (sometimes referred to as "Palace Dog"), a covert augmentation of the DEPCHIEF program, under which about 120 USAF and US Army personnel and some civilians served in Laos, although they were administratively assigned to DEPCHIEF in Thailand. They were stationed at RLAf bases and Military Region Headquarters of the Royal Laotian Army to advise, assist in targeting effort and to coordinate regional air support requirements. Only part of these men really acted as trainers for the Lao, while a good number of them helped to coordinate the Lao Air Operations Centers (AOCs) and RLAf and USAF aircraft.<sup>157</sup> In 1964, there had been only two AOCs, one at Wattay Airport and the other at the RLAf headquarters at Savannakhet. In about July 1966, the RLAf reopened Luang Prabang Airfield (L-54), which had been closed for resurfacing and the construction of an Air Operations Center (AOC). General Thao Ma brought 12 T-28s and pilots to Luang Prabang to provide air operations in support of the Royal Lao Army in Military Region I (MR-I) and General Vang Pao in Military Region II (MR-II) to the East. And at that time, Don Moody, who had been working with the *Water Pump* detachment, was sent up to Luang Prabang as an advisor to General Ma, the RLAf commander, and to be the commander of the AOC at L-54.<sup>158</sup> In the beginning, this also meant that he had the function of a Forward Air Controller, flying in a RLAf U-17 and looking for enemy positions or dropping surrender leaflets in "Psy Ops" or Psychological Operations. In July 66, Bob Downs and Al Shinkle flew an RLAf U-17: "This included

---

<sup>153</sup> Leary, *Outline - Air America in Laos*, 1964, p.15; Trest, *Air Commando One*, pp.163/4.

<sup>154</sup> See the Memorandum dated 26 June 65, sent from the Deputy Director of the Office of Southeast Asian Affairs (Dexter) to the Deputy Assistant Secretary of State for Far Eastern Affairs (Unger), and the Memorandum dated 17 September 65, sent from the Director of the Office of Southeast Asian Affairs (Trueheart) to the Assistant Secretary of State for Far Eastern Affairs (Bundy), that is documents no. 188 and 197 in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/181\\_200.html](http://www.state.gov/www/about_state/history/vol_xxviii/181_200.html).

<sup>155</sup> Interview with Thomas G. Jenny conducted by Prof. William Leary at Atlanta, GA on 24 May 1988, written resume, in: UTD/Leary/I B13F7.

<sup>156</sup> Moody, *The great adventures, Prelude*, p.1.

<sup>157</sup> Castle, *At war*, pp.85/6; Moody, *The great adventures, Prelude*, p.5.

<sup>158</sup> Moody, *The great adventures*, Episode 1, pp.2/3.

finding targets by flying visual recce in the area around Nam Bac and up the Nam Ou River”.<sup>159</sup> This particular U-17 was probably “64-17796”, the remaining one of two U-17As which had been delivered to Laos on 2 October 64 as part of a Military Assistance Program. The other U-17A, “64-17797” had been destroyed in Laos on 11 October 65, when the aircraft took off with controls locked, as the check off list was not used.<sup>160</sup>

With the arrival of the “Ravens” in late 1966, the AOC commanders were relieved of most of their FAC responsibilities, as these Ravens were based and assigned to one of the AOCs, which, by that time, had become five: Vientiane, Pakse, Savannakhet, Long Tieng, and Luang Prabang.<sup>161</sup> At the same time, the personnel of the Air Operation Centers (AOCs) in each of the five military regions in Laos was augmented by further Project 404 people, mostly by other Air Commandos in the Black in that technically they were not in Laos, consisting – in addition to the commander – of a line chief, a communications specialist, and a doctor or medic, who were attached to a native fighter squadron.<sup>162</sup> Ambassador William Sullivan wanted Project 404 personnel to have a Special Operations background to support his air operations; that is why he selected the Air Commandos to fill his requirement. “Individuals in Project 404 were assigned to out of country units and their in-country existence was classified for most of the 1966-73 period. Being in the Black allowed personnel to perform military duties as a civilian operating in Laos under the supervision of AIRA (Air Attaché).”<sup>163</sup>

### More T-28s for the Royal Laotian Air Force

At the same time, the United States strengthened the Royal Lao Air Force to be able to attack the Pathet Lao: Already in May 64, the USA, which had initiated low-level reconnaissance flights over southern Laos on 19 May and over northern Laos on the 21 May, using USAF RF-101s and US Navy RF-8As from the *USS Kitty Hawk*, also released bomb fuses and additional T-28s to the RLAF.<sup>164</sup> A further step was taken in late June 64: Already on 23 June 64, the Royal Lao Government had asked for extensive US support for an operation in the areas north of Vientiane and west of the Plain of Jars; the operation was to be an attack to secure control of Route 13 (Vientiane-Luang Prabang) and that part of Route 7, which runs from Route 13 east to the present position of the Neutralist forces at Muong Soi. On 26 June 64, the US authorized the release of bombs to the RLAF and increased from six to twenty-four the number of T-28s under Laotian command (16 for strike missions, 8 for reconnaissance missions), and by the end of June 64, the RLAF had 33 T-28s,<sup>165</sup> another 17 T-28s being added to the RLAF fleet in July 64.<sup>166</sup> It has not been disclosed, in which way

---

<sup>159</sup> Moody, *The great adventures*, Episode 1, p.3.

<sup>160</sup> USAF Assignment Records, AFHRA, Maxwell AFB; Lists “Company operated aircraft lost or destroyed” (in: UTD/CIA/B51F12) and “Aircraft accidents 1965” (in: UTD/CIA/B49F2).

<sup>161</sup> Moody, *The great adventures*, Episode 1, pp.7/8; Castle, *At war*, p.86.

<sup>162</sup> Robbins, *Ravens*, p.118.

<sup>163</sup> Moody, *The great adventures*, Prelude, pp.5/6.

<sup>164</sup> Leary, *Outline - Air America in Laos*, 1964, p.12; Trest, *Air Commando One*, p.143.

<sup>165</sup> Moody, *The great adventures*, Prelude, p.3.

<sup>166</sup> A total of 30 T-28s have been identified that were probably all delivered to the RLAF in 1964, but are not known to have been flown by Air America pilots, so were probably flown by B-Team and C-Team pilots out of Vientiane and Savannakhet. These T-28s are: “**0-13463**” (msn 174-1, ex 51-3463), still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America current on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2); its fate is unknown; “**0-13617**” (msn 174-155, ex 51-3617) was noted as “0-13617” by Jon Pote, probably at Savannakhet in September or October 65 (e-mail dated 8 August 2008 kindly sent to the author by Jon Pote), but was no longer current on 1 January 72 (List of Assigned and maintained aircraft at Udorn of 1 January 72, in: UTD/Bisson B5 microfilm reel 24); “**0-13680**” (msn 174-218, ex 51-3680), still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his

---

e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2); its fate is unknown; the wreck (tail only) of **"0-13768"** (msn 174-306, ex 51-3768) was seen at Vientiane on 13 February 66 by Jon Pote; it is believed to have crashed during a low level roll (e-mail dated 8 August 2008 kindly sent to the author by Jon Pote); **"0-13791"** (msn 174-329, ex 51-3791) was noted as "0-13791" or possibly "0-13719" by Jon Pote, when the aircraft took off from Vientiane on 13 February 66 in a formation of nine aircraft (e-mail dated 8 August 2008 kindly sent to the author by Jon Pote), but was no longer current on 1 January 72 (List of Assigned and maintained aircraft at Udorn of 1 January 72, in: UTD/Bisson B5 microfilm reel 24); T-28 **"647"** was noted at Savannakhet on 8 September 65 by Jon Pote (e-mail dated 8 August 2008 kindly sent to the author by Jon Pote); but was no longer current on 1 January 72 (List of Assigned and maintained aircraft at Udorn of 1 January 72, in: UTD/Bisson B5 microfilm reel 24); T-28 **"668"** was noted at Savannakhet on 8 September 65 by Jon Pote (e-mail dated 8 August 2008 kindly sent to the author by Jon Pote); but was no longer current on 1 January 72 (List of Assigned and maintained aircraft at Udorn of 1 January 72, in: UTD/Bisson B5 microfilm reel 24); T-28 **"774"** was noted at Savannakhet on 16 October 65 by Jon Pote (e-mail dated 8 August 2008 kindly sent to the author by Jon Pote); but was no longer current on 1 January 72 (List of Assigned and maintained aircraft at Udorn of 1 January 72, in: UTD/Bisson B5 microfilm reel 24); **"0-17611"** (msn 174-464, ex 51-7611), still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America current on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2), and sold to the Philippine Air Force as "17611" in 1974 (?); **"0-17677"** (msn 174-530, ex 51-7677), still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America current on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2); its fate is unknown; **"0-17746"** (msn 174-599, ex 51-7746), still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America current on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2); its fate is unknown; **"0-17753"** (msn 174-606, ex 51-7753), still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America current on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2); its fate is unknown; **"0-17763"** (msn 174-616, ex 51-7763), shown on a photo, where it carries the Erawan, but no red line, at <http://www.ravens.org/kham/KhamOperNongKeunMR5.jpg>, current on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), but not current on 1 April 72, so was probably destroyed between 1 August 71 and 1 April 72; **"0-17773"** (msn 174-626, ex 51-7773), still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America current on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2); its fate is unknown; **"0-17777"** (msn 174-630, ex 51-7777), still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), but not current on 1 April 72; so it was probably was destroyed between 1 August 71 and 1 April 72; **"0-17779"** (msn 174-632, ex 51-7779), still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), but not current on 1 April 72; so it was probably destroyed between 1 August 71 and 1 April 72; **"0-21187"** (msn 189-2, ex 52-1187), still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America current on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2); its fate is unknown; **"0-21208"** (msn 189-23, ex 52-1208), still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America current on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2); its fate is unknown; **"0-21225"** (msn 189-40, ex 52-1225), still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America current on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2), and sold to the Philippine AF as "21225" in 1974 (?); broken up at Sangley

these T-28s joined the fleet of the Royal Laotian Air Force. But, probably, most if not all of them were loaned to the RLAFF thru the Military Assistance Program that officially supported Thailand, that is thru the US Military Assistance Advisory Group in Thailand, whose *Deputy Chief, Joint United States Military Assistance Advisory Group, Thailand*, normally abbreviated as “DEPCHIEF”, was responsible for all Military Aid to be sent to Laos.<sup>167</sup> Many of these aircraft probably came from surplus MACV stocks,<sup>168</sup> so that they are no longer

---

Point Air Base; “0-23498” (msn 189-59, ex 52-3498), still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America current on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2), and sold to the Philippine AF as “23498” in 1974 (?); “0-37644” (msn 200-7, ex BuA 137644), still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2), and still current in 1973, when it bore the Erawan and the Long Tieng badge, but destroyed in 1973 (photo plus information in: <http://members.bellatlantic.net/~ltcol/laos.html>); “0-38259” (msn 200-330, ex BuA 138259), still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America in April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2), and sold to Apex Associates Inc., Canby, OR, as N86AW 24 January 86 (AMCAR 30/p.39); sold to M. Rolph-Smith, Archerfield, QLD, as VH-SHT in 6.90; current in 1996; “0-38276” (msn 200-347, ex BuA 138276), shown on a photo taken at Vientiane in 1967 in Davis, *Laos: The Secret War*, in: <http://www.preservingourhistory.com/Laos.html> with an detachable Erawan on the side (the text gives the serial as “0-38728”, which is impossible), but not current on 1 April 72; “0-38331” (msn 200-402 ex BuA138331), probably an ex MACV aircraft that was noted as “331” by Jon Pote at Savannakhet on 8 September 65 (e-mail dated 8 August 2008, kindly sent to the author by Jon Pote); it was not current on 1 January 72 (List of Assigned and maintained aircraft at Udorn of 1 January 72, in: UTD/Bisson/B5 reel 23); “0-38345” (msn 200-416 ex BuA138331), probably an ex MACV aircraft; it was noted as “345” by Jon Pote at Savannakhet on 8 September 65 (e-mail dated 8 August 2008, kindly sent to the author by Jon Pote), but was not current on 1 January 72 (List of Assigned and maintained aircraft at Udorn of 1 January 72, in: UTD/Bisson/B5 reel 23); “0-38351” (msn 200-422, ex BuA 138351), still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2), and sold to the Philippine AF as “138351” in 1974 (?), and to Business Air Charter, Portland, OR, as N20580 in August 89; “0-40457” (msn 226-34, ex BuA 140457), formerly South Vietnamese AF “140457” (photo in: Mesko, *VNAF*, p.27), still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2), still current in 1973, when it bore the Erawan and the Long Tieng badge (photo in <http://members.bellatlantic.net/~ltcol/laos.html>), and sold to the Philippine AF as “140457” in 1974 (?), and to Business Air Charter, Portland, OR, as N2065R in August 89; “0-40533” (msn 226-110, ex BuA 140533), bore the Erawan, but no red line in “Operation Nong Keun” (see the photo in: <http://www.ravens.org/Kham/KhamOperNongKeunMR5.jpg>), but a photo probably taken at Long Tieng and contained in the collection of Allen Rich (in: UTD/Rich/B1), also reproduced in Davis (*Across*, p.73), shows it without any markings; another photo can be seen in photo in: <http://www.namphong.com/album5/album5.htm>, taken at Nam Phong, Thailand; still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2), and sold in 1974 (?) to the Philippine Air Force as “140533”; preserved at Villamor Air Base, Manila; “0-40547” (msn 226-124, ex BuA140547), known to have been delivered in the seventies (Carroll, *World Air Forces Directory 1998-99*, p.275), but not current on 1 April 72, which was sold as N2800Q in June 79; and finally T-28C “0-40579” (msn 226-156) ex MACV “140579” (photo in: Mesko, *VNAF*, p.29); this aircraft was still current on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), but no longer current on 1 April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2), so was probably destroyed between 1 August 71 and 1 April 72.

<sup>167</sup> Castle, *At war*, p.53.

<sup>168</sup> As has been seen above, all American T-28s in South Vietnam were replaced by the A-1E Skyraiders in May

listed in the USAF Assignment Records preserved at the USAF's Historical Research Agency at Maxwell Air Force Base, Alabama. Another difficulty in identifying those aircraft comes from the fact that these Assignment Records only note that an aircraft was transferred to a MAP on a specific day, but do not state to which country it went. It can, however, be assumed that all aircraft of the same type going to a MAP the very same day, also went to the same country, because the date indicated in the Assignment Records only indicates the date of an administrative act, that is the day when the process of transferring an aircraft began by cancelling it from list of aircraft that are in regular USAF service. From documents covering the 1972/3 period, we do know that in the case of a T-28 destined for Laos, it could take another 3-4 months until that particular aircraft would actually be in use out of Udorn. So, as T-28D "0-13656", which was flown by Air America pilot Allen Rich on a special mission in Laos on 21 May 65,<sup>169</sup> was part of a group of 8 T-28s that were all transferred to a Military Assistance Program on 4 June 64,<sup>170</sup> probably all of these 8 T-28Ds belonged to the same MAP; and as three of these 8 T-28Ds, that is "0-13714", "0-13658", and "0-13732", are known to have also been with Royal Thai Air Force,<sup>171</sup> the T-28s destined for neutral Laos were probably all brought in thru the official MAP for Thailand and then passed on to Laos thru DEPCHIEF. In any case, these were too many aircraft to fly, so, the Royal Thai Air Force provided pilots on loan, who were based at Vientiane.

On 7 October 64, a cable from State and Defense to Embassy, Vientiane said that the US Ambassador was authorized to urge the Royal Lao Government to begin air attacks against Viet Cong infiltration routes and facilities in the Laos Panhandle by RLAf T-28 aircraft as soon as possible.<sup>172</sup> At the same time, the strength of *Water Pump* was increased: When, on 9 October 64, a second *Water Pump* contingent headed by Lieutenant Colonel Bill Thomas replaced the first one at Udorn, the detachment was augmented by 3 C-47s and 21 personnel, so that, in late 1964, the *Water Pump* detachment was the largest American contingent at Udorn.<sup>173</sup> As a response to the call for attacks to be flown against the infiltration routes in

---

1964. During a meeting held at Udorn on 18 August 64, it was discussed how to augment the current strength of the RLAf. Two methods were proposed: either to assign VNAF A-1Hs to Laos (this idea was later rejected) or "by assignment remaining T-28s now in Vietnam as soon as A-1Es arrive in country" (Telegram sent by the US Embassy at Saigon to the Dept. of State on 20 August 64, in: US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 123, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/111\\_130.html](http://www.state.gov/www/about_state/history/vol_xxviii/111_130.html)).

<sup>169</sup> Log book of Allen Rich, in: UTD/Rich/B1.

<sup>170</sup> The eight USAF T-28Ds that were transferred from SMAAR, McClellan AFB, to MAP on 4 June 64, are: 51-3656 (msn 174-194), becoming "0-13656", flown by Allen Rich on 21 May 65; 51-3658 (msn 174-196), probably becoming "0-13658" (this aircraft was with the Royal Thai Air Force in 1967 and later became "513658" of the Philippine AF); 51-3669 (msn 174-207), probably becoming "0-13669"; 51-3698 (msn 174-236), probably becoming "0-13698", flown by Air America pilot Rich Crafts in April 65; 51-3714 (msn 174-252), probably becoming "0-13724", flown by A. Rich on 20 April 65; 51-3724 (msn 174-262), becoming "0-13714" (this aircraft later went to the Royal Thai AF as "0-13714" and was noted at Bangkok 20 October 72; then it passed to the Khmer AF as "51-3714" and later to the Philippine AF as "13714"); 51-3732 (msn 174-270), probably becoming "0-13732", later with the RThAF; and 51-3744 (msn 174-282), probably becoming "0-13744". On 29 June 64, US Secretary of State Rusk cabled to the US Embassy in Laos that "15 additional T-28s are being moved to Udorn" (US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 107, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/91\\_110.html](http://www.state.gov/www/about_state/history/vol_xxviii/91_110.html)).

<sup>171</sup> See *Aviation Letter*, no.73, December 72, p.2, for "0-13714", which was seen at Bangkok 20 October 72 in the colors of the Royal Thai Air Force. For the T-28s flown by the RThAF see Steve Darke's T-28 website at <http://www.thai-aviation.net/military-T28.html>.

<sup>172</sup> In: US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 138, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/131\\_150.html](http://www.state.gov/www/about_state/history/vol_xxviii/131_150.html).

<sup>173</sup> Apart from the austere manned and equipped *Water Pump* detachment, the Americans based at Udorn in 1964/65, consisted of Bill Lair's CIA office in an abandoned civil aviation building, responsible for the rear support HQ for paramilitary operations in Laos, the Air America helicopter operations, a small MAAG contingent of 3 US Army officers, a relay station located a few miles east of town, and a USAF adviser attached to a Thai flying squadron at Udorn (Trest, *Air Commando One*, pp.140/1). A photo of a USAF C-47A flown in

southern Laos, 13 T-28s were used in air strikes against the Ho Chi Minh Trail since 14 October 64. The same day, the US even authorized jets from Yankee Team to fly cover for the RLAf T-28s bombing the Ho Chi Minh Trail against attacks from NVA MiGs.<sup>174</sup> On 19 October 64, the Director of the Defense Intelligence Agency, Lieutenant General Joseph F. Carroll, wrote to the Secretary of Defense (McNamara): “The missions have so far been conducted out of Savannakhet using 13 aircraft (T-28). To date strikes are known to have been conducted against 5 of the 12 scheduled targets. Yesterday, Gen. Ma, Air Force Chief, moved six T-28s to Pakse to strike the two southernmost targets today.”<sup>175</sup> And the T-28 fleet was constantly growing and growing: In November 64, there were 27 T-28s in Laos, of which 22 were in operation, and on 5 August 65, the RLAf had even 45 T-28s. As to the attack missions, these T-28s were involved in general harassing activities against Pathet Lao in the Xieng Khouang and Sam Neua provinces, plus in interdiction missions against Route 7, and in the spring of 1965, Ban Dong Hene (LS-54) was successfully defended against an attack by North Vietnamese troops.<sup>176</sup> On 6 November 65, 45 T-28 sorties were flown on Route 92 in the south, killing about 200 road workers working on the Ho Chi Minh Trail. These were staged from Pakse, and General Ma, Commander of the Royal Laotian Air Force, stated that these strike missions could have been even more effective, if they could had been conducted out of Saravane airfield, which is closer to the Trail.<sup>177</sup>

The total number of T-28s supplied to the Royal Laotian Air Force is unknown: Moody presumes that at the end, the RLAf had received 60 T-28Ds.<sup>178</sup> Probably, there were even many, many more than that, as no less than 48 T-28s are known to have been lost or destroyed – and this is for sure not the total number: At the beginning, the loss rate was quite low, so that in his telegram sent to the US Dept. of State on 20 August 1964, Ambassador Unger is quite optimistic: “Since May 17, when T-28 activities expanded, RLAf had flown 1543 combat sorties, many against heavily-defended targets, e.g. Ban Khan bridge, Phou Kout area, PDJ. Yet during this period only four T-28s lost to enemy ground fire and one lost to weather. Lost rate .0032 percent very low. [...] They have carried out air operations to destroy PL bases, interdict supply lines, provide close support for ground operations and provide visual and photo recce. They have also played important role SAR operations. In many respects amount and effectiveness hostile fire here is much greater than in South Viet-Nam.”<sup>179</sup> But then, the situation changed: Already from July 64 to the end of the year, 9 RLAf T-28s and 2 *Water Pump* T-28s were lost,<sup>180</sup> so that more T-28s were urgently needed. In January 1965,

---

RLAF markings (“24178” msn 10040) can be seen at <http://members.tripod.com/chancefac/Laos/AirCraft/RLAFC-47.htm>.

<sup>174</sup> Leary, *Outline - Air America in Laos*, 1964, pp.39+25.

<sup>175</sup> In: US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 141, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/131\\_150.html](http://www.state.gov/www/about_state/history/vol_xxviii/131_150.html).

<sup>176</sup> Leary, *Outline - Air America in Laos*, 1964, p.41, quotes these numbers from a State Department report dated 7 November 64 on actions taken after the “Gulf of Tonkin Resolution” of 7 August 64; Leary, *Outline - Air America in Laos*, 1965, p.26. See also the Special National Intelligence Estimate dated 5 August 65, document 192 in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/181\\_200.html](http://www.state.gov/www/about_state/history/vol_xxviii/181_200.html).

<sup>177</sup> Telegram dated 8 November 65, sent from the US Embassy in Laos to the Commander in Chief, MACV (Westmoreland), document 203, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/201\\_225.html](http://www.state.gov/www/about_state/history/vol_xxviii/201_225.html).

<sup>178</sup> Moody, *The great adventures*, Prelude, p.1.

<sup>179</sup> US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 125, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/111\\_130.html](http://www.state.gov/www/about_state/history/vol_xxviii/111_130.html).

<sup>180</sup> One T-28 was shot down on **14 July 64**, followed by another one on **16 July 64** (Log book of Allen Rich, in: UTD/Rich/B1); four T-28s were shot down in **August 64**, the first one, an RT-28, on **14 August** at UG 025528 on western end of PDJ, killing its Thai pilot named Prasap (Leary, *Outline - Air America in Laos*, 1964, p.29); 2 T-28s were lost on **18 August**, one while it was engaged in close air support of Neutralists in the northwest corner of PDJ, the other one, piloted by the well regarded Thai base commander of Udorn, near route 42, about 5 miles NE of Ban Peung (LS-95) (Leary, *Outline - Air America in Laos*, 1964, pp.29/30+35; Log book of Allen Rich (in: UTD/Rich/B1; see also the Memorandum dated 18 August 64, sent by the President’s Special Assistant

the Royal Thai Air Force loaned 10 T-28s to the United States for operation in Laos.<sup>181</sup> During the entire year of 1965, no less than 48 T-28s were transferred from SMAAR, the USAF's Air Logistics Center at McClellan Air Force Base, Sacramento, California, to Military Assistance Programs. If we continue to assume that all aircraft delivered on a specific day were destined for the same customer, we must believe that in 1965, at least 38 USAF T-28s were delivered to Thailand and Laos in a Military Assistance Program: three T-28s on 4 March 65,<sup>182</sup> five on 17 March 65,<sup>183</sup> six on 22 March 65,<sup>184</sup> seven on 29 April 65,<sup>185</sup> three on

---

for National Security Affairs, McGeorge Bundy, to President Johnson in: US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 122, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/111\\_130.html](http://www.state.gov/www/about_state/history/vol_xxviii/111_130.html)); and the fourth T-28 of the month was shot down on **28 August** over Rittaville (Log book of Allen Rich, in: UTD/Rich/B1); in **October 64**, one T-28 was lost, when it ran out of gas during air strikes against the Ho Chi Minh Trail (Leary, *Outline - Air America in Laos*, 1964, p.25). On **25 November 64**, two *Water Pump* T-28s were lost on a flight from Udorn to Saigon, killing four pilots (Leary, *Outline - Air America in Laos*, 1964, p.46). According to Hobson (*Vietnam air losses*, p.12), this already happened on **19 November 64**, involving 51-7870 plus another T-28D; the USAF Assignment Records make believe that these two aircraft were T-28Ds **51-7863** (msn 174-715) of 2 AD, Udorn, which was officially transferred to accident status TM / code 2, on 6 December 64, and **51-7870** (msn 174-723) of 2 AD, Tan Son Nhut, which was officially transferred to accident status TQ on 64324, that is on 30 November 64. On **22 December 64**, an RT-28 was shot down near Xieng Khouang Ville (Leary, *Outline - Air America in Laos*, 1964, p.48).

<sup>181</sup> See the Telegram dated 26 January 65 sent from the US Embassy in Thailand to the Dept. of State (document 160), in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/151\\_160.html](http://www.state.gov/www/about_state/history/vol_xxviii/151_160.html).

<sup>182</sup> T-28D 51-3470 (msn 174-8) became "**0-13470**" and can be seen on a photo in the video by Ed Eckholdt (at 1.23.16); 51-3472 (msn 174-10) probably became "**0-13472**"; and 51-3511 (msn 174-49) probably became "**0-13511**" and was flown by Allen Rich on 25 May 65, who quotes it as "511".

<sup>183</sup> T-28D 51-7616 (msn 174-469), becoming "**0-17616**", documented by a slide by John Wiren preserved in the Air America Archives; 51-7622 (msn 174-475), becoming "**0-17622**", was noted as "7622" at Savannakhet on 16 October 65 by Jon Pote (e-mail dated 8 August 2008 kindly sent to the author by Jon Pote); 51-7635 (msn 174-488), becoming "**17635**", documented by a photo in Love, *Wings of Air America*, p.92; it then became "**0-17635**", flying without insignia, as is documented by a photo by Robert Campbell, taken in June 67; crashed near Savannakhet in 1967/8 (the wreck is documented by another photo by Robert Campbell, taken between June 67 and June 68; e-mail kindly sent to Erik Carlson on 26 June 2006, who forwarded it to the author); 51-7665 (msn 174-518), probably becoming "**0-17665**"; and 51-7869 (msn 174-722), probably becoming "**0-17869**".

