

The early days I – CAT operations in China 1946-48

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1946: The foundation of CNRRA Air Transport

The history of Civil Air Transport goes back to the year 1946 when General Claire L. Chennault and Whiting Willauer formed CNRRA (Chinese National Relief and Rehabilitation Administration) Air Transport at Shanghai on 25 October 1946. General Chennault had in vain tried to build up a Chinese Air Force since 1937, before the Japanese had occupied most of the country, but in 1941, his plan was approved by the United States to build up an American Volunteer Group and he was allotted 100 Curtiss P-40s already rejected by the British. As many of these P-40s carried shark's teeth, a tongue and a single red and white eye painted along the noses, and as Chennault's pilots were called "tigers" by the Chinese, the First American Volunteer Group became known as "The Flying Tigers". As, under the rules of the Geneva Convention, U.S. military personnel was not supposed to be fighting in China, the whole operation was to be secret – but nevertheless even the Japanese knew very well that these planes were flown by American volunteers. When the United States officially entered the war in China on 3 July 1942, the U.S. Government decided that the "Flying Tigers" should become part of the US Army Air Force, and at that time, Chennault became the commander of the China Air Task Force: During the rest of the war, the Nationalist Chinese saw Chennault as a savior.¹ This was by no means the opinion of Chennault's superiors with the US military, for no sooner had he taken command of the US air units in China in 1942 when he became embroiled in a controversy especially with General Joseph W. Stillwell over matters of high strategy, and this conflict was to last during the whole war. So when Chennault left China and the USAF in the summer of 1945, his relations with Chiang Kai-shek were still as excellent as they had been during the whole war. And before Chennault left the area, he had had discussions with officials of Yunnan province about establishing an airline that would carry tin, Yunnan's main export, to ports in Indochina.²

Among the persons who had assisted in setting up Chennault's American Volunteer Group in 1941 had been Whiting Willauer, who in May 1944 had become director of the Far East and Special Territories Branch in the Foreign Economic Administration. When Willauer returned to the US in the fall of 1945, he contacted David M. and Thomas G. Corcoran, with whom he had worked together in China and who were now partners in Rio Cathay SA, a Washington-based corporation whose purpose was to pursue business ventures in China and South America. Thru Rio Cathay, Willauer raised \$50,000 for building up a civilian passenger and freight airline in China and Indo-China and then asked Chennault to join the Rio Cathay group. As Chennault's supporter in Yunnan Province had been overthrown in the meantime, the General decided to abandon the idea of a Yunnan provincial airline and to cooperate with Willauer, who then – thru Rio Cathay – procured another \$35,000 for Chennault. In late December 45, both men headed for Shanghai.³

In January 46, Chennault and Willauer discussed plans for a new air service with several Chinese officials, and most of them were interested; on 15 January 46, Willauer even noted optimistically that they had the full cooperation of Madame Chiang, the influential wife of China's president. But then the problems arose: Opposition to a new airline not only came from the 2 big Chinese airlines, China National Aviation Corporation (CNAC) and Central Air Transport Corporation (CATC), who had powerful supporters in the government and

¹ Leary, *Perilous missions*, pp.3-10; Robbins, *Air America*, pp.37-42.

² Leary, *Perilous missions*, pp.5/6.

³ Leary, *Perilous missions*, pp.6-10.

argued that competition by a new airline would probably hinder the orderly development of air transportation in China, but also from groups who opposed a non-Chinese ownership and from people who worried about China's financial situation. The solution seemed to have come when on 6 February 1946, Colonel Ralph W. Olmstead, director of operations for the United Nations Relief and Rehabilitation Administration (UNRRA) asked Chennault and Willauer to draw a plan for an airline that would carry relief supplies from the coastal cities to the interior of China. 24 hours later, the draft of such a contract was in Olmstead's hands: The new airline was to fly the supplies into the interior and operate a commercial cargo service on the return flight; UNRRA, thru its Chinese counterpart Chinese National Relief and Rehabilitation Administration (CNRRA), would supply the funds to purchase the aircraft, and Chennault and Willauer would contribute working capital. As Olmstead recommended approval to his superiors in UNRRA, Willauer and Chennault worked to obtain the approval of the Chinese government, which was tentatively granted in late April 46. Finally, on 10 September 46, Chiang Kai-shek gave his warm personal approval to the idea of CNRRA Air Transport.⁴ The obstacles within UNRRA were even bigger – first in China about who was to determine the conduct of relief operations in China and then in the US in gaining approval from UNRRA and the State Department.⁵

With the full concurrence of the Executive Yuan of the National Government of China,⁶ on 25 October 1946, Chennault and Willauer signed the contract with CNRRA creating CNRRA Air Transport, abbreviated as CAT. UNRRA would allocate \$2 million to CNRRA for purchasing the aircraft and equipment and another \$1.8 million for wages, fuel, and other imports. CAT would use the aircraft primarily to carry relief supplies from coastal points to the interior, but was allowed to sell unused return space to the general public. Chennault and Willauer were to absorb any losses in the conduct of operations by their own working capital, but were allowed to buy the aircraft at cost plus 10 percent interest, compounded annually. But problems continued – first by Chinese competitors who publicly accused the airline of only wanting to earn profits. Thru advertising pressure and use of interested parties in both the foreign and the Chinese press, China's two existing airlines, CNAC and CATC, continued trying to halt establishment of the new airline.⁷ But the main problem came from another side: Pennsylvania Central Airlines, the former main backers of CAT that had been recruited thru Rio Cathay SA, did no longer support the new Chinese airline with money. Looking desperately for the necessary working capital, Willauer turned to Chinese businessmen who finally put together a group of financial backers offering a loan of \$250,000 for 18 months at interest. Willauer had no choice but to agree, and the money was paid on 30 November 46. Nevertheless, Willauer was heavily criticized from Washington's Corcoran for what seemed to the US side to be an unfavorable deal.⁸ But, before the end of the year 1946, CNRRA Air Transport had already put together a total of 87 employees.⁹

1947: CNRRA Air Transport (CAT) in action

After the war, many supplies sent by the United Nations accumulated on dockside and in warehouses along the coast of China instead of being delivered to the interior of the country, where they were desperately needed. The new airline – CNRRA Air Transport, whose long name was abbreviated to a red “CAT” painted on the rear of the fuselage – started operations from Shanghai to Canton on 31 January 1947 after buying 5 C-47s from US war surplus in

⁴ Souder, “Highlights in the history of Civil Air Transport”, p.1.

⁵ Leary, *Perilous missions*, pp.10-14.

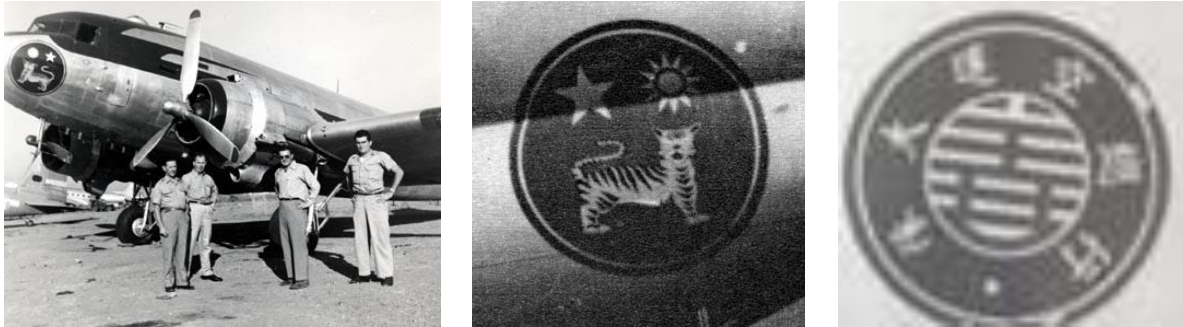
⁶ Souder, “Highlights in the history of Civil Air Transport”, p.1.

⁷ Souder, “Highlights in the history of Civil Air Transport”, p.1.

⁸ Leary, *Perilous missions*, pp.14-21.

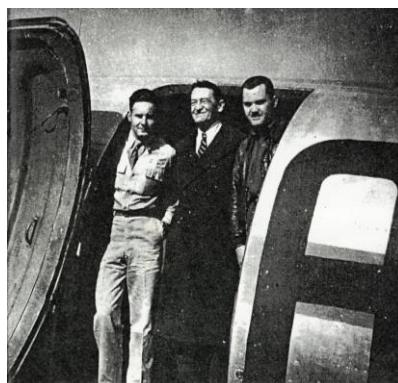
⁹ Souder, “Highlights in the history of Civil Air Transport”, p.1.

the Philippines. Three of these C-47s had reached Lunghwa airport near Shanghai on 27 and 28 January 47, flown in by CNRRA Air Transport pilots A. Lewis Burridge, Var M. Green, Harry A. Cockrell, Stuart E. Dew, Paul R. Holden, and Frank L. Hughes, and only one of these C-47s – said to be no. “404”¹⁰ – had already been painted in full CNRRA Air Transport colors. These did not only include the red “CAT” on the rear fuselage and a blue cheat line and front, but also the company insignia – a tiger below a sun and a star¹¹ – on the nose and the CAT/CNRRA emblem on the horizontal stabilizer.



John G. McMeeking, Carl Prisbeck, Gene Bable, and Robert E. Rousselot standing in front of a CAT C-47 (UTD photo no. 1-RR1-6-PB1); CAT’s insignia on the nose of a C-46 (detail from UTD photo no. 1-AB1-1-PB18); the CAT/CNRRA emblem on the stabilizer of C-46 “413” (detail from UTD photo no. 1-RR1-6-PB15)

Already on 29 January 47, this C-47 had taken off from Shanghai for a first flight to Canton – with General Chennault, 12 company and CNRRA employees, a jeep, and office equipment on board, but then the aircraft had to return to Shanghai, because the C-47 ran into severe icing. Due to a bad weather forecast for the following day, CNRRA Air Transport’s first flight took place only in the afternoon of 31 January 47,¹² and only after solving bureaucratic problems with the local customs who wanted to check everything on board. On 2 February 47, 2 CAT C-47s began relief operations out of Canton, flying 9,000 pounds of medical supplies to Liuchow. In mid-February 47, CAT’s remaining 2 C-47s arrived from the



General Chennault arriving at Liuchow with the first airlift of UNRRA medical supplies
(*CAT Bulletin*, vol. III, no.2)

¹⁰ Leary, *Perilous missions*, p.27.

¹¹ CAT explained the insignia as follows: “Against a blue field is the famed ‘flying tiger’ of Chennault’s wartime fliers, together with U.S. and Chinese stars symbolizing the cooperative endeavor that made CAT possible” (Caption below a photo of the insignia in: *CAT Bulletin*, vol. III, no.2 [1 December 1949], p.2).

¹² (Anonymous), “In the Beginning”, in: *CAT Bulletin*, vol. IX, no. 10, October 56, pp. 4/5; the pilots were Frank Hughes and Doug Smith (Smith, *China Pilot*, p.27).

Philippines. With now 5 C-47s available, CAT could add new employees to the payroll, and by the end of the month, the new airline had 158 employees and had flown 40,117 ton-miles in February 47.¹³ In those early days, CAT's aircraft had not yet received Chinese registration numbers, but flew using the last three digits of their former USAAF serial.

As no official fleet inventories are available for those early days, not all of those original C-47s have been documented. Based on USAF microfilms,¹⁴ the following five C-47s are known to have been transferred from USAAF stocks at Manila to UNRRA (CNRRA), the organization that financed CAT's fleet, in early January 1947:¹⁵

43-16215	msn	20681	on 4 January 47
43-16239	msn	20705	on 4 January 47
43-48572	msn	14388/25833	on 4 January 47
43-49571	msn	26832	on 4 January 47
43-49906	msn	27167	on 1 January 47

C-47 43-16215 arrived in China as "316215",¹⁶ and soon this serial was abbreviated to "215": When the engines of this aircraft contacted the ground during run up at West Field, Peiping, on 17 November 47, it still flew as "215".¹⁷ Probably before April 47, all of these C-47s had received the abbreviated serial giving the last three digits only. For on 11 April 47, C-47 "572" was destroyed in a ground accident at West Field, Peiping, and subsequently used for spares.¹⁸ This was already CAT's second C-47 that had to be cannibalized, as CAT's first

CNRRA AIR TRANSPORT
ACCIDENT REPORT

DATE: April 11, 1947 TIME: 0705

PLACE OF ACCIDENT: West Field, Peiping, China

TYPE OF AIRCRAFT: Douglas C-47B SERIAL NO. 572

AIRCRAFT OWNER: CNRRA AIR TRANSPORT

CREW MEMBERS: Captain: Var H. Green
First Officer: C. J. Chow
Radio Operator: P. Hsieh
Flight Engineer: Donald Eavery

PERSONNEL INJURED: None

INSPECTION DATA: Total time of aircraft: 120430
Total engine time R&L: 259130
Time since last inspection: 19400
Last 50 hr. inspection: April 7, 1947 Peiping by D. Eavery
Last 100 hr. inspection: March 5, 1947 Canton by H. Wood

EXTENT OF DAMAGE BRIEFLY: Total loss of right hand engine, nacelle, landing gear, outboard wing panel, center wing panel, and distorted skin and stringers of fuselage at radio operators compartment, also small amount of wiring.