<sup>184</sup> T-28D 51-3465 (msn 174-3), becoming "**0-13465**", was noted at Savannakhet on 8 September 65 and low over Thakhek on 11 November 65 by Jon Pote (e-mail dated 8 August 2008 kindly sent to the author by Jon Pote), but was no longer current on 1 January 72 (List of Assigned and maintained aircraft at Udorn of 1 January 72, in: UTD/Bisson B5 microfilm reel 24); 51-3469 (msn 174-7), becoming "**0-13469**", was noted at Savannakhet on 8 September 65 by Jon Pote (e-mail dated 8 August 2008 kindly sent to the author by Jon Pote), but was no longer current on 1 January 72 (List of Assigned and maintained aircraft at Udorn of 1 January 72, in: UTD/Bisson B5 microfilm reel 24); the other four T-28Bs, which had all been stored with the 2<sup>nd</sup> AD at Bien Hoa before, are 53-8363 (msn 200-434), possibly becoming "**0-38363**", 53-8364 (msn 200-435), possibly becoming "**0-38364**", 53-8366 (msn 200-437), possibly becoming "**0-38366**", then possibly went to the Royal Thai Air Force and reappeared with the Khmer Air Force as "55-138366"; and 53-8371 (msn 200-442) possibly becoming "**0-38371**".

<sup>185</sup> T-28D 51-3478 (msn 174-16), becoming "**0-13478**" (a photo showing "0-13478" together with T-28 "0-40533" is in <http://secretvietnamwar.com/BOSSET28.jpg>); 51-3506 (msn 174-44), probably becoming "**0-13506**", was noted as "506" at Savannakhet on 8 September 65 (e-mail dated 8 August 2008 kindly sent to the author by Jon Pote); 51-3507 (msn 174-45), becoming "**0-13507**", was noted as "0-13507" at Savannakhet on 16 October 65 (e-mail dated 8 August 2008 kindly sent to the author by Jon Pote); 51-3508 (msn 174-46), probably becoming "**0-13508**", was noted as "508" at Savannakhet on 8 September 65 and 16 October 65; bombed a target 15 km east of Thakhek on 12 November 65 (e-mail dated 8 August 2008 kindly sent to the author by Jon Pote); 51-3531 (msn 174-69), becoming "**0-13531**"; a photo taken at Vientiane in 1967 can be seen in Davis, *Laos: The Secret War*, in: <http://www.preservingourhistory.com/Laos.html>, showing the aircraft with an detachable Erawan on the side; this aircraft, an RT-28D recce bird, was still maintained by Air America, Udorn, in current on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and April 72 (List of Assigned and maintained aircraft at Udorn as of 1 April 72, in: UTD/CIA/B49F2); 51-3538 (msn 174-76), probably becoming

11 May 65,<sup>186</sup> two on 9 June 65,<sup>187</sup> three on 18 October 65,<sup>188</sup> four on 4 November 65,<sup>189</sup> and five on 18 November 65;<sup>190</sup> but probably even more T-28s were delivered to the RLAf in 1965. Little is known about the T-28s lost in 1965, but nine T-28s were lost on 24 January 65,<sup>191</sup> 2 Air America-piloted T-28s were lost on 14 May 65<sup>192</sup> and on 4 or 5 June 65,<sup>193</sup> one Air America piloted T-28 based at Udorn was shot down near Sam Neua (L-04), Laos, on 23 July 65, while it flew cover on a rescue mission; the pilot was rescued, however.<sup>194</sup> And in September 65, a RLAf T-28, which had been downed, was to be lifted up by Air America UH-34D H-12, but when the aircraft proved to be too heavy, a US Army Chinook had to carry the wreck back to Udorn.<sup>195</sup>

In 1966, no less than 43 T-28Ds were transferred from USAF stocks to various Military Assistance Programs, most of them thru SMAAR, the USAF's Air Logistics Center at McClellan Air Force Base, Sacramento, California. If we continue to assume that all aircraft delivered on a specific day were destined for the same customer, we must believe that in

---

**"0-13538"**, was noted as "358" at Savannakhet on 8 September 65 and 16 October 65 by Jon Pote (e-mail dated 8 August 2008 kindly sent to the author by Jon Pote); this aircraft was later transferred to the Royal Thai Air Force as "0-13538", coded 22404, and noted airworthy at Chiang Mai in November 96 (*Air-Britain News*, vol.26, no.2, February 97, p.196); and 51-3609 (msn 174-147), probably becoming **"0-13609"**.

<sup>186</sup> T-28D 51-3467 (msn 174-5), becoming **"0-13467"**, was noted at Savannakhet on 8 September 65 and on 16 October 65 by Jon Pote (e-mail dated 8 August 2008 kindly sent to the author by Jon Pote); 51-3518 (msn 174-56), becoming **"0-13518"**, as can be seen on a photo taken at Vientiane in 1967 seen in Davis, *Laos: The Secret War*, in: <http://www.preservingourhistory.com/Laos.html>, showing the aircraft with an detachable Erawan on the side, and T-28A 51-3608 (msn 174-146), probably becoming **"0-13608"**; this aircraft was noted as "608" at Savannakhet on 8 September 65 by Jon Pote (e-mail dated 8 August 2008) kindly sent to the author by Jon Pote); operated by *Water Pump* in 1967 (see the photo in: Conboy, *War in Laos*, p. 28), but was not current on 1 April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2).

<sup>187</sup> T-28D 51-3579 (msn 174-117), probably becoming **"0-13579"**; and 51-3588 (msn 174-126), probably becoming **"0-13588"**; although it was not current on 1 April 72 (List of Assigned and maintained aircraft at Udorn of 1.4.72, in: UTD/CIA/B49F2), it was with the Air Force of the Laos People's Army as "3405" since 1975 and was sold as VH-PFM in September 93.

<sup>188</sup> T-28D 51-3476 (msn 174-14), becoming **"0-13476"**, was flown in Laos by Allen Rich on 13 January 66 (Log book of A. Rich, in: UTD/Rich/B1); this aircraft was maintained by Air America, Udorn, still on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udorn as of 1 April 72, in: UTD/CIA/B49F2); 51-3743 (msn 174-281), probably becoming **"0-13743"** (this T-28 was also flown by Air America pilot Joe Hazen according to his log book: information kindly supplied by John Wiren in his e-mail to the author as of 11 October 2001); and 52-1220 (msn 189-35), probably becoming **"0-21220"**.

<sup>189</sup> T-28D 50-315 (msn 171-121), probably becoming **"0-00315"**; 50-317 (msn 171-123), probably becoming **"0-00317"**; 51-3759 (msn 174-297), probably becoming **"0-13759"**; and T-28A 51-7597 (msn 174-450), becoming **"0-17597"**, as can be seen on a photo taken at Vientiane in 1967, published in Davis, *Laos: The Secret War*, in: <http://www.preservingourhistory.com/Laos.html>, showing the aircraft with an detachable Erawan on the side.

<sup>190</sup> T-28D 50-308 (msn 171-114), probably becoming **"0-00308"**; 50-311 (msn 171-117), becoming **"0-00311"**, flying without insignia (documented by photos kindly sent by Robert Campbell to Erik Carlson who forwarded them to the author on 26 June 2006); 50-312 (msn 171-118), probably becoming **"0-00312"**; 50-314 (msn 171-120), probably becoming **"0-00312"**, and 51-3468 (msn 174-6), probably becoming **"0-13468"**.

<sup>191</sup> See the Telegram dated 26 January 65 sent from the US Embassy in Thailand to the Dept. of State (document 160), in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/151\\_160.html](http://www.state.gov/www/about_state/history/vol_xxviii/151_160.html). No details are available, but to replace the losses, the Royal Thai Air Force immediately loaned 10 T-28s to the United States for use in Laos.

<sup>192</sup> On 14 May 65, Dick Nolan was hit in his T-28 during a SAR mission. He made an emergency landing at LS-36, ran off the end of the runway, and flipped over. The aircraft was heavily damaged, but Nolan was OK (Leary, "T-28 chronology", in: UTD/Leary/I B15F3).

<sup>193</sup> On 4 or 5 June 65, Joe Potter was hit in his T-28 during the SAR for US Navy pilot Ilg. His rocket pot caught fire. He bailed out and was picked up by an Air America helicopter (Leary, "T-28 chronology", in: UTD/Leary/I B15F3).

<sup>194</sup> See the report by Tom Hoppe in Davis, *Across the Mekong*, pp.100-102).

<sup>195</sup> The scene is shown on the video tape by John Tarn at 0.37.40 minutes.

1966, at least 17 USAF T-28s were delivered to Thailand and Laos, that is 7 on 1 February,<sup>196</sup> 3 on 3 February,<sup>197</sup> 1 on 14 July,<sup>198</sup> 3 on 21 July,<sup>199</sup> and 3 on 7 August 66.<sup>200</sup> In May 66, 18 T-28s and some 12 C-47s had their base at Savannakhet.<sup>201</sup> The introduction of Project 404, however, meant that more Air Commandos could be stationed in Laos and work for the Royal Laotian Air Force. Already in March 66, the 606<sup>th</sup> Air Commando Squadron was activated at Nakhon Phanom with its small force of T-28s to augment the capabilities of the *Water Pump* detachment at Udorn, and on 8 April 67, this 606<sup>th</sup> Air Commando Squadron was transformed

---

<sup>196</sup> According to the USAF Assignment Records, the following 7 T-28Ds were transferred from SMAAR to TL MAP on 66032, that is on 1 February 66: 50-281 (msn 171-87), probably flying as “**0-00281**”; 50-285 (msn 171-91), probably flying as “**0-00285**”; 50-287 (msn 171-93), probably flying as “**0-00287**”; 50-297 (msn 171-103), probably flying as “**0-00297**”; 50-298 (msn 171-104), flying as “**0-00298**”, and based at Luang Prabang, as the aircraft bore the eagle badge on the fin; a photo is in Moody, *The great adventures*, prelude, p.13; 50-301 (msn 171-107), probably flying as “**0-00301**”; and 50-306 (msn 171-112); this T-28 is known to have flown with MAP/Laos as “**0-00306**”; it was destroyed at Luang Prabang on 2 February 67, when the airfield was attacked at midnight: In that attack, 8 people were killed, and 5 RLAF T-28s as well as Air America’s UH-34Ds H-F + H-31 were destroyed, and 3 T-28s were damaged; the enemy used rocket launchers and small arms; a photo of “0-00306” appeared in Davis, *Laos: The Secret War*, in: <http://www.preservingourhistory.com/Laos.html>.

<sup>197</sup> According to the USAF Assignment Records, 3 T-28Ds were transferred from SMAAR to TL MAP on 66034, that is on 3 February 66: 50-307 (msn 171-113), probably flying as “**0-00307**” (which later became “00307” of the Philippine Air Force); 50-309 (msn 171-115), probably flying as “**0-00309**” (which later became “00309” of the Philippine Air Force); and 50-310 (msn 171-116); the latter is believed to have flown as “**0-00310**” and still on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 1972, it was maintained by Air America, Udorn, and flown under the command of the USAF Attaché, Vientiane (List of Assigned and maintained aircraft at Udorn as of 1 April 72, in: UTD/CIA/B49F2); later, it was sold to the Philippine AF as “00310”.

<sup>198</sup> T-28D-5 49-1531 (msn 159-43) was transferred from SMAAR to TL MAP on 66195 (14 July 66) as “**0-91531**”; it served with the RLAF at Wattay, in 1967 (a photo is in: Davis, *Laos: The Secret War*, in: <http://www.preservingourhistory.com/Laos.html>, p.13, when it bore the Erawan); until it was transferred to the Steve Canyon program as a Raven aircraft in 1970?; a photo of its Raven service, when it bore a badge on the fin, but no Erawan, can be seen at: <http://www.ravens.org/gene72-2.jpg>; this USAF aircraft was still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America, Udorn, on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udorn as of 1 April 72, in: UTD/CIA/B49F2); its fate is unknown

<sup>199</sup> According to the USAF Assignment Records, 3 T-28Ds were transferred from SMAAR to TL MAP on 66202, that is on 21 July 66: 49-1508 (msn 159-20), flying with MAP/Laos as “**0-91508**” (a photo taken at Udorn in 1967 and showing the aircraft without insignia was kindly sent by Robert Campbell to Dr. Erik Carlson on 25 June 2006, who forwarded it to the author); 49-1523 (msn 159-35), as “**0-91523**”; this T-28 later became a Raven aircraft about 1970?, not wearing the Erawan, nor a badge on the fin; a photo can be seen in: <http://www.ravens.org/jimcain6.jpg>; it also appeared in the movie “Birds of a feather” at 0.49.47 minutes, without the Erawan; and still in April 1972, it was maintained by Air America, Udorn, and flown under the command of the USAF Attaché, Vientiane; finally, T-28D 49-1526 (msn 159-38) was transferred, to the RLAF on 66202 (21 July 66) as “**0-91526**”; it bore an eagle emblem on the tail and was destroyed in the mortar attack at Luang Prabang (L-54) on 2 February 67; a photo of the wreck in can be seen in Don Moody, *The great adventures of Bob and Don*, Episode 2, p.1, in: <http://www.aircommandos.org/BobAndDon/Episode0002.htm>); reportedly, it was repaired and later given to the *Aviation Nationale Khmère* (Lon Nol) between 1970-1975, but was written off (Carroll, *World Air Forces Directory 1998-99*, p.187).

<sup>200</sup> On 7 August 66 (66219), 3 T-28D-5s were transferred from SMAAR to TL MAP: 49-1496 (msn 159-8), probably flying as “**0-91496**”; still on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72, it was maintained by Air America, Udorn, and flown under the command of the USAF Attaché, Vientiane (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2); in 1975 (?), it was transferred to the Air Force of the Laos People’s Army as “3407”; in May 1990, it was sold to Brian P. Kenney, Myrtle Point, OR, as N1496K; later becoming N2496; T-28D 49-1500 (msn 159-12), probably flying as “**0-91500**”, and 49-1504 (msn 159-16), probably flying as “**0-91504**”.

<sup>201</sup> Telegram dated 15 May 66, sent from the US Embassy in Laos to the US Dept. of State, document 233 in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/226\\_240.html](http://www.state.gov/www/about_state/history/vol_xxviii/226_240.html).

into the 56<sup>th</sup> Air Commando Wing,<sup>202</sup> later known as the 56<sup>th</sup> Special Operations Wing, still based at Nakhon Phanom.<sup>203</sup> While from 1964 to 1966, instructors, maintenance and armament personnel were assigned only on temporary duty, since 1966, permanent personnel from Nakhon Phanom was used. As Don Moody notes, almost every T-28 pilot from the 56<sup>th</sup> Special Operations Wing did one tour of duty at *Water Pump*.<sup>204</sup> Officially, only the Lao pilots were flying the T-28s; unofficially, the Americans flew only maintenance test hops on the T-28. But “sometimes those test hops had strange configurations.”<sup>205</sup> And this was only the beginning: “During the air war in Laos,” Moody notes,<sup>206</sup> “the Air Commandos were called upon to perform operational tasks at great risk to the personnel and pilots involved. Although operating under rules not normally found in the regular Air Force, the personnel assigned to Project 404 continued to place their lives at risk for many years. Some Air Commandos flew in Laos for more than a decade, braving enemy fire and surmounting challenging operational conditions with rare skill and determination.” And there was still another type of help brought by the Air Commandos: In the summer of 1966, the T-28s of Royal Lao Air Force General Thao Ma attacked Pathet Lao positions around Attopeu (LS-10), as the Pathet Lao was burning and pillaging the town, killing, raping, and maiming the inhabitants. It was probably at this occasion, that Colonel Aderholt, who was working at Clark AFB in the Philippines at that time, arranged for a C-47 full of medical supplies flown to Attopeu, where they were urgently needed by Royal Lao Air Force General Thao Ma for the inhabitants of the town.<sup>207</sup>

This obvious augmentation of air power for the Royal Laotian Air Force was, however, opposed by several losses. An unknown number of RLAF T-28s was shot down during the fighting around Na Khang (LS-36) in 1966.<sup>208</sup> A major loss occurred on 21 October 66: As General Thao Ma, the commander of the Royal Laotian Air Force, feared to be removed from his command,<sup>209</sup> he suddenly left Luang Prabang without warning on 20 October. In the evening, “the location of Ma and 12 loaded T-28s could not be determined. Early the next morning, the T-28s<sup>210</sup> took off from Savannakhet and bombed targets around Wattay Airport,

---

<sup>202</sup> The components of the new 56<sup>th</sup> ACW were the 602<sup>nd</sup> ACS at Udorn with A-1Es and A-1Hs, the 606<sup>th</sup> ACS at NKP with T-28D-5s, C-123s, and U-10Ds, and the 609<sup>th</sup> ACS at NKP with A-26As. There was also Detachment 1 based at Udorn, using T-28Bs, Cs, Ds, and D-5s to train Laotian pilots and to fly tactical reconnaissance missions over Laos and North Vietnam. Detachment 1 was also the parent unit of the Ravens. In addition, the NKP-based O-1s and O-2s of the 23rd TASS, were also attached to the 56<sup>th</sup> ACW, although not assigned to the unit (Hagedorn/Hellström, *Foreign Invaders*, p.160).

<sup>203</sup> Trest, *Air Commando One*, p.182.

<sup>204</sup> Moody, *The great adventures*, Prelude, p.3.

<sup>205</sup> Moody, *The great adventures*, Episode 1, p.7.

<sup>206</sup> Moody, *The great adventures*, Prelude, p.6.

<sup>207</sup> Trest, *Air Commando One*, pp.163/4.

<sup>208</sup> See Hamilton-Merritt, *Tragic mountains*, pp.144-146, for the battle around LS-36 in 1966. Wrecks of two T-28s shot down there can be seen on the video tape by John Tarn at 0.18.15 and 0.53.42 minutes.

<sup>209</sup> “B/Gen Thao Ma had a serious disagreement with FAR M/Gen Abhay Kouprasith (‘Fat K’ in my personal dictionary) due to Fat K and FAR Chief of Staff Ouane Rattikoun removing Ma from command of the RLAF and transferring Ma to an obscure ‘staff’ position in Vientiane. Fat K and Ouane wanted the RLAF C-47 fleet made available to them for smuggling opium from Burma, and which was carried into Laos, to the US Military market in South Vietnam (and the rest of the world too). Ma stood firm and refused to allow the RLAF C-47s to be so used.” **Error! Main Document Only.**(E-mail dated 14 June 2009, kindly sent to the author by Col. Al Shinkle).

<sup>210</sup> Leary (*Outline - Air America in Laos*, 1966, p.10) states that on 21 October 66, General Ma led only six of his T-28s from Savannakhet (L-39) on the bombing run over military targets in the Vientiane area, Kirk (*Wider war*, p.218) says he had led 10 T-28s against Vientiane, and still other sources (Davis, *Laos: The Secret War*, in: <http://www.preservingourhistory.com/Laos.html>) say that 13 T-28s attacked Vientiane. It seems that 11 T-28s participated in the attacks, as Ambassador Sullivan cabled to the Dept. of State on 20 October, 0200Z: “At 0830 hours this morning General Ma’s 5-28 [read: T-28] pilots from Savannakhet launched bombing and strafing attacks against Phone Keng and Chinaimo in what appears to be the last ditch effort by Ma to salvage his own

the Army Barracks, and Chinaimo HQ North of Vientiane. The primary target seems to have been a high level secret meeting place adjacent to the Bomb Storage Area near Vientiane, where reportedly high level officials from powerful Communist countries prepared to pay for a secret deal with an extremely high level Lao Government control person.<sup>211</sup> Later that day, the Coup fell apart. Ma and the T-28 pilots fled across the river and landed at Udorn. The Thai Government impounded the aircraft and incarcerated General Ma and the pilots. They were later given political asylum.<sup>212</sup> For the AOC at Luang Prabang, this meant that they had to start all over, and this included new crews and replacement aircraft, which arrived in November 66. “We only had six T-28s to cover all of MR-I”.<sup>213</sup>

In 1967 and in the early months of 1968, a total of 57 USAF T-28s were delivered to various air forces like the *Fuerza Aérea Hondureña*<sup>214</sup> in Military Assistance Programs. At least 24 of these T-28s were probably delivered to the Royal Laotian Air Force, that is five on 31 January 67,<sup>215</sup> four on 7 February 67,<sup>216</sup> four on 20 July 67,<sup>217</sup> three in late October 67,<sup>218</sup>

---

position and force change in General Staff. [...] T-28s continue to fly over city as we draft this and machine-gun fire heard near Embassy. Bombs have hit barracks near AOC at Wattay as well as Chinaimo and Phone Kheng” (Document 262 in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/241\\_265.html](http://www.state.gov/www/about_state/history/vol_xxviii/241_265.html)). An undated paper prepared for US President Johnson notes that “Sullivan, the British Ambassador and Boun Oum flew to Savannakhet to persuade Ma to go into voluntary exile”, continuing: “In face of this Ma has flown out 10 T-28s to Udorn and one to Ubol in Thailand. Ma is now with the Thai base commander at Udorn. Seven T-28s remain at Savannakhet. General La is now moving to reassert the government’s control over Savannakhet and anticipates no opposition” (Document 264 in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/241\\_265.html](http://www.state.gov/www/about_state/history/vol_xxviii/241_265.html)).

<sup>211</sup> See Davis, *War Pilots Remembered*, at <http://www.preservingourhistory.com/Pilots.html> , p.8, where Thao Ma is commemorated as a Laotian Patriot.

<sup>212</sup> Moody, *The great adventures*, Episode 1, pp.7/8. The General Staff executed Ma after he was captured following another failed Coup attempt in 1973 (p.8).

<sup>213</sup> Moody, *The great adventures*, Episode 1, p.8.

<sup>214</sup> Five T-28Ds are believed to have gone to the Honduran Air Force in 1967: three – 50-230 (msn 171-36); 50-272 (msn 171-78), becoming *Fuerza Aérea Hondureña* “215”; and 50-293 (msn 171-99) – on 67153, that is on 2 June 67, and two – 50-233 (msn 171-39); and 50-234 (msn 171-40), becoming *Fuerza Aérea Hondureña* “212” – on 67195, that is on 14 July 67.

<sup>215</sup> The 5 T-28Ds that were transferred (TL) to the MAP from McClellan AFB, Sacramento CA, on 67031 (= 31 January 67), that is to the RLAF were: 50-288 (msn 171-94), probably becoming “**0-00288**”; 50-292 (msn 171-98), probably becoming “**0-00292**”; 50-294 (msn 171-100), probably becoming “**0-00294**”; this USAF aircraft was still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America, Udorn, on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udorn as of 1 April 72, in: UTD/CIA/B49F2); 51-3562 (msn 174-100), probably flying as “**0-13562**”; this USAF aircraft was still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America, Udorn, on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udorn as of 1 April 72, in: UTD/CIA/B49F2); and 51-3660 (msn 174-198), probably becoming “**0-13660**”.

<sup>216</sup> All of the four T-28Ds were transferred (TL) to the MAP from McClellan AFB, Sacramento CA, on 67038 (= **7 February 67**): 50-261 (msn 171-67), probably becoming “**0-00261**”; 50-271 (msn 171-77), probably becoming “**0-00271**”; this T-28D was still under the command of the USAF Attaché, Vientiane, and maintained by Air America, Udorn, on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udorn as of 1 April 72, in: UTD/CIA/B49F2); 50-274 (msn 171-80), probably becoming “**0-00274**”; and 50-276 (msn 171-82), probably becoming “**0-00276**”, also still under the command of the USAF Attaché, Vientiane, and maintained by Air America, Udorn, on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udorn as of 1 April 72, in: UTD/CIA/B49F2).

<sup>217</sup> The four T-28D-5s transferred from McClellan AFB to TL for MAP on 67201, that is on 20 July 67, are: 50-214 (msn 171-20), probably serving as “**0-00214**”, fate unknown; 50-219 (msn 171-25), probably serving as “**0-00219**”; current with MAP/Laos on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August

two on 8 March 68,<sup>219</sup> two on 12 March 68,<sup>220</sup> two on 16 March 68,<sup>221</sup> and two on 28 March 68,<sup>222</sup> but probably many of the remaining T-28s, which had also been transferred to a Military Assistance Program in 1967, equally went to Laos. On 9 November 66, US Ambassador Sullivan had estimated that by July 1967, there would be “a fleet of between 44 and 48 T-28” in Laos.<sup>223</sup> A major loss occurred shortly after midnight in the early morning of 2 February 67, when North Vietnamese sappers attacked the airfield of Luang Prabang (L-54) by rockets launchers and automatic weapons fire.<sup>224</sup> The day before, on 1 February 67, 9 fully loaded T-28s had been parked on the ramp overnight to save time the next morning. So when these aircraft were attacked, there were also huge secondary explosions from the bombs on the aircraft; furthermore, the ammo dump exploded and the AOC building was destroyed.<sup>225</sup>

---

71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), but not current on 1 April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2), so it was probably destroyed between 1 August 71 and 1 April 72; 50-228 (msn 171-34), probably serving as “**0-00228**”, fate unknown; and 50-232 (msn 171-38), probably serving as “**0-00232**”, fate unknown.

<sup>218</sup> Two T-28Ds were transferred (TL) from McClellan AFB to the MAP on 67297, that is on 24 October 67: 49-1648 (msn 159-160), probably becoming “**0-91648**” and still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America, Udorn, on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udorn as of 1 April 72, in: UTD/CIA/B49F2); and 49-1723 (msn 159-235), probably becoming “**0-91723**”, followed by a third T-28D, that is 49-1624 (msn 159-136), probably becoming “**0-91624**”, on 67299, that is on 26 October 67.

<sup>219</sup> Both T-28Ds were transferred (TL) from McClellan AFB, Sacramento CA, to MAP on 68067, that is on 8 March 68: T-28D 51-3558 (msn 174-96), probably becoming “**0-13558**”, and 51-7801 (msn 174-654), probably becoming “**0-17801**”, and still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America, Udorn, on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2).

<sup>220</sup> Two T-28D-5s were transferred from NAMCO, Columbus, to MAP on 68071, that is on 12 March 68: 51-3500 (msn 174-38), probably serving as “**0-13500**”; it is no longer current on 1 August 71; and 51-3552 (msn 174-90), probably serving as “**0-13552**”; this aircraft was still current with MAP/Laos on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), but is no longer current on 1 April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2); its fate is unknown.

<sup>221</sup> Both T-28Ds were transferred (TL) from NAMCO, Columbus, to MAP on 68075, that is on 16 March 68: 50-289 (msn 171-95), probably becoming “**0-00289**”, and 50-303 (msn 171-109), probably becoming “**0-00303**”; while “0-00289” is longer current on 1 August 71, “0-00303” was current with MAP/Laos on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), but not on 1 April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2); its fate is unknown, but it was reported as sold as N3338G prior to 1987.

<sup>222</sup> Two T-28D-5 were transferred from NAMCO, that is from North American Aircraft, Columbus, to MAP on 68087, that is on 28 March 68: 50-226 (msn 171-32), probably serving as “**0-00226**”; it was current with MAP/Laos on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), but not on 1 April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2); so probably it was destroyed between 1 August 71 and 1 April 72. The other T-28D-5 was 50-246 (msn 171-52), probably serving as “**0-00246**”.

<sup>223</sup> Telegram dated 9 November 66, from the US Embassy to the Dept. of State, in: US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 268, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/266\\_285.html](http://www.state.gov/www/about_state/history/vol_xxviii/266_285.html).

<sup>224</sup> Two Air America UH-34Ds – H-F (msn 58.1166) and H-31 (msn 58.1170) – which were parked in a designated area adjacent to the T-28s were also destroyed at 0105 local time. “According to all available information, the attack began at approximately 0035L and the fire fight lasted approximately 15 minutes. During the time of attack both helicopters plus 6 RLAf aircraft were completely destroyed by direct hits from rocket launchers and automatic weapons fire” (Narrative report of the accident as part of the Air America Local Board of Review Memorandum dated 11 February 67, in: UTD/CIA/B59F1).

<sup>225</sup> Moody, *The great adventures*, Episode 2, pp.2/3.

Eight people were killed in the attack.<sup>226</sup> Don Moody, commander of AOC at Luang Prabang recalls: “Out of the nine T-28s at LP, six were totally destroyed and three were heavily damaged.<sup>227</sup> The damaged airplanes were shipped down to the Air America facility at Udorn for repair and would soon return to action. [...] We didn’t know at the time that *Water Pump* had retrieved the T-28s that were confiscated during the coup, and were able to get six of these aircraft back within two days. [...] The Requirements Office (RO) sent us munitions and replacement parts to replace almost everything lost in the attack. The Embassy negotiated an into-plane contract with Esso to refuel all of our aircraft. Everyone rolled up their sleeves and got to work. We were able to return to combat ready status three days after the attack on the airfield.”<sup>228</sup> Photos of the T-28s involved in this attack show that all aircraft the Erawan and an eagle badge on the tail, which seems to have been the emblem of the T-28s based at Luang



RLAF / MAP T-28Ds destroyed at Luang Prabang on 2 February 67,  
including 0-00306 and 0-91526 (UTD/Rich/B3)

Prabang. As all T-28s involved seem to have borne USAF-style serials, they were probably all loaned to the RLAF as part of the MAP. Furthermore, the article by Don Moody makes clear that, while the pilots of the T-28s were Lao, the man really in charge was the USAF/Air Commando Commander of the Air Operations Center, that is Moody himself.

<sup>226</sup> Log book of Allen Rich, in: UTD/Rich/B1.

<sup>227</sup> Three of the T-28s involved can be identified: a photo is on the video tape made by John Tarn shows among others the wreck of T-28 “3625” at 0.21.10, which is believed to be “0-13625” (msn 174-163) ex USAF 51-3625; a photo contained in the papers of Allen Rich (Air America Archives) shows the wreck of a T-28 with just the last three digits of its tail number visible: “0-??306”, believed to be “0-00306” (msn 171-112), which is clearly shown in Davis, *Laos: The Secret War*, in: <http://www.preservingourhistory.com/Laos.html> . The best documented victim of this attack was T-28D “0-91526” (msn 159-38) ex 49-1526; a photo of the intact aircraft is shown on p.4 of Don Moody’s article *The great adventures*, Episode 2, while photos of the wreck can be found in the papers of Allen Rich (in: UTD/Rich/B1) and on pp.1 and 6 of Moody’s article. This aircraft seems to have been one of those that were only damaged and later repaired, as it was reportedly given to the Lon Nol’s *Aviation Nationale Khmère* between 1970-1975 (Carroll, *World Air Forces Directory 1998-99* p.187).

<sup>228</sup> Moody, *The great adventures*, Episode 2, pp.5/6.

But the night-attack on to Luang Prabang was not an isolated phenomenon: In 1967, the whole character of war began to change, as the North Vietnamese, impatient with the progress of the Pathet Lao, introduced new combat forces into Laos and took control of the dry season offensive. Already in May 67, Don Moody, Commander of AOC Luang Prabang, was given the job of teaching the Laotian Army at Luang Prabang the Principles of Air Ground Operations and how to set up a Tactical Air Control System. Missions flown by RLAF T-28s on 11 March 68 included air strikes flown against the enemy forces who had taken Phou Pha Thi (LS-85) the night before. By mid-March 1968, enemy forces had also recaptured Nam Bac, a strategic valley north of Luang Prabang, and Na Khang (LS-36) and Moun Soui (LS-108) were in danger. The NVA offensive ended only with the monsoon season of 1968.<sup>229</sup> This increased activity also meant a higher number of T-28s lost. Even after the shock of Luang Prabang, no less than 8 T-28s are known to have been lost until the end of February 1968: Two RLAF T-28s from Luang Prabang were shot down north of Nam Yu in northern Laos in late February or early March 67, when they flew cover for a CIA infil mission in northern Laos.<sup>230</sup> Three RLAF T-28s went missing in the Tha Thom (LS-11) area on 23 February 68, and three more RLAF T-28s crashed in the same area on 25 February 68.<sup>231</sup>

### **Air America's Udorn Thailand base and the RLAF T-28s**

But Air America did not only supply pilots to fly the Royal Laotian Air Force T-28s, the Company's maintenance facility at Udorn also maintained these aircraft, although it was not the only facility to do this. Former Air Intelligence Officer Lt./Col. Al Shinkle, who served in Laos from 13 October 64 - 10 August 66 with the Royal Lao Air Force at Savannakhet and wherever B/Gen Thao Ma went in Laos,<sup>232</sup> recalls: "The T-28s flown by the RLAF were maintained at two locations: Savannakhet by a combination of USAF enlisted men and by RLAF mechanics. Some, but not all, of the USAF personnel were assigned in a PCS status to the Detachment 6, 1st Air Commando Wing, Project Water Pump, Udorn, Thailand and were TDY to Savannakhet. The original Air Commando detachment under Major Drexel B. (Barney) Cochran had only about forty total assigned personnel and it was necessary to supplement their numbers with TDY from other USAF units. I was from Hdqrs, 2nd Air Division, Saigon. Some of the men were from a Bangkok unit (I think it was the 35th Support Group), and other USAF units. I recall that Bill Falconer came from a unit in Japan. The primary maintenance was done at Udorn by the 432nd Support Group. When they had a plane ready for use by the RLAF, it was flown to Savannakhet by whatever pilot was available and who had permission to venture into Laos (Geneva Conventions considered). B/Gen Ma never knew from one day to the next how many T-28s would be available for combat flying. During my time with B/Gen Ma the average number of available T-28s was 12-15. However, I also recall that at one time while I was there, we had thirty-eight T-28s at Savannakhet. That was after the first few classes of RLAF trainee pilots had graduated from Water Pump."<sup>233</sup>

As to maintenance of RLAF aircraft carried out by Air America at that period of time, no contract stating this in a clear way is available at the time of writing, but from other sources, it is known that already in June 1964, Air America's Udorn facility maintained the T-28s operated by the Royal Laotian Air Force,<sup>234</sup> that already in September 65, RLAF C-47s were

---

<sup>229</sup> Moody, *The great adventures*, Prelude, pp.6/7, and Episode 2, p.8; Robbins, *Ravens*, p.43-45.

<sup>230</sup> Moody, *The great adventures*, Episode 2, p.7.

<sup>231</sup> Entries in the log book of Allen Rich, in: UTD/Rich/B1.

<sup>232</sup> E-mail dated 13 June 2009, kindly sent to the author by Col. Al Shinkle.

<sup>233</sup> E-mail dated 14 June 2009, kindly sent to the author by Col. Al Shinkle.

<sup>234</sup> In telegram no. 1683 sent to the US Dept. of State on 23 June 64, Ambassador Unger states that "Department appears nervous about any acknowledgment that Air America involved in maintenance T-28s in Udorn" (US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 100, in:

repaired by Air America teams at the crash-site, while RLAF T-28s that had crashed were taken back to Udorn for repair at the Air America facilities, as John Tarn shows on his video tape.<sup>235</sup> The best evidence, however, comes from Jack Forney, who had been in charge of the Air America maintenance at Udorn. He states: “The AAM operation at Udorn provided all heavy maintenance and almost all intermediate maintenance for the entire RLAF fleet during the period in question [i.e. the 1964-69 period]. In the case of the T-28s, we provided the heavy and intermediate maintenance at Udorn and at Vientiane and up country Laos (LS-20, et al). For the RLAF H-34s, we contracted with Air Vietnam (because of political considerations) for the periodic heavy maintenance operations conducted at Saigon, but virtually all other H-34 maintenance was performed at Udorn. For the O-1s all maintenance was performed at Udorn, though the T-28 pilots and USAF support personnel were to accomplish daily maintenance up country.”<sup>236</sup> This maintenance was probably done thru Air America’s contracts with the United States Air Force, which, although negotiated with Headquarters Air Procurement Region Far East, placed all services to be performed by Air America under the command of DEPCHIEF.<sup>237</sup> Already contract AF 62(531)-1758 effective 1 July 63 included maintenance of Government furnished equipment, which in that case only referred to the UH-34Ds, as well as “helicopter flight and maintenance training to such students as are presented by Deputy Chief, JUSMAG, at time or times when the aircraft are not performing other operations hereunder or undergoing necessary maintenance.”<sup>238</sup> The students presented by DEPCHIEF were probably RLAF pilots and mechanics, as DEPCHIEF was responsible for the military aid to the RLAF. Contract AF 62 (531)-1841 negotiated between Air America and the USAF and effective 1 July 65 is quite similar to contract AF 62(531)-1758, in so far as it also refers to the UH-34Ds, as it also places Air America’s services under the command of DEPCHIEF, and as it also allows training RLAF personnel. But then it mentions “any agreements of a classified nature pertaining to this contract” which could be set forth by the Procurement Contracting Officer,<sup>239</sup> and it extends the services to be performed by Air America to “flying services with Beechcraft, C-46, C-47, Helio Courier, Piper Apache, Dornier Do-28, Pilatus Turbo-Porter PC-6A, fixed wing type aircraft and UH-34D helicopter type aircraft” in accordance with the Deputy Chief, JUSMAG, Thailand, and to “all necessary repairs to its aircraft determined by the Deputy Chief, JUSMAG, Thailand”.<sup>240</sup> So, there is no direct hint to the T-28s in this contract, but its extension from the operation and maintenance of helicopters to that of fixed wing aircraft working for DEPCHIEF as well as the mention of classified agreements which could be added to the original contract, make believe that this was the way, Air America could also do maintenance for RLAF aircraft – later contracts between Air America and the USAF will be much clearer.

### **Combat Air Control in Laos: the “Butterflies”**

The control of air power over Laos was first in the hands of a joint operation between the RLAF, the USAF and Air America. Already in July 1964, during Operation *Triangle*, Air Commando pilot Joe Potter, who joined Air America about a year later, flew an Aero

---

[http://www.state.gov/www/about\\_state/history/vol\\_xxviii/91\\_110.html](http://www.state.gov/www/about_state/history/vol_xxviii/91_110.html)).

<sup>235</sup> Video tape made by John Tarn at 0.16.16 and 0.37.48 minutes.

<sup>236</sup> E-mail dated 2 April 2002 kindly sent to the author by Jack Forney.

<sup>237</sup> “The Contractor [that is: Air America] shall [...] provide, establish, manage, operate, and maintain a complete flying and maintenance service [...]. The aircraft are to be operated [...] at points in the Work Zone designated by the Deputy Chief, JUSMAG. The contract services shall be rendered at airports or other locations in a specified area made effectively available by the United States Government and designated in writing to the Contractor by the Deputy Chief, JUSMAG” (Contract AF 62(531)-1758, in: UTD/Kaufman/B1F10, quotation taken from p.1).

<sup>238</sup> Contract AF 62(531)-1758, in: UTD/Kaufman/B1F10, quotation taken from p.2.

<sup>239</sup> Contract AF 62(531)-1841, in: UTD/Kaufman/B1F9, quotation taken from p.3.

<sup>240</sup> Contract AF 62(531)-1841, in: UTD/Kaufman/B1F9, quotation taken from pp.11/2.

Commander U-4 which was loaned to the RLAF by the USAF,<sup>241</sup> that is “2714”, when he acted as a Forward Air Controller to direct the strikes carried out by RLAF T-28s. On 2 October 1964, two Cessna U-17As (417796, ex USAF 64-17796, and 417797, ex USAF 64-17797), were transferred to the RLAF under a Military Assistance Program. Both aircraft were flown by Air Commando pilots like Bob Downs,<sup>242</sup> but also by Air America pilots. On 23 October 64, Cessna U-17A “64-17797” was test flown by Joe Hazen, Air America’s Chief pilot of the STOL program, and ferried to Udorn (T-08) the same day. Joe Hazen checked out Air America Captain Paul M. Severson in that aircraft on 21 January 65 or 25 February 65. There after, the aircraft sat on the ground at Udorn for quite a while,<sup>243</sup> but Air America’s Paul M. Severson flew it again between 1 and 5 October 65 on missions out of Vientiane.<sup>244</sup> When “417797” was destroyed during take-off from Vientiane, Laos, on 11 October 65, the



RLAF U-17A “64-17797”, taken at Vientiane in October 65 by John Anthony (photo no.VA031041, No Date, John Anthony Collection, The Vietnam Archive, Texas Tech University, with kind permission from Steve Maxner)

accident appeared on an Air America list called “Company operated aircraft lost or destroyed”,<sup>245</sup> so at that time it was again flown by an Air America pilot. Don Moody, commander of the AOC at Luang Prabang, recalls his activity in 1966: “Bob and I had been flying together regularly for several months. We had flown FAC missions, Strike missions, Armed Recce missions, and Psy Ops missions”, “Psy Ops” meaning that from their U-17, they dropped surrender leaflets east of Luang Prabang.<sup>246</sup>

But when no Air Commando pilot was available to fly a RLAF aircraft, Forward Air Controllers in Laos used Air America or Continental PC-6 Porters. And that is what happened after the U-17 flown by Bob Downs was taken back to Savannakhet from Luang Prabang in late 1966: “I had no other means to provide the air support for MR-I,” Don Moody, commander of the AOC in Luang Prabang, recalls. “Mostly, I used Air America and Continental Porters, which weren’t free, and occasionally the T-28. We were restricted by AIRA as to when we could fly the T-28.”<sup>247</sup> And: “I believe that Dick Secord was responsible for making the Raven Program happen. Up until now, we had tried to do it with the combat controllers and AOC Commanders in Porters, but we had too many restrictions placed on us by the Embassy. For example, we were not allowed to mark targets by throwing smoke

<sup>241</sup> Still in July 71, this aircraft is listed as loaned by the USAF (Memorandum dated 19 July 71 about aircraft insurances in: UTD/Herd/B2).

<sup>242</sup> Moody, *The great adventures*, Episode 1, p.1.

<sup>243</sup> E-mail dated 9 September 2003 sent by Joe Hazen to Erik Carlson who kindly forwarded it to the author.

<sup>244</sup> Flight Crew Member Monthly Movement Report of Paul M. Severson, in: UTD/Severson/B3F26.

<sup>245</sup> In: UTD/CIA/B51F12. The aircraft took off with controls locked, as the check off list was not used.

<sup>246</sup> Moody, *The great adventures*, Episode 1, pp.5+6.

<sup>247</sup> Moody, *The great adventures*, Episode 1, p.7.

grenades out of the windows of the Porters. There was a fear that dropping things out of airplanes that were used for humanitarian purposes would change the rules of the game. The bad guys might think that all of those Air America and Continental aircraft flying around Laos were combat aircraft and make a special effort to shoot them down as if they didn't already. The truth is that we needed our own FAC aircraft and we got them when the Ravens came."<sup>248</sup> As far as Air America is concerned, these Air Commandos used Udorn-based Porters assigned to contract 59-069<sup>249</sup> with CEECO and since 1966 to USAID contract 713.<sup>250</sup> LTC Robert A. Farmer, USAF (CCT) Retired, who was sent to Long Tieng in May 1966, describes one of those "Butterfly" missions flown in Air America Porter N12235: "We were way out in the east of Laos, and the weather was marginal. I was sitting in the back seat of the Air America Porter, monitoring Jim Stanford as he was controlling air strikes. He was, as I remember, just coming on to the job and this was his *check ride*. This mission was flown in support of General Vang Pao; he was deeply concerned about an enemy troop position nearby, and wanted us to deal with them. The strike aircraft arrived, and sure enough we weren't able to put them on target because of the weather, so we returned to 20-Alternate to refuel and prepare for the scheduled afternoon strikes. While there, we decided that if the weather was still bad, we would do whatever we could to help General Vang Pao and his beleaguered Mao soldiers. I had some grenades, so while they were refueling, I collected them from my room. Jim and I bent the grenade handles outward, and very lightly taped them with a small strand of masking tape so they wouldn't go off until they hit the ground. On the second trip out the weather was not any better, and the air strike aircraft aborted once again. At that point we decided to use what we had, so flew back over the enemy position. I opened the back window, and as we passed along the enemy ridge I began pulling the pins and tossing the grenades out the window. Just as the fourth grenade left my hand, there was a bang near me. Jim and the pilot both looked back sharply. I thought maybe they were afraid that I had dropped one of the grenades in the aircraft, or one had gone off near the plane. I quickly assured them that everything was OK with me, and the pilot immediately banked left – away from the ridge. As we circled around, we decided we could do more, so I loaded my M-16, and prepared to fire it out the right rear window. I'm not sure how many passes we made, but I managed to empty four magazines into the position before we decided that we were pushing our luck, and started back. When we arrived home, at Long Tieng (20-Alternate), I crawled under the aircraft and found a bullet hole under my seat. Looking down the top of the empennage I found the exit hole."<sup>251</sup>

On some occasions, Air America pilots also flew Air Force Cessna O-1s<sup>252</sup> and U-17s.<sup>253</sup> The small number of aircraft used corresponded to the fact that in these early days, only half a dozen of "sheep-dipped"<sup>254</sup>, that is officially civilian nonrated Air Commandos served as

---

<sup>248</sup> Moody, *The great adventures*, Episode 3, p.3.

<sup>249</sup> In November 1965, two PC-6 Porters were assigned to CEECO contract 59-069 and based at Udorn, that is N9444 and N285L (List "Status of aircraft" as of 1 November 65, in: UTD/Kirkpatrick/B1F1).

<sup>250</sup> In April and May 1966, three PC-6 Porters were assigned to contract USAID-439-713, the two taken over from the CEECO contract, that is N9444 and N285L, plus N12235 (msn 556); all of them were based at Udorn (Lists "Status of aircraft" as of 8 April 66 [in: UTD/Kirkpatrick/B1F1] and 5 May 66 [UTD/Hickler/B1F2]).

<sup>251</sup> See [http://ccthistory.arrowmaker.com/THE\\_1960s.html](http://ccthistory.arrowmaker.com/THE_1960s.html).

<sup>252</sup> So, on 20 February 66, Air America pilot Lewis H. Maxwell flew "Air Force" Cessna O-1F "1861" according to his log book (in: UTD/Maxwell/B1F6), but it is unknown, if this O-1F belonged to the RLAF or to the USAF Military Assistance Program.

<sup>253</sup> According to his log book preserved at the Air America Archives, Air America pilot Paul M. Severson flew Cessna U-17A "797" (64-17797) between 1 and 5 October 65 out of Vientiane, U-17A 65-10853 on 15 November 65 from Vientiane to Udorn, on 2 January 66 out of Sam Thong, on 4 and 5 January 66 out of Vientiane, and between 3 and 7 March 1966 out of Vientiane, and U-17A 65-10854 on 13 and 17 October 65 out of Vientiane.

<sup>254</sup> A good description of what "sheep-dipped" meant is given by Robbins (*The Ravens*, p.49, note): "A complex process in which someone serving in the military seemingly went through all the official motions of resigning

Forward Air Controllers, using the call-sign “Butterfly”. They were enlisted USAF men belonging to the *Water Pump* detachment at Udorn, who flew in Air America piloted aircraft in civilian clothes and directed air strikes in northern Laos as part of the *Water Pump* operations. Mostly, they did not mark the targets with smoke canisters dropped out of the windows – which was forbidden –, but talked fighters onto the target by describing the scenery. These Butterflies – up to 1966 only four men to control the whole of Laos – directed RLAFF T-28s as well as USAF jet fighters and were very effective.<sup>255</sup>

### **The Ravens between 1966 and early 1968:**

But in spite of the effectiveness of the “Butterflies”, their number was not sufficient in a constantly growing war. Already on 8 November 65, US Ambassador Sullivan proposed to General Westmoreland, Commander in Chief of the US Military Assistance Command Vietnam, a closer cooperation between the RLAFF and MACV: “Substance in our preliminary understandings is that US aircraft will be able, subject to detailed arrangements to be worked out in aforesaid trilateral meetings: [...] C. Share low-level, eyeball recce and FAC functions with RLAFF in O-1 type aircraft. For this purpose General Ma would like to accept MACV’s previous offer of ten O-1 type aircraft.”<sup>256</sup> The end of the “Butterflies”, however, arrived from another side: It was abruptly terminated by USAF General William M. Momyer, a commander of the 7<sup>th</sup> Air Force in Vietnam and deputy commander of the US Military Assistance Command Vietnam, when he heard that his precious high-tech jets were being controlled by people who were neither pilots nor officers. In December 1966, General Momyer created a FAC training school at Bien Hoa and replaced the “Butterflies” by the “Ravens”, that is rated USAF officers having at least six months’ experience in Vietnam.<sup>257</sup> In late 1966, about half a dozen of USAF Forward Air Controllers were stationed in Laos, using “Raven” as call-sign. These men, all USAF volunteers, were given six-month temporary duty orders and administratively assigned to the *Water Pump* detachment at Udorn, that is to Detachment 1 of the 56<sup>th</sup> Air Commando Wing of Nakhon Phanom. But in reality, these combat-tested USAF FACs worked in the *Steve Canyon Program*, which was the official name of the “Ravens” program. They were assigned under Project 404, the umbrella program for covert USAF activities in Laos, and were considered “loaned” to the US Air Attaché at Vientiane (AIRA), who became their nominal Air Force commander, although in the field, they actually performed missions for Hmong General Vang Pao and for the CIA in Laos. In practice, these men lived and worked in one of the five Lao Air Operations Centers, which had been created one by one since 1964: Vientiane and Savannakhet, then Luang Prabang, Long Tieng, and Pakse, and the “Ravens” were based at and assigned to these AOCs. Among them, one of the busiest and most demanding FAC assignments in Laos was to become Long Tieng, where nearly a dozen Ravens flew in support of Vang Pao’s operations. The whole group of the “Ravens” wore civilian clothes, carried USAID identification cards, and flew O-1s and U-17s that belonged to the USAF, but bore the insignia of the Royal Lao Air Force or were unmarked. In later years, the Ravens would also fly T-28s. They operated under the

---

from the service. The man’s records would be pulled from the personnel files and transferred to a special Top Secret intelligence file. A cover story would be concocted to explain the resignation, and the man would become a civilian. At the same time, his ghostly paper existence within the intelligence file would continue to pursue his Air Force career: when his contemporaries were promoted, he would be promoted, and so on. Sheep-dipped personnel posed extremely tricky problems when they were killed or captured. There would be all sorts of pension and insurance problems, which was one of the reasons the CIA found it necessary to set up its own insurance company.”

<sup>255</sup> Robbins, *The Ravens*, pp.49/50; Trest, *Air Commando One*, p.193.

<sup>256</sup> Telegram dated 8 November 65, sent from the US Embassy in Laos to the Commander in Chief, MACV (Westmoreland), document 203, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii/201\\_225.html](http://www.state.gov/www/about_state/history/vol_xxviii/201_225.html).

<sup>257</sup> Trest, *Air Commando One*, p.193.

direction of the American Ambassador in Vientiane. Flying with English-speaking indigenous observers and Forward Air Guides who possessed the authority under the Lao “rules of engagement” to validate targets, the Ravens provided indispensable targeting assistance for US and Lao aircraft. With the arrival of the Ravens, the AOC commanders were relieved of most of their FAC responsibilities and could turn their attention to coordination tasks.<sup>258</sup>

There were two legal links between the “Ravens”, who were USAF men assigned to a secret USAF program, and Air America: One of them was rescue – Air America helicopters also picked up Raven pilots who had been downed<sup>259</sup> – and the other one was maintenance. When a Raven O-1 went down somewhere in Laos, an Air America helicopter would fly in an Air America flight mechanic who would fix the damage<sup>260</sup> – but little regular maintenance was done, until, in late 1968, after a number of engine failures, Raven Ron Rinehart grounded



LS-20A Early 1969 Picture taken by Chuck Baird CASI Porter Mechanic

Some Raven O-1s, plus an Air America C-123K and C-130A at Long Tieng  
(with kind permission from Chuck Baird)

all Raven aircraft working out of Long Tieng. Only then, a lot of improvements were introduced. But in the period described here, the situation was very bad: All of the O-1s had come from the US military, where sometimes they had been out in the field for many years, accumulating dirt in the fuel tanks. As was discovered in the new maintenance program introduced in late 1968, some planes had two cups of mud in each of their fuel tanks. This explains why, until 1968, the situation of the Raven pilots flying in Laos was quite bad: Their number was too small – there were only four Ravens to cover the whole of northeast Laos –, the maintenance was limited,<sup>261</sup> and the number of airplanes available was too small, which was especially felt when one of the O-1s was down from battle damage or in for maintenance. In such a situation, more than one Raven illegally flew as copilot in an Air America or Continental Air Services aircraft, returning to the old practice of the “Butterflies”.<sup>262</sup> Finally, there was also another group of Forward Air Controllers operating over Laos, who had nothing to do with the Ravens, and that were the USAF OV-10s based at Nakhon Phanom, using the radio call-sign “Nail”. They flew over the Trail in Vietnam, but occasionally also operated in Laos.<sup>263</sup>

### USAF T-28s over Laos: the “Zorros”

But the T-28s of the Military Assistance Program supporting the RLA and those flown by

<sup>258</sup> Castle, *At war*, p.86/7; Robbins, *The Ravens*, pp.49/50; Hagedorn/Hellström, *Foreign Invaders*, p.160; Moody, *The great adventures*, Prelude, p.7/8.

<sup>259</sup> The rescue of Ron Rinehart (“Papa Fox”) by an Air America helicopter is described in Robbins, *The Ravens*, pp.72-75.

<sup>260</sup> Robbins, *The Ravens*, pp.57+77.

<sup>261</sup> Robbins (*The Ravens*, p.76) notes that before 1968, the mechanics who worked on the Raven aircraft in Laos were passing them after a ground-check inspection, instead of a flight-test, which involved a certain amount of risk.

<sup>262</sup> Robbins, *The Ravens*, pp.75-78.

<sup>263</sup> Robbins, *The Ravens*, p.401.

the Ravens were not the only US T-28s operated in Laos. In March 1966, the 606<sup>th</sup> Air Commando Squadron was activated at Nakhon Phanom with its small force of T-28s to augment the capabilities of the *Water Pump* detachment at Udorn.<sup>264</sup> After the 606<sup>th</sup> ACS had arrived at NKP, T-28 pilots from its Detachment 1 took over the operation of the in country AOCs. In June 66, a detachment of 8 A-26s arrived at Nakhon Phanom for combat evaluation as a night interdiction weapon over Laos. Between 5 and 16 August 1966, no less than 11 T-28Ds were transferred from McClellan Air Force Base to the 606<sup>th</sup> ACS at Nakhon Phanom.<sup>265</sup> Very soon, they began to fly night interdiction missions over the Ho Chi Minh Trail in central Laos on a regular basis, and in November 66, these aircraft even began flying missions in the more heavily defended “Barrel Roll” sector in northeastern Laos, supporting General Vang Pao. This initial force of 8 A-26As (“Nimrods”) had proved their effectiveness



A *Steel Tiger* A-26A taken in the mid-sixties  
(Ed Eckholdt collection, photo kindly submitted by Mike LaDue)

in night interdiction between June 66 and 9 December 66, when Colonel Aderholt arrived at Nakhon Phanom to take over the command of the Squadron. Colonel Aderholt immediately began molding it into a wing with control and supervision over Thailand-based special air warfare operations, and in April 67, the 56<sup>th</sup> Air Commando Wing was activated at Nakhon Phanom, consolidating the many special air warfare activities in Thailand under Colonel Aderholt’s hand.<sup>266</sup> Officially, seven of the original T-28s of 606 ACS were assigned to the 56<sup>th</sup> Air Commando Wing, Nakhon Phanom, on 31 May 67 as an act of “reconciliation”.<sup>267</sup> In

<sup>264</sup> One of these T-28Ds, **49-1582** (msn 159-94), of 606 ACS, NKP, crashed near Nakhon Phanom on 23 October 66 during a training flight (Hobson, *Vietnam Air losses*, p.79).