TYPE OF ACCIDENT: Wreck

CAUSE OF ACCIDENT: Unknown

ACCIDENT IN DETAIL: On the morning of the accident 572 was prepared for one of its routine flights from Peiping to Tia Yuan. The usual daily preflight was carried out by the flight engineer; the visual checking of the engines, landing gear, surfaces and the draining of the gasoline tank sumps etc. The engines were started at 0655 with the engineer standing by as fire guard. The aircraft then proceeded to the south end of the north-south runway for final check before take-off.
The right hand engine was run up to 2700 RPM and 40" manifold pressure to

UTD / Lewis / B1F14

CNRRA AIR TRANSPORT
ACCIDENT REPORT

DATE: Nov. 17, 1947 TIME: 0515

PLACE OF ACCIDENT: West Field, Peiping

TYPE OF AIRCRAFT: DOUGLAS C-47B SERIAL NO. 215

AIRCRAFT OWNER: CNRRA AIR TRANSPORT

INSPECTION DATA: Total time of aircraft: 223125
Total time of left engine: 273115
Total time of right engine: 247115
Time since last inspection: 00100
Last 50hr. inspection: 223125
Last 100hr. inspection: 223100

CREW MEMBERS: Crew Chief R.S. Lewis

PERSONNEL INJURED: None

TYPE OF ACCIDENT: Major

CAUSE OF ACCIDENT: High winds and negligence

EXTENT OF DAMAGE BRIEFLY: All three blades of both propellers nicked severely from the tip to the eight inch station of each blade.

ACCIDENT IN DETAIL: The aircraft was headed northwest in the parking area and there was a forty mile an hour wind blowing from the northwest. A fifty hour inspection had just been completed on the aircraft and it was ready for run-up. The mechanics had been on the job this day since six A.M. and had come to work without breakfast so the crew chief had dismissed all of them for check out. He, whom he kept to act as fire guard with standby men. He ran the engines up by himself and in the process of the run discovered it necessary to parallel the generators. He rolled the aileron trim tab into full nose up position and ran the engines up to 1800RPM, then stepped from the cockpit to the main junction box, which is located directly behind the pilots seat, to carry out the balancing of the generators. When he looked up from the voltage regulators to the amp meters the horizon was coming up into view through the windshield. He immediately reached into the cockpit and pulled the yoke back with one hand and the throttles back with the other simultaneously. When the ship was back in a three point position the engines were still running and they were then cut off immediately. Neither engine was stopped when coming in contact with the ground. During all of this action the aircraft was empty and the control locks were off. There was about two hundred and fifty gallons of gasoline in the rear tanks.

DESCRIPTION OF MATERIAL FAILURE: No material failure.

UTD / Lewis / B1F14

The accidents of CNRRA Air Transport C-47Bs "572" (11 April 47) and "215" (17 Nov. 47) (Accident reports in: UTD/Lewis/B1F14)

¹³ Leary, *Perilous missions*, pp.26-29.

¹⁴ J. Gradidge, *The Douglas DC-1/DC-2/DC-3. The first seventy years*, Staplefield UK 2006, vol. II, p.292.

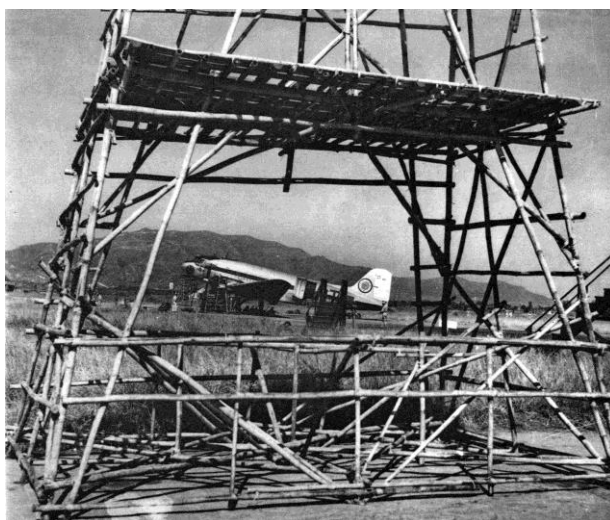
¹⁵ Details given in Gradidge, vol. II, pp. 510, 538, 575, and 584.

¹⁶ See the video tape *Air America. The CIA's secret airline* (2000), by Monte Markham, at 4.00 minutes.

¹⁷ See the report of this accident preserved at UTD/Lewis/B1F14.

¹⁸ Accident report in: UTD/Lewis/B1F14. A photo in Rosbert, *The pictorial history of Civil Air Transport*, p.25, shows this aircraft still as "348572".

C-47 – the mysterious “404” mentioned by William Leary – had already been broken up for spares in late March 47.¹⁹ Leary’s source for this serial and for many other details had been an anonymous article entitled “CAT went commercial” that was published in *CAT Bulletin* in February 57, that is 10 years after those events. The article begins: “Just ten years ago, at 0930 January 30,²⁰ 1947, Number 404, a CAT C-46, took off from Shanghai’s Hung Jao airfield to Canton to inaugurate CAT’s commercial service.”²¹ Well, as can be seen below, CAT’s first C-46s arrived only in March 47. The error concerning the type of aircraft, the erroneous date, and the erroneous hour²² make believe that the sources for these details were not too correct. So “404” is probably also erroneous – maybe a misprinting or a misreading for “434”, the beginning of the long serial of 3 of CAT’s C-47s, abbreviated in that way by the writer of the article so that he could affectionately call it “old 404”. There is no doubt that the CAT C-47 cannibalized in March 47 was “571”,²³ as all the other candidates – 215/“Tientsin”,²⁴ 906/“Peiping”²⁵, and 239/“Taiyuan” – are known to have survived.



An unknown CAT C-47 in 1947/48
(UTD/Burridge, photo no. 1-AB1-1-PB15)

The article quoted above describes the short life of CAT’s first commercial aircraft, and as it gives a good impression of the circumstances under which CNRRA Air Transport had to fly

¹⁹ (Anonymous), “CAT went commercial”, in: *CAT Bulletin*, vol. X, no.2, February 1957, pp.4/5.

²⁰ Souder, “Highlights [...]”, p.1, gives: 31 January 47, and this seems to be more correct.

²¹ (Anonymous), “CAT went commercial”, in: *CAT Bulletin*, vol. X, no.2, February 1957, p.4.

²² According to Leary, *Perilous missions*, p. 27, the plane could take off only in the afternoon, so the precise hour indicated in the article may be poetic license.

²³ CAT’s first C-47 was “215”, which – together with “571” – departed Hong Kong for Shanghai on 27 January 47, followed by “572” on 28 January 47 (Leary, Manuscript, pp.40/1, in: UTD/Leary/B18F16).

²⁴ A photo of C-47 XT-801 (former “215”) / “Tientsin” taken in 1948 can be found in: Rosbert, *The pictorial history of Civil Air Transport*, p.90.

²⁵ A photo of C-47 “906”/ “Peiping” can be found in Rosbert, *The pictorial history of Civil Air Transport*, p.96, and a photo of C-47 “239”/ “Taiyuan” can be found in: Rosbert, p.64. A note in *CAT Bulletin*, vol. I, no.15, 1 May 1948, p. 1, says that the “239” was to become XT-803 and that the “906” was to become XT-805 (e-mail dated 2 February 2011, kindly sent to the author by Clarence Fu). This would make the “Taiyuan” the future XT-803 and the “Peiping” the future XT-805. However, Souder (“Highlights in the history of Civil Air Transport”, p.24) states that XT-803 was the “Peiping” (see below): So only photos can determine which version is correct.

October 24 CAT planes were today donated to the United Nations for the “bombing” of seven cities (Shanghai, Hankow, Canton, Tsingtao, Peiping, Tientsin, Mukden) with leaflets marking today as “United Nations Day”

October 25 XT-803 (“Peiping”), a C-47, scrapped

in those days, here are some more extracts: “Seated just behind the pilot and ahead of the voltage regulators on a chair brought along especially for this flight, General Chennault was flying over the terrain he had come to know so intimately during his many years in China, but he still recalls a part of the route, particularly around Kweilin, as some of the roughest in the world. The first leg of the inaugural flight to Canton was made without further mishap. On February 2nd No. 404, having been joined by two other CAT planes loaded with a jeep, medicine and relief cargo, took off for Kweilin via Liuchow, where the General and his party were greeted by Governor S. C. Wang, who was their host for the night. [...] Governor Wang was ready for visitors, having just completed a new guest house. Unfortunately, it was not positively ‘winterized’ and the cold blasts of air did not await an invitation to join the guests, who were further chilled during trips to the bathroom, hygienically located a hundred shivery paces from the house. On February 3rd, in departing for Canton, the passengers and crew alike had a nightmarish thrill in taking-off from the Kweilin field. The runway, still pockmarked by World War II bombings and stretching between deep craters on one side and grease-like clay on the other, was difficult to negotiate under ideal conditions. But for this particular flight Capt. Hughes had to fight a crosswind which threatened to push the plane into the clay. After a preliminary taxi down the strip the aircraft took-off and landed at Canton. To put it mildly, maintenance was a few notches below CAT’s present day facilities. Therefore, on February 5th Vice President Whiting Willauer and the crew headed for Hong Kong to negotiate with Hong Kong Airways for the repair and maintenance of CAT planes which might come to the Colony from South China. The arrival was without incident but the February 7th take-off was almost identical with that of January 30th from Shanghai. Low hanging clouds again caused icing and after being out of Hong Kong only 45 minutes it was decided to turn back. [...] After getting safely back to Hong Kong, and returning to Shanghai on February 8th, old 404 was loaded with more medicines and relief supplies and, on February 10th, returned to Canton. After laying over several days for minor repairs, on February 23rd the plane headed for Liuchow and Kunming. [...] On February 24th, after loading tung oil, the plane was impounded by the Chinese Air Force at Kunming. Every day the crew would turn the props by hand, to conserve fuel, in keeping the cylinders well lubricated. During the first year of operations CAT planes were impounded dozens of times because some base commander failed to ‘get the word’ from his headquarters. [...] On March 1st the plane was freed and took off for Hong Kong with another load of tung oil, the following day returned with a load of medicine, intending to return to Hong Kong immediately with another load of tung oil. Again the plane was impounded, this time until March 20th. In the meantime, on March 14th, Captains Joe Rosbert, Dave Davenport, W. J. Bigony and Willis Hobbs arrived, in two planes. [...] It was with joy that they greeted their four compatriots who immediately guided them to a restaurant for a Chinese feast. [...] Everyone was still glowing from the good food when they arrived at Chennault Field to find all three planes impounded. On March 20th number 404 was released and flown to Hong Kong. Mechanics had arrived from Hawaii and the Philippines and began giving the aircraft a check. It didn’t take long. In addition to countless minor defects it was noted that the wing structures, where attached to the fuselage, had corroded in many places, some spots were so rusted that a hole could be punched through the metal. That was enough. Philosophically speaking, CAT was going to need spare parts and this was an ideal place to start. Old 404 was relegated to the spare parts bin. But not until having launched CAT on its commercial way.”²⁶ So after losing a second C-47 on 11 April 47, CNRRA Air Transport operated only three C-47s, “215”, “239”, and “906”.²⁷ And CAT

²⁶ (Anonymous), “CAT went commercial”, in: *CAT Bulletin*, vol. X, no.2, February 1957, pp.4/5.

²⁷ The log book of Whiting Willauer (preserved at: Whiting Willauer Papers, Box 4: Public Policy Papers, Dept. of Rare Books and Special Collections, Princeton University Library) mentions 2 CAT C-47s for 1947/48: “315” and “295” – believed to have been “215” and “239”. It is unknown if these were fake serials or just errors by a man who – as a businessman – did not pay that much attention to tail numbers. The photo of C-47 “239”

also had three unregistered light aircraft: a Piper Cub, flown by Whiting Willauer out of Shanghai on 17 February 47, a Stinson L-5 flown by him a couple of weeks later, and an unregistered AT-6 flown on 10 May 48.²⁸

However, the backbone of CNRRA Air Transport was not to be the C-47, but the C-46, and General Chennault decided to acquire 17 of them in 1947 – 14 C-46s for flight and 3 for spare parts. Suitable aircraft were located among the surplus stocks at Honolulu.²⁹ But as these C-46s had been “pickled” in their Hawaiian depots, they all had to be prepared for delivery, that is the preservatives had to be removed, engines and flight instruments cleaned and checked, navigation equipment had to be installed, and all had to be test flown. Due to this complex preparation, the first four C-46 departed Honolulu only in late February 47, flown by John R. Rossi, C. Joseph Rosbert, Robert Conrath, and Ozzie Young. Young was grounded at Johnson Island due to engine trouble, but the remaining 3 C-46s continued to Manila, from where they flew in formation to Canton, where they arrived on 2 March 47.³⁰ The remaining C-46s followed during the next couple of weeks, with the last of the 15 C-46s³¹ arriving at the end of May 47.³² Like the C-47s, the C-46s initially flew using the last three digits of their USAAF serial as tail number, and C-46s “392”,³³ “395”,³⁴ “405”,³⁵ “409”,³⁶ “413”,³⁷ “522”,³⁸ “524”,³⁹ “528”,⁴⁰ “530”,⁴¹ “536”,⁴² “539”,⁴³ “540”,⁴⁴ and “543”⁴⁵ have been documented so far. C-46 “392” was damaged at West Field, Peiping on 5 July 47, when a Chinese Air Force C-47 ran into its tail, as the accident report above shows. The identities of these 13 CAT C-46s can be established from later fleet lists⁴⁶ as msn 22215 (ex USAAF 44-78392), msn 22218 (ex USAAF 44-78395), msn 22228 (ex USAAF 44-78405),

published in Rosbert, *The pictorial history of Civil Air Transport*, p.64, was taken in November 47, so this aircraft survived, but the of photo of C-47 “906” (Rosbert, p.24), was probably taken earlier.