<sup>265</sup> According to the USAF Assignment Records, these T-28Ds were: **49-1559** (msn 159-71); **49-1561** (msn 159-73); **49-1569** (msn 159-81); **49-1571** (msn 159-83); **49-1572** (msn 159-84); **49-1582** (msn 159-94), it was based at Udorn for WN-service on 66297, and returned to NKP on 66323; the same day, it was transferred to status TA (flying accident); **49-1583** (msn 159-95); **49-1586** (msn 159-98); **49-1591** (msn 159-103); **49-1599** (msn 159-111); and T-28D-5 **49-1621** (msn 159-133).

<sup>266</sup> Trest, *Air Commando One*, pp.182+191/2+195; Moody, *The great adventures*, Episode 3, p.1.

<sup>267</sup> These **seven** T-28Ds were: **49-1569** (msn 159-81); this aircraft was transferred to a classified project on 12 June 67 (67163), flying attacks on to North Vietnam; on such a mission, it was shot down near Ban Katoi, North Vietnam, on 12 July 67, killing Captain J. P. Dove and Major B. E. Squire (see: Hobson, *Vietnam air losses*, p.108, and <http://www.geocities.com/Pentagon/Quarters/9553/losses.html>); **49-1571** (msn 159-83); after service with the 56<sup>th</sup> Special Operations Wing (56 SOP WG, NKP) since 3 August 68 (68215), this aircraft was transferred to a Military Assistance Program on 2 October 68 (68275); **49-1572** (msn 159-84); crashed over Laos on 2 January 68 (Hobson, *Vietnam air losses*, p.131); officially to status “TP” on 3 January 68; **49-1586** (msn 159-98); crashed near the Ho Chi Minh Trail on 28 January 68 (Hobson, *Vietnam air losses*, p.134); officially to status “TN” on 28 January 68; **49-1591** (msn 159-103), to 56 SOP WG, NKP, on 68215; transferred to an MAP

January 67, Colonel Aderholt got permission to augment operations in *Steel Tiger* with T-28s (call sign “Zorro”) that were not used in the Thai training program, and on 18 January 67, the T-28 “Zorros” phased into the night interdiction program over the Ho Chi Minh Trail. Although Colonel Aderholt did not want the Zorro T-28s to be used in daylight missions, the 7<sup>th</sup> Air Force fragged four of them for a daylight rescue mission on 17 January 67, and one of them was shot down, killing the pilot, Captain William K. Cogdell.<sup>268</sup> More T-28s were added<sup>269</sup> and more T-28s were lost in accidents,<sup>270</sup> while some others were transferred to a Military Assistance Program.<sup>271</sup> As a total, the 56<sup>th</sup> ACW at Nakhon Phanom had 10 A-26s and 10 T-28s in operation in the spring of 1967. In addition, the NKP-based O-1 and O-2 FAC aircraft of the 23<sup>rd</sup> TASS, call-sign *Nail* at night and *Cricket* during day-time, were in effect attached to the 56<sup>th</sup> ACW, although not assigned to the unit.<sup>272</sup>

## ABCCC

There was still another aspect of the air war in Laos that should be mentioned here: the chain of command. Already in 1961, a letter by US President Kennedy dated 29 May 61 determined that the US Ambassador to Laos was in charge of all CIA operations undertaken in that country. After all MAAG personnel had officially left the country in October 1962, the US Ambassador to Laos acquired an unprecedented military power in special military

---

on 69003, that is on 3 January 69; **49-1599** (msn 159-111), to 56 SOP WG, NKP, on 68215; this aircraft was transferred (TL) to an MAP on 68265, that is on 22 September 68; **49-1621** (msn 159-133), to 56 SOP WG, NKP, on 68215; to TL on 15 September 68 (68259), which means it became a Raven aircraft, probably flying as “0-91621”; still on 1 April 72, it was one of those USAF aircraft, that were maintained by Air America, Udorn, but flown under the command of the USAF Attaché, Vientiane (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2).

<sup>268</sup> Trest, *Air Commando One*, p.196. According to the USAF Assignment Records preserved at Maxwell AFB, AL, the T-28D of 606 ACS which was destroyed on 17 January 67 (Hobson, *Vietnam air losses*, p.86), but officially written off (TA) on 18 January 67 (67018) was **49-1604** (msn 159-116), which had been transferred from McClellan AFB to 606ACS, NKP, on 67017, that is the very day before its crash.

<sup>269</sup> According to the USAF Assignment Records, T-28D **49-1543** (msn 159-55) came from McClellan AFB, when it joined the 606 ACS, Nakhon Phanom, on 67101, that is on 11 April 67, and was reassigned to 56ACW, NKP, on 67151, that is on 31 May 67.

<sup>270</sup> T-28D **49-1559** (msn 159-71), which had probably been with 606ACS, NKP, since 1966, was shot down (TA) over Laos on 67091, that is on 1 April 67, killing Majors R. A. Govan and D. R. Williams (see: Hobson, *Vietnam air losses*, p.94, and <http://www.geocities.com/Pentagon//Quarters/9553/losses.html>); **49-1558** (msn 159-70) had been transferred from IACW, England AFB, to 606ACS, NKP, on 67052, that is on 12 February 67; it was reassigned to 56ACW, NKP, on 67151 (31 May 67), crashed during a reconnaissance mission over Route 23 near the Ban Karai Pass on 25 December 67, killing the pilot, Captain Terry T. Koonce, and an unknown backseat observer (Hobson, *Vietnam air losses*, p.129); officially to status “TM” on 67360, that is on 26 December 67; see also: <http://www.geocities.com/Pentagon//Quarters/9553/losses.html>.

<sup>271</sup> According to the USAF Assignment Records preserved at Maxwell AFB, T-28D **49-1561** (msn 159-73) came from “THABTRRFCV”, which possibly means the Royal Thai Air Force at Nakhon Phanom (RFCV), and joined the 606ACS, NKP, on 67089, that is on 30 March 67; like the other T-28s, it was reassigned to 56ACW, NKP, on 67151, that is on 31 May 67, and served for some time at XMTG, that is at Udorn, in 1968, so was probably serving with the *Water Pump* Detachment there; on 68278, that is on 5 October 68, it was transferred (TL) to the MAP/Laos, probably as “0-91561”, and was still current with them on 1 April 72 (List of assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2), until it was sold to the Philippine AF as “91561” in 1974 (?); T-28D **49-1583** (msn 159-95) came from 8TFW, Ubon, when it joined 56ACW, NKP, on 67303, that is on 30 October 67; after having been reassigned to the 56th Special Operations Wing, NKP, on 68215, that is on 3 August 68, it was likewise transferred (TL) to the MAP/Laos on 68279, that is on 6 October 67, but later, it was used as a Raven aircraft (a photo exists in <http://www.ravens.org/gene72-2.jpg>); it was still current on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), but not on 1 April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2), so was probably destroyed between 1 August 71 and 1 April 72.

<sup>272</sup> Trest, *Air Commando One*, p.197; Hagedorn/Hellström, *Foreign Invaders*, p.160.

activities.<sup>273</sup> William H. Sullivan, who was the US Ambassador to Laos between November 64 and June 69, had the power to control “permanent and temporary assignment in Laos of all personnel concerned with military activity. Budget requests for MAP. Ground rules governing movements of US advisory personnel within Laos. Construction of US military facilities. Sizable movements of Lao military [...] by US controlled aircraft. Advance approval of preplanned US air attacks against targets in Laos.”<sup>274</sup> Ambassador Sullivan continued Leonard Unger’s policy of daily staff meetings. It was during these meetings and in private sessions with the CIA Station Chief and the Embassy’s military attachés that Sullivan shaped and administered his multi facial war. When he required military advice, it came in from the CIA chief of station and the US military attachés at Vientiane, that is the USAF Attaché (AIRA) and the US Army Attaché (ARMA). This combined staff of the US Embassy at Vientiane was called the “Country Team”.<sup>275</sup> Colonel Robert Tyrell, AIRA, said: “I report to the Ambassador proposals for air strikes that come to us from the Laotian military forces and the American military commands and in turn, I submit to US commands the requirements for air strikes approved by the Ambassador, which supplements the RLAF capability.”<sup>276</sup>

This complex command system created problems especially for the USAF. Initially, the air strikes were controlled by the Ambassador and his staff from the Air America operations.<sup>277</sup> But in November 65, the Department of Defense decided to establish a new air headquarters at Udorn, which was initially called Deputy Commander, 2<sup>nd</sup> Air Division/13<sup>th</sup> Air Force, and then redesignated as Deputy Commander, 7<sup>th</sup>/13<sup>th</sup> Air Force, in April 1966.<sup>278</sup> This was probably the beginning of the ground-based Direct Air Support Center (DASC) and the Airborne Battlefield Command or Control Centers (ABCCC). Up to 1967, the ABCCC coordinating all air strikes had been a USAF EC-47,<sup>279</sup> and since 1967, it was a Udorn-based EC-130E.<sup>280</sup> There were two ABCCCs orbiting over Laos, one operating in northern Laos, using the radio call-sign “Cricket” during daytime and “Alley Cat” during night, and another one operating in the Laotian panhandle, using the radio call-sign “Hillsboro” in the day and “Moonbeam” at night.<sup>281</sup> As has been made clear, these ABCCC C-47s and C-130Es did not

---

<sup>273</sup> Castle, *At war*, pp.54/5.

<sup>274</sup> Douglas S. Blaufarb, CIA station chief in Vientiane 1964 - 1966, quoted by Castle, *At war*, p.78.

<sup>275</sup> Castle, *At war*, pp.2-3, 79, and 88.

<sup>276</sup> Colonel Tyrell quoted by Castle, *At war*, p.88.

<sup>277</sup> Castle, *At war*, p.70.

<sup>278</sup> Castle, *At war*, p.89.

<sup>279</sup> According to the USAF Assignment Records preserved at Maxwell AFB, AL, two C-47Ds of 2AD were based at Udorn in 1965: **43-49373** (msn 26634) on 65181, that is on 30 June 65, and **45-887** (msn 34147) on 65314, that is on 10 November 65; in 1966, C-47D **43-48388** (msn 25649) of 606 ACS was assigned to Udorn service on 31 July 66 (66212); in 1967, 4 C-47Ds were operated by the 432<sup>nd</sup> Tactical Reconnaissance Wing, Udorn, that is by the same unit which later also operated the ABCCC C-130Es: **43-48492** (msn 25753), **43-48946** (msn 26207), **43-49701** (msn 26962), and **45-887** (msn 34147), which left the 432<sup>nd</sup> TRW in 67; probably, these were the ABCCC aircraft. At some time, RC-47s from Nakhon Phanom (NKP) were also used on ABCCC duties in Barrell Roll, using the call-sign “Dog Patch” (*Operational Call Signs SEA*, in: [http://downloads.members.tripod.com/chancefac/Call\\_SignPgs/CSpg\\_1.htm](http://downloads.members.tripod.com/chancefac/Call_SignPgs/CSpg_1.htm)). One of these RC-47s, RC-47D **43-48388** (msn 25649) of 606 ACS, Nakhon Phanom, using call-sign “Dogpatch 2”, was shot down by a North Vietnamese MiG 17 in North Vietnam close to the Sam Neua Province of Laos on 29 July 66 (Hobson, *Vietnam air losses*, p.68).

<sup>280</sup> Hagedorn/Hellström, *Foreign Invaders*, p.160. A total of ten C-130Es are known to have been modified to EC-130Es over the years, but only four of these aircraft were based at Udorn with 432 TRW in 1969: **62-1809** (msn 3770), **62-1820** (msn 3783), **62-1836** (msn 3799), and **62-1857** (msn 3821) (USAF Assignment Records). All of them were later reported with the 7<sup>th</sup> Airborne Command and Control Squadron at Udorn (Olausson, *Lockheed Hercules production list 1954-1999*, pp.35-39+149), which had been activated on 13 February 68, organized on 1 March 68, and assigned to the 432<sup>nd</sup> Tactical Reconnaissance Wing on 31 October 68 (History of the 7<sup>th</sup> ACCS in: <http://www.au.af.mil/au/afhra/wwwroot/sqs/0007accs.htm>), so that these four C-130Es / EC-130Es are believed to have been used as ABCCC over Laos already since 1967.

<sup>281</sup> Robbins, *Ravens*, pp.398+400.

give the orders themselves, but they served as relay stations between the “Country Team” as well as other military headquarters and the aircraft involved in the air strike. When a Raven had marked a target by white phosphorus (“Willy Pete”) smoke rockets, he would call fighter-bombers on to the target from a circling Airborne Battlefield Command or Control Center (ABCCC) or a ground-based Direct Air Support Center (DASC). Then, the target chosen by the Raven had to be approved by the orbiting ABCCC or the DASC, which could take up to half an hour. Sometimes, the ABCCC aircraft would also pass requests for special ordnance and target validation to Air Force HQ in Saigon and to the Air attaché at Vientiane.<sup>282</sup> When a target chosen by the Raven had been approved, ABCCC would call in RLAf T-28s or a RLAf AC-47 or USAF F-105 jet fighters out of Takhli.<sup>283</sup> If necessary, the ABCCC aircraft would also give the radio frequency of a certain ground unit and the coordinates of its location, weather information, information about fuel depots, coming from AIRA, and special instructions to the Ravens.<sup>284</sup> While the fighters were on station, their operation would be controlled by the Raven, and after the fighters had departed, the Forward Air Controller remained over the target to make a bomb damage assessment (BDA), which he relayed to the fighters and to the ABCCC, and the ABCCC aircraft would send the bomb damage assessments thru to the Air Attaché’s office at Vientiane, who would give the direct orders of what had to be done next.<sup>285</sup> As an air strike was a very complex operation, in the later years, the T-28s flown by Air America pilots were also directed by ABCCC. Already on 15 August 68, the CIA’s Deputy Director of Plans had requested that more USAF ARDF (Airborne Radio Direction-Finding) aircraft be made available for CIA operations in Laos.<sup>286</sup>

### **The 1968-73 period**

The period that followed the Tet Offensive of January 68 was characterized by two things in Laos: First, the Communist aggression in Laos increased, as the North Vietnamese now brought big guns and entire battalions into Laos, resulting in a similar strategy on the pro-western side that, to a certain extent, replaced the old guerrilla strategy. Then, beginning in 1969, the traditional pattern of the war in Laos – during the dry season Communist troops would advance to the west, but during the rainy season they would be pushed back to the east by pro-western troops supported by Air America aircraft – no longer worked, as then, the Communist troops continued their attacks during the rainy season.<sup>287</sup> Second, since 20 October 69, a subcommittee of the Senate Committee on Foreign Relations led by Missouri Senator Stuart Symington began closed hearings on the war in Laos, whose transcripts were released to the public in April 1970. So the war in Laos was no longer a secret war. All that meant greater participation of US-paid Thai ground forces and more US air power in Laos.<sup>288</sup> Already since early 1968, Vang Pao’s Hmong army, who had originally been conceived as a guerrilla force, had shouldered the majority of the Royal Lao government responsibility for ground attacks in northeastern Laos. So they were reorganized into 300-man “Guerrilla Battalions” of three 100-man companies each and “Groupements Mobiles” of three to six battalions. But as due to the many casualties the Hmong had suffered over the years, Vang Pao had to recruit even 13 or 14 year old boys. As the Royal Lao Army remained incapable or unwilling to fight the North Vietnamese, the United States began to recruit Thai volunteers

---

<sup>282</sup> Robbins, *Ravens*, pp.10+18+283.

<sup>283</sup> Robbins, *Ravens*, pp.10+155+268.

<sup>284</sup> Robbins, *Ravens*, pp.13+175+176+76.

<sup>285</sup> Robbins, *Ravens*, pp.10+79.

<sup>286</sup> Letter sent by the CIA to Major General William E. DePuy, Special Assistant for Counterinsurgency and Special Activities, published at <http://www.foia.cia.gov/AirAmerica/C05260977.pdf> of the CIA.

<sup>287</sup> Kirk, *Wider war*, p.228.

<sup>288</sup> Castle, *At war*, pp.98/9.

thru “Headquarters 333”, and by April 1971, at least twelve Thai volunteer SGU battalions had served in Laos.<sup>289</sup> Air America felt these changes by receiving stronger USAF support in paramilitary operations, but also by new transport duties, as between 1970 and 1974 the Company transported entire battalions of Thai volunteers (project *Unity*)<sup>290</sup> between their training camps in Thailand and battle fields and outposts in Laos where these Thai volunteers were deployed. Finally, in late 1971, Air America’s maintenance facility at Udorn began to maintain a fleet of 10 former US Army Bell UH-1Ms that were flown by Thai pilots on medevac missions to support the Thai *Unity* volunteer forces fighting in Laos.<sup>291</sup>

### **Supporting the “Secret war” on the ground**

As in the 1962-68 period, Air America UH-34Ds in Laos were used to airlift troops and to bring them close to the point where they had to fight. Often, those military operations of the late sixties were characterized by the same type of cooperation between the various partners as has been shown above for Operation *Triangle* of 1964. On 23 March 69, for example, Operation *Duck* was launched against a Pathet Lao base hidden in a cave on the side of Phou Labo, southeast of Mahaxay. Two SGU companies of 115 men each belonging to the SGU “Red Battalion” were airlifted close to the cave by seven USAF CH-3Es, three USAF UH-1s, and eight Air America UH-34Ds. The USAF also provided cover: six A-1Es escorted the helicopters, and eight F-105s plus four A-1Es all directed by two O-2s working as Forward Air Controllers attacked the enemy between the helicopter landing zone and the cave. Instructed to destroy the complex, the irregulars ran up and then retreated south, as the operation met unexpected resistance. The evacuation of the Hmong troops was mostly done by the Air America UH-34Ds, as five of the USAF CH-3Es sustained major battle damage and had to return to base. The bulk of the irregulars walked southwest onto Route 122 and were rescued the following day.<sup>292</sup>

But the late sixties and the early seventies also brought two new elements to Air America’s support to the ground forces: One of them was the fleet of Bell 205s. They could

---

<sup>289</sup> Castle, *At war*, pp.110-12.

<sup>290</sup> Castle, *At war*, pp.2/3; Conboy / Morrison, *Shadow war*, p.444.

<sup>291</sup> Conboy / Morrison, *Shadow war*, pp. 303/4.

<sup>292</sup> Castle, *At war*, pp.92/3; Conboy / Morrison, *Shadow war*, p.218.



Air America Bell 205 XW-PFF plus one more at Ban Keun in 1968, taken by Harry Casterlin  
(photo no. 1-WL1-28-26-PB399, preserved at UTD/Leary/I B28F26)

passengers or cargo, had seat armor, and a hoist and inertia reels could be installed.<sup>293</sup>  
Although these helicopters were assigned to contract AID-439-713, they in fact flew Hmong

---

<sup>293</sup> Aircraft and avionics information as of 1 April 73, in: UTD/Kaufman/B1F14.



Air America Bell 205 XW-PFG after dropping troops  
(UTD/Leary/I B28F5, photo no. 1WL1-28-5-PB44)

carry 12 troopers and other SGUs from one position of the battle field to another – comparable to the UH-1s of the US Army Airborne Cavalry Divisions in South Vietnam. This technique was called “leap frog” and consisted of transporting SGUs behind enemy lines. The Bell 205s were also used to supply isolated outposts and gun positions with all types of goods including arms. This type of helicopters was introduced to Air America Laos in 1967.

In 1972, a heavy transport helicopter joined Air America’s fleet, the Boeing CH-47 Chinook. All Air America Chinooks had armor plates and IFR capability. Essentially, there were four types of missions flown by Air America’s Chinooks: First, they were used as troop



Air America Chinook with a sling, taken by Gary Gentz  
(photo no. 1-WL1-28-7-PB79, preserved at UTD/Leary/I B28F7)

carriers within Laos, and in this configuration, they could carry 32 passengers;<sup>294</sup> to quote one example: On 20 January 73, two Air America Chinooks were used to transport troops to re-open the Vientiane-Luang Prabang highway.<sup>295</sup> In another configuration, they could carry wounded out of a battle area, then they could be equipped with 24 litters, while 2 attendants could take care of the wounded. In still another configuration, they could carry cargo and even small vehicles, and so they had roller conveyer tracks and inertia reels. They could also rescue besieged people and lift heavy equipment with its hoist winch, including downed aircraft like a Twin Otter or even a C-46 fuselage estimated to weigh about 13,000 pounds and they could transport large outside cargo in a sling.<sup>296</sup> Indeed, the primary mission of the Chinook probably was to transport large external sling loads from Udorn, Thailand to isolated positions in Laos. An Air America Chinook could move a 155MM gun with ammunition and crew from one position to another in one trip; the crew and ammunition were loaded inside and the gun outside to a cargo hook. Sometimes, even four cargo hooks were used in order to transport four different loads to four different places.<sup>297</sup>

---

<sup>294</sup> Aircraft and avionics information as of 1 April 73, in: UTD/Kaufman/B1F14.

<sup>295</sup> Bowers, *The USAF in South-East Asia. Tactical Airlift*, p. 462.

<sup>296</sup> Aircraft and avionics information as of 1 April 73, in: UTD/Kaufman/B1F14.

<sup>297</sup> Hutchison, *Chinooks*, p. 4.



Air America Chinook "016" carrying a big gun, taken by Gary Gentz  
(UTD/Leary/I B28F7, photo no. 1WL1-28-7-PB76)

### **Hazardous supply flights to locations besieged by enemy forces**

Although, strictly speaking, dropping supplies to friendly positions could be a routine flight as described in the file *Air America in Laos II – military aid*, such flights could become very dangerous combat support missions, when the locations to be re-supplied were besieged by enemy forces. As Air America's Twin Otter pilot Jim Pearson points out, this was true for Long Tieng in the early seventies: "At that time, flying in the Long Tieng area was quite hazardous, especially making air drops onto Skyline ridge." He recalls two particularly dangerous situations: "Captain Parker and I were flying two Twin Otters making air drops onto Skyline ridge. I was first in and noticed heavy 12.7mm weapons firing at us, when Captain Parker arrived and began holding overhead. I said: 'Pete, we are taking heavy 12.7 fire, be careful up there!' So we made our second pass, and just before the DZ I turned away and made a very hard 360 degree turn. Just as we turned away, we heard numerous explosions on the DZ. The enemy (smart guys) timed our procedure and fired mortars to try and knock us down as we over-headed the DZ. As we made our second drop, we noticed much heavier 12.7 firing. I again told Pete: 'Be careful, we are really taking heavy fire!' 'They can't get me way up here.' I mentioned that 5000 feet is the effective range of the 12.7. The bullets don't stop there. On the third pass, the same turn away maneuver with the same explosions with a quick 360 and drop to the steadily increasing tune of 12.7s. On my fourth pass in again 12.7s. I told Pete: 'Be careful and hold somewhere else!' He replied: 'They can't hit me up here.' I said: 'No, unless they get lucky.' The pregnant pause! 'They just got lucky, I am on fire!' I told

him to high tail it to Alternate and put her down. Then I rolled in and made two tight drops and headed for Alternate myself at a high power setting and tried to catch him. I heard him say: 'I'm not landing there.' Apparently the enemy said him coming in smoking and knew he would be landing. Again they fired mortar rounds, so as to impact just as he landed, and as he came over the runway threshold they began exploding, causing him to go around. I told him to head for Phu Kao on the 9700 foot mountain Phu Bia. It is where LS-14 was located and it was harassed by the enemy daily. By now I was approaching Alternate and saw Captain Parker's plane and did not see any smoke and told him so. I told him to land at Phu Khao and I would follow him in and pick him up, which I did. They shut down and chocked the plane and jumped on my plane, and we were out of there in seconds. Fortunately, the strip was not attacked that evening and we flew in the next day and retrieved the repaired plane.

Again making drops on Skyline. I was heading west looking for a DZ, and unbeknownst to me, a Continental Twin Otter was heading east, looking for a DZ at the same height! The sun was in my eyes, and I caught a glint of light which attracted my attention only to see both pilots in the Continental Twin Otter looking at me. The glint was, as they saw me first, they took evasive action by diving, and the changing attitude of the plane reflected the sun into my eyes. I saw they were descending, so I just pulled up slightly and we missed each other. My plane naturally was OK, but in his massive effort to evade my aircraft he dislodged the cargo and it flew up to the overhead along with the two kickers. When he pulled out, the load crashed down onto the deck, doing heavy damage to the plane and injuring one kicker very much. I have always felt the most dangerous situation was first weather, then the possibility of a mid-air collision and lastly enemy action."<sup>298</sup>

### **Hazardous supply drops to road watcher teams**

But the *Plaine des Jarres* was not the only area where Twin Otters were used. "Shortly after utilizing the Twin Otter out of Long Tieng area on night missions, the customer focused on the Pakse, Laos area. The Twin Otter began operations with constant air drops to teams positioned all over the *Plateau des Bolovens* just east of Pakse. We would begin usually with a recon flight interrogating all the positions as to their present locations and needs, then fly back to Pakse and begin to assemble drop bundles. These missions were taking up to six hours."<sup>299</sup>

### **"Hot soup"**

While during the 1968-73 period, many of Air America's combat support operations remained the same as described before, on several occasions the Company's transport aircraft were apparently used as bombers. This illicit type of combat missions flown by Air America's transport aircraft occurred in the early seventies: When, in 1970, an overzealous CIA case officer employed Laotians to mix homemade napalm, then known as "hot soup", Air America Caribous dropped them with great effect onto enemy positions for some time, until the US ambassador G. McMurtrie Godley stopped it right out, as it was in direct contravention of the Geneva accords – as had been the action of an Air America helicopter whose flight mechanic had shot down a Russian AN-2 biplane leading North Vietnamese troops into a valley in northern Laos, equally blamed by the ambassador, but praised by Vang Pao.<sup>300</sup> Nevertheless later in the war, the practice was repeated using aviation gas. Air America's Twin Otter pilot Jim Pearson recalls that this type of flights was also undertaken out of Pakse in late 1972: "The last operations of note out of Pakse were due to the critical situation regarding the enemy proximity to the city. The Pathet Lao and their cohorts, the North Vietnamese, were

---

<sup>298</sup> E-mail dated 5 September 2005, kindly sent to the author by Jim Pearson.

<sup>299</sup> E-mail dated 5 September 2005, kindly sent to the author by Jim Pearson.

<sup>300</sup> Robbins, *Air America*, pp.135-37.

only 20 kilometers from the city of Pakse, with no opposition between and no air cover. All aerial assets were totally utilized elsewhere. So one morning, the customer at Pakse told me to load up with six 55 gallon drums of Av Gas and: ‘Go up the road from Pakse to the Plateau and join up with a Raven who will mark targets for you.’ Wow, I could not believe this. Real combat flying, except in an unarmed plane! Well, you can’t have everything, make do. The customer decided to go and watch the hot soup drop. On the way up to the contact area, I was pondering just how to deliver this weaponry: two 55 gallon drums of Av Gas with two thermite grenades taped to the side! Finally, I decided that in order to hit the target, the drums had to be going straight towards the target; so to make the drums go straight to the target, I had to point the plane straight to the target, until stabilized, and then ring the bell, and the kickers would push out two drums attached to the static line, which would remove the safety pins allowing the grenades to explode. So I met up with the Raven, and he said he had a target and would put in Willy Pete for me. White smoke. He smoked the target and told me to put the ordnance on the beginning of the smoke. So with my newly concocted drop procedure, I pulled up to 1200 feet over the drop zone and slowed the plane to 80 knots with 10 degrees of flap. Max flap speed was 110 knots. So I pushed the nose into a dive straight at the beginning of the smoke plume, and when it was coming straight at my window, I rang the bell. Out went the drums, and I pulled up and rolled to the left and watched the grenades begin to smoke and watched until both barrels hit the beginning of the smoke and exploded. Wow, on target! I was mostly relieved, as the customer was on board watching this entire episode. Again I repeated this procedure on two more targets and went back to Pakse and picked up four more loads that day. We stopped the advance of the enemy troops.”<sup>301</sup>

### **Dropping Commando raiders**

Generally speaking, introducing the Twin Otter to Air America’s fleet in the early seventies meant a new level of effectiveness. Air America’s Twin Otters were the special project aircraft of the early seventies. Jim Rhyne ran the program, assisted by Berl King. Clyde Moorehouse was Chief Pilot of the Twin Otter program, and Jim Pearson was Chief Pilot of Special Projects on the Twin Otter, and also on the program was Don Romes.<sup>302</sup> This role of the Twin Otter explains why the official blue and black stripes of its color scheme were quickly replaced by a black night color scheme, which makes the registration very difficult to be seen. Some of them had special electronic equipment, including terrain following radar. Of course, the aircraft could make deliveries of all sorts of supplies, and sometimes did so in order to hide their real activities. These included nightly supply drops to road watcher teams, relay missions for electronic signals, parachuting Commando raiders, and intelligence flights. Jim Pearson recalls: “As the North Vietnamese and the Pathet Lao moved southward towards Long Tieng, the Twin Otters were flying daily in both north central and southern Laos supporting the customers’ operations there. Out of the Alternate in north central Laos, operations were basically routine and consisted of mostly air drops of food and ammunition to the local forces holding the mountain outposts checking the advance of the North Vietnamese and Pathet Lao forces. This operation became rather hectic as the enemy forces got closer. Due to their constant motion, it was also difficult to determine their exact location, so you were shot at from nearly everywhere you were sent to drop supplies. During all this maneuvering back and forth the customers’ demands increased, and the Twin Otters were flying day and night missions. At this point in time, we still flew with one pilot in day-time and two pilots on night drop missions. Due to the shortage of trained pilots on the TFR Radar, it was usually the same two of us on night missions for some time.

---

<sup>301</sup> E-mail dated 5 September 2005, kindly sent to the author by Jim Pearson.

<sup>302</sup> E-mail dated 2 July 2005, kindly sent to the author by Jim Pearson. Donald R. Romes, telephone interview made by William M. Leary on 19 May 1990; notes of Prof. Leary preserved at UTD/Leary/I B14F6.



An unknown DHC-6 in night colors at Udorn in October 1973  
(with kind permission from Ward S. Reimer)

We would depart Vientiane around 1730 to 1800 locally and fly up to LS 272 Ban Xon, as Long Tieng was by now destroyed and the enemy had withdrawn. The first night mission was conducted the instant we were indoctrinated on the newly modified Loran C installation on 74M. Captain Parker and I flew five night drops and delivered Commando raiders on the East side of the *Plaine des Jarres* in North Central Laos. It was pitch black out and thunder storms in the area. On our first drop, we could see out somewhat, even though it was pitch black. However, on the second through fifth drop it was completely IFR, and we dropped the Commandos on instrument conditions in the high mountains. Fortunately they all survived. The mission success was rather dubious, unless you consider the fact they all came back, which makes it successful. Their objective was to capture and hold a position that the USAF helicopters were going to utilize for other missions the next day. The mandate was that no US aircraft could be damaged or downed in Laos, so the high degree of anxiety regarding the security of the air strips they utilized. During this hectic period of operations my log shows that I was making up to 36 take offs and landings per day.”<sup>303</sup>

Before the commando raiders were dropped, Air America S-58Ts would infiltrate a small team was to serve as a reception party. The dangers of those infiltration flights are well illustrated by a commendation that the CIA sent to Air America for the mission accomplished on 20 August 72. On 26 August 1972, Mr. William E. Nelson of the CIA sent the following message to Air America’s Managing Director Paul C. Velte: “Dear Paul, I would like to express my sincere thanks and admiration to your aircrews that made possible the airborne infiltration of Lao irregular forces deep into enemy territory north of the Plain of Jars an 20 August. Flying at night over enemy-controlled territory in less-than-favorable conditions, two S-58T helicopters successfully inserted a small ‘pathfinder’ team that acted as a reception party for airborne troops who were later parachuted. There were several factors that made this

---

<sup>303</sup> E-mail dated 5 September 2005, kindly sent to the author by Jim Pearson.

difficult mission even more hazardous. During the helicopter infiltration the lead S-58T pilot experienced problems with his long range navigational system, but continued the mission until the system could be restored. On the return flight the second helicopter lost its automatic stabilization system and artificial horizon instrument, making flight under the prevailing instrument conditions extremely dangerous. Without extremely well-qualified and professional aircrews this mission could not have been accomplished. The positive attitude and dedication of these crews to their assigned missions continue to be the hallmark of our operations in Southeast Asia. Please extend my sincere appreciation to the crews who made this mission a success. William E. Nelson.”<sup>304</sup>

Sometimes, Air America’s Twin Otters would drop Commando raiders even into North Vietnam. Jim Pearson recalls: “I had been advocating the utilization of two pilots on the Otter for some time due to the threat of enemy fire, when I was assigned a night mission beginning at Udorn at 0530 in the morning: ‘Proceed to Pakse and fly as assigned by the customer until relieved, then after the evening meal, proceed to PS-44 for briefing.’ I asked if they required two pilots. This particular customer said ‘no’ – he seemed to only want one pilot on board. So after dropping to positions all day and doing some point to point flying, I proceeded to PS-44 and loaded up with 20 Commando raiders and one customer, and he said: ‘Go to Udorn.’ Oh well off to Udorn, where we picked up the Number One customer, and he said: ‘Go to Luang Prabang, Laos.’ We would be the Command ship with two just converted Twin Pack helicopters, on their first operational flight. ‘Where to?’ ‘Commando raid on Dien Bien Phu, Viet Nam.’ Wow, and only one pilot! This guy must have balls or is a pilot himself. So off from L-54 northward with two choppers full of Commandos. Our raiders were issued chutes, and if the choppers got into trouble, we would deploy our Commandos to assist on the ground. Our primary duty was Command ship. After heading north we turned off all lights on the aircraft and proceeded black to a short distance from Dien Bien Phu and then orbited, while waiting for the choppers to insert and exfil the commandos.

Going in, all was well, however they managed to stir up the hornets’ nest, and they were really pissed off. One of the choppers got shot up pretty badly coming out, and some on board were injured and I think one or two fatalities. We had been holding black for over an hour and I was not that sure of our position, however I had not doubts about going back to L-54, as the evening was still clear out. The shot up chopper’s pilot was somewhat distressed as this was his first mission utilizing the S-58T, which had two Pratt & Whitney turbine engines which really sucked up the jet fuel compared to the Wright 1820 recip engine. He had been hit in the fuel tanks and in the fuselage and was losing fuel, to compound his problems. He asked me my position and distance from L-54. I barely got ‘I am app...’ (approximately), when he jumped down my throat: ‘I want to know exactly how many miles from L-54!’ Well, a quick calculation (wild assed guess): ‘I could just barely see the glow of the lights of the town of Luang Prabang, I am exactly 110 miles north.’ He said: ‘I cannot see you.’ So with that to help him calm down, I turned on every light on the aircraft including the landing and taxi lights. He could not see me. So I told him: ‘I will fly directly to where I think you are coming from. Tell me when you see my lights.’ When he said ‘I see you now’, I said: ‘I will head for L-54 and orbit overhead until you come in. Call if you have any doubts as to whether or not you are going to make it and I will come running.’ He made it into L-54 OK, so we landed and refueled, reloaded and headed for Udorn. On arrival at Udorn, the One customer got off, and we proceeded to PS-44. On arrival at PS-44, now about three in the morning, we were greeted with zero zero weather at the site. After circling I noticed that I could get under the clouds from the south and make it up to where I thought the runway began. The runway was pitched up about 20 degrees from the horizontal and had an easterly heading. When I turned final, above the runway touch down zone, but below the upper portion of the runway, my

---

<sup>304</sup> See the document at <http://www.foia.cia.gov/AirAmerica/C05266410.pdf>

visibility went zero zero. I went to full throttle (thank heavens for our change in landing procedures as the engines spooled up beautifully). We went into the murk and climbed for all we could and then broke out on top. I turned south and began another approach and I analyzed I could make it OK. Second approach, same thing, go around. By now, the customer was really feeling the stress and said: 'Let's go to Pakse.' Sure, with 20 fully armed Commandos on board they would think this was a *Coup d'etat*. So I made one more approach and just as planned. We went zero zero and I applied max power, and on the go around the aircraft impacted the ground. Fortunately for us, we could be nowhere but on the runway, so I reversed both engines fully and applied the brakes before I really hit something, and sure enough, we were on the runway. So with knees shaking, we slowly taxied back and offloaded the Commandos and the customers. Then once again I got the wonderful opportunity of making an instrument take-off with trees on both sides up a 20 degree slope and climb at full throttle, until I saw some beautiful safe sky. Then I proceeded to Pakse and went to the crew quarters and went to bed, while the other chopper pilots were just getting up for a day's work. 0530 until 0500: not a bad duty day for one pilot!"<sup>305</sup>

"By now, the military situation at Pakse was getting tight. Due to enemy action, the USAF had a *Spectre* gun ship shot down, and Air America lost two C-123s and one Caribou plus two or three H-34 helicopters. The decision was made that the Twin Otter will commence night operations to resupply positions due to the large number of aircraft shot up during daylight operations. We had to put in Commando raiders on the Saravane, Laos runway at night, as there was a seven USAF Jolly Green mission scheduled in the morning, ferrying in troops to retake the position from the enemy. In the morning, we all gathered at a strip just west of PS-44 to pick up troops and a customer. Of the seven planes, two aborted for maintenance, one sustained damage on landing. Later one went mechanical before departure. We lead the remaining planes with troops into Saravane and held overhead for the customer in case of a counter attack. After a while we were beginning to get short of fuel. I called the customer and he said he had to stay longer. I did not want to leave him, so I asked if he had any prisoners. He said: 'Yes, why?' 'I am running low on fuel and don't want to leave. Can you run them up and down the runway and check for land mines?' He said: 'Just a minute.' He called back and said: 'OK, come on in....' Don't know what he used to check, but we were OK on this one. When he came out, he said we would have to shuttle troops, as there were only three choppers working, and we would have to pick up the slack. Thus it was an uneventful day for us, we had a chopper shot down, and the customer on board was killed. I noticed that of late more and more customers were getting killed by enemy action."<sup>306</sup>

However, Long Tieng and Pakse were not the only area where Air America used Twin Otters: "One more episode in Air America's utilization of the Twin Otter in Laos was flying Commando raiders into LS-32 at night pitch black. We would bring the raiders out of PS-44 to Udorn and then to LS-32, join up with the choppers, and after refueling depart with the choppers to North Viet Nam as Command ship. We flew numerous missions which basically were routine of nature, except the landing and take-off from LS-32. It was down in a bowl on top of a mountain. After about three attempts, we settled on a guy standing at the far end of the runway with a flash light pointing at us. With this aid, we came in over a rock rim (part of the bowl shaped depressed mountain top) at a speed of 70 knots with full flaps (engines spooled up). We would make a slight descent until the flash light disappeared, then begin a slight reduction in descent rate until the light came back on. Then we made a normal descent until impacting the runway. Scary! Yes, very! Nearly as much as with full fuel and full load of Commandos on take-off.

---

<sup>305</sup> E-mail dated 5 September 2005, kindly sent to the author by Jim Pearson.

<sup>306</sup> E-mail dated 5 September 2005, kindly sent to the author by Jim Pearson.

Most of these flights were routine except during one day flight. We were operating in the same area with air cover. AD Sky Raiders, call-sign 'Sandy', were overhead with the most beautiful load of ordnance one could imagine. We were returning to LS-32 when we began taking ground fire. The Chief Pilot was in the right seat with me this flight. He alerted the choppers: 'Ground fire, guys, scatter!' The Sandy came in with 'I got em!' and proceeded to drop CBU's on them until they hated their mothers."<sup>307</sup>

### **Carrying home body bags**

One of the sad duties linked to combat support flights was carrying home body bags. Two or three times a week, Air America's Twin Otters had to perform that duty at Pakse, as Jim Pearson recalls: "To pick up the KIA in body bags and fly them to Ubon, Thailand and pick up replacements. We would land in Ubon, and as usual, it was steaming hot. The kickers just offloaded the dead and placed them haphazardly in piles beside the aircraft in the full heat of the sun. I told them: 'These are dead comrades and should be treated with more dignity. Please place them in a row under the shade of the wings!' Then with them nicely placed under the wings the buses drive up with the replacements. The troops (kids) climbed down from the buses with big smiles. Going on an airplane ride, big smiles. Then they noticed the body bags all in a row under the plane wings. The smiles of happiness begin to fade and then a feeling of horror overtakes them, then silence, as they just kept looking at the body bags. They loaded up with no problems, and we hauled them to the slaughtering grounds. When making air drops to these guys in the positions, I was amazed at the amount of enemy incoming fire they were subjected to. It was as if the DZ was elevated up about 15 feet into the air, with all the dust and explosions going on. For this reason I would never turn away until I had dropped my load. I wanted them to know that we (AAM) would be there when they needed us".<sup>308</sup>

### **Reinforcing the Royal Laotian Air Force**

#### **The Air Commando advisors**

As has been shown above, already in 1966, *Water Pump* had become part of the 56<sup>th</sup> Air Commando Wing at Nakhon Phanom, and on 4 August 68, the 56<sup>th</sup> ACW changed its name to become the 56<sup>th</sup> Special Operations Wing at Nakhon Phanom, and all aircraft were assigned to the new unit name the same day.<sup>309</sup> The duties of these Air Commando advisors remained essentially the same as during the previous years: to advise, assist in targeting effort and to coordinate regional air support requirements. Part of these men acted as trainers for the Lao, while others helped to coordinate the Lao Air Operations Centers (AOCs) and RLA and USAF aircraft. As there were Thai "B Team" pilots based at Vientiane still in late 1968, Bob Downs, the Vientiane AOC commander, as well as Air Commando advisors Jim Walls and Jesse Scott were responsible for these men.<sup>310</sup> In 1968/69, a new Joint Operations Center (JOC) was set up at Luang Prabang. The JOC "met every morning with an Intel type, an Army rep and an RLA rep to determine priorities for potential targets and publish a daily FRAG Order."<sup>311</sup> Sometimes, these Air Commando advisors still flew reconnaissance missions: In the summer of 1969, a Raven U-17 based at Luang Prabang made photos of the Chinese Road, and some days later, Don Moody, commander of the AOC at Luang Prabang,

---

<sup>307</sup> E-mail dated 5 September 2005, kindly sent to the author by Jim Pearson.

<sup>308</sup> E-mail dated 5 September 2005, kindly sent to the author by Jim Pearson.

<sup>309</sup> See the USAF Assignment records preserved at Maxwell AFB for the aircraft formerly assigned to the 56<sup>th</sup> ACW, e.g. T-28D 49-1599, which was transferred from 56ACW, NKP, to 56SOP WG, NKP, on 68215, that is on 4 August 68.

<sup>310</sup> Moody, *The great adventures*, Prelude, p.10, in: <http://www.aircommandos.org/BobAndDon/Episode0000.htr>.

<sup>311</sup> Moody, *The great adventures*, Episode 3, p.3: in: <http://www.aircommandos.org/BobAndDon/Episode0003.htr>.

flew a photo reconnaissance mission over the Chinese Road, using a RT-28 Guppy photo bird that was normally based at Udorn. Four Luang Prabang-based armed T-28s flew cover, and in spite of heavy triple-A fire none of the aircraft that participated in this extremely dangerous mission took a hit.<sup>312</sup> Sometimes, these Air Commandos also flew attack missions together with the Lao and Thai pilots they advised. In March 69, Don Moody, commander of the AOC at Luang Prabang, operated out of Ban Houei Sai for 5 days: “LP had sent 4 T-28s and Raven Dale Richardson over to provide support for the FAR operating in an area close to the Burmese border. [...] The air strikes were directed against the caravans bringing questionable cargo (opium) down through Burma.”<sup>313</sup>

In October 69, the former US Ambassador to Laos, William Sullivan, admitted at the US Senate hearing that at that time, 558 Americans were employed by the US Government in Laos, including 338 Americans on direct hire with USAID and another 127 serving as military attachés. The US military attachés worked in all five regional headquarters, from Luang Prabang in the north to Pakse in the south and often visited units in the field. Their number could be increased thru Project 404, whose personnel was under the direct command of the US Military Assistance Group, Thailand, headquartered at Bangkok to expedite supplies thru Thailand to Laos. Project 404 people in Laos were also called attachés, although they did not have diplomatic status. Some of these people also worked from Udorn Airbase, Thailand, in coordinating with a group of Vientiane based air-attachés on strike and transport missions flown from all bases in north-eastern Thailand (Udorn, Nakhon Phanom, Ubon, Korat).<sup>314</sup> Looking to the situation in April 1972, Moody concludes “that the past three years had produced a lot of successes but also a high toll in lives and serious injuries to Project 404 personnel. US and Laotian aircrews had been called upon to perform under possibly the most difficult environmental conditions in the world. In Laos, there is always a morning mist in the mountains that seems to screen out some of the more sinister elements. This was a combination of remote jungle, rugged mountainous terrain, and the bad guys.”<sup>315</sup>

### **More T-28s for the Royal Laotian Air Force after March 1968:**

Once again, no exact numbers are available for those T-28s that were added to the fleet of the Royal Laotian Air Force between April 1968 and February 1973. Between early April 68 and the end of the same year, no less than 40 USAF T-28s were transferred to various Military Assistance Programs, but their exact destination is not indicated in the USAF Assignment Records. But if we continue to assume that all aircraft transferred to an unknown MAP on the very same day were delivered to the same Military Assistance Program, the RLAF received no less than 29 T-28s between April 68 and the end of the year, that is 2 of them on 4 April,<sup>316</sup> 3 on 4 June,<sup>317</sup> 5 on 27 June,<sup>318</sup> 4 on 13 August,<sup>319</sup> 1 on 15 September

---

<sup>312</sup> Moody, *The great adventures*, Episode 3, pp.5-7, in: <http://www.aircommandos.org/BobAndDon/Episode0003.htr>.

<sup>313</sup> Moody, *The great adventures*, Episode 3, p.2, in: <http://www.aircommandos.org/BobAndDon/Episode0003.htr>.

<sup>314</sup> Kirk, *Wider war*, pp.236/7.

<sup>315</sup> Moody, *The great adventures*, Prelude, p.10, in: <http://www.aircommandos.org/BobAndDon/Episode0000.htr>.

<sup>316</sup> T-28Ds 49-1753 (msn 159-265) and 50-216 (msn 171-22) were both transferred to MAP from NAMCO, i.e. the North American Aircraft plant at Columbus, OH, on 68095, that is on 4 April 68, probably becoming “**0-91753**” and “**0-00216**” respectively. “0-00216” was maintained by Air America, Udorn, and flown under the command of the USAF Attaché, Vientiane, still on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and on 1 April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2).

<sup>317</sup> T-28Ds 49-1699 (msn 159-211), 49-1704 (msn 159-216), and 49-1717 (msn 159-229) were all transferred from McClellan AFB to MAP on 68156, that is on 4 June 68, probably becoming “**0-91699**”, “**0-91704**”, and “**0-91717**” respectively. As “0-91704” was maintained by Air America, Udorn, and flown under the command of the USAF Attaché, Vientiane, on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August

coming from Nakhon Phanom,<sup>320</sup> and 4 on 17 September, probably all of them to General Vang Pao's Hmong troops,<sup>321</sup> 4 on 24 September 68,<sup>322</sup> 4 in late September and early October 68, coming from the 56<sup>th</sup> Special Operations Wing of Nakhon Phanom,<sup>323</sup> and 2 T-28s on 8 October 1968.<sup>324</sup> No details about RLAF T-28s lost in 1968 are available.

As to the operations flown by RLAF T-28s, there was another increase in 1968: As already in June 68, the US Joint Chiefs of Staff had decided to delete the "Zorros", that is the T-28s flown by the 606<sup>th</sup> Air Commando Squadron at Nakhon Phanom, in order to make space for

---

71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and on 1 April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2), the other two T-28Ds probably had the same career. By 1974, all of them joined the Philippine AF, becoming "91699", "91704", and "91717" (Anido/Austria-Tomkins, *Pictorial history of the Philippine Air Force*, p.68).

<sup>318</sup> T-28Ds 49-1608 (msn 159-120), 49-1622 (msn 159-134), 49-1687 (msn 159-199), 49-1688 (msn 159-200), and 49-1702 (msn 159-214) were all transferred from McClellan AFB to MAP on 68179, that is on 27 June 68, probably becoming "**0-91608**", "**0-91622**", "**0-91687**", "**0-91688**", and "**0-91702**" respectively. "0-91622" is known to have been maintained by Air America, Udorn, and flown under the command of the USAF Attaché, Vientiane, on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and 1 April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2).

<sup>319</sup> The four T-28Ds from transferred (TL) from McClellan AFB to MAP on 68226 (= 13 August 68) were: 49-1510 (msn 159-22), becoming "**0-91510**"; it was used by the Ravens in 1970? (a photo is in: Moody, *The great adventures*, Prelude, p.5); 49-1514 (msn 159-26), probably becoming "**0-91514**"; 49-1529 (msn 159-41), probably becoming "**0-91529**"; and 49-1539 (msn 159-51), probably becoming "**0-91539**".

<sup>320</sup> T-28D 49-1621 (msn 159-133) was transferred to the 56<sup>th</sup> Special Operations Wing, Nakhon Phanom, on 68215; it was transferred (TL) to MAP on 15 September 68 (68259), which probably means to the RLAF, probably flying as "**0-91621**"; later, that is in 1970?, it became a Raven aircraft, still on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and 1 April 72, it was one of those USAF aircraft, that were maintained by Air America, Udorn, but flown under the command of the USAF Attaché, Vientiane (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2).

<sup>321</sup> T-28Ds 49-1600 (msn 159-112), 49-1613 (msn 159-125), 49-1627 (msn 159-139), and 49-1631 (msn 159-143) were all transferred from McClellan AFB to MAP on 68261, that is on 17 September 68, probably as "**0-91600**", "**0-91613**", "**0-91627**", and "**0-91631**" respectively. As there are photos showing Hmong Ace Lee Lue standing in front 49-1600 (in Hamilton-Merritt, *Tragic mountains*, p.165) and sitting in 49-1627 (in: Robbins, *Ravens*, pp.120-21), the other two T-28s are believed to have gone to the Hmong as well. "0-91600" later became a Raven aircraft – a photo by H. Mesaris, probably taken in 1970, can also be seen in Robbins, *Ravens*, pp.120/1.

<sup>322</sup> On 24 September 68 (= 68268), the following four T-28Ds were transferred (TL) from McClellan AFB, Sacramento, CA, to MAP/Laos, Udorn: 49-1637 (msn 159-149), probably becoming "**0-91637**", 49-1638 (msn 159-150), probably becoming "**0-91638**", 49-1706 (msn 159-218), probably becoming "**0-91706**", and 49-1716 (msn 159-228), becoming "**0-91716**"; this aircraft was transferred to the Ravens in about 1970; a photo, taken by H. Mesaris probably in 1970, showing the aircraft without markings or badge, is published in: Robbins, *Ravens*, pp.120-21, photo section; none of these aircraft was still current on 1 April 72; their fates are unknown.

<sup>323</sup> T-28D 49-1599 (msn 159-111) was transferred from 56SOP WG, NKP, to MAP on 68265, that is on 21 September 68, probably becoming "**0-91599**"; T-28D 49-1571 (msn 159-83) on 68275, that is on 2 October 68, probably becoming "**0-91571**"; T-28D 49-1561 (msn 159-73) on 68278, that is on 4 October 68, probably becoming "**0-91561**"; this aircraft was still maintained by Air America, Udorn, and flown under the command of the USAF Attaché, Vientiane, on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and on 1 April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2) and went to the Philippine AF as "91561" by 1974; finally T-28D 49-1583 (msn 159-95), on 68279, that is on 5 October 68 as "**0-91583**"; it later became a Raven aircraft, as the photo in <http://www.ravens.org/gene72-2.jp> proves.