²⁸ Whiting Willauer, Log Book, in: Whiting Willauer Papers, Box 4: Public Policy Papers, Dept. of Rare Books and Special Collections, Princeton University Library.

²⁹ Leary, *Perilous missions*, p.26.

³⁰ Souder (“Highlights in the history of Civil Air Transport”, p.2) says on 1 March 47.

³¹ Only 15 C-46s were flyable, 2 had been cannibalized for spares – apparently 44-78514 and 44-78515, which – as the other 15 C-46s – had been transferred to the War Assets Administration on 10 January 47 (see Davis/Martin/Whittle, *The Curtiss C-46 Commando*, p.110).

³² Leary, *Perilous missions*, p.29.

³³ See the Accident report of 5 July 47, in: UTD/Lewis/B1F14.

³⁴ CAT C-46 “395” is depicted carrying troops in: Smith, *China Pilot*, between pp.144 and 145, but also at: <http://www.civilairtransport.com/gallery2/pages/48C46Plane5.jpg.htm> .

³⁵ CAT Maintenance Manual of 18 May 50, at: Whiting Willauer Papers, Box 7: Public Policy Papers, Dept. of Rare Books and Special Collections, Princeton University Library.

³⁶ CAT Maintenance Manual of 18 May 50, at: Whiting Willauer Papers, Box 7: Public Policy Papers, Dept. of Rare Books and Special Collections, Princeton University Library.

³⁷ See photo no. 1-RR1-6-PB15, in: UTD/Rousselot.

³⁸ A photo of C-46 “522” (“Swatow”) was published in: *CAT Bulletin*, vol. I, no. 37 (15 May 1948), p.11.

³⁹ CAT C-46 “524” is mentioned in a letter dated 1 July 47, sent by CAT’s Crew Chief to General Chennault (in: UTD/Hickler/ catoperational.pdf at the UTD Treasures).

⁴⁰ CAT Maintenance Manual of 18 May 50, at: Whiting Willauer Papers, Box 7: Public Policy Papers, Dept. of Rare Books and Special Collections, Princeton University Library.

⁴¹ CAT Maintenance Manual of 18 May 50, at: Whiting Willauer Papers, Box 7: Public Policy Papers, Dept. of Rare Books and Special Collections, Princeton University Library.

⁴² CAT Maintenance Manual of 18 May 50, at: Whiting Willauer Papers, Box 7: Public Policy Papers, Dept. of Rare Books and Special Collections, Princeton University Library.

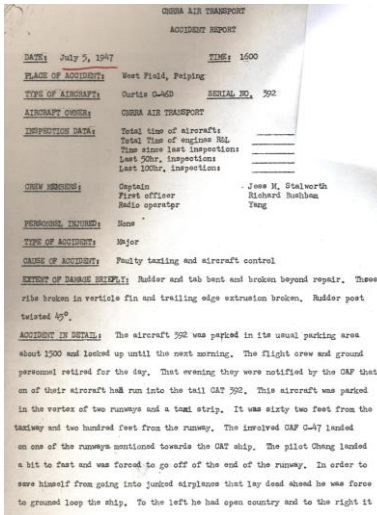
⁴³ CAT C-46 “539” was on the cover of the CAT Bulletin Anniversary Supplement of October 1947 (see <http://www.air-america.net/images/CAT/earlybull1.jpg>).

⁴⁴ CAT Maintenance Manual of 18 May 50, at: Whiting Willauer Papers, Box 7: Public Policy Papers, Dept. of Rare Books and Special Collections, Princeton University Library.

⁴⁵ CAT C-46 “543” flew in a formation of several C-46s over Shanghai on 2 March 1947, when it arrived from Hawaii; see the photo at: <http://www.civilairtransport.com/gallery1/pages/C46Shanghai.jpg.htm> .

⁴⁶ The CAT Maintenance Manual of 18 May 50, at: Whiting Willauer Papers, Box 7: Public Policy Papers, Dept. of Rare Books and Special Collections, Princeton Univ. Library, and Davis/Martin/Whittle, *The Curtiss C-46*.

22232 (ex USAAF 44-78409), msn 22236 (ex USAAF 44-78413), msn 22345 (ex USAAF 44-78522), msn 22347 (ex USAAF 44-78524), 22351 (ex USAAF 44-78528), 22353 (ex USAAF 44-78530), 22359 (ex USAAF 44-78536), msn 22362 (ex USAAF 44-78539), 22363 (ex USAAF 44-78540), and msn 22366 (ex USAAF 44-78543). All of these C-46s had been transferred from USAAF Oahu to the War Assets Administration on 10 January 1947, and in the same way, the identities of CAT's remaining 2 C-46s can be established, even if no official fleet list for this early period is available. A total of 15 C-46s were operational in the spring of 1947,⁴⁷ and only 2 C-46s were used for spares at that time,⁴⁸ so



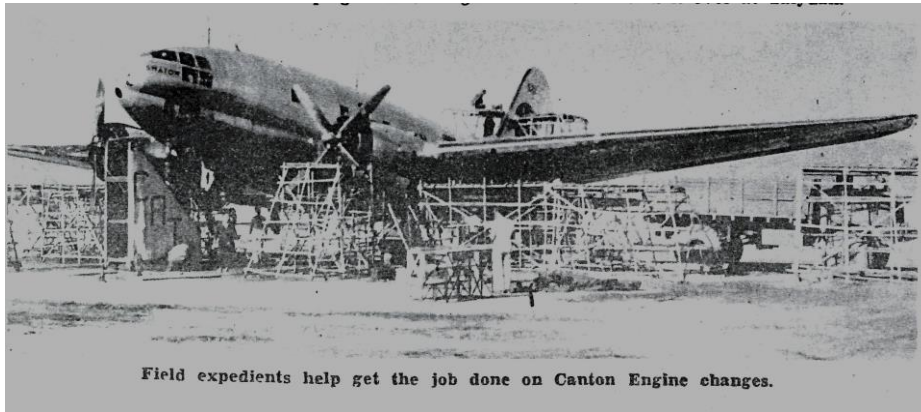
Accident Report for C-46 “392” Nationalists troops boarding C-46 “395” for Manchuria (UTD/Lewis/B1F14) (© Felix Smith –with kind permission from F. Smith)



CNRRA Air Transport Emblem on the stabilizer of C-46 “543” (© Felix Smith –with kind permission from F. Smith) and letter-head (quoted from <http://www.air-america.net/images/CAT/crnna.jpg>)

⁴⁷ According to Davis/Martin/Whittle, *The Curtiss C-46 Commando*, the remaining 2 C-46s that entered active service with CAT in 1947 were 22354 (ex USAAF 44-78531) and 22355 (ex USAAF 44-78532). These C-46s probably flew as “531” and “532”, although none of these serials has been documented up to now.

⁴⁸ According to Davis/Martin/Whittle, *The Curtiss C-46 Commando*, 2 more C-46s were transferred from USAAF Oahu to the War Assets Administration on 10 January 47: msn 22337 (ex USAAF 44-78514) and msn 22338 (ex USAAF 44-78515); they are believed to have been the original 2 C-46s destined to be used for spare parts.



Field expedients help get the job done on Canton Engine changes.

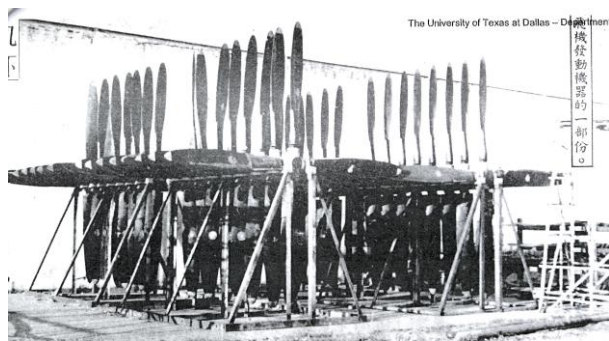
CAT C-46 “522” *Swatow* at Canton in 1947
(*CAT Bulletin*, vol. I no.17, 15 May 1948, p.11)

that the dwindling reserve of C-46 spare parts soon became a problem for CAT. But in April 47, 25 surplus C-46s were located in the Philippines, and after some pushing, UNRRA, the parent company behind CNRRA, agreed to provide \$ 183,000 to buy the aircraft, and by the end of June 47, all of these aircraft were in China⁴⁹ – a sufficient reserve for spare parts and for possible further expansion of the fleet.⁵⁰

In the meantime, CAT’s staff had to prepare their new operational headquarters at Hungjao Airfield, Shanghai, picking up rocks and filling in chuckholes. As Hungjao even lacked a windsock, CAT’s new maintenance man Mervyn A. Garrold bought several yards of silk and



SALVAGE PLANES—Hulks of 25 C-46s owned by CAT stand on Tien Ho airfield in varying degrees of cannibalization. For months CAT’s salvage crews have been removing equipment and parts from them to keep the rest of CAT’s fleet in the air.



PROP STAND—Salvaged propellers mounted on metal stands make an odd photographic pattern.

CAT’s “Ghost fleet” for spare parts, Tien Ho airfield: 25 C-46 hulks and the C-46 prop stand
(*CAT Bulletin*, vol. I, no.10, p.13)

⁴⁹ According to Davis/Martin/Whittle, *The Curtiss C-46 Commando*, p.29, USAAF records show a number of C-46Ds transferred from surplus dumps in the Philippines to UNRRA on 19 May 47: msn 30535 (ex USAAF 42-101080); msn 30538 (ex USAAF 42-101083); msn 30583 (ex USAAF 42-101128); msn 30596 (ex USAAF 42-101141); msn 30597 (ex USAAF 42-101142); msn 30618 (ex USAAF 42-101163); msn 32746 (ex USAAF 44-77350); msn 32755 (ex USAAF 44-77359); msn 32761 (ex USAAF 44-77365); msn 32768 (ex USAAF 44-77372); msn 32775 (ex USAAF 44-77379); msn 32781 (ex USAAF 44-77385); msn 32878 (ex USAAF 44-77482); msn 32879 (ex USAAF 44-77483); msn 33128 (ex USAAF 44-77732); msn 33132 (ex USAAF 44-77736); msn 33152 (ex USAAF 44-77756); msn 33153 (ex USAAF 44-77757); msn 33173 (ex USAAF 44-77777); msn 33174 (ex USAAF 44-77778); msn 33185 (ex USAAF 44-77789); msn 33189 (ex USAAF 44-77793); msn 33322 (ex USAAF 44-77926); msn 33324 (ex USAAF 44-77928); and msn 22342 (ex USAAF 44-78519) – indeed a total of 25 C-46s. These aircraft are believed to have been CAT’s reserve fleet, three of which later joined CAT’s active fleet. In mid-1948, one of the remaining reserve C-46s was donated to Canton’s National Chungshan University in the interest of furthering aviation studies at that university (*CAT Bulletin*, vol. II, no.1, 15 September 48, p.7).

⁵⁰ Leary, *Perilous missions*, p.31.

designed what has been called “the most elegant landing aid in China”.⁵¹ In March 47, CAT more than doubled the total of ton-miles that had been flown in February, transporting for UNRRA/CNRRRA 100 tons of medical supplies for a leper hospital at Nanchang, 150 tons of seeds, more than 1,300 displaced persons, and thousands of tons of miscellaneous relief items. Between 22 March and 22 May 47, CAT hauled 425 New Zealand thoroughbred sheep from Shanghai to Lanchow and 200 sheep from Shanghai to Peking.⁵² But in spite of all this, it



Happy sheep turned loose on new grazing lands: another safe delivery by CAT.



The start of a 1,200 mile aerial journey.

(both in: *CAT Inc. Equipment*, in: UTD/Leary/B22F12)

became quite clear by late March 47 that there wasn't enough priority relief cargo to keep CAT operating at full capacity and that in order to avoid financial trouble additional cargo had to be found. So Chennault and Willauer flew to Nanking asking Chiang Kai-shek for an amendment of their contract with CNRRA, and in early April, the original contract was amended “to permit inbound airlift of other Government and relief agency cargoes.” As the CIA's official history of Civil Air Transport notes: “Often there was space available on the aircraft when they returned from the interior, and individual CAT pilots were the first to realize that this represented a valuable economic opportunity. On their own, they began to make purchases in inland areas of such raw materials as cotton, hog bristles, tobacco leaf, wolfram, tin etc., which were in great demand in the major seaports. On those occasions when there was space available on inbound flights, such finished items as bicycles, which were in great demand upcountry, were used to take advantage of the available space and were resold or bartered at a substantial profit. It did not take long for the CAT management to recognize these profitable opportunities, and they formed a trading corporation known as the Willauer Trading Company, which was established as a preferred customer of CAT and had first call on available space.”⁵³ In addition to that, a new contract with the Chinese Post Office allowed CAT to carry mail. In April, Willauer also signed a contract with Standard Oil to carry 1,000 tons of petroleum products from Liuchow to Kunming. And so on 17 April, a CAT C-47 flown by Dave Davenport and Doug Smith airlifted an emergency load of cotton and vegetable seed from Shanghai to Chengchow. In the whole month of April 47, less than half of the 109,425 ton-miles flown (i.e. 48,671 ton-miles) was cargo and passengers for UNRRA/CNRRRA, while 38,471 ton-miles were other relief and rehabilitation items and

⁵¹ Leary, *Perilous missions*, p.26.

⁵² Leary, *Perilous missions*, pp.29-30.

⁵³ Cox, *Civil Air Transport (CAT), A Proprietary Airline, 1946-1955*, Washington DC (CIA) 1969, vol. I, p. 7 (paper version) (Clandestine Services History), at: <http://libtreasures.utdallas.edu/xmlui/handle/10735.1/1789>

22,284 ton-miles was mail. The only problems that remained, was that of return cargo and the fact that the Chinese Air Force sometimes impounded CAT's aircraft in order to hinder an unloved competitor. On 30 April, CAT had 247 employees, and on 31 May there were already 312 employees on CAT's roster.⁵⁴

The problems CAT still had to overcome in some areas in July 1947 – impoundments, lack of ground transportation, lack of radio installations, and lack of mechanics – are well illustrated by two letters sent by Ronald E. Lewis, head of CAT's Peiping station – and the problems even included hi-jacking of CAT trucks by members of the Chinese Air Force.⁵⁵

Hotel Des Wagons-Lits
Peiping, China
June 1, 1947

Dear Lu,

The situation of our Peiping operation this date is as follows:
Ship No. 215 Aircraft free to leave Peiping as soon as load is removed but not clear to return.
Ship No. 239. Aircraft clear to leave Peiping but not clear to return.
Ship No. 524. Aircraft arrived from Tai Yuan 6/1/47 and impounded. No further information until instructions have been received from Nanking.

The Shansi government has made arrangements to remove their load of cigarettes at Peiping on June the 2nd and this will then make the ship free for Shanghai, however, it has been decided to hold 215 here and also 239 until further instructions have been received from Shanghai Operations. Ship 524 will continue to Tsintao as soon as permission is granted.

General Lee of the CAF is uninformed of the Peiping defense area but the instructions of your cable of May 29, have been followed. Any aircraft landing here after this date will be impounded until further clearances have been received from Nanking.

Also advise me of the mechanics that were suppose to come up here. If safe and economical operations are to be maintained at this base it will be necessary for more than one man to be stationed here. As it stands now it takes one man a complete day to pull a fifty hour inspection and even then there are many things that he misses, whereas, a crew could do the same job in much less time with a greater safety ratio.

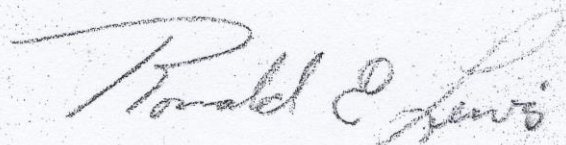
Parts and equipment are another important factor that should be given immediate attentions. CATC and CALTEX and even CNAC have been very courteous and helpful but their good will is going to give out sooner or later.

This business of impoundment every time a ship lands has become very discouraging and I am sure that if this was straightened out that the morale and enthusiasume of the pilots and also the mechanics would pick up 100%. As it stands right now everyone that I have come in contact with up here working for the company is just about ready to go back to the states.

I have finance enough to pay the landing fees, if there are any, transportation and etc. for approximately the next five days.

I remain

Sincerely,



REL/REL

(both letters preserved at: UTD/Lewis/B1F7)

⁵⁴ Leary, *Perilous missions*, pp.30/1; quotation from: Souder, "Highlights ...", pp.2-3.

⁵⁵ See the letter sent by CAT Crew Chief Dave Hickler to the CAT Management on 1 July 47 at: <http://libtreasures.utdallas.edu/xmlui/bitstream/handle/10735.1/913/catoperational.pdf?sequence=1>.

Peiping
July 3, 1947

C. W. Hunter
Operations
Shanghai

Dear Sir:

In response to your letter of June 26, concerning the parts salvaged from C-47 # 522, I can advise you that the only remaining parts at this base are the cargo doors, the cowling from the left hand engine, and the accessories that have been retained here for spare parts. The engine itself has been sent to Shanghai via C-46 # 413 on the June 27. The remaining items I shall send down immediately.

As for the fuselage I shall follow your advise on the matter and try to utilize it as best possible.

In regards to the guard fees, they have all been settled and there are no other debts on matter pending payment.

Once again I take the opportunity to say how urgently we need some means of transportation at this base. Every day our operation is hampered by lack of this. To rent is too expensive and to rely on public or borrowed vehicles is too undependable so once more I request that you send us some sort of transportation as soon as possible.

A radio station is another important factor that is badly needed at this base. The only way we have of knowing the ETAs of other aircraft is by the possible interception of a Shanghai despatch and many times we fail to get these thus causing much delay and inconvenience to the crew members and also to the loading and unloading of the ships.

R. E. Lewis

REL/REL

Traffic grew and grew during the summer months, especially north of the Yangtze River, and so Shanghai became CAT's operational base, while Canton remained the center of maintenance.⁵⁶ At Shanghai's Hungjiao airfield, the company acquired additional facilities and spent US \$ 250,000 for runway improvement, installing runway lights.⁵⁷ On 30 June, CAT had already 385 employees, and so also arranged housing for newly assigned flight crews.⁵⁸

⁵⁶ For 1 October 47, Ed Souder notes: "Under original agreements, Canton was to be CAT's main operating base. However, experience early showed that the Kwangtung Regional Office of CNRRA at Canton was unable to fulfill tonnage commitments and that the demand for relief airlift north of the Yangtze was far heavier than anticipated. By this date, therefore, CAT operational headquarters has shifted to Shanghai, with Canton remaining our Main Engineering Base" ("Highlights in the history of Civil Air Transport", p.7).

⁵⁷ For 1 August 47, Ed Souder notes: "The end of the CNCS \$ 300,000,000 program of improvement of the Hungjiao (Shanghai) strip is in sight. For two months CAT aircraft have shared the strip with bulldozers, rock crushers, graders and rollers, landing and taking off on one half of the runway as colliers worked the other half. [...] Hungjiao runway lights tested tonight for proposed night operations."

⁵⁸ Leary, *Perilous missions*, pp.31/2. For 1 August 47, Ed Souder notes: "House 4, Lane 253, Tunsin Road acquired as a hostel for foreign crew chiefs in Shanghai. [...] New Mess Hall-Kitchen and Dormitory completed at Hungjiao" ("Highlights in the history of Civil Air Transport", p.5).

In the meantime, CAT's relief work was highly praised in China. On 21 June 47, T. T. Chang, Political Commissioner of the Shantung Provincial Government, officially and warmly thanked CAT for the vital role played by the airline in delivering relief supplies to the people of Red-surrounded Weih sien. On 14 July 47, the Flood Relief Emergency Committee of Kwangtung sent CAT a telegram that said: "During the recent flood in Kwangtung, your valuable assistance to this commission placed us in a position to extend relief measures. We wish to tender our sincere thanks and also to represent five-million people in the flooded area in an expression of gratitude. [...] The good relations between China and America have been greatly promoted by your efforts." And on 28 July 47, Marshal Yen Hsi-shan, leader of the



AS COOLIES SMOOTH and extend the Hungjao strip, another CAT plane takes off for north China.
在上海空運最忙的時候，飛機在紅橋跑道上起降時。

WITH HEAVIEST OPERATIONS CONCENTRATED in north China, the Company shifted gradually from Canton to Shanghai where we operated out of Hungjao airfield. Operations, Supply, Radio, Shops, Warehouses, Hospital, Mess and other buildings sprang up under the direction of Jess Lanming (Jesse).

魏斯蘭寧是工程設計組主任。上海紅橋機場本隊的所有建築都由他設計。

Runway construction and CAT's new facilities at Hungjao airfield, Shanghai (*CAT Bulletin*, vol. III, no.2, 1 December 1949)

heroic defense of Taiyuan sent CAT a telegram saying "I wish to thank CAT for its generous assistance in airlifting supplies to our province. I have no way to express how grateful our refugees feel about your help during this critical moment."⁵⁹

August 47 was an especially successful month for CNRRA Air Transport: During that 7th month of operation, 762,252 ton-miles were flown, including 261,424 ton-miles of UNRRA / CNRRA passengers and cargo, 445,391 ton-miles of other relief and rehabilitation items, and 55,436 ton-miles of mail. On 17 August 47, CAT's scattered Shanghai offices moved to new quarters on the 7th floor at the prestigious 17 *The Bund*. On 20 August 47, the first issue (vol. I, no.1) of the new *CAT Bulletin* made its appearance. Also in August 47, it was decided to name all CAT planes after Chinese cities, starting with "Nanking",⁶⁰ "Shanghai",⁶¹ "Canton", "Lanchow",⁶² "Chengtu",⁶³ "Swatow",⁶⁴ "Liuchow", and "Taiyuan".⁶⁵ Other names were added later, including "Amoy",⁶⁶ "Hami",⁶⁷ "Hankow",⁶⁸ "Kunming",⁶⁹ "Peiping",⁷⁰ "Sian",⁷¹

⁵⁹ Quotations from: Souder, "Highlights in the history of Civil Air Transport", pp.3-4.

⁶⁰ C-46 msn 22363 (ex USAAF 44-78540), "540", photo in UTD/Hickler, no. 1-DH53-10-PB43.

⁶¹ C-46 msn 22347 (ex USAAF 44-78524), "524", which later became XT-T510 (?), then XT-814.

⁶² C-46 msn 22236 (ex USAAF 44-78413), "413", which later became XT-T508, then XT-810.

⁶³ An unknown C-46, probably msn 22366 (ex 44-78543), then "543", then XT-T518, then XT-830.

⁶⁴ C-46 msn 22345 (ex USAAF 44-78522), "522", which later became XT-T509, then XT-812.

⁶⁵ "Taiyuan" was C-47 "239". For the list see Souder, "Highlights in the history of Civil Air Transport", pp.4-5.

⁶⁶ An unknown C-46.

⁶⁷ C-46 msn 22215 (ex USAAF 44-78392), "392", which later became XT-T504, then XT-802 (see the photo in Rosbert, *The pictorial history of Civil Air Transport*, p.58).

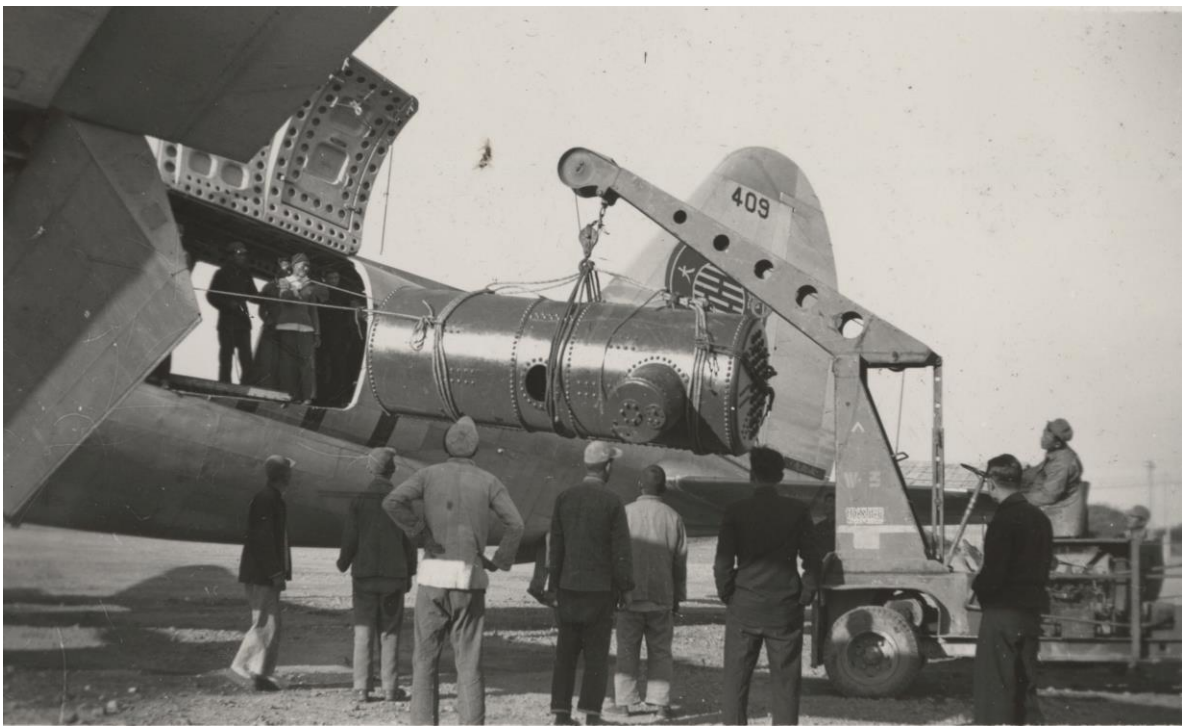
⁶⁸ Probably C-46 XT-T506 (msn 22228), which later became XT-806 (see the photo in Rosbert, p.14).

⁶⁹ An unknown C-46.

⁷⁰ The C-47 that later became XT-805, that is "906".

⁷¹ An unknown C-46; photo in UTD/Leary/B30F2.