<sup>324</sup> T-28Ds 49-1724 (msn 159-236) and 49-1731 (msn 159-243) were both transferred from McClellan to MAP (Laos) on 68282, that is on 8 October 68, probably as "**0-91724**" and "**0-91731**" respectively; although it seems that their delivery was first postponed for some time, both of them were maintained by Air America, Udorn, and flown under the command of the USAF Attaché, Vientiane, on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and on 1 April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2).

additional A-1s and A-26s,<sup>325</sup> some of the 12 remaining T-28s had found their way into the RLAF. This availability of additional T-28s was met by an additional need to compensate the losses suffered by the Hmong. As the strength of the Hmong waned, the US tried to redress the growing imbalance of forces in the field thru an increased use of airpower. Between 1965 and 1968, the rate of sorties in Laos, in direct support of VP, had remained fairly constant at 10 to 20 a day. In late 1968 and thru 1969, the rate reached 120 per day at LS-20A and 300 in all of Laos. This increase in air sorties was also the basis of enhancing the Ravens FAC program and increasing the number of FACs allowed in country.<sup>326</sup> In the north, Moug Soui (L-108), the traditional stronghold of the Neutralists on the western edge of the Plain of Jars about 100 miles north of Vientiane, became the scene of a bloody battle in late 1968 and early 1969. At that time, the Moug Soui area became the primary target of the Thai “B Team” pilots and the RLAF assigned to Vientiane. The Thais and the RLAF were both flying out of Moug Soui in late 1968; but there was so much dust, that an old yellow water truck had to keep down the dust from before day light until way after dark. Without the truck, flying out of Moug Soui would have been very difficult. But there was also an ARMA Captain at Moug Soui, Joe Bush, who worked with the Lao Army there to take the mountains east of L-108; he was one of the two Army advisers that were allowed by the Geneva Accords of 1962 to advise the Neutralists at Moug Soui.<sup>327</sup> In the south, the number of North Vietnamese troops had increased to about 25,000 men by mid-1968, and equipment now even included new 106mm. canons never before used in southern Laos. There was heavy fighting on the Bolovens Plateau, and the city of Attopeu was under siege and had to be supplied by parachute drops and Air America helicopters.<sup>328</sup> By that time, the RLAF also had a T-28 wing at Pakse, M.R.IV, and *Water Pump* T-28s operating in southern Laos were kept at Pakse as well as at Savannakhet.<sup>329</sup> This also meant an increasing fighter traffic coming out of the RLAF headquarters at Savannakhet, which, sometimes, could be quite dangerous. Former Air America pilot Frank Bonansinga recalls: “It was well after I was working in the HARP project at L-39. This was an afternoon passenger flight out of Udorn probably in the late 60s. There were five passengers onboard our Volpar from Udorn. We had stopped to pick up two additional customer passengers at L-39, for the last leg to our destination, Pakse in Southern Laos. The runway at Savannakhet was laid out on a slight hill, so the ends of the runway could not be seen from either end. Our Volpar was cleared for take off and as we were approaching the middle of the runway and just about to lift off, when here comes a T-28 directly in front of us, heading directly for us! We both veered to the right and managed to pass without hitting each other! Our wing tips passed by perhaps a foot or so, at most! The tower was shouting over the radio, in Lao to the T-28 pilot and soon after told us in English the T-28 pilot had taken off without clearance! The chief of AB-1 at Udorn, Pat Landry, next to me in the copilot’s seat and we just shook our heads in disbelief. The rest of the flight was anti climatic! I never heard about it again, though it is easy to remember. Sometimes, things happen really fast and you do it or don’t do it, right! Good luck is a blessing.”<sup>330</sup>

In 1969, more T-28s were added to the RLAF inventory, but at this time, only 8 of them can be traced: T-28D-5 49001591 was transferred from the 56<sup>th</sup> Special Operations Wing at

---

<sup>325</sup> A Memorandum dated 17 June 1968, from the Joint Chiefs of Staff to Secretary of Defense, McNamara (Document 371, in: US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 366, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii.351\\_370.html](http://www.state.gov/www/about_state/history/vol_xxviii.351_370.html)) recommends that all of the 12 T-28s flown by the 606th Air Commando Squadron at Nakhon Phanom at that time should be deleted to make space for additional A-1s and A-26s.

<sup>326</sup> Moody, *The great adventures*, Prelude, p.7.

<sup>327</sup> Moody, *The great adventures*, Prelude, pp.10, 11, and 14.

<sup>328</sup> Kirk, *Wider war*, pp.228-30.

<sup>329</sup> Robbins, *Ravens*, pp.58+168.

<sup>330</sup> E-mail dated 4 January 2002 sent to the author by Frank Bonansinga.

Nakhon Phanom to the Military Assistance Program on 3 January 69.<sup>331</sup> On 27 December 1969, a total of 5 T-28s are known to have been transferred from SMAAR, the USAF's Air Logistics Center at McClellan Air Force Base, Sacramento, California, to the Military Assistance Program for Laos,<sup>332</sup> followed by a 6th T-28 on 28 December 69.<sup>333</sup> Only 3 losses are known for 1969: Hmong fighter Ace Lee Lue was shot down in his T-28 on 12 July 69 during the battle for Muong Suoi (L-108),<sup>334</sup> one RLAf T-28 lost its brakes and crashed into a warehouse at Long Tieng (LS-20A) on 2 December 69, and another T-28 was shot down at the "O" pad on 3 December 69, killing the pilot.<sup>335</sup> In 1969, there were already five Air Operations Centers in Laos, that is at Savannakhet, the RLAf headquarters, at Vientiane,<sup>336</sup> at Luang Prabang, at Long Tieng, and at Pakse,<sup>337</sup> but *Water Pump* T-28s, that is USAF-owned T-28s operated for the RLAf, were not only kept at these places, but usually also at Korat and Ubon in Thailand.<sup>338</sup>

Strategically, the T-28 operations were focused on two large aims in 1969: the battle for Muong Soui during the first half of the year, and Operation *About Face* in the fall of 1969. As to the battle for Muong Soui (L-108), the plan was for the Neutralist troops to move out from Muong Soui, the Neutralists HQ and, in a coordinated push with Vang Pao's guerrillas in the south, advance onto the Plain of Jars and force the North Vietnamese back. Air support would be provided exclusively by Lao, Meo, and Thai pilots flying T-28s from the strip of Muong Soui itself, rather than staging out of Vientiane.<sup>339</sup> Vang Pao wanted that US piloted Ravens could drop bombs onto the Plain of Jars, and also that his Hmong pilots were based at Long Tieng, under his personnel control, instead of at Vientiane, where they were under the nominal control of the RLAf. The United States finally accepted the second point, but did not admit it officially.<sup>340</sup> So, in June 1969, Vang Pao sent the 8 T-28s at his disposal,<sup>341</sup> lead by

---

<sup>331</sup> T-28D-5 49001591 was later transferred to the Steve Canyon program as a Raven aircraft, not wearing the Erawan, but a badge on the fin; a photo can be seen in: <http://www.ravens.org/gene72-2.jpg>; it was still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America, Udon, in April 72 (List of Assigned and maintained aircraft at Udon of 1 April 72, in: UTD/CIA/B49F2).

<sup>332</sup> They were: T-28Ds 50000275 (msn 171-81), probably flying as "0-00275"; 50000283 (msn 171-89), probably flying as "0-00283"; it was still flown under the command of AIRA, that is the USAF Attaché, Vientiane, and maintained by Air America, Udon, on 1 August 71 (List of Assigned and maintained aircraft at Udon of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udon of 1 April 72, in: UTD/CIA/B49F2); 50000295 (msn 171-101), probably flying as "0-00295"; 51003521 (msn 174-59), probably flying as "0-13521"; 51007552 (msn 174-405), probably flying as "0-17552"; it was still flown under the command of AIRA and maintained by Air America, Udon, on 1 August 71 (List of Assigned and maintained aircraft at Udon of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udon of 1 April 72, in: UTD/CIA/B49F2).

<sup>333</sup> This was T-28D 50000273 (msn 171-79), probably flying as "0-00273"; it was still flown under the command of AIRA and maintained by Air America, Udon, on 1 August 71 (List of Assigned and maintained aircraft at Udon of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udon of 1 April 72, in: UTD/CIA/B49F2); its subsequent history is unknown, but in December 1990, it was sold to R. MacFarlane, Archerfield, Queensland, as VH-XVT.

<sup>334</sup> A transcription of the communications exchanged between Lee Lue, the other pilots of his group and Forward Air Controller General Vang Pao during Lee Lue's fatal flight on 12 July 69 can be found in: Chaophakhao Red, "The day we lost Lee Lue", in: <http://www.geocities.com/koratmahknut/warinlaos/hmonglao/theday.htm>.

<sup>335</sup> For these two accidents, see the log book of Allen Rich (in: UTD/RichB1).

<sup>336</sup> In 1969, Lao-piloted RLAf T-28s were also based at Vientiane (Robbins, *Ravens*, pp.141+164).

<sup>337</sup> Castle, *At war*, p.86.

<sup>338</sup> Robbins, *Ravens*, p.168

<sup>339</sup> Robbins, *Ravens*, p.142.

<sup>340</sup> Robbins, *Ravens*, p.147.

<sup>341</sup> For many years, the USAF was opposed to allowing the Hmong to fly T-28s. Former Air Intelligence Officer Lt./Col. Al Shinkle, who served in Laos from 13 October 64 - 10 August 66 with the Royal Lao Air Force at Savannakhet and wherever B/Gen Thao Ma went in Laos, recalls: "A further complication was that the CIA

Lee Lue, in support of the Neutralist headquarters of Muong Soui, where they bombed the enemy until July 69.<sup>342</sup> But, of course, inevitably, the gap between embassy policy and battlefield reality was a large one. It was impossible to monitor the rules and control the placing of every bomb in Laos, although this was the intention under Ambassador Godley, as it had been under Ambassador Sullivan. The embassy had no right to monitor or control where the Lao or Hmong T-28s put their bombs. And all the Laotian regional military commanders had the right and the ability to attack where they wished.<sup>343</sup> But in spite of this more direct type of control, which was closer to the actual battlefield,<sup>344</sup> at the end L-108 was lost in June 69.<sup>345</sup> As to Operation *About Face*, this was a daring campaign to retake the communist controlled Plain of Jars, conceived as a hit-and-run assault against the North Vietnamese 316<sup>th</sup> Division, mainly carried out by Hmong troops. Vang Pao was supported by some 200 daily USAF sorties, as well as by Ravens and by RLAFF T-28s operating out of four Lima Sites in enemy-held territory.<sup>346</sup> The operation was so successful that on 12 September 69, Vang Pao's forces captured the Pathet Lao "provincial capital" at Xieng Khouang, including a number of howitzers, anti-aircraft artillery, and AK-47s, as well as an enormous amount of ammunition and food. Two weeks later, Vang Pao recaptured Muong Soui.<sup>347</sup> But there were other activities as well, in which RLAFF T-28s were involved: For example, in September 69, Luang Prabang-based T-28s attacked and destroyed a huge Chinese supply area located in Nam Beng valley which had had the purpose of allowing to extend the Chinese Road further to the South.<sup>348</sup>

In 1970, at least 14 T-28Ds were added to the Military Assistance Program for Laos, all of them between 15 and 28 January 1970. According to the USAF Assignment Records preserved at Maxwell AFB, Alabama, they were all transferred from SMAAR, the USAF's Air Logistics Center at McClellan Air Force Base, Sacramento, California, to an unknown MAP, but if we continue to assume that aircraft delivered at the same time all went to the same customer, they all went to Laos.<sup>349</sup> As to losses suffered in 1970, it is known that at least

---

wanted the RLAFF T-28 assets made available to them and under their command and control to support their efforts with M/Gen Vang Pao in and around the Plaines des Jarres (PDJ). This CIA effort was blocked until Aug 66 by me and then the CIA arranged for me to be transferred to another job in Thailand due to 'mainly political' reasons." **Error! Main Document Only.**(E-mail dated 14 June 2009, kindly sent to the author by Col. Al Shinkle).

<sup>342</sup> Robbins, *Ravens*, pp.173+180.

<sup>343</sup> Robbins, *Ravens*, p.187.

<sup>344</sup> In 1969, Bob Downs checked the area around Moug Soui in his T-28 (Moody, *The great adventures*, Prelude, p.12).

<sup>345</sup> Moody, *The great adventures*, Prelude, p.16.

<sup>346</sup> Robbins, *Ravens*, p.188.

<sup>347</sup> Castle, *At war*, pp.105/6.

<sup>348</sup> Moody, *The great adventures*, Episode 3, p.8.

<sup>349</sup> These 13 T-28Ds were: 49001503 (msn 159-15), transferred on 21 January 70, probably serving as "0-91503", 49001506 (msn 159-18), transferred on 15 Jan. 70, probably serving as "0-91506"; this USAF aircraft was still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America, Udorn, on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and on 1 April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2); 49001519 (msn 159-31), transferred on 16 Jan. 70, probably serving as "0-91519"; USAF aircraft officially serialled "49-1519", maintained by Air America, Udorn, but flown under the command of AIRA, that is the USAF Attaché, Vientiane; current on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and on 1 April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2); transferred in 1975 (?) to the Lao Air Force (Air Force of the Laos People's Army) as "3408"; sold in ? (prior to 1987) to ? as N8098H; sold in May 91 to Heli-Muster, V.R.D. Station, as VH-AVC; regd. 22 May 91; current in 1996; 49001633 (msn 159-145), transferred on 16 Jan. 70, probably serving as "0-91633"; 49001677 (msn 159-189), transferred on 28 Jan. 70, the RLAFF/MAP as "0-91677"; bore the Erawan, but no red line; photo taken at Udorn in <http://www.air-america.org/ImageLibrary/Large4a.htm>; USAF aircraft, maintained by Air America, Udorn, but flown under the

6 T-28s were lost that year, one being shot down in the Luang Prabang (L-54) area on 25 February 70,<sup>350</sup> 3 T-28s were lost during the battle for Sam Thong in late March 1970,<sup>351</sup> also in March 1970, a Luang Prabang-based T-28 was shot down over the Chinese Road, while flying at 10,000 feet on the way to support Lima Site 118A,<sup>352</sup> and one Lao-piloted T-28 was shot down on 13 November 70, when returning to Luang Prabang.<sup>353</sup>

As to the areas where RLAFF T-28s were involved in combat actions during 1970, the success of Operation *About Face* was very short-lived. In January 1970, the North Vietnamese launched a tank-led counterattack and recaptured Xieng Khouang in February 70 in spite of B-52 strikes that were ordered against targets in the Plain of Jars for the first time.<sup>354</sup> In early 1970, Muong Suoi was even the center of T-28 operations, where Major Jesse E. Scott worked from January to late February 70, and during this time, RLAFF T-28s

---

command of AIRA; current on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and on 1 April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2); sold to the Philippine AF as "91677" in 1974 (?) (Anido/Austria-Tomkins, *Pictorial history of the Philippine Air Force*, p.68); and 49001698 (msn 159-210), transferred on 20 Jan. 70, probably serving as "0-91698"; none of these 6 T-28Ds was current on 1 April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2). T-28D 5000240 (msn 171-46) was transferred to MAP/Laos on 15 January 70, probably flying as "0-00240", and maintained by Air America, Udorn, still on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in 1 April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2); its fate is unknown. Four more MAP/Laos T-28Ds did not survive until April 72: They were 5000304 (msn 171-110), transferred on 20 Jan. 70, probably serving as "0-00304"; this aircraft was current with MAP/Laos on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), but was no longer current on 1 April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2), so maybe it was destroyed between 1 August 71 and 1 April 72; 51003485 (msn 174-23), transferred on 25 Jan. 70, probably serving as "0-13485"; 51003787 (msn 174-325), transferred on 28 Jan. 70, probably serving as "0-13787", as well as 51003588 (msn 174-126), transferred on SMAAR, McClellan AFB, to TL MAP on 28 January 1970, probably serving as "0-13588"; this aircraft had already been with MAP/Laos between 9 June 65 and 23 December 1968 (68357), where after it was based at Keesler AFB among others, but it returned to MAP/Laos on 28 January 70 and was current on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002); however, it does not appear on the List of Assigned and maintained aircraft at Udorn of 1 April 72 (in: UTD/CIA/B49F2); so it may have been under long term repair or not yet recovered after a crash or leased to the Khmer Air Force; transferred in 1975 (?) to the Lao Air Force (Air Force of the Laos People's Army) as "3405"; sold in September 93 to F. Pike, Bankstown, NSW, as VH-PFM; regd.30 September 93; sold in ? to W. Hamilton, Gordon, NSW; current in 1996. And the remaining 3 T-28Ds of MAP/Laos survived at least until April 72: They were 51007493 (msn 174-346), transferred on 28 Jan. 70, probably serving as "0-17493"; maintained by Air America, Udorn, on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2), transferred in 1975 (?) to the Lao Air Force (Air Force of the Laos People's Army) as "3409", and sold to Australia in 1989; T-28D 51007696 (msn 174-549), transferred on 25 Jan. 70, probably serving with MAP/Laos as "0-17696", and still maintained by Air America, Udorn, on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72; its subsequent fate is unknown. The last of the 13 T-28Ds was 51007793 (msn 174-646), which was transferred to MAP/Laos on 24 January 70, probably flying as "0-17793"; this T-28D-5 was also maintained by Air America, Udorn, on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and in April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2), and its subsequent fate is also unknown.

<sup>350</sup> Log book of Allen Rich, in: UTD/Rich/B1.

<sup>351</sup> Robbins, *Ravens*, p.236: "A bad six days [i.e. the last of March 1970], a tally of 3 T-28s, 2 O-1s and 1 U-17 with two dead or presumed so and one hurt rather badly. But we have retaken Sam Thong."

<sup>352</sup> The pilot, Lt. Liao Phaysane, was missing in action and never recovered (Moody, *The great adventures*, Episode 3, p.8).

<sup>353</sup> Leary, *Outline - Air America in Laos*, 1970, p.23.

<sup>354</sup> Castle, *At war*, p.106.

were also based at Muong Suoi until 24 February 70, when the site was overrun. Then, a new T-28 operation was opened at Ban Na Then (LS-249), about 30 miles west of the Plain of Jars. At the same time, Thai pilots flew missions out of Vientiane, arriving from and returning to Udorn every day. At that time, there were some 20 Thai pilots on a six-month contract to fly T-28s, although, in April 70, Scott recommended that the contract be cancelled as there were sufficient Lao pilots for the T-28s.<sup>355</sup> And there were other T-28 activities as well: During the first week of January 1970, two Thai-piloted RLAFF T-28s headed northwards, bombing a truck convoy on Route 46, registering 15 confirmed vehicle kills.<sup>356</sup> In the western part of Laos, large armed boats were discovered operating on the Nam Ou River in 1970, and they were attacked and bombed by Luang Prabang-based T-28s. Many more ships were discovered later on the Nam Ou and on the Nam Bac Rivers, carrying supplies to the Pathet Lao and sometimes even Pathet Lao troops; finally, after many of these ships had been destroyed by the T-28s, they preferred to go at night; but then, USAF F-4s dropped mines into the Nam Ou, shutting down a major supply road into MR-I.<sup>357</sup>

In 1971, at least 9 T-28Ds were delivered to the Military Assistance Program for Laos, all of them coming from NASJA, that is from Cecil Field Naval Air Station at Jacksonville, Florida, on 13 and 14 September 71 according to the USAF Assignment Records preserved at Maxwell Air Force Base, Alabama. All of them are still present on the list of aircraft maintained by Air America's Udorn base in April 1972, contained in the CIA papers preserved at the Air America Archives at Dallas.<sup>358</sup> Another 42 USAF T-28s, most of them T-28Ds, were also marked "TL" in the 1971 USAF Assignment Records, which means that they were delivered to an "organization outside the USAF" in 1971, but as they were not marked "MAP" at the same time, at least 25 of them are believed to have become Raven aircraft, while the others probably went to the Royal Thai Air Force. They are also listed on the Air America maintenance list of 1 April 1972,<sup>359</sup> but are not distinguished from the T-28Ds of the

---

<sup>355</sup> Leary, *Outline - Air America in Laos*, 1970, p.10; Bowers, *The USAF in South-East Asia*, p.459.

<sup>356</sup> Conboy/Morrison, *Shadow war*, p.315.

<sup>357</sup> Moody, *The great adventures*, Episode 3, pp.9-11.

<sup>358</sup> These 9 aircraft are: T-28D 00137639 (msn 200-2), marked "55-137639" in the list of aircraft maintained by Air America, Udorn, but probably flying as "**0-37639**"; its fate is unknown. T-28D 00137738 (msn 200-101), marked "55-137738" in the list of aircraft maintained by Air America, Udorn, but probably flying as "**0-37738**"; its fate is also unknown. T-28D 00137757 (msn 200-120), marked "54-137757" in the list of aircraft maintained by Air America, Udorn, but probably flying as "**0-37757**"; its fate is also unknown. T-28D 00137773 (msn 200-136), marked "55-137773" in the list of aircraft maintained by Air America, Udorn, but probably flying as "**0-37773**"; this T-28D was transferred to the Lao Air Force (Air Force of the Laos People's Army) as "3411" in 1975, but sold in to the Central Michigan Crematory, Battle Creek, Mi, as N128TB in October 93 and rereg'd. as N5291Y in March 1994. T-28D 00138208 (msn 200-279), marked "55-138208" in the list of aircraft maintained by Air America, Udorn, but probably flying as "**0-38208**"; its fate is unknown. T-28D 00138232 (msn 200-303), marked "55-138232" in the list of aircraft maintained by Air America, Udorn, but probably flying as "**0-38232**"; this aircraft was also transferred to the Lao Air Force (Air Force of the Laos People's Army) in 1975, becoming "3416"; in January 93 it was sold to Trojan Air-Tech, Darwin, NT, and was registered as VH-DPT on 14 Jan. 93; it is now preserved at Tyabb Airport Collection, Tyabb, Vic, as VH-DPT (Ogden, *Aircraft museums*, vol. 11, p.85) and is painted in a white and gray US Navy color scheme (*Air-Britain News*, June 99/p.699). T-28D 00138249 (msn 200-320), marked "55-138249" in the list of aircraft maintained by Air America, Udorn, but flying as "**0-38249**"; this aircraft rolled into Air America C-123K "374" at Long Tieng (LS-20A) on 16 November 72 (a photo of the accident can be seen in the Air America Yearbook 1984 (in: UTD/Smith/B1) and is believed to have been broken up for spares. T-28D 00138258 (msn 200-329), marked "55-138208" in the list of aircraft maintained by Air America, Udorn, but flying as "**0-38258**"; its subsequent fate is also unknown. The last T-28D, "**0-37679**" (msn 200-42), is not listed in the USAF Assignment Records, but a photo showing this aircraft wearing the Erawan, can be seen in: Don Moody, *The great adventures of Bob and Don*, Prelude, p.4 ("Getting ready to go") in: <http://www.aircommandos.org/BobAndDon/Episode0000.htm>. It is believed that this T-28D was redelivered in late 1972. It later became "0-37679" with the Royal Thai Air Force and then passed to the Philippine AF as "137679" in 74 (?); a photo taken in July 77 at Villamor Air Base can be seen in Anido/Austria-Tomkins, *Pictorial history of the Philippine Air Force*, p.34.

<sup>359</sup> They are listed in the section dealing with the Raven aircraft.

first group. So, it cannot be excluded that some of the T-28Ds believed to be destined for Raven use, actually went to the RLAf instead, as the RLAf insignia borne on the T-28Ds were detachable.<sup>360</sup> Ten RLAf T-28s are known to have been destroyed in 1971: 2 T-28s burnt at Vientiane on 8 February 71,<sup>361</sup> 3 T-28s were destroyed at Ban Dong Hene (LS-54) on 9 March 71, when the location was under a rocket attack,<sup>362</sup> one T-28 was shot down in late October 71, when bombing enemy positions around Long Tieng,<sup>363</sup> 2 T-28s were shot down on 1 December 71, when the North Vietnamese Army attacked the Plain of Jars bases,<sup>364</sup> and another 2 T-28s were shot down on 18 and 19 December 71 during the battle for Long Tieng.<sup>365</sup> Between 1 August 71 and 1 April 72, a total of RLAf 10 T-28s<sup>366</sup> disappeared from the inventory of aircraft maintained by Air America's Udorn facility.

When talking about Laos in February 71, most people would look at the fighting that took place in the south in Operation *Lam Son 719*. But at the same time, North Vietnamese forces again infiltrated the southern ridge of Skyline overlooking Long Tieng, shooting at Hmong positions around Long Tieng and at Long Tieng itself. Hmong T-28s daily bombed enemy positions on Skyline Ridge, at Bouam Loung, and at other positions in danger of being overrun. When North Vietnamese commandos stormed Long Tieng in the early morning of 14 February 71, F-4s were called in from Thailand, and as a result of confusion, one of the jets hit friendly positions. This debacle would be referred to as the "Valentine's Day Massacre". But the siege continued, and during March 71, T-28s flew over 1,000 sorties in defense of Long Tieng.<sup>367</sup> In May 1971, General Vang Pao launched another operation, called *About Face II*. On 11 June 71, he airlifted irregulars to the southern tip of the Plain of Jars; hit-and-run strikes by his 8,900 irregulars airlifted by Air America helicopters from one location to another were supplemented by T-28 strikes. This type of guerrilla warfare with T-28 close support finally enabled him to retake the Plain of Jars – at least for the next six months, when the mountains surrounding Long Tieng were again controlled by North Vietnamese and Pathet Lao forces.<sup>368</sup> In late 1971, there were even 12 T-28s based at Long Tieng, although some of them were Raven T-28s flown by American Forward Air Controllers. But when Long Tieng came under heavy attack so that aircraft could no longer take off safely, at the end of December 71, air operations and the T-28s moved from Long Tieng to Vientiane, and Ban Xong became the new staging base for all RLAf T-28 operations previously at Long Tieng. In late February 72, however, the T-28s returned to Long Tieng.<sup>369</sup>

As to the T-28s that joined the RLAf in 1972, no less than 76 T-28s were maintained by Air America at Udorn in April 72, of which only 26 are believed to have been Raven T-28s,<sup>370</sup>

---

<sup>360</sup> See the photos of T-28s wearing a detachable Erawan on the side of the fuselage and the explanation in Davis, *Laos: The Secret War*, in: <http://www.preservingourhistory.com/Laos.html>.

<sup>361</sup> Log book of Allen Rich, in: UTD/Rich/B1.

<sup>362</sup> Log book of Allen Rich, in: UTD/Rich/B1.

<sup>363</sup> Hamilton-Merritt, *Tragic mountains*, pp.268/9.

<sup>364</sup> Leary, *Outline - Air America in Laos*, 1971, p.12.

<sup>365</sup> Hamilton-Merritt, *Tragic mountains*, p.274.

<sup>366</sup> These 10 T-28s were: "0-40579", "0-13588", "0-17777", "0-17779", "0-17763", "0-00219", "0-00226", "0-00303", "0-00304", and "0-13552" (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002; and List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2).

<sup>367</sup> Hamilton-Merritt, *Tragic mountains*, pp.253-55.

<sup>368</sup> Castle, *At war*, p.107; Hamilton-Merritt, *Tragic mountains*, pp.263-66.

<sup>369</sup> Conboy/Morrison, *Shadow war*, p.330; Leary, *Outline - Air America in Laos*, 1971, pp.12/3, also notes that, when the T-28s moved to Vientiane in late December 71, the Raven O-1s staged out of Ban Xon (LS-272), about 18 miles south and west of Long Tieng. Before, there had been 12 T-28s, and 6 O-1s as well as 2 RLAf UH-34Ds based at Long Tieng, flown by 6 Hmong pilots, 6 Lao pilots and 10 American FACs.