“Tientsin”,⁷² and “Tsingtao”.⁷³ Commendations for CAT continued to flow in during August 47: At the beginning, CAT won an honorable mention in an interim report by China UNRRA chief Mr. Cleveland, a report which related how starvation had been averted in critical food shortage areas. CAT airlift was given top credit for contributing to *speedy* relief when speed was of the essence. On 22 August 47, CAT received a telegram from the Honan Provincial Government saying: “The whole district of Chengchow cheers with gratitude on learning that CAT is sending planes to distribute relief.” On 28 August 47, CAT received a letter from a missionary in Weihsien saying: “Ten days ago found isolated Weihsien the center of intense air activity. CAT flew ten flights of relief supplies. [...] Hog bristles, tobacco leaf and other Weihsien products were flown out. Thirty-five tons of mail alone were flown in. Four-hundred students seeking education in Tsingtao were flown out. [...] Were it not for CAT, this town would be without electricity and coal and the mission hospital would have had to close. With fighting not more than five miles away, your courageous pilots still flew in. Prices have been halved in Weihsien since CAT planes started coming in. Cotton goods dropped from CNC\$20,000,000 to CNC\$ 14,000,000.”⁷⁴ Among the cargo that CNRRA Air Transport carried to various destinations in 1947 were also spare parts for machines.



(Photo no. 1-DH53-10-PB42 in UTD/Hickler)

CAT Bulletin, vol. III, no.2 of 1 December 49 dedicates a special page to the flood relief work done by the company in the summer of 1947, as can be seen below:⁷⁵

⁷² C-47 XT-801 (see the photo in Rosbert, *The pictorial history of Civil Air Transport*, p.90).

⁷³ C-46 msn 22362 (ex USAAF 44-78539),”539”, which later became XT-T516, then XT-826.

⁷⁴ Souder, “Highlights in the history of Civil Air Transport”, pp.5-6.

⁷⁵ The scenes depicted refer to the Kwangtung flood. The Piper Cub on floats had been loaned to CAT by L. K. Taylor and was flown by Miss Kay Boothe, General Chennault’s pilot-secretary. She returned to Shanghai after a two-week assignment to the flood, during which she spent 16 hours in the air on data-gathering flights for the relief committee (Newspaper clipping, in: Whiting Willauer Papers, Box 5: Public Policy Papers, Dept. of Rare Books and Special Collections, Princeton University Library). When the city and the airfield of Canton were inundated in 1947, she also flew medicine into the city and carried persons out (*CAT Bulletin*, vol. IV, no.6, July 1951, p.12).



CAT VETERANS will remember when American aviatrix Kay Bowne contributed sterling work during the Pearl River flood of 1947. Her Piper Cub was flown from Shanghai to Canton in a CAT C-46.
一九四七年夏季洪水患，本隊曾以勃斯小姐任飛行員率古晉機到廣投賑賑災。

...WHERE SHE WAS GREETED by signs like these.
這是工作不忘從機手？

KAY SMILES from the cockpit of her float-equipped Piper before taking off from the Pearl River's muddy waters on another relief mission.
勃斯小姐如今已是威路特太太了，往事如明。



Piper Cub is unloaded from belly of CAT C-46, to be used for rescue work in flood area.



Cub unloaded from C-46 "413" (from: *CAT Inc. Equipment*, in: UTD/Leary/B22F12) and the same unregistered Cub on floats (photo no. 1-DH53-9-PB13, in: UTD/Hickler)

There had also been some problems in that period: When Captain Rousselot lost an engine over mountainous terrain in August, he ordered part of the cargo to be jettisoned. What he did not know was that the canisters contained Chinese money, so that for some time, CAT feared a claim for US \$ 1 million – the value of the Chinese money –, but nothing happened. Then, CNAC cut off without warning the use of their radio aids for navigation, when CAT refused to pay the exorbitant fees requested by CNAC. And finally an incredible inflation forced CAT to buy fuel at black market prices so that the airline's operational costs climbed steadily. On the other hand, the inflation allowed them to quickly repay its loan to CNRRA. In late September, the Yunnan People's Development Corporation purchased a 7 % equity in CAT for \$ 3 million, and this meant that at that time, Chennault, Willauer, and associates owned

nearly 90 % of the airline.⁷⁶ September continued to be a very successful month: On 17 September 47, CAT made 2 trips from Tsingtao to Tsinan, airlifting 28 UNRRA-donated Jersey and Ayrshire cows to Cheelo University. On 25 September 47, CAT flew 50,000 doses



CAT C-46 “413” being loaded for the cattle airlift to Cheelo University on 17 September 47
(in: UTD/Rousselot, photo no. 1-RR1-6-PB15)

of UNRRA serum from Shanghai to Changsha to combat a serious outbreak of hog cholera. On 30 September, CAT had 634 employees.⁷⁷

Another operation of 1947 is well described by former CAT pilot Felix Smith: the soldier-cotton shuttle between Tsingtao and Tsinan. “We departed Shanghai’s Hungjao airport by the flickering light of coffee-can flares and headed north to the Yellow Sea. [...] By the time we got close enough to see the city, the sun was bouncing light off of Tsingtao’s red tile roofs, and we saw two cruisers in the bay. An American voice in the control tower cleared us to land, and we parked next to a row of Marine Corps fighters. The blue Corsairs with inverted gull wings and the warships in the bay represented the only American force in China except for military attachés at various consulates. Ordered to remain aloof from China’s internal affairs, the U.S. Navy and Marines gave moral support to President Chiang Kai-shek, who was edgy. His Soviet allies had betrayed him by giving Chinese Communist guerrillas the stockpile of war supplies from Japan’s surrendering army. Guerrillas had captured a few Shantung villages; the capital of province required strength.

“Our operations manager, clipboard in hand, said: ‘We’re adding you to the soldier-cotton shuttle.’ Hundreds of soldiers stood or sprawled on a grassy area near the tarmac, waiting to be transported two hundred miles inland, to the city of Tsinan. Return flights brought bales of cotton to Tsingtao’s textile mills. Tsinan was strategic. In addition to nesting the provincial capital, it produced huge quantities of raw cotton and was an important Yellow River port. [...] ‘You got a new copilot’, our ops man said. ‘Fresh from the Air Corps.’ I waited for fuel and watched Shorty Tam, our traffic agent, load another C-46. He put a bathroom scale at the foot of the boarding ladder and stood there with his abacus while a single file of soldiers stepped on the scale and climbed up to the cabin. The agent kept flicking the beads until they totaled 48,000 pounds gross weight, and then he shut the cabin door. I heard someone bellow, ‘Smees’, which is the way many Chinese pronounced my name. I turned and saw a hulk

⁷⁶ Leary, *Perilous missions*, pp.32/3; Smith, *China Pilot*, pp.37, 52, 54, 59/60.

⁷⁷ Souder, “Highlights in the history of Civil Air Transport”, p.6.

lumber toward me. ‘Earthquake Magoon’, I said. [...] Earthquake pursed his lips while we looked at boys who couldn’t be older than sixteen. Tin cups, parchment umbrellas, potato-masher grenades hung from their belts. Khaki strips of cloth spiraled their calves, canvas sneakers covered their feet. They looked scared. An officer barked, and they formed a single file at our boarding ladder, where the traffic agent waited with his abacus. I stepped over the scale, climbed the ladder to the plane’s cabin, and looked down to see Earthquake standing on the scale, hands on his belly. After turning slowly around to assess his audience, he leaned over to read the scale and then grimaced, threw up his hands, and shouting something that sounded Chinese but wasn’t. And he messed with the beads on the abacus. The soldiers laughed and pointed and jabbered, forgetting, for a few brief moments, the war.

“By the time I’d checked the escape hatches in the cabin and the latches on the starboard cargo door, Earthquake Magoon had gone to the cockpit. [...] ‘You fly’, I said. [...] I figured anyone who had raided Japanese warships in Hong Kong’s harbor in the big war and shot down a few Zeros could find Tsinan. A half hour later we saw our first checkpoint, which was the city of Weih sien, north of course. [...] Even though its distinctive appearance made it a perfect landmark, Earthquake Magoon didn’t pull a calculator out of his pocket or do anything else to determine our ground speed. In another hour we saw the long suspension bridge over the Yellow River, and Earthquake descended into Tsinan. We hit hard, bounced down the runway, and stopped at the end. [...] The soldiers disembarked, and laborers unlatched the wide cargo doors of our cabin and swung them open. Each bale of cotton weighing a hundred kilos (220 pounds) was carried on the shoulder of a single laborer, up a steep plank and into the cabin. [...] The cotton was loaded in twenty minutes, and a jeep was the last item to go aboard. A driver steered it up the planks, under its own power, but it stalled midway. The incline was too steep. Several men grabbed the bottom end of the planks and lifted them above their heads until they were level, and the jeep drove into our cabin. [...] After we had shuttled all day – soldiers to Tsinan, cotton to Tsingtao – a company station wagon took us to a castle that Willauer had rented for transient crews.”⁷⁸

It was probably in October 47 that there were some changes in CAT’s fleet of aircraft. For 2 October 47, Ed Souder’s official chronicle “Highlights in the history of Civil Air Transport” notes: “The CAT fleet now consists of three C-47s (two of the five which CAT originally acquired have been cannibalized for parts) and 15 C-46s. CAT also has a ghost fleet of cannibalized C-46s in Canton” (p.8). There is nothing new about the number of aircraft operated, as CAT’s 2 C-47s had already been cannibalized in late March and in April 47. So it seems that in early October 47, there was a change that concerned all aircraft. Indeed, for October 47, Souder’s chronicle for the first time lists tail numbers beginning with “XT-”. For 31 October 47 he notes: “Capt. Frank Hughes and First Officer Dick Bushbaum bring back XT-536 from Tsingtao-Tsinan shuttle with a bullethole through the tiger insignia”, and for 6 November 47: “A CAT plane today became the first of its breed to visit Tientsin, chief pilot Bob Rousselot taking XT-539 in with a full load of cotton for Tientsin mills and returning to Tsinan with a load of kerosene.”⁷⁹ To add to the confusion, XT-536 is known to have been a CATC C-46 and XT-539 a CATC C-47.⁸⁰ But CAT did not lease aircraft from their unloved competitor. Apparently, in October 47, all CAT aircraft received official new “XT-T5xx” registration numbers that were painted below the wings and on the stabilizer,⁸¹ but on the stabilizer of CAT’s aircraft, the old 3-digit tail number – to whom most CAT people were probably used – remained as well. So, in this case, “XT-539” probably means the old well-known C-46 “539” with an XT-T5xx serial added that nobody remembers. As these XT-T5xx

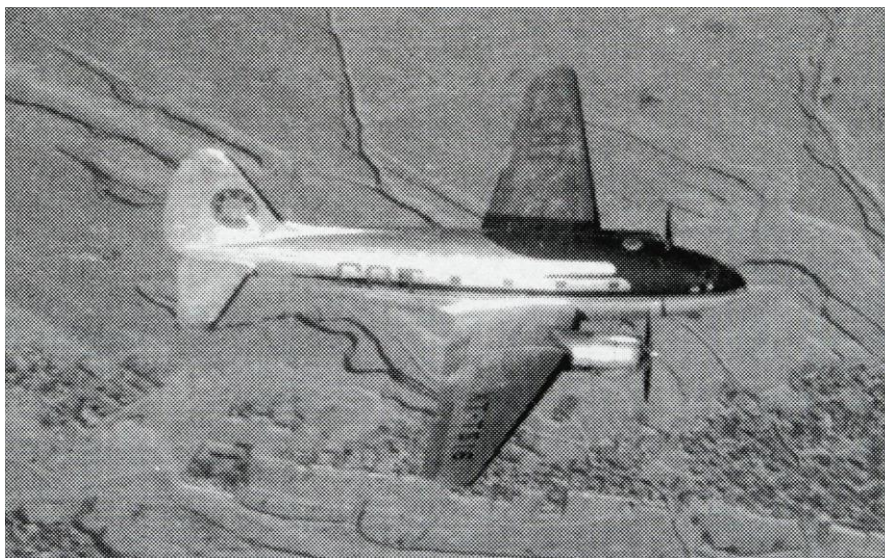
⁷⁸ Smith, *China Pilot*, pp. 62-65.

⁷⁹ Souder, “Highlights in the history of Civil Air Transport”, pp.9-10.

⁸⁰ See Martin S. Best, “The development of commercial aviation in China, Part 8A: Central Air Transport Corporation”, in: *Air-Britain Archive*, Summer 2009, pp.75-92, ib., p.87.

⁸¹ C-47s XT-T501 to XT-T503 and C-46s XT-T504 to XT-T518 – see below.

registrations were probably painted on the aircraft only between October 47⁸² and May 48, only very few of them are documented by photos up to now. They are XT-T504, XT-T509, XT-T516, and XT-T519. XT-T516 was one of CAT's C-46s, as can be seen on the photo below. XT-T519 was CAT's Stinson L-5, and CAT C-46 XT-T509 is the only CAT aircraft



C-46 XT-T516 with the CNRRA tail emblem, probably in late 1947
 (© Felix Smith – with kind permission from Felix Smith)

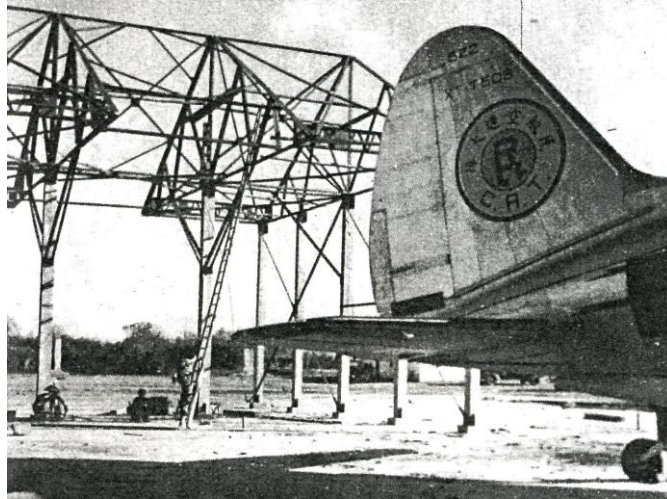
with this type of registration number, whose identity can be established from photos. This



photo of the *Swatow* appeared in an old *CAT Bulletin*.⁸³ The C-46 has XT-T50? painted below the wing and the CNRRA emblem on the tail, so was probably taken in late 1947. As the *Swatow* is known to have been the former “522”, that is msn 22345 (ex USAAF 44-78522), the C-46 XT-T509 on the photo below, which still has “522” on the tail, but also CAT's new interim tail emblem probably borne between January and May 48, is known to be the same aircraft, i.e. the *Swatow*.

⁸² According to the CAT Maintenance Manual of 18 May 50 (preserved at: Whiting Willauer Papers, Box 7: Public Policy Papers, Dept. of Rare Books and Special Collections, Princeton University Library), these Chinese XT-T5xx registrations were already issued in January 47, but photographic evidence shows that they were not borne before October 47.

⁸³ *CAT Bulletin*, vol. I, no.10, 15 February 48, p.10.



CAT C-46 XT-T509 (“522”) at Hungjao airfield, Shanghai in early 1948
(*CAT Bulletin*, vol. III, no.2, 1 December 1949)

The only official documents known up to now that give the Chinese registration numbers used by CAT aircraft prior to May 1948 – at least for the aircraft still existing in 1950 –, are the CAT Maintenance Manuals of 24 April 50 and 18 May 50 preserved at Princeton University Library.⁸⁴ For all aircraft, the Manuals list the manufacturer’s serial number as well as all types of registrations that had been used between 1947 and 1950:

XT-T501	C-47B	msn 20681	ex “215”	later to XT-801 and N8421C
XT-T504	C-46D	msn 22215	ex “392”	later to XT-802 and N8406C
XT-T505	C-46D	msn 22218	ex “395”	later to XT-804 and N8407C
XT-T506	C-46D	msn 22228	ex “405”	later to XT-806 and N8408C
XT-T507	C-46D	msn 22232	ex “409”	later to XT-808 and N8409C
XT-T508	C-46D	msn 22236	ex “413”	later to XT-810 and N8410C
XT-T511	C-46D	msn 22351	ex “528”	later to XT-816 and N8412C
XT-T512	C-46D	msn 22353	ex “530”	later to XT-818 and N8413C
XT-T515	C-46D	msn 22359	ex “536”	later to XT-824 and N8414C
XT-T516	C-46D	msn 22362	ex “539”	later to XT-826 and N8415C
XT-T517	C-46D	msn 22363	ex “540”	later to XT-828 and N8416C
XT-T518	C-46D	msn 22366	ex “543”	later to XT-830 and N8417C

From other sources can be added:

XT-T509	C-46D	msn 22345	ex “522”	later to XT-812
XT-T519	Stinson L-5 ⁸⁵	msn ?	ex —	possibly destroyed at Weih sien in April 48

It is absolutely amazing to see that – evidently in the case of CAT’s C-46s – the Chinese CAA allotted the registration numbers following the sequence of the manufacturer’s serial numbers. And it is equally amazing to see that in June 1948, the re-registration of the fleet in the XT-8xx series evidently followed the same principle. This makes it easier to guess the registration

⁸⁴ CAT Maintenance Manuals of 24 April 50 and 18 May 50, at: Whiting Willauer Papers, Box 7: Public Policy Papers, Dept. of Rare Books and Special Collections, Princeton University Library.

⁸⁵ See the photo in *Fliegerrevue* extra, no.25, June 2009, p.100.

numbers of the remaining aircraft, at least for the C-46s.⁸⁶

XT-T502	C-47B	msn 20705	ex "239" ("Taiyuan")	later to XT-803
XT-T503	C-47B	msn 27167	ex "906" ("Peiping")	later to XT-805 ⁸⁷
XT-T510 (?)	C-46D	msn 22347	ex "524"	later to XT-814
XT-T513 (?)	C-46D	msn 22354	ex "531" (?)	later to XT-820
XT-T514 (?)	C-46D	msn 22355	ex "532" (?)	later to XT-822
XT-T5??	AT-6	msn ?	ex —	later to XT-882
XT-T5??	Piper Cub	msn ?	ex —	later to XT-883

TYPE	REG. 2	REG. 2 NUMBER	MODEL	SERIAL NUMBER	A A 7 NUMBER	ORIG. OWNER	ORIG. SL NR	CHINESE REG. NO. 1/47-5/48	CHINESE REG. NO. 5/48-12/49	AMERICAN REG. NO. 12/49-1/50
1	o	NR3690	C-46F	22451	44-78628	CNAC	134	XT-T15	XT-132	
2	ne	NR3700	C-46F	2558-CU	44-78626	CNAC	125	XT-T16	XT-134	
3	be	NR3720	C-46A	347356	43-47356	CNAC	131	XT-T41	XT-138	
4	u	NR3790	C-46D	33372	44-77976	CNAC	-	-	XT-156	
5	be	NR3800	C-46D	32950	44-77554	CNAC	-	-	XT-158	
6	u		C-46D	22218	44-78395	CAT	395	XT-T505	XT-804	NR4070
7			C-46D	22228	44-78405	CAT	405	XT-T506	XT-806	
8	a		C-46D	22232	44-78409	CAT	409	XT-T507	XT-808	NR4090
9			C-46D	22236	44-78413	CAT	413	XT-T508	XT-810	
10	a	NR4120	C-46D	22351	44-78528	CAT	528	XT-T511	XT-816	
11	a	NR4190	C-46D	22362	44-78539	CAT	539	XT-T516	XT-826	
12			C-46D	22566	44-78543	CAT	543	XT-T518	XT-830	NR4170
13	as		C-46D	32878	44-77156	CAT	-	-	XT-832	NR4180
14	e		C-46D	33132	44-77736	CAT	-	-	XT-834	NR4190
15	as		C-46D	33153	44-77757	CAT	-	-	XT-836	NR4200
16	o		CSSSNA 105	7256	-	CAT	-	-	XT-884	NR4280
17	e		CSSSNA 105	7314	-	CAT	-	-	XT-886	NR4290
18	e		CSSSNA 105	7307	-	CAT	-	-	XT-888	NR4300
19	o		CSSSNA 193	7313	-	CAT	-	-	XT-889	NR4250

TYPE	REG. 2	REG. 2 NUMBER	MODEL	SERIAL NUMBER	CHINA SL NR	CHINA SL NR 1/47-5/48	CHINA SL NR 5/48-12/49	CHINA SL NR 12/49-1/50		
20		XT-801	C-47B	20681	43-16215	CAT	215	XT-T501	XT-801	NR4210
21		XT-816	C-46D	22215	44-78392	CAT	392	XT-T504	XT-802	NR4060
22		XT-814	C-46D	22353	44-78530	CAT	530	XT-T512	XT-818	NR4130
23		XT-810	C-46D	22359	44-78536	CAT	536	XT-T515	XT-824	NR4160
24		XT-842	C-46D	22363	44-78540	CAT	540	XT-T517	XT-828	NR4160
25	node		C-46F	22379	44-78556	NOC	-	-	XT-30	NR3880
26	abode		C-46F	22465	44-78642	NOC	-	-	XT-36	NR3900
27	eda		C-46F	22500	44-78677	NOC	-	-	XT-38	NR3910
28	nda		C-46F	22502	44-78679	NOC	-	-	XT-44	NR4000
29	ede		C-46F	22461	44-78638	NOC	-	-	XT-46	NR4010
30	ade		C-46F	22510	44-78687	NOC	-	-	XT-48	NR4030
31	ede		C-46F	22526	44-78703	NOC	-	-	XT-50	NR4030
32	ada		C-46F	22466	44-78643	NOC	-	-	XT-52	NR4040
33	nda		C-46F	78547	44-78547	NOC	-	-	XT-54	NR4050

NOTES:
 General - Dates of effective registration periods (last column) are approximate.
 a - Manufacturer's data plate missing from airplane. Manufacturer's serial number obtained from previous CNAC or CAT records and therefore may be in error.
 b - These aircraft, at time of purchase by CAT from CMC (12/49), were given new Chinese registration numbers. XT-128 became XT-814; XT-158 became XT-822; and XT-36 became XT-56. These numbers were cancelled at the time of US registration (1/50).
 c - These aircraft were operated by CNAC up to time of sale to CAT.
 d - These aircraft are still owned by CAA-MEC and are on lease to CAT.
 e - American registration on these aircraft has been cancelled. Chinese registration has been applied for but not yet received.

CAT Maintenance Manual of 24 April 1950, pp.1 and 2
 (with kind permission from © Princeton University Library)

⁸⁶ The identities of the missing C-46s are based on Davis/Martin/Whittle, *The Curtiss C-46 Commando*, whose assumptions for the other C-46s have been confirmed by the official CAT Maintenance Manual of 18 May 50.

⁸⁷ On the photo in Rosbert, *The pictorial history of Civil Air Transport*, p.96, C-47 "906" / "Peiping" seems to have XT-T-503 painted below the wing, so "239" / "Taiyuan" must be XT-T502.



CAT C-46 XT-T-512 (“530”)

(*CAT Bulletin* of 1 April 1948, cover, photo kindly supplied by Clarence Fu)

Economically speaking, CAT’s story of success continued during the remaining three months of 1947. On 3 October 47, CAT completed the speedy repatriation of 748 Japanese repatriates from Taiyuan to Peiping. Air transport was the only means of removing the burden of feeding the Japanese from the shoulders of the hard-pressed government of Marshal Yen Shi-shan. On 25 October 47, CAT completed the air evacuation of 200 orphans and a group of Roman Catholic sisters from Communist-threatened Shihchiachuang. On 6 November 47, a CAT plane rescued 63 Trappist personnel and 6 cows from that city, where previously the Reds had murdered a number of Roman Catholic monks. Also on 25 October, the Governor of Shensi Province asked CAT to establish a station at Sian and to airlift 1,000 tons of raw cotton per month from the city. On 31 October 47, CAT completed – in 21 days instead of the contracted for 30-day period – the airlift of 300 tons of wolfram from Kunming to Liuchow for the National Resources Commission, using 3 planes on the shuttle, so that, at the end of October 47, CAT had flown 1,149,155 ton-miles during that month with a total of 708 employees on 31 October 47. In the meantime, CAT was acting as the “missing link” in an economic chain involving the employment of 19,000 cotton mill workers in Tsingtao, airlifting 1,000 tons of raw cotton from Tsinan across the Communist areas to supply the Tsingtao mills. In that way, the backlog of raw cotton in Tsinan could be reduced to the benefit of that city, with finished material flown back to the benefit of Tsinan and of other parts of China, and CAT was the only agency transporting raw cotton to the mills of Tsingtao. A similar service was started on 6 November 47, when CAT C-46 “XT-539”⁸⁸ visited Tientsin with a full load of cotton for Tientsin mills and returned to Tsinan with a load of kerosene.