<sup>370</sup> See the List of aircraft "presently operated, maintained or supported by Air America Inc., Udorn" as of 1 April 72 (in: UTD/CIA/B49F2).

leaving a total of 50 RLAf T-28s on the list.<sup>371</sup> In June 72 and July 72, a total of 8 new T-28D-10s are listed for the first time in the lists of aircraft maintained by Air America at Udorn;<sup>372</sup> they had been transferred from NASPF, Pensacola, on 22 February 72 and 15 March 72, and most of them are documented as being operated in Laos to at least 1 June 73.<sup>373</sup> On 1 December 72, no less than 14 new T-28s were listed for the first time among the aircraft maintained by Air America at Udorn.<sup>374</sup> On 26 June 72, one Hmong T-28 was shot down and exploded, while bombing enemy positions at Sam Thong.<sup>375</sup> Among the RLAf T-28s that suffered accidents in 1972, was also T-28D “0-38249”, which landed without flaps at Long Tieng (LS-20A), Laos, on 16 November 72 and rolled into Air America C-123K “374” that was parked on the tarmac.<sup>376</sup> As to the missions flown by the RLAf T-28s in 1972, there were two centers of activities. In the north, Hmong T-28s based at Vientiane since late December 71, bombed enemy positions on Skyline Ridge in January and February 72 to defend the besieged town of Long Tieng, and by late February, Vang Pao’s troops moved doggedly some two miles back up the Ridge. But as Sam Thong (LS-20) and Phou Pha Xai were still occupied by enemy forces, Vang Pao ordered his Hmong T-28s to hit these gun positions in June 1972.<sup>377</sup> When, in late 1972, North Vietnamese troops launched another major attack against Bouam Long (LS-32), a remote mountaintop base located in an area controlled by the Communists, Vang Pao directed 4 Hmong T-28s and 6 Lao-piloted T-28s to destroy the enemy gun positions around LS-32, but only USAF F-111s finally saved Bouam Long in early 1973.<sup>378</sup> In the south, North Vietnamese and Pathet Lao forces moved from the Bolovens Plateau down Route 23 and into the valley, advancing to Pakse in the beginning of 1972, so that many T-28 attacks were flown in the south. Still in December 72, RLAf T-28s attacked the enemy forces that had Saravane under siege. But all this was ended with the

---

<sup>371</sup> According to the List of aircraft “presently operated, maintained or supported by Air America Inc., Udorn,” as of 1 April 72 (in: UTD/CIA/B49F2), these 50 RLAf T-28s were: **4 T-28Bs** (0-37644, 0-38351, 0-38352, and 0-40044), **1 T-28C** (0-40457), **1 RT-28D** (0-13531), **10 T-28Ds** (0-13463, 0-17611, 0-17677, 0-17746, 0-17753, 0-21187, 0-17773, 0-21208, 0-21225, and 0-23498), **25 T-28D-5s** (0-91496, 0-91506, 0-91519, 0-91561, 0-91622, 0-91648, 0-91677, 0-91704, 0-91724, 0-91731, 0-00216, 0-00240, 0-00271, 0-00273, 0-00283, 0-00294, 0-00310, 0-13476, 0-13562, 0-13680, 0-17493, 0-17552, 0-17696, 0-17793, and 0-17801), and **9 T-28D-10s** (0-37757, 0-37639, 0-37738, 0-37773, 0-38208, 0-38232, 0-38249, 0-38258, and 0-38259).

<sup>372</sup> Lists of Assigned and maintained aircraft at Udorn of 1 June 72 to 1 June 73, in: UTD/Bisson/B5 microfilm reel 24.

<sup>373</sup> Two T-28Ds were transferred from NASPF, Pensacola, to TL MAP on 72053 (22 February 72); they are listed as maintained by Air America Udorn already on 1 June 72 (List of Assigned and maintained aircraft at Udorn of 1 June 72, in: UTD/Bisson/B5 microfilm reel 24): 00153654 to the RLAf probably flying as “**0-53654**” 1 June 72 to 1 June 73; later to the Philippine AF as “153654”; and 00153658 to the RLAf probably flying as “**0-53658**” 1 June 72 to 1 June 73; later to the Philippine AF as “153658”. Six T-28s were transferred from NASPF, Pensacola, to TL MAP on 72075 (15 March 72); they appear in the Udorn lists only on 1 July 72: 00153643 to the RLAf probably flying as “**0-53643**” 1 July 72 to 1 September 72; later to the Philippine AF as “153643”; 00153646 to the RLAf probably flying as “**0-53646**” 1 July 72 to 1 June 73; later to the Philippine AF as “153646”; 00153648 to the RLAf probably flying as “**0-53648**” 1 July 72 to 1 June 73; later to the Philippine AF as “153648”; 00153650 to the RLAf probably flying as “**0-53650**” 1 July 72 to 1 December 72; later to the Philippine AF as “153650”; 00153655 to the RLAf probably flying as “**0-53655**” 1 July 72 to 1 June 73; later to the Philippine AF as “153655”; 00153659 to the RLAf probably flying as “**0-53659**” 1 July 72 to 1 June 73; later to the Philippine AF as “153659”. The manufacturer’s serial numbers of these T-28s are unknown. For more details see the T-28 file within *The Aircraft of Air America*.

<sup>374</sup> On 1 December 72, there were 6 new T-28Bs at Udorn, probably used for training: 51-37679, 51-37762, 51-38135, 51-38181, 51-38192, and 51-38325; 4 new T-28Ds: 51-3632, 51-3656, 51-3700, and 51-3722; and 4 new T-28D-5s: 49-1584, 49-1702, 49-1749, and 50-250 (List of Assigned and maintained aircraft at Udorn of 1 December 72, in: UTD/Bisson/B5 microfilm reel 24).

<sup>375</sup> Hamilton-Merritt, *Tragic mountains*, p.287.

<sup>376</sup> The Accident report and photos can be found in: UTD/CIA/B61F13; other photos are preserved in: UTD/Anthony/F6.

<sup>377</sup> Hamilton-Merritt, *Tragic mountains*, pp.284 and 287.

<sup>378</sup> Hamilton-Merritt, *Tragic mountains*, pp.300/1.

cease-fire of 22 February 73, which meant that all “USAF air support would halt as of 1200 22 February.”<sup>379</sup>

### **The Hmong T-28s**

A special group within the T-28s operating over Laos were the Hmong T-28s. Since quite a long time, some Lao pilots had been based at Long Tieng to fly T-28 attack missions. For General Vang Pao, however, the problem was that traditionally, the lowland Lao looked upon the Hmong as their social and cultural inferiors, so that no lowland Lao was going to die defending a Hmong village, while, the other way round, no Hmong was going to trust his life in the hands of a lowland Lao, and the Thai mercenaries were ethnically closer to the lowland Lao. For all of these reasons, Vang Pao wanted his own Hmong pilots to fly a squadron of T-28s out of Long Tieng. So since 1968, initially five Hmong pilots were trained at the *Water Pump* training unit at Udorn. They were handpicked by Vang Pao himself as well as by the CIA, who also conducted a language program for them. The most brilliant of these Hmong pilots was Lee Lue (also written Ly Lue), a cousin of Vang Pao, whose courageous and daring aerial attacks onto Pathet Lao and North Vietnamese positions made him a legend even among his enemies, until he was shot down and killed in his T-28 near Muong Suoi (L-108) on 12 July 69.<sup>380</sup> A total of 33 Hmong pilots were trained, all of whom were very courageous, which may explain why 20 of them were killed during the war.<sup>381</sup> These Hmong pilots flew T-28s out of Long Tieng and were funded by the CIA. The group was known as the “Long Tieng Strike Force” and used the call-sign “Chaophakaow”, meaning “Lord White Buddha”.<sup>382</sup> Their T-28Ds were not integrated into the regular RLAF, and probably four of them were assigned to Vang Pao’s new air force on 17 September 68.<sup>383</sup> By mid-1969, General Vang Pao had already eight T-28s at his disposal: When the Neutralist headquarters at Muong Suoi (L-108) in the northwestern corner of the Plain of Jars was attacked by North Vietnamese troops in June 69, General Vang Pao directed Lee Lue to lead the eight T-28s at his disposal in full support of the Neutralists, and during the next five days, these Hmong T-28s flew continuous bombing missions against the North Vietnamese.<sup>384</sup> And as has been shown above, to the very end of the official war in Laos in February 1973, Hmong pilots continued to be a very important factor in aerial combat in Laos’ Military Region II.

### **The USAF in Laos: Zorros, ABCCC, and Ravens**

It has already been mentioned that in June 1968, the US Joint Chiefs of Staff had decided to delete the “Zorros”, that is the T-28s flown by the 606<sup>th</sup> Air Commando Squadron at Nakhon Phanom, in order to make space for additional A-1s and A-26s,<sup>385</sup> and that

---

<sup>379</sup> Robbins, *Ravens*, pp.305, 312, and 323.

<sup>380</sup> Robbins, *Ravens*, pp.181-84; Moody, *The great adventures*, Prelude, p.8. A description of the battle of Mung Suoi (L-108) can be found in Moody, Prelude, pp.10-16.

<sup>381</sup> Moody, *The great adventures*, Prelude, p.4.

<sup>382</sup> Leary, *Outline - Air America in Laos*, 1969, for October 69-April 1970, p.10; Robbins, *Ravens*, pp.64/5 + 180/1; Hamilton Merritt, *Tragic mountains*, pp.165 (photo of Ly Lue)+192.

<sup>383</sup> The USAF’s Assignment Records preserved at Maxwell AFB note that 4 T-28Ds were transferred from the USAF’s SMAAR unit, McClellan AFB, Sacramento, CA, to MAP on 68261, that is on 17 September 68: Two of them are positively Hmong T-28s, that is **0-91600** (that is 49-1600, msn 159-112; photo in Hamilton-Merritt, *Tragic mountains*, p.165) and **0-91627** (that is 49-1627, msn 159-139; photo in Robbins, *Ravens*, pp.120-21), while the other two, that is **0-91613** (or 49-1613, msn 159-125) and **0-91631** (or 49-1631, msn 159-143), are believed to have been used by Hmong pilots as well.

<sup>384</sup> Robbins, *Ravens*, pp.170-74.

<sup>385</sup> A Memorandum dated 17 June 1968, from the Joint Chiefs of Staff to Secretary of Defense, McNamara (Document 371, in: US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 366, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii.351\\_370.html](http://www.state.gov/www/about_state/history/vol_xxviii.351_370.html)) recommends that all of the 12 T-28s flown by the 606<sup>th</sup> Air Commando Squadron at Nakhon Phanom at that time should be deleted to make space for additional A-1s and A-26s.

consequently, some of the remaining “Zorro” T-28s found their way into the RLAf. At the same time, the number of sorties and the size of USAF aircraft operating over Laos increased. Since May 1969, virtually all the aircraft that had been flying from Thailand against North Vietnam prior to the bombing halt up North, including USAF B-52s, were now directed towards Laos, for which official permission was granted by the Laotian Government only in June 1969. These B-52 strikes initially only hit the Ho Chi Minh Trail, but in February 1970, USAF B-52s attacked the Plain of Jars for the first time.<sup>386</sup> These increased air combat activities also required a larger scale of coordination: Already on 13 February 1968, the 7<sup>th</sup> ACCS (Airborne Command and Control Squadron) was constituted and activated and organized on 1 March 1968, equipped with EC-130Es. They initially operated out of Udorn, until moving to Korat Royal Thai Air Force Base on 15 April 72. The 7<sup>th</sup> ACCS provided airborne combat command and control in South East Asia from 1 March 1968 to 15 August 1973.<sup>387</sup>

Air strikes by smaller USAF aircraft and by RLAf T-28s however continued to be called in by Raven Forward Air Controllers. Already after the fall of Phou Pha Thi (LS-85) in March 68, more Ravens were required to handle the increase in TACAIR sorties.<sup>388</sup> In late 1968, important changes in maintenance were introduced, as since that time, Air America mechanics maintained the Raven O-1s based at Long Tieng, and on a periodical basis, all Raven aircraft were rotated thru Udorn, where they were overhauled by Air America’s Maintenance Department.<sup>389</sup> But at that time, only Cessna O-1s<sup>390</sup> and Cessna U-17s were operated, and very little is known about the individual Raven aircraft flown in those days. They either bore the Erawan or were unmarked, and normally, they used a 4-digit<sup>391</sup> and sometimes also 3-digit<sup>392</sup> abbreviation of their USAF or US Army serial. Later, Raven O-1s used normal USAF serials,<sup>393</sup> like the Raven T-28s,<sup>394</sup> but were still unmarked. Raven FACs who had flown the T-28 had done so in direct violation of the rules. But in 1969, the Ravens were finally allowed to fly T-28s as FACs, and some Raven pilots were trained at Udorn on *Water Pump* T-28s in 1969, the first being Mike Cavanaugh who was to be based at Long Tieng.<sup>395</sup> Ravens were absolutely forbidden to fly the T-28 in combat, but with the RLAf at Pakse in Military Region IV being ineffective, Raven pilot Tom Richards broke that rule too in 1968. He would find a target in the O-1 Bird Dog only to have the Lao refuse to hit it. He would then return to base, climb into the T-28, and fly out to bomb it himself.<sup>396</sup> The first

---

<sup>386</sup> Kirk, *Wider war*, pp.239-43.

<sup>387</sup> See <http://www.spectrumwd.com/c130/inactive/left3.htm>; on 22 May 1974, the 7<sup>th</sup> ACCS moved to Clark AFB in the Philippines.

<sup>388</sup> Moody, *The great adventures*, Episode 3, p.3.

<sup>389</sup> Robbins, *Ravens*, p.78.

<sup>390</sup> Three Raven Cessna O-1s have been traced, which were no longer current on 1 April 72: O-1A “2628”, a photo of which is contained in: UTD/LaShomb/B11F3; O-1A “2044”, a photo of which can be seen at <http://www.ravens.org/>; and O-1 “1674”, a photo of which, taken at Pakse in March 71, can be seen at <http://www.ravens.org/>.

<sup>391</sup> A photo of Raven Cessna O-1A “2628” can be found in: UTD/LaShomb/B11F3; another picture of a Raven Cessna O-1 (“1674”), taken at Pakse in March 71 can be seen at <http://www.ravens.org/>; the fate of these aircraft is unknown.

<sup>392</sup> A photo of Raven Cessna O-1 “937”, wearing small South Vietnamese Air Force insignia, can be found at <http://www.ravens.org/pictures/o1nape.jpg>; its identity and fate are unknown.

<sup>393</sup> A photo taken at Pakse in March 71 showing Raven Cessna O-1F “0-72897”, that is former USAF 57-2897 of 504 TAS, Cam Ranh Bay, delivered to TL MAP on 5 March 71 (71064), can be seen at <http://www.ravens.org/>. As it is no longer current on 1 April 72, it probably crashed before that date.

<sup>394</sup> A photo of Raven T-28D-5 “0-91531” (msn 159-43) can be seen at <http://www.ravens.org/gene72-2.jpg>; it does not wear the Erawan, but a badge on the fin, indicating that it was based at Long Tieng.

<sup>395</sup> Robbins, *Ravens*, pp.166/7.

<sup>396</sup> Robbins, *Ravens*, p.59.

Raven T-28s came from various sources – some came from *Water Pump*,<sup>397</sup> but most came from the RLAf Military Assistance Program.<sup>398</sup> As to 1971, more than 21 T-28Ds that were marked as “transferred to non-USAF” (TL) in the USAF Assignment Records, without going to a Military Assistance Program, do appear in the list of T-28s maintained by Air America, Udorn, in April 1972: Two T-28 were transferred on 21 June 71,<sup>399</sup> 2 on 30 June 71,<sup>400</sup> three on 20 July 71,<sup>401</sup> 5 on 10 October 71,<sup>402</sup> 4 on 18 October 71,<sup>403</sup> 4 on 11 December 71,<sup>404</sup> and 4

---

<sup>397</sup> Former *Water Pump* T-28C “0-40456” (msn 226-33) was a Raven aircraft probably since 1969/70, as its photo is presented on the homepage of the *Ravens Organization* at <http://www.ravens.org/kham/Kham1965TrainingUdorn.jpg>; in April 1972, it is still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America, Udorn (List of Assigned and maintained aircraft at Udorn as of 1 April 72, in: UTD/CIA/B49F2), but went to the Philippine AF as “140456” in 1974 (?), and was sold to Business Air Charter, Portland, OR, as N2065J in August 1989.

<sup>398</sup> A total of 8 Raven T-28s have been identified by photo proof: T-28D-5 “0-00276” (msn 171-82) crashed at Lima 36 (Na Khang, LS-36); a photo of “0-00276” without the Erawan can be found at <http://www.tlc-brotherhood.org/lima36down.jpg>; still in April 72, it is flown under the command of the USAF Attaché, Vientiane, and maintained by Air America, Udorn (List of Assigned and maintained aircraft at Udorn as of 1 April 72, in: UTD/CIA/B49F2), its fate is unknown; T-28D “0-91510” (msn 159-22) is pictured as a Ravens T-28 in: Moody, *The great adventures*, Prelude, p.5; it is not current in April 72, so was probably destroyed before that date; T-28D “0-91523” (msn 159-35) is pictured as a Ravens T-28 in: <http://www.ravens.org/jimcain6.jpg>, and appeared in the movie *Birds of a feather* at 0.49.47 minutes, without the Erawan; it is not current in April 72, so was probably destroyed before that date; T-28D-5 “0-91531” (msn 159-43) is pictured as a Ravens T-28 in: <http://www.ravens.org/gene72-2.jpg>; still in April 72, it is flown under the command of the USAF Attaché, Vientiane, and maintained by Air America, Udorn (List of Assigned and maintained aircraft at Udorn as of 1 April 72, in: UTD/CIA/B49F2), its fate is unknown; T-28D “0-91583” (msn 159-95) is pictured as a Ravens T-28 in: <http://www.ravens.org/gene72-2.jpg>; it is not current in April 72, so was probably destroyed before that date; T-28D “0-91600” (msn 159-112) is pictured as a Ravens T-28 in: Robbins, *Ravens*, pp.120-21 photo section, taken by Howard Mesaris probably in 1970; it is not current in April 72, so was probably destroyed before that date; T-28D “0-91716” (msn 159-228) is pictured as a Ravens T-28 in: Robbins, *Ravens*, pp.120-21 photo section, taken by Howard Mesaris probably in 1970; it is not current in April 72, so was probably destroyed before that date; and finally, T-28C “0-40533” (msn 226-110) is pictured as a Raven T-28 in a photo probably taken at Long Tieng and preserved in: UTD/Rich/B2F6, and published in: Davis, *Across the Mekong*, p.73; still in April 72, it is flown under the command of the USAF Attaché, Vientiane, and maintained by Air America, Udorn (List of Assigned and maintained aircraft at Udorn as of 1 April 72, in: UTD/CIA/B49F2); probably in 1973, it was transferred to the training unit at Nam Phong, Thailand (photo in <http://www.namphong.com/album5/album5.htm>, taken at Nam Phong, Thailand), and in 1974 (?), it went to the Philippine Air Force as “140533”, who, subsequently preserved it at Villamor Air Base, Manila.

<sup>399</sup> T-28D-10 “0-38268” (msn 200-339) was transferred from NASJA, Jacksonville, to TL on 21 June 71 (71172), but not to MAP, and was current within the fleet of T-28s maintained by Air America Udorn on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and on 1 April 72 as flown under the command of the USAF Attaché, Vientiane, and maintained by Air America, Udorn (List of Assigned and maintained aircraft at Udorn as of 1 April 72, in: UTD/CIA/B49F2). T-28D-10 “0-37729” (msn 200-92) was also transferred from NASJA, Jacksonville, to TL on 21 June 71 (71172), but not to MAP, and was current within the fleet of T-28s maintained by Air America Udorn on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), but not current on 1 April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2), so was probably destroyed between 21 June 71 and 1 April 72.

<sup>400</sup> T-28D-10s “0-37769” (msn 200-132) and “0-38270” (msn 200-341) were both transferred from NASJA, Jacksonville, to TL on 30 June 71 (71181), but not to MAP, and were both current within the fleet of T-28s maintained by Air America Udorn on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002), and on 1 April 72 as flown under the command of the USAF Attaché, Vientiane, and maintained by Air America, Udorn (List of Assigned and maintained aircraft at Udorn as of 1 April 72, in: UTD/CIA/B49F2).

<sup>401</sup> T-28D-10s “0-37646” (msn 200-9), “0-37785” (msn 200-148), and “0-38174” (msn 200-245) were all transferred from NASJA, Jacksonville, to TL on 20 July 71 (71172), but not to MAP; all of them were current within the fleet of T-28s maintained by Air America Udorn on 1 August 71 (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002); “0-37646” was no longer current on 1 April 72 (List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2), but reportedly leased to the Khmer Air Force as “137646”;

on 21 December 71.<sup>405</sup> Evidence of its career with the Ravens exists only for one of these 21 T-28s, that is for “0-37799”.<sup>406</sup> As at the very same dates, other T-28s were transferred “to non-USAF” (TL) that ended up with the Royal Thai Air Force,<sup>407</sup> it is believed that those T-28s given in the Air America list of 1 April 72 for which the USAF Assignment Records note “transferred to non-USAF”, but not to an MAP, were actually Raven aircraft that had been from batches destined for the Royal Thai Air Force. A similar case seems to be that of T-28D-5 “0-91621”, which was transferred from the 56<sup>th</sup> Special Operations Wing, Nakhon Phanom,

---

mentioned in <http://www.scramble.nl/mil/>; “0-37785” was still flown under the command of the USAF Attaché, Vientiane, and maintained by Air America, Udorn, on 1 April 72 (List of Assigned and maintained aircraft at Udorn as of 1 April 72, in: UTD/CIA/B49F2); this aircraft was later (1974?) sold to the Philippine AF as “37785”; and “0-38174” was also no longer current on 1 April 72, so may have been destroyed between 20 July 71 and 1 April 72.

<sup>402</sup> T-28D-10 “0-37673” (msn 200-36), T-28D-10 “0-37674” (msn 200-37), T-28D “0-37697” (msn 200-60), T-28D-10 “0-37713” (msn 200-76), and T-28B “0-37799” (msn 200-162) were all transferred from NASJA (Cecil Field Naval Air Station, Jacksonville, FL) to status “non-USAF” (TL) on 71283, that is on 10 October 71, but not to MAP, and all of them were current on 1 April 72 as flown under the command of the USAF Attaché, Vientiane, and maintained by Air America, Udorn (List of Assigned and maintained aircraft at Udorn as of 1 April 72, in: UTD/CIA/B49F2). “0-37673” was transferred to the Khmer Air Force as “673” in 73/4?, and received battle damage in March 74 (Phnom Penh base monthly report for March 74, in: UTD/CIA/B38F8); “0-37697” was transferred to the RLAF in 1973 (?) and to the Lao Air Force (Air Force of the Laos People’s Army) as “3406” in 1975; later, it was sold to the Royal Australian Navy Museum at Nowra, and is preserved there (noted in June 89; see *Air-Britain News*, Oct. 97, p.1229); “0-37799” was transferred to the Royal Lao Air Force in 1973 and to the Lao Air Force (Air Force of the Laos People’s Army) as “3412” in 1975; in March 92, it was sold to Ron J. Kitchen, Carson City, NV, as N28YF; regd. on 3 March 92; repainted as “0-37799” in RLAF colors and wearing the Long Tieng badge, advertised as a Hmong aircraft, allegedly flown by Hmong ace Lee Lu; photos in: <http://pages.prodigy.net/jollyrogercain/uimages/pages>; the fates of “0-37674” and “0-37713” are unknown.

<sup>403</sup> T-28D-10s “0-37666” (msn 200-29), “0-37675” (msn 200-38), “0-37677” (msn 200-40), and “0-37709” (msn 200-72) were all transferred from NASJA (Cecil Field Naval Air Station, Jacksonville, FL) to status “non-USAF” (TL) on 71283, that is on 18 October 71, but not to MAP, and all of them were current on 1 April 72 as flown under the command of the USAF Attaché, Vientiane, and maintained by Air America, Udorn (List of Assigned and maintained aircraft at Udorn as of 1 April 72, in: UTD/CIA/B49F2); their fates are unknown.

<sup>404</sup> T-28D-10s “0-37684” (msn 200-47), “0-37693” (msn 200-56), “0-37701” (msn 200-64), and “0-38201” (msn 200-272) were all transferred from NASPF (Naval Air Station, Pensacola, FL) to status “non-USAF” (TL) on 71345, that is on 11 December 71, but not to MAP, and all of them were current on 1 April 72 as flown under the command of the USAF Attaché, Vientiane, and maintained by Air America, Udorn (List of Assigned and maintained aircraft at Udorn as of 1 April 72, in: UTD/CIA/B49F2); while the fate of “0-37684”, “0-37693”, and “0-38201” is unknown, “0-37701” was used by the Royal Thai Air Force in 1974 (?), and sold to the Philippine AF as “137701” in 1974 (?), where it was damaged beyond repair at Sangley Point Air Base on 1 December 89.

<sup>405</sup> T-28B “0-38305” (msn 200-376), T-28D “0-38320” (msn 200-391), T-28D-10 “0-40019” (msn 219-18), and T-28D-10 “0-40023” (msn 219-22) were all transferred from NASPF (Naval Air Station, Pensacola, FL) to status “non-USAF” (TL) on 71355, that is on 21 December 71, but not to MAP, and all of them were current on 1 April 72 as flown under the command of the USAF Attaché, Vientiane, and maintained by Air America, Udorn (List of Assigned and maintained aircraft at Udorn as of 1 April 72, in: UTD/CIA/B49F2); while the fates of “0-40019” and T-28D-10 “0-40023” are unknown, “0-38305” and “0-38320” went to the RLAF in 1973 (Carroll, *World Air Forces Directory 1998-99*, p.275), and “0-38320” was transferred to the Lao Air Force (Air Force of the Laos People’s Army) as “34??” in 1975, and sold to J. Rayner, Moorabbin, as VH-LAO in March 92, regd. on 12 March 92; cancelled after a damage which occurred at Wangaratta, Victoria, on 13 June 92, and no longer current in 96.

<sup>406</sup> See the photo at <http://www.ravens.org/t28craig.jpg> on the homepage of the Ravens Organization.

<sup>407</sup> For example, T-28D 00137742 (msn 200-105) was transferred from NASJA, Jacksonville, to TL (not MAP) on 71283 (10 October 71), and became “137742” with the Royal Thai Air Force (<http://www.scramble.nl/>); and as to the date of 11 December 71 (71345), even five T-28Ds transferred from Naval Air Station, Pensacola, FL, to “non-USAF” (TL), but not to an MAP, are known to have gone to the Royal Thai Air Force: **0-37671** (msn 200-34), was noted at Bangkok on 11 November 72; **0-37802** (msn 200-165) was noted at Bangkok on 6 January 73 and is preserved at Phitsannulok as “802”; **0-38157** (msn 200-228) is listed by <http://www.scramble.nl/>; **0-38173** (msn 200-244) was coded “22103” and noted airworthy in Nov. 96 and at Bangkok in 97; **0-38284** is also known to have gone to the Royal Thai Air Force.

to “non-USAF” (TL), but not to an MAP, on 15 September 68 (68259), that is at a date, when the Ravens did not yet fly T-28s, but reappears on the list of T-28s maintained by Air America in April 72; probably, this was also a former Royal Thai Air Force T-28, transferred to the Ravens by 1970.

In April 1972, no less than 3 Raven O-1As,<sup>408</sup> 6 Raven O-1Ds,<sup>409</sup> and 14 Raven O-1Fs<sup>410</sup> were maintained by Air America’s Udorn facility. This high number of O-1s still operated in spite of the T-28s introduced in 1969 was probably necessary in order to balance the equally high number of O-1s lost in crashes: No less than 27 Raven Cessna O-1s are known to have been lost in Laos,<sup>411</sup> and there were probably many more. At the same date, that is in April

---

<sup>408</sup> The List of aircraft assigned and maintained by Air America, Udorn, as of 1 April 72 (in: UTD/CIA/B49F2) mentions only the full USAF serials of Raven Cessna O-1As **51-12666**, **51-12781**, and **51-6864**; it is unknown if they bore the abbreviated 3 or 4 digit serial or the full USAF serial prefixed by an O-; their fate is equally unknown.

<sup>409</sup> The List of aircraft assigned and maintained by Air America, Udorn, as of 1 April 72 (in: UTD/CIA/B49F2) mentions only the full USAF serials of Raven Cessna O-1Ds **55-4656**, **55-4699**, **55-4743**, **57-2903**, **57-2952**, and **57-2974**; it is unknown if they bore the abbreviated 3 or 4 digit serial or the full USAF serial prefixed by an O-; their fate is equally unknown.