This economic success of CAT also inspired envy from competitive airlines, especially from CNAC and CATC. Former CAT pilot Felix Smith recalls: “Pilots from Shanghai brought us copies of the *Shanghai Evening Post and Mercury*. Banner stuff. ‘CAT – Profiteers Masquerade as Relief Airline.’ Days later, Willauer told us, ‘I asked the newsmen to come to my office and invited them to dip a hand into our files and pull out airplane manifests at random – provided they agreed to report what they found.’ Willauer’s gamble worked: The reporters kept their word. English-language newspapers listed the items they had found on CAT’s manifests: rubber shoes for Canton; generators and tires for Henyang; tractor parts, engine equipment, and gasoline for Kaifeng; gasoline, lubricating oil, medicine, and engine parts for Kunming; pumps and drilling machines for the development of the Kansu oil

⁸⁸ Probably C-46 “539” (msn 22362 ex USAAF 44-78539), reregistered as XT-T516 in the meantime.

fields; cloth and cotton yarn for Linfen; nickel and chrome alloy for the steel mills of Taiyuan; water pumps to restore the coal mines of Weihsien; and wires to restore Weihsien's electrical systems."⁸⁹

The relief flights continued: Following a survey flight of 12 November 47 to Lini in southern Shantung isolated by surrounding Communist troops, CAT scheduled an airlift of more than 200 tons of relief cargo for that city. On 8 December 47, CAT's C-46 *Lanchow*,⁹⁰ piloted by Bill Wingfield, evacuated 55 White Russian refugees from Lanchow to Shanghai, the end of what was – for the refugees – a 4,000-mile migration from Kulga. On 15 December 47, Doug Smith flew CAT C-46 “XT-539”⁹¹ into Chengchow, although the airfield had already been declared closed due to imminent capture by Communist troops. All CAT and SVOC personnel were safely evacuated to Tsingtao. On 20 December 47, CAT flew a party of 20 newsmen from Peiping to the besieged city of Taiyuan to interview Marshal Yen Hsi-shan, and then back to Peiping. On 21 December, CAT's C-46 “Kunming” flew 138 baskets of silkworm eggs from Kunming to Shanghai, destined to supply China with ¼ of her silk exports. And on 22 December 47, four CAT planes operating out of Tsingtao smashed all records, flying 29,108 ton-miles in this single day. Flying only during the brief winter daylight,⁹² 47 plane-hours were flown. Ground crews unloaded and reloaded the aircraft in an average of 20 minutes, and refuellers rolled up to incoming aircraft even before the engines were shut off. On 31 December 47, CAT could say that they had flown 1,722,224 ton-miles that month and that the company now had 822 employees.⁹³

As before, CAT or CNRRA Air Transport received lots of commendations from many sides, but as CAT's original agreement permitted operations only during the lifetime of CNRRA, and as CNRRA was scheduled to go out of business by the end of 1947,⁹⁴ many of those commendations also expressed the anxious desire that CAT should continue its services also after that critical date. On 10 October 47, CAT received a letter from Dr. Ernest B. Struthers, Dean of the College of Medicine at Cheelo University, Tsinan, saying: “Ever since February, railway service from Tsingtao has been suspended. [...] Without air service we should have found it impossible to continue. It is our hope that CAT will continue to render such services and that the company will have a long and useful history in China. We feel that the service which CAT is giving is not only a great help to the missions, but to China as well.” On 21 October 47, Major General Lowell Rooks, Director General of UNRRA, issued a statement to the press saying: “We hope that arrangements can be made for a charter under which [CAT] will continue to operate in China. [...] It is my understanding that [CAT] has been doing a very excellent job.” On 26 November, Associated Press correspondent Spencer Moosa wrote a story, widely reprinted, praising CAT for noteworthy and hazardous flights into Communist-surrounded Paoting. And on 23 December 47, the Head Office of the Chinese Postal Administration sent an urgent message expressing the hope that CAT would continue to fly the mail.⁹⁵ It was the war with its exigencies that made CAT's services so important to the civilian population. In war areas like the Province of Shantung, Nationalist elements held the large urban areas, while Communists ruled the countryside. Railroads, the lifelines that connected the cities, were attacked or even interdicted by the Communists. With surface transportation cut off, airlift became the only way of transportation even for goods

⁸⁹ Smith, *China Pilot*, pp.66/7.

⁹⁰ C-46 “413” (msn 22236 ex USAAF 44-78413), reregistered as XT-T508 in the meantime.

⁹¹ For the identity see above.

⁹² Mixing gasoline, oil, cotton, and sand in a specially cut GI vegetable tin that would burn for 4 hours, CAT's Lew Burrige invented a system of runway lighting allowing limited night operations at Tsingtao (Leary, *Perilous missions*, p.35).

⁹³ Souder, “Highlights in the history of Civil Air Transport”, pp.8-11.

⁹⁴ Leary, *Perilous missions*, p.36.

⁹⁵ Quotations from: Souder, “Highlights in the history of Civil Air Transport”, pp.8-11.

like raw cotton that would normally have been hauled by rail or by trucks. Without CAT, plants like the giant cotton mills of China Textile Corporation at Tsingtao would have stood idle.⁹⁶

CAT FLIGHT TIME RECORD
CHIEF PILOT'S OFFICE
SHANGHAI

Month November
Name Rosbert Status Captain

Date	FLIGHT	A/C No.	Check Pilot	Pilot	Co-pilot	Reserve Captain	A. I.	O. T.	Night	Total	Cumul. Total	C R E W	
												Pilot	F/O
1	TAO-WEI-TAO (1 ROUND TRIP)	239		8:50						8:50		HICKS	HSIEN
2	TAO-WEI-TAO (2 ROUND TRIPS)	239		5:15						5:15	14:05	"	"
3	TAO-WEI-TAO (1 ROUND TRIP)	239		8:35						8:35	22:40	"	"
4	TAO-WEI-TAO (1 ROUND TRIP)	239		9:05						9:05	31:45	"	"
5	TAO-WEI-TAO (1 ROUND TRIP)	239		9:00						9:00	40:45	"	"
6	TAO-WEI-TAO (1 ROUND TRIP)	239		7:10						7:10	47:55	"	"
7	TAO-WEI-TAO	239		1:40						1:40	49:35	"	"
8													
9	TAO-TAO-TAO	239		3:40						3:40	53:15	TROUT	CHEUNG
10	TAO-WEI-TAO (1 ROUND TRIP)	239		9:00						9:00	62:15	"	"
11													
12													
13	TAO-CHG	239		2:55						2:55	65:10	TROUT	CHEUNG
14													
15													
16	SHA-TYN-PPG	295		6:25			1:50			6:25	7:35	CHU	BANG
17													
18													
19													
20													
21	PPG-TYN-SHA	295		6:40						6:40	7:45	WATTS	BANG
22													
23													
24													
25													
26													
27	SHA-TYN-SHA	295		6:20			1:30			6:20	84:35	CHOW	KING
28													
29													
30	SHA-PPG-SHA	295		6:00						6:00	90:35	CHOW	TANG
31													
				90:35			2:00			90:35			

Certified Correct By WC Koenig
Walter C. Koenig,
Office Manager,
Chief Pilot's Office.

An extract from Joe Rosbert's Log book showing the month of November 1947
(in: UTD/Rosbert/B1F1)

Many of the flights shown above were support flights for Communist-beleaguered Weihshien: From 1 to 10 November 47, Rosbert transported supplies in CAT C-47 "239" from Tsingtao (TAO) to Weihshien (WEI), often several round trips per day. On 13 November 47, Rosbert

⁹⁶ Leary, *Perilous missions*, p.34.

proceeded to Shanghai, from where he made several flights in CAT C-46s (“395”, “530” and “543”) during the second half of November 47.

The end came nearer, and on 1 November 47, supervising the transfer of CNRRA’s remaining relief supplies to the Ministry of Social Affairs and the National Clearing Commission, an 11-man team chartered a CAT plane for a fact-finding tour covering Hankow, Nanchang, Changsha, and Foochow. On 20 December 47, CAT received a letter from P. H. Ho, Director-General of CNRRA, saying: “As the time approaches for CNRRA to cease, I wish to express my appreciation and that of the Chinese Government to CAT. Various members of this administration have had an opportunity to fly on your planes and they have been unanimous in their praise of the efficiency and courtesy of the crews and of the cooperation they have received. CAT facilities have enabled us to send passengers and freight to places otherwise not easily accessible.”⁹⁷

⁹⁷ Quotation from: Souder, “Highlights in the history of Civil Air Transport”, p.11.

1948: Civil Air Transport of the CAA-MOC

Of course, Chennault and Willauer themselves knew that they had to do everything possible to continue the successful operation of CNRRA Air Transport (CAT). Already in July 47, they had toured the provinces of China looking for support, and one of their first results was that the Yunnan People's Development Corporation purchased 7 % of CAT in September. For several months, CAT's Public Relations Officer Clyde A. Farnsworth had organized an impressive publicity campaign, underlining China's need for air transportation and CAT's contribution to the relief programs. At Nanking, CAT's Chinese stockholders led by Wang Wen-san, by intense lobbying created a favorable climate for the continuation of CAT. Finally, on 2 January 48, Chennault and Willauer signed a draft agreement with the Government of China, represented by Colonel Tai An-kuo, director of the Civil Aeronautics Administration (CAA). According to this draft agreement, which was later confirmed in the final contract of 28 May 1948, the airline would continue its operations as a partnership that was under the direct control of the Ministry of Communications (MOC). As a partnership operating within the ministry, CAT was a special case: Apparently, in this way, the MOC hoped to avoid some criticism from other airlines and also to avoid a violation of the law that prohibited foreign ownership of aviation companies.⁹⁸ Nationalist officials also made clear at the time of renewal that they expected CAT to support military operations of the Government in Manchuria, where in early 1948, heavy fighting had broken out between Nationalists and Communists: CAT had to transport military food and other supplies as well as personnel.⁹⁹

Probably in January 48, CAT's fleet received a new interim tail emblem, as can be seen on these 2 photos from the *CAT Bulletin* I 17 of 15 May 48, p.10. The photo on the left illustrates



Evacuated Catholic Sisters land at Shanghai from Kaifeng. A few of the hundreds of such people that CAT has rescued.



one of CAT's activities during the first 2 weeks of January 48: the evacuation of a large group of missionaries and others from Kaifeng and Chengchow.¹⁰⁰ Other activities of January 48 included an airlift to Shansi Province and supply flights into besieged Weih sien. On 7 January 48, the Shansi authorities asked CAT to assign 8 aircraft permanently to airlift exclusively to their province, but CAT was unable to do that, filling only one-third of Shansi's airlift needs.¹⁰¹ But on 10 January, CAT could say that it had made more landings in the besieged city of Weih sien than the Chinese Air Force, CATC, and CNAC together: over 700

⁹⁸ Leary, *Perilous missions*, pp.36/7.

⁹⁹ Leary, *Perilous missions*, pp.37/8.

¹⁰⁰ Souder, "Highlights in the history of Civil Air Transport", p.14.

¹⁰¹ Souder, "Highlights in the history of Civil Air Transport", p.12.

landings.¹⁰² Another destination of CAT's supply flights was the Communist-isolated city of Lin-I in southern Shantung. "Thousands of refugees who had fled from Communist hands, received in the month of January approximately 100 tons of clothing, fuel and food, which CAT had flown into that distressed city from Tsingtao and Haichow, in northern Kiangsu. CAT made its first survey flight into Lin-I on November 12, 1947, and was recorded as the first civilian aircraft that ever landed in Lin-I, receiving a landing certificate marked "001". In January, CAT made a total of 33 landings at Lin-I and 26 landings at Haichow. All these flights were chartered by the International Relief Committee for airlifting relief cargoes for the Catholic Mission in Lin-I. The cargoes hauled by CAT into Lin-I consisted of old clothings, woollen blankets, gasoline, hospital beds, milk powder and soup powder, while the outbound cargoes included the various kinds of native products such as pigs, eggs, and peanut oil."¹⁰³

On 10 January 48, the first move was made to create a new type of service: airlifting tin from Mengtze to Haiphong. This had been a long-held Chennault-Willauer idea that, after one and a half year of patient negotiating, could be translated into action only on 22 June 49.¹⁰⁴ The first step, undertaken on 10 January 48, was to send CAT sales director Ed Way to French Indo-China to conduct preliminary investigations into the possibilities of setting up a regular airlift of tin ingots and tin concentrates from Mengtze in southwest China to the seaport of Haiphong in the north of French Vietnam. This was an old Chennault-Willauer plan whose objectives were

"1) to restore the economy of Southwest China whose mines were idled and citizens unemployed by the postwar lack of transport for tin to world markets

2) to channel Southwest China's huge tin potential to the USA and other democracies, and away from Soviet Russia whose buyers were the only ones then willing to pay the exorbitant costs of the small quantities of tin trickling to the coast on coolies' backs

3) to help build up China's dollar position, at the same time helping China to evidence her honest efforts toward her own economic recovery, thus improving her chances for further ECA sympathy and assistance

4) through return airlift bringing into Southwest China badly-needed mining and industrial machinery, spare parts and equipment."¹⁰⁵

At that time, what small amounts of tin were reaching world markets were carried long distances by coolie-back, sampan and ancient truck from Kunming south to Rangoon in Burma or east to Canton, and during those trips high percentages were lost due to banditry and pilferage. CAT proposed airlifting four to six tons of tin at a clip to Haiphong, less than 2 hours from the mining center of Southwest China. But CAT did not overlook the difficulties that still had to be overcome:

"a) Getting the French to agree to landings by Chinese planes

b) Getting the Chinese to agree to reciprocal landing rights by French aircraft

c) Getting the Reconstruction Finance Corporation of the United States Government to recognize both the feasibility and the desirability of such a plan

d) To obtain ocean-going shipping to call at the port of Haiphong

e) Establishing the procedures for the issuing of through bills-of-lading from Mengtze to the USA, eliminating mountains of red tape, currency problems, etc.

f) Getting the tin producers to reach agreement on prices, methods of receiving payment, percentages of profits to be plowed back into importing mine-improvement machinery, etc.

g) Getting the Chinese Ministry of Communication to designate Mengtze an international

¹⁰² Souder, "Highlights in the history of Civil Air Transport", p.12.

¹⁰³ *CAT Bulletin*, vol. I, no.11, 15 February 1948, p.7.

¹⁰⁴ Souder, "Highlights in the history of Civil Air Transport", pp.12+45.