<sup>410</sup> No less than 10 of the 14 Cessna O-1Fs given on the List of aircraft assigned and maintained by Air America, Udorn, as of 1 April 72 (in: UTD/CIA/B49F2) were transferred (TL) from the 504<sup>th</sup> TAS of Cam Ranh Bay, South Vietnam, to MAP in February or March 1971: Again, the Air America list only gives the full USAF serials. Two O-1Fs were transferred on **15 February 71**: **57-2792**, and **57-2799**; three more O-1Fs were transferred from the same unit the very same day, but do not appear on the Air America list of 1 April 72: These are O-1Fs **57-2860**, **57-2861**, and **57-2866**; they are believed to have been destroyed between 15 February 71 and 1 April 72. Three Raven Cessna O-1Fs still current on 1 April 72 were transferred on **20 February 71**; they are O-1Fs **57-2847**, **57-2863**, and **57-2874**; two more O-1Fs were transferred from the same unit the very same day, but do not appear on the Air America list of 1 April 72: These are O-1Fs **57-2872** and **57-2921**; they are believed to have been destroyed between 20 February 71 and 1 April 72. Four Raven Cessna O-1Fs still current on 1 April 72 were transferred on **28 February 71**; they are O-1Fs **57-2827**, **57-2892**, **“0-72976”** (a photo taken at Pakse in March 71 can be seen at <http://www.ravens.org/>), and **57-2977**. And one Raven Cessna O-1F still current on 1 April 72 was transferred on **5 March 71**, namely **57-2942**; another Raven Cessna O-1F, which was transferred (TL) from 504 TAS, Cam Ranh Bay, to MAP on 5 March 71 and photographed at Pakse in March 71 (see: <http://www.ravens.org/>), was **“0-72897”**; as it is no longer current on 1 April 72, it probably crashed before that date. The delivery dates of 4 Raven Cessna O-1Fs mentioned on the list of 1 April 72 are not known, so they were probably inherited from earlier times; they are O-1Fs: **57-2899**, **51-12718**, **51-12776**, and **55-4693**. In most cases, only the full USAF serials are known, so maybe they used the 4-digit abbreviation or also the regular USAF serial with the 0- prefix.

<sup>411</sup> The “King of crashes” probably was Fred Platt, who crashed no less than 11 aircraft himself, his first crash being in **January 1969**, when he crashed his O-1 on the Plain of Jars in bad weather, his last O-1 crash was on Route 7, east of Xieng Khouang, on **11 January 70**, and this time, Fred Platt was injured (Robbins, *Ravens*, pp.143/4 and 209-12). The other 18 Raven O-1 crashes known are (all quoted from Robbins, *Ravens*): One O-1 disappeared on **6 September 68** during a ferry flight from Bien Hoa to Laos, killing Sam Deichelman (Robbins, *Ravens*, pp.61+379); on **7 November 68**, an O-1 crashed into the side of the mountains near Long Tieng, killing Charles D. Ballou (Robbins, *Ravens*, pp.68/9 + 379); also in **1968**, a Raven O-1 was shot down and crashed into a paddy near the Chinese border, but this time, the pilot (Papa Fox) and his backseater survived, as both were rescued by an Air America helicopter (Robbins, *Ravens*, pp.72-74); on **27 November 68**, a Raven O-1 was shot down east of Savannakhet, killing Ed “Hoss” McBride (Robbins, *Ravens*, pp.81/2+380); on **20 April 69**, a Raven O-1 was shot down over the PDJ near Xieng Khouang, killing John Bach (Robbins, *Ravens*, pp.155+386); on **26 March 70**, a Raven O-1 crashed north of Vientiane, killing Hank Allen and Dick Elzinga (Robbins, *Ravens*, p.235); in **late December 70**, a Raven O-1 crashed on the northern edge of the PDJ, killing Park Bunker (Robbins, *Ravens*, p.260); in **February /March 71**, a Raven O-1 crashed near Vientiane, killing Chuck Engle (Robbins, *Ravens*, pp.273-75); in **late April 71**, the Raven O-1 of Frank Kricker was shot down near Paksong on the Bolovens Plateau, killing his backseater (Robbins, *Ravens*, pp.296/7); on **11 June 71**, Lloyd Duncan’s O-1 was shot down near Pakse, injuring him (Robbins, *Ravens*, p.299); in the **second half of 1971**, Jim Hix’s O-1 crash-landed near Pakse (Robbins, *Ravens*, p.303); in **December 71**, three Raven O-1s were destroyed while parked on the ramp at LS-20A (Robbins, *Ravens*, pp.280/1); on **23 December 72**, Hal Mischler was killed in his O-1 over Saravane, (Robbins, *Ravens*, pp.312-16), and on **24 December 72**, Raven Skip Jackson was killed in his O-1 over the PDJ (Robbins, *Ravens*, p.316).

1972, 7 Raven Cessna U-17Bs<sup>412</sup> were maintained by the Udorn facility of Air America, and of the 76 T-28s given in that list as maintained by Air America, Udorn, 26 are believed to be Raven T-28s.<sup>413</sup> One more Raven T-28, delivered in November 72 from US Navy stocks,<sup>414</sup> is known to have been T-28 “0-37762”, whose wreck was photographed in 1973 and can be seen at <http://members.bellatlantic.net/~ltcol/laos.html>. Little is known about Raven T-28s that were lost: One Raven T-28 was shot down on the Plain of Jars on 25 May 70, wounding John Fuller, another one was shot down near Ban Na on 9 February 71, wounding Jim Hix, and a third one was shot down near Ban Na on 11 February 71, killing Grant Uhls.<sup>415</sup> Among those T-28s that, between 1 August 71 and 1 April 72, disappeared from the inventories of T-28s maintained by Air America’s Udorn facility, four are believed to have been Raven aircraft,<sup>416</sup> most of them were probably destroyed. The cease-fire of 22 February 73 meant that all “USAF air support would halt as of 1200 22 February.” The US Ravens were ordered to be back on the ground by midday and to be out of Laos very soon. As the war on the ground continued, the Raven pilots handed over their planes to the RLAf, that is to the Lao FACs, who turned them around and flew back into battle to direct the hopelessly inadequate squadrons of T-28s.<sup>417</sup>

In 1968, there were probably enough Lao and Hmong pilots available, as since 1969, even the Ravens were allowed to fly T-28s as FACs, and although they were absolutely forbidden to fly the T-28s in combat, some of them just did it.<sup>418</sup> Furthermore, a Contingency Study of Laos and Thailand, accompanying a letter sent on 8 May 1968 to the Deputy Secretary of Defense, Paul Nitze, by the Under Secretary of State, Nick Katzenbach, states that Ambassador Sullivan “considers it preferable to augment the number of ‘Class B’ pilots (Thai pilots flying RLAf aircraft under control of our Air Attaché in Vientiane)”,<sup>419</sup> and so Royal Thai Air Force pilots continued to fly for the Royal Laotian Air Force until 1975.<sup>420</sup>

### **RLAF T-28s at Air America’s Udorn Thailand base 1968-1973**

As has been seen above, many more T-28s were added to the Military Assistance Program to Laos in the 1968-1973 period, all of them loaned to the RLAf thru DEPCHIEF, all of them flown under the command of AIRA, that is the USAF Attaché, Vientiane,<sup>421</sup> and all of them maintained by Air America, Udorn. So, on the map of the Air America Udorn Thailand Base drawn on 15 October 68 and contained in the papers of David Hickler, a certain area located

---

<sup>412</sup> The following Raven Cessna U-17Bs were maintained by Air America, Udorn, in April 72 (List of Assigned, maintained aircraft as of 1 April 72 in: UTD/CIA/B49F2): **66-8549; 68-10538; 69-7304; 69-7305; 69-7306; 71-1050; and 71-11046**); it is unknown if they bore the abbreviated 4 digit serial or the full USAF serial prefixed by an O-; their fate is equally unknown. One Raven U-17 is known to have been shot down in the Ban Ban valley in May 70, killing Jim Cross and Dave Reese (Robbins, *Ravens*, p.247).

<sup>413</sup> These 26 T-28s are: **2 T-28Cs** (0-40456 and 0-40533), **3 T-28D-5s** (0-91531, 0-91621, and 0-00276), and **21 T-28D-10s** (0-37666, 0-37673, 0-37674, 0-37675, 0-37677, 0-37684, 0-37693, 0-37697, 0-37701, 0-37709, 0-37713, 0-37769, 0-37785, 0-37799, 0-38201, 0-38268, 0-38270, 0-38305, 0-38320, 0-40019, and 0-40023 (List of aircraft assigned and maintained by Air America, Udorn, as of 1 April 72, in: UTD/CIA/B49F2).

<sup>414</sup> T-28B BuA 137762, struck off charge from US Navy records on 13 November 72 (e-mail dated 29 April 2009 kindly sent to the author by Sid Nanson), is listed as T-28B “51-37762” training aircraft from 1 December 72 to 1 June 73 (Lists of Assigned and maintained aircraft at Udorn of 1 December 72 to 1 June 73, in: UTD/Bisson/B5 microfilm reel 24).

<sup>415</sup> Robbins, *Ravens*, pp.247/8+p.390, and pp.260-63.

<sup>416</sup> These 4 T-28s were: “0-91583”, “0-37729”, “0-37646”, and “0-38174” (List of Assigned and maintained aircraft at Udorn of 1 August 71, kindly supplied by Jackson L. Forney in his e-mail to the author, dated 12 September 2002; and List of Assigned and maintained aircraft at Udorn of 1 April 72, in: UTD/CIA/B49F2).

<sup>417</sup> Robbins, *Ravens*, pp.312+323-25.

<sup>418</sup> Robbins, *Ravens*, pp.166/7 and 59.

<sup>419</sup> US Dept. of State, Foreign Relations of the United States, 1964-1968, vol. XXVIII, Laos, document 366, in: [http://www.state.gov/www/about\\_state/history/vol\\_xxviii.351\\_370.html](http://www.state.gov/www/about_state/history/vol_xxviii.351_370.html).

<sup>420</sup> Moody, *The great adventures*, Prelude, p.3, in: <http://www.aircommandos.org/BobAndDon/Episode0000.htm>.

<sup>421</sup> Fax dated 7 August 2000 kindly sent to the author by B/G Aderholt.

adjacent to the open storage area is called “T-28 Operations”. Furthermore, mention of the T-28 maintenance performed by Air America at its Udorn facilities is no longer hidden in classified documents, but in this period, it overtly figures in the contracts that the Company negotiated with the United States Air Force. Contract F04606-71-C-0002, negotiated between Air America and the USAF’s Sacramento Air Material Area in June 1970 and modified on 30 June 71 to cover Fiscal Year 1972, that is ending on 30 June 72, first mentions a certain sum for T-28 CBD (combat, battle damage), then states that “the primary customer for the Udorn maintenance base is DepChf JusMag”, that is DEPCHIEF, and finally adds a paragraph C “Supply instructions for DepChf-managed aircraft” in Section XVIII “Other items”, where the contract states that “supply procedures for T-28, UH-34, O-1, and U-17 aircraft had been included in three separate documents attached to the basic contract. DepChf, in conjunction with the Det. 11 Udorn plant office, developed a consolidated supply procedure.”<sup>422</sup> These details clearly show that the Udorn-based T-28s flying in RLAf colors belonged to the USAF, were managed by DEPCHIEF, and were maintained by Air America. As the O-1s and U-17s were aircraft used by the Ravens, one part of the T-28s managed by DEPCHIEF was also Raven aircraft. Indeed, the “List of Assigned, maintained aircraft” of 1 April 72 contains, among others, a total of 76 T-28s of all versions (that is 4 T-28Bs, 3 T-28Cs, 1 RT-28D, 10 T-28Ds, 28 T-28D-5s, and 30 T-28D-10s), of which at least 26 were Raven aircraft, as well as 23 Raven O-1s (A, D, and F models) and 7 Raven U-17Bs,<sup>423</sup> and all of these aircraft were operated, maintained or supported by Air America’s Udorn base at that time.

The follow-on contract between Air America and USAF’s Sacramento Air Material Area (SMAMA), that is Modification P00054 to contract F04606-71-C-0002, effective 1 July 72 and valid until 30 June 73, now also included services formerly performed under USAID contracts 439-342 and 439-713. In the beginning, it specifically mentions “additional requirements, totaling \$ 815,400 for Weather Network O&M [that is: Operation and Maintenance], TACAN (PACAF) O&M, T-28 Stand by Maintenance and a Logistics Management Assistance Team” that “are also provided for under the FY73 program”. Later it states that several changes had to be introduced to the Maintenance Services at Udorn for operation during Fiscal Year 1973, including “addition of coverage for the expanded ‘South Forty’ T-28 facility (USAF operational area, with contractor facility maintenance)”.<sup>424</sup> So, until the very end of its Udorn operations, Air America was responsible for maintaining the USAF T-28s loaned to the RLAf thru DEPCHIEF.

### **The 1973-74 period:**

It is evident that after the Cease-Fire Agreement of February 73, no combat or combat support missions were allowed in Laos to any US personnel. The Ravens handed their T-28s over to the Royal Laotian Air Force in February 73,<sup>425</sup> which probably meant another 22 aircraft.<sup>426</sup> Others seem to have been added later in 1973. On 10 September 73, a total of 11

---

<sup>422</sup> Contract F04606-71-C-0002-P00024, effective 1 July 71, pp. 2 and 60 (both quotations on p.60), in: UTD/Kaufman/B1F8.

<sup>423</sup> The list dated 1 April 72 contains all aircraft “presently operated, maintained or supported by Air America, Inc., Udorn” (in: UTD/CIA/B49F2).

<sup>424</sup> Contract F04606-71-C-0002-P00054, effective 1 July 72, pp. 2 and 11, in: UTD/Kaufman/B1F6.

<sup>425</sup> Robbins, *The Ravens*, pp.323-27.

<sup>426</sup> Ten T-28s (T-28Bs “0-37762”, “0-37799”, and “0-38352”, T-28Cs “0-40044”, “0-40456”, and “0-40533”, T-28D “0-13463”, as well as T-28D-5s “0-00276”, “0-17793”, and “0-91531”) have been documented as Raven aircraft, and 12 T-28s (T-28B “0-38305”, T-28D “0-38320” as well as T-28D-10s “0-37673”, “0-37674”, “0-37684”, “0-37697”, “0-37701”, “0-37709”, “0-37769”, “0-37785”, “0-38201”, and “0-40019”) are believed to have been Raven aircraft; all of them were maintained by Air America Udorn still in March 73 (List of Assigned and maintained aircraft at Udorn of 1 March 73, in: UTD/Bisson/B5 microfilm reel 24).

Ref. No. PLNG-UTH-73-134

Type	Tail No.	Manufacturer's No.	
O-1A	66-15107	-	Total : 9
	66-15128	-	
	66-15145	-	
	66-15181	-	
	66-15185	-	
	66-15188	-	
	66-15193	-	
	66-15218	-	
	66-15222	-	
O-123K	54-477	20026	Total : 10
	54-616	20065	
	54-617	20066	
	54-636	228016	
	54-671	20120	
	55-4545	20206	
	55-4546	-	
	55-4556	20217	
	55-4576	20237	
	56-4386	20270	
O-17	66-15828	B540	Total : 8
	66-15837	B549	
	66-15864	B576	
	66-15992	B584	
	66-15998	B590	
	66-16019	B611	
	66-16016	B608	
	69-17103	B618	
O-1A	51-12222	-	Total : 3
	51-12314	-	
	51-16925	-	
O-1D	55-2974	-	Total : 11
	55-4656	-	
	55-4688	-	
	55-4703	-	
	55-4718	-	
	55-4733	-	
	55-4743	-	
	57-2802	-	
	57-2838	-	
	57-2852	-	
	57-2903	-	

Page 3 of 5

Ref. No. PLNG-UTH-73-134

Type	Tail No.	Type	Tail No.
U-17B	66-8549	T-28D-5	49-1496
	66-10538		49-1506
	69-7304		49-1519
	69-7306		49-1531
	71-11046		49-1561
	Total : 5		49-1584
U-6	58-2053	Total : 1	49-1620
			49-1628
O-1F	51-12718		49-1677
	51-12726		49-1702
	57-2792		49-1704
	57-2827		49-1724
	57-2847		49-1731
	57-2863		50-216
	57-2869		50-273
	57-2976		50-278
	57-2977	Total : 9	50-283
T-28B	51-37679		50-310
	51-37762		51-3562
	51-38135		51-3696
	51-38181		51-7793
	51-38192		51-7801
	51-38325		Total : 22
	53-137644	T-28D-10	51-153646
	53-138351		51-153654
	53-138352		51-153655
	53-140044		51-153658
	Total : 10		51-153659
T-28D	54-140456		54-137673
	54-140457		54-137684
	54-140533	Total : 3	54-137697
T-28D	51-3463		54-137701
	51-3588		54-137757
	51-3632		54-137785
	51-3656		54-137799
	51-3700		55-038309
	51-3722		55-038320
	51-7611		55-137639
	51-7677		55-137773
	51-7746		55-138201
	51-7773		55-138232
	52-1187		55-138248
	52-1258		55-140019
	52-1225		55-138259
	52-3498		Total : 22
	51-7753	Total : 15	

Narong, N.  
S/Planning, Udorn

Page 4 of 5

The RLAf O-1s, U-17Bs, U-6, and T-28s maintained by Air America at Udorn on 1 May 73 (List No. PLNG-UTH-73-134, pp. 3-4, in: UTD/Bisson/B5 microfilm reel no. 24)

T-28Ds were transferred from Naval Air Station, Pensacola, Florida (NASPF) to an unknown Military Assistance Program (MAP).<sup>427</sup> While many of these aircraft were later flown by the Khmer Air Force,<sup>428</sup> at least two of them found their way into the Air Force of Communist Laos,<sup>429</sup> so had evidently been taken over from the Royal Laotian Air Force. This means that possibly the remaining 9 T-28Ds of this batch had also gone to the Royal Laotian Air Force before being transferred to the Khmer Air Force. More T-28s joined the Royal Laotian Air Force in 1973 and 1974.<sup>430</sup> What has to be mentioned here is a T-28 coup that failed: On 20

<sup>427</sup> T-28Ds 51003763 (msn 174-301), 51007492 (msn 174-345), 51007505 (msn 174-358), 51007521 (msn 174-374), 51007555 (msn 174-408), 51007568 (msn 174-421), 51007576 (msn 174-429), 51007586 (msn 174-439), 51007593 (msn 174-446), 51007637 (msn 174-490), and 52001203 (msn 189-18).

<sup>428</sup> Documented as in service with the Khmer Air Force in 1973/4 are T-28Ds 51007492, 51007505, 51007568, 51007586, and 51007637; for details see the Khmer Air Force files of *The Aircraft of Air America*.

<sup>429</sup> T-28D "0-17521" (Previous history: T-28A 51007521 SMAAR, to 3380 M & S Group, Keesler AFB on 70117; to T-28D 51007521; to NASPF, Pensacola; to TL MAP on 73253 [10 Sept. 73], that is to the Royal Laotian Air Force, probably as "0-17521". Fate: transferred to the Lao Air Force [Air Force of the Laos People's Army] as "3403" in 1975 [?]; sold to A. Schmidt, Alice Springs, NT, as VH-DUK in August 93; regd. on 5 August 93) and T-28D "0-17576" (Previous history: T-28A 51007576 of SMAAR, to 3380 M & S Group, Keesler AFB on 70119; to T-28D 51007576; to NASPF, Pensacola; to TL MAP on 73253 [10 Sept. 73], that is to the Royal Laotian Air Force, probably as "0-17576". Fate: transferred to the Lao Air Force (Air Force of the Laos People's Army) as "3401" in 1975 [?]; stored at Xieng Khouang airfield before 1984, until finally sold to Keith Death of Australia in 1988; the aircraft was dismantled, trucked to Savannakhet and finally to Bangkok, and then shipped to Sydney, where it arrived in January 1991; dispatched to its future owner in early 1991 who employed several months to rebuild it [Wilkinson, *Trojans from Laos*, pp. 182-84]; sold to Guido Zuccoli, Toowoomba, Qld, as VH-ZUC in November 94).

<sup>430</sup> These probably included T-28D "0-38369" (msn 200-440, ex BuA 138369), which was not current on 1 June 73 nor listed in the AFRHA microfilms, but is known to have been current in 1973, when it bore the Erawan and was based at Luang Prabang; a photo taken at Luang Prabang in 1973 can be seen in <http://members>.

August 1973, Brigadier General Thao Ma, who had been in exile in Thailand since his *coup d'état* of October 1966, tried to stop the slow handover of Laos to the Communists by another T-28 attack. The attack began quietly around 1:30 AM across the Mekong at Vientiane's Wattay Airport. In the meantime, proud Lao nationalists who supported the uprising handed out Blue-and-white ascots to help identify Thao Ma's supporters. Although ordered not to accept or wear those ascots, some of them were worn by some Airport Security, some mechanics, some Air America employees, and some *Water Pump* personnel, until they were ordered to remove them by supervisors fearing they might become targeted for reprisals. Around noon, some RLA T-28s taken over by Thao Ma to aid in the bombardment attack, took off to begin bombing missions. In the meantime, Thao Ma's associates had captured the City Bank and begun transmitting messages from the captured downtown radio station. During the air attack, the T-28 flown by Thao Ma himself was battle damaged, and crashed short of the runway while returning to land at Vientiane. Thao Ma, although badly injured from the plane crash, was captured by General Kouprasith Abhay and head shot. And 60 of the leaders supporting his coup were also reportedly shot, after some had been captured and others surrendered to the authorities.<sup>431</sup>

Aug 20, 1973

0000 0100 0100  
 TL UHXYFA BKXKFA SSXKFA WSAFYA TPXKFA HXKXFA  
 JUTERFA 000447

2200Z, 816 F10

BT  
 TO : VP-10D UTR AVP SWY SZ CHX VP-SWMD SBN  
 INFO : CHIEF EXECUTIVE OFFICER WAS RUP-050 P/T TPE MAAL HXG  
 REF : MILITARY DISTURBANCE VTE  
 DEF : 1

1. SINCE DAWN THIS MORNING THERE HAS BEEN ODDING SOME SORT OF MILITARY CONFRONTATION, APPARENTLY BETWEEN UNIDENTIFIED ELEMENTS OF THE RLA AND THE LAO ARMY. ROADBLOCKS WERE IN FORCE AT APPROXIMATELY 0600L, AND BY 0700L SOME BOMBS DROPPED FROM LOW-FLYING T-28 AIRCRAFT AGAINST THE LAO ARMY HEADQUARTERS AT CAMP CHANGING AND THE DEFENSE HEADQUARTERS AT PHONE THONG. GROUND FORCES REPLIED AGAINST THE AIRCRAFT WITH SMALL ARMS THEREAFTER, ALMOST SIMULTANEOUSLY, IN THE AREA.

2. ALL TRAFFIC TO ALL TRAFFIC, AND AT THIS HOUR ONLY T-28S ARE OPERATING FROM THERE.

3. APPROVED PERSONNEL CARRIERS OF THE ARMY MOVED UP LUANG SPANANG ROAD TOWARD WATTAY AIRFIELD AND THERE HAVE BEEN SEVERAL REPORTS OF THESE UNITS ENGAGING UNIDENTIFIED FORCES BETWEEN THEM AND THE AIRFIELD. THE LAO ARMY HAS MADE ANNOUNCEMENTS ON THE LOCAL RADIO TELLING THE POPULACE TO BE CALM, BUT NOT TO CONGREGATE IN GROUPS, AND ADVISING THEM THAT THE PUBLIC IS SAFE.

4. REQUEST NO ATTEMPT BE MADE TO LAUNCH ANY COMPANY AIRCRAFT TO VTE UNTIL FURTHER NOTICE. THERE HAS BEEN NO SEEN TO DEPART TO COMPANY PROPERTY OF PERSONNEL. COMPANY EMPLOYEES NOT AT THE AIRFIELD BY THE TIME COMPANY STAFFERS HAVE BEEN ADVISED TO REMAIN AT HOME UNTIL THE SITUATION BECOMES CLEARER. THERE HAS BEEN NO PROTECTION FROM THE AMERICAN EMBASSY ABOUT PERSONNEL EVACUATION, AT LEAST AT THIS TIME. ALL ESSENTIAL PUBLIC UTILITIES REMAIN IN OPERATION. T-28 AIRCRAFT ARE CONTINUING TO SOAR THE CITY, BUT WITHOUT TAKING FURTHER OFFENSIVE ACTION.

5. IT WOULD APPEAR DOUBTFUL THAT THERE WILL BE COMMERCIAL FLIGHTS INTO VTE TODAY, AND AIR TRAVELERS FROM THE US OR OTHER AREAS SHOULD BE ALERTED TO THIS POSSIBILITY. WILL ADVISE AS MORE FACTS ARE KNOWN.

VP-10D UTR 0100 000447

0000 0100  
 TL UHXYFA BKXKFA SSXKFA WSAFYA TPXKFA HXKXFA  
 JUTERFA 000450

BT  
 TO : VP-10D UTR AVP SWY SZ CHX VP-SWMD SBN  
 INFO : CHIEF EXECUTIVE OFFICER WAS RUP-050 P/T TPE MAAL HXG  
 REF : MILITARY DISTURBANCE VTE  
 DEF : VP-10D UTR 0100 000447

1. AS FURTHER TO REFERENCE, LAO ARMY TROOPS HAVE TAKEN OVER THE AAM RAMP AREA, IN AN ATTEMPT TO SEAL OFF THE T-28 RAMP. ONE T-28 WAS HIT BY GROUND FIRE AND CRASHED ON THE AIRFIELD. THE FIRE BRIGADE SUCCEEDED IN GETTING THE PILOT OUT. THE PILOT, HIMSELF WOUNDED, WAS SAID TO BE GENERAL MA, LEADER OF THE ABORTIVE 1966 AIR FORCE ATTEMPT TO OVERTHROW THE GOVERNMENT.

2. AIR AMERICA PERSONNEL STILL ON DUTY ARE BEING EVACUATED INTO TOWN BY COMPANY VEHICLES, AS A PRECAUTION-ARY MOVE, AND COMPANY BUSINESS WILL PRETTY MUCH COME TO A HALT UNTIL THE ARMY TROOPS DEPART THE SCENE.

VP-10D UTR 0100 000450

Brig. Gen. Thao Ma's coup of 20 August 73 as seen by Air America radio messages: At 0445Z or 11.45 local time, T-28s are reported to be attacking the Lao Army. The message of 0446Z reports that the Lao Army has taken the ramp and that Ma crashed in his T-28 (documents preserved at: UTD/Leary/I B16F10)

[bellatlantic.net/~ltcol/lp2.jpg](http://bellatlantic.net/~ltcol/lp2.jpg); its fate is unknown. Another T-28D that apparently joined the Royal Laotian Air Force in 1973/4 was "0-17509" (msn 174-362); no details of its service in Laos are known, but it found its way into the Air Force of Communist Laos as "3402" in 1975 (?); this was one of the T-28Ds that were stored at Xieng Khouang airfield before 1984, until finally sold to Keith Death of Australia in 1988; it was last reported as current and stored without registration by G. Glynn, NSW, in 2002 (Wilkinson, *Trojans from Laos*, p. 184).

<sup>431</sup> Davis, *War Pilots Remembered*, at <http://www.preservingourhistory.com/Pilots.html>, p.9.