¹⁰⁵ Souder, "Highlights in the history of Civil Air Transport", pp.12/3.

airport by defining it as a ‘satellite’ of Kunming Airport

h) Getting Chinese Customs to set up staff and procedures at Mengtze to facilitate shipments

i) Acquiring Haiphong representatives to handle warehousing, liaison with the French authorities, acquiring backhaul loads, etc.

j) Contacting oil companies and convincing them of a business potential justifying expanded airport avigas service facilities

k) Setting up Communications, billeting, etc.”¹⁰⁶

The Yunnan Tin Producers’ Association reacted quickly, asking CAT already on 16 February to speed steps toward setting up the Tin Airlift, “noting that during the past three weeks tin prices have dropped more than 25 % (from CNC\$ 10,500,000 per catty to CNC\$ 7,500,000), bringing dire poverty to tin-mining areas.”¹⁰⁷ On 23 February, CAT’s President Chennault wrote to Chiang Kia-ngau, Governor of the Central Bank of China asking his support for establishing the planned airlift of 800 tons of tin per month from Mengtze to Haiphong. On 10 May 48, the US Government began to show interest in the CAT Tin Airlift Plan. On 14 September 48, General Chennault informed the Governor of Yunnan Province that both the French and the Chinese governments had given their approval to the Tin Airlift project. On 24 September 48, a CAT C-46 airlifted more than 4,000 pounds of tin ingots from Kunming (where the tin had been stockpiled for months awaiting transport). This was CAT’s first flight into Indo-China and CAT’s first international flight, but it was not yet the projected Mengtze-Haiphong tin airlift. In early November, CAT was working with the United States Lines to make possible the issuing of through bills-of-lading from Mengtze to US ports. At the end of December 48, ECA (U.S. Economic Cooperation Administration) was negotiating with the Yunnan Tin Producers’ Association for 250 metric tons of tin ingots per month (plus 15,000 metric tons of concentrates), and so the groundwork for the tin airlift was virtually complete, when CNAC moved in thru influential contacts in the Government to get its “share” of this CAT-pioneered business. On 27 March 49, CAT was officially appointed agent for the United States Lines in Yunnan, and so was now empowered to issue through bills-of-lading for tin shipments from the province to US ports. From 15 May onwards, radio facilities were set up at Mengtze for CAT’s soon-to-begin tin shuttle flights. And on 22 June 49 – “after long months of patient work” – CAT finally began airlifting tin from Mengtze to Haiphong.¹⁰⁸



CAT C-47 “Tientsin” being maintained
(UTD/Burridge/ photo no. 1-AB1-1-PB19)

¹⁰⁶ Souder, “Highlights in the history of Civil Air Transport”, pp.13/4.

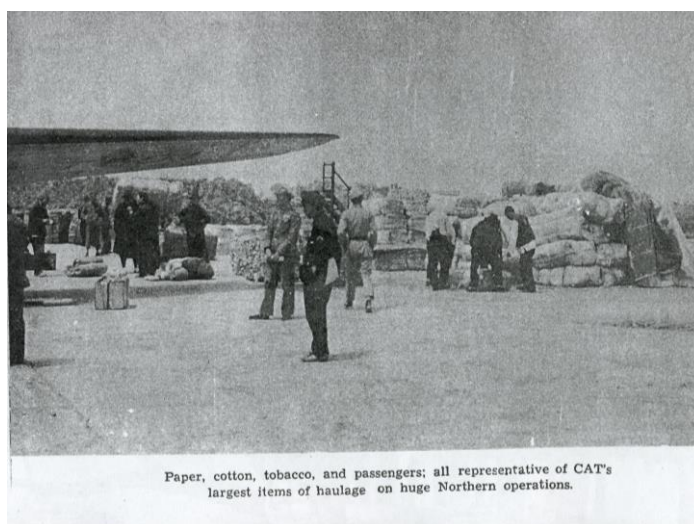
¹⁰⁷ Souder, “Highlights in the history of Civil Air Transport”, p.16.

¹⁰⁸ Souder, “Highlights in the history of Civil Air Transport”, pp.17, 19, 22/3, 26, 28, 38, 41, and 45.

Luckily for CAT, most of their business did not take that long to get underway. Between 21 December 47 and 20 January 48, CAT had airlifted 4,830,666 pounds of exportable cargo, including cotton, tobacco leaf, silk, bristles, goatskins, deer pelts, cowhides, cow-hair, wool, steel bars, iron wire and tin bars – not to mention urgent requests to airlift vitally-needed relief supplies, like the one from Shanghai to the Northwest, or to increase existing airlifts like the one between Tsingtao and Weihsien.¹⁰⁹ In mid-1948, *CAT Bulletin* published a series of articles entitled *Cotton and Tobacco – China’s Biggest Sources of Revenue*,¹¹⁰ underlining that this economical success was possible only because CAT brought in the supplies that were necessary and took the finished products to the markets: “Civil Air Transport has performed, and continues to perform a commendable operation in the case of China’s tobacco industries. The Shanghai Cigarette Factory in Tsingtao, one of China’s biggest, operated entirely with Chinese capital, would have suspended operations long ago but for the fact that CAT planes have managed to haul enough supplies to keep machines running and that the same ships are at present carrying its finished products to Tsinan and other markets. The same could be said of Universal Leaf, an American concern with branches in Shanghai and Tsingtao, which formerly contributed substantial sums to the Chinese government in the form of taxes. Presently, only one of its two redrying machines is in operation using raw materials airlifted by CAT from Tsinan. [...] CAT used to transport cotton from Chengchow, Honan Province, for production of fine cotton yarn, but this supply source was cut when Communists occupied that city. CAT planes, however, are at present hauling cotton [...] from Tsinan and Sian.”¹¹¹



CAT C-46 at Sian, loaded with cotton for China Textile Industries, Tsingtao (*CAT Bulletin*, I 18, 1 June 48, cover)



CAT C-46 hauling paper, cotton, and tobacco (*CAT Bulletin*, I 20, 1 July 48, p.13)

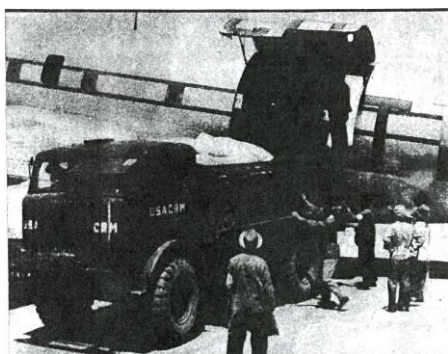
In early January 48, the National Resources Commission signed a contract with CAT for the air-evacuation of 7,000 workers, officials, and refugees from Mukden. The operation began on 18 January, when Captain Richard Bushbaum carried 5 tons of flour from Peiping to Mukden returning with a load of evacuees. William Leary described the situation as follows: “CAT personnel, headed by operations agent David H. Stauffer, arrived the following day to set up control procedures at Mukden’s Hun Ho airfield. Facilities were meager. There was no control tower, a bare half-mile of runway, a parking area, and a few abandoned, wind-swept

¹⁰⁹ Souder, “Highlights in the history of Civil Air Transport”, p.14.

¹¹⁰ *CAT Bulletins*, vol. I, no.18, 1 June 48, pp.2/3; vol. I, no.19, 15 June 48, p.2; vol. I, no.20, 1 July 48, p.2.

¹¹¹ *CAT Bulletin*, vol. I, no.19, 15 June 48, p.2.

hangars. Stauffer installed a VHF transmitter-receiver in a dilapidated bus and established air-to-ground-communications at the airport. At the end of each day, the bus carried CAT personnel back to the warmth of the Railway Hotel. Operations quickly settled into a routine. An aircraft would arrive from Peking, the crew covered in white flour dust that had shifted from the thin sacks. Coolies unloaded the transport while waiting passengers shivered in buses, unable to keep warm in the biting, subzero temperatures. Then fifty-odd men, women, and children would board the pot-bellied C-46 for the four-hundred-mile flight to comparative warmth and safety. To avoid being hit by Communist ground fire, aircraft would circle the field after takeoff, climbing to five thousand feet before heading on course for Peking. Arriving aircraft would hold over the city at high altitudes, then make a rapid circling descent to land. The wreckage of a CNAC C-46, which had crashed on January 20 while attempting to take off from Hun Ho, served as a constant reminder of the 'ordinary' hazards of flight."¹¹²



Saving lives in Mukden! A U.S. China Relief Mission truck loads grain seed, critically needed in Mukden, into Manchurian-bound CAT plane. (Photo by E. A. Riel.)



CAT's mail haulage has grown by leaps and bounds. Above, mail and passengers alight at Peiping, from Mukden.



PEIPING LANDING—Mukden evacuees, shivering against Manchurian cold, find Peiping like tropical clime upon descending from CAT plane.



Mukden refugees disembark at Peiping in great mass movement from embattled North.

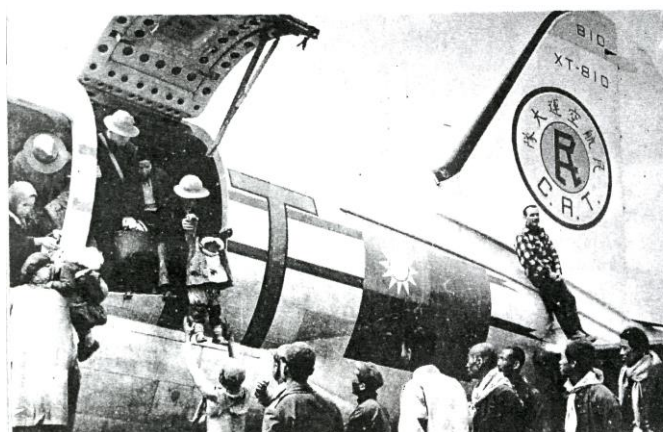
Four photos illustrating the Mukden airlift of 1948: grain seeds flown in (*CAT Bulletin* I 21, 15 July 48, p.11), mail (*CAT Bulletin* I 20, 1 July 48, p.13) and refugees (*CAT Bulletin* I 11, 15 Feb. 48, p.10, and I 17, 15 May 48, p.10) arriving at Peiping from Mukden

A little bit later, in early February 48, the National Resources Commission asked CAT to send an aircraft to evacuate its personnel from Changchun, the starving capital of Manchuria.¹¹³ While the evacuation of Mukden was underway, CAT also delivered badly-needed supplies into Mukden: On 25 February 48, Northeast Supplies and Commodities Regulating and Controlling Bureau signed contracts with CAT for airlifting 220 tons of wheat flour from Tsingtao to Mukden and another 220 tons from Peiping to Mukden, with backhauls of official passengers. In doing so, CAT planes were averaging 5 tons per trip from Peiping to Mukden,

¹¹² Leary, *Perilous missions*, pp.38/9.

¹¹³ Souder, "Highlights in the history of Civil Air Transport", pp.14/5.

while CNAC and CATC aircraft were carrying average loads of 3 ½ tons per plane.¹¹⁴ As early as late February 48, that is ahead of schedule, CAT's contract with the National Resources Commission to evacuate 7,000 persons from Mukden was successfully completed.¹¹⁵ But a new and very large contract with the Combined Services Command called for airlifting foodstuffs and flour into Mukden, while wounded soldiers and other personnel had to be taken out.¹¹⁶ On 15 April 48, CAT beat "a deadline in hauling a special 1,320 tons of flour to hungry Mukden", and the same day, Northeast Supplies and Commodities Regulating and Controlling Bureau signed "a new contract with CAT for airlifting another 1,100 tons of wheat flour from Peiping to Mukden, evacuating agency personnel and dependents on return flights."¹¹⁷ By 25 May 48, "CAT had flown 2,210 tons of flour into Mukden and brought out 22,173 passengers, including 4,571 wounded soldiers."¹¹⁸ Supply flights to Mukden did not end with this: On 9 May 48, CAT accelerated the pace to fulfill a contract to deliver 9,000 tons of food to Mukden before 1 August 48.¹¹⁹ As *CAT Bulletin* reports: "From May 9 through June 9 Civil Air Transport planes, operating from Peiping, Chinchow and Tientsin, carried into Mukden over 2,000 tons of food."¹²⁰ And of course, evacuees were to be taken back from Mukden to Peiping – even later on, as the photo below taken in August 48 clearly shows. On 1 October 48, CAT could say that during the last past months, CAT had airlifted 12,305 long tons of food (not counting heavy tonnages of other items) to Mukden and CAT was then averaging 30 flights every day to Mukden.¹²¹



HERE IS ONE OF THE 31,000 PASSENGERS transported by CAT during August. The young lady being assisted from the plane has just been evacuated from Mukden to Peiping. Pilot Jim Bledsoe stands on tail of aircraft.

由瀋陽撤往北平的難民羣。

(*CAT Bulletin*, vol. II, no.2, 1 October 1948, p.13)

Flying conditions in the winter months were extremely hazardous, with ice and snow, and sometimes the visibility was zero: The English cover of *CAT Bulletin* vol. I. no.11 of 15 February 48 shows "Traffic Assistant Dave Stauffer at work in a temperature of nearly 20 degrees below zero, Fahrenheit, at Mukden"¹²² – that is at about -29° Celsius. On 15 February 48, CAT received an unexpected letter from Rev. D. K. West who had flown to Shanghai by a CAT plane during such a zero-zero landing weather and who thanked CAT for being still alive: "Last Sunday I came in with Capt. Stew Dew on a G.C.A. landing. I am alive today because of his skill, courage and fidelity in obedience to commands. It was a thrill I don't care

¹¹⁴ Souder, "Highlights in the history of Civil Air Transport", p.17.

¹¹⁵ Leary, *Perilous missions*, p.39.

¹¹⁶ Souder, "Highlights in the history of Civil Air Transport", p.18.

¹¹⁷ Souder, "Highlights in the history of Civil Air Transport", p.19.

¹¹⁸ Leary, *Perilous missions*, p.39.

¹¹⁹ Souder, "Highlights in the history of Civil Air Transport", p.19.

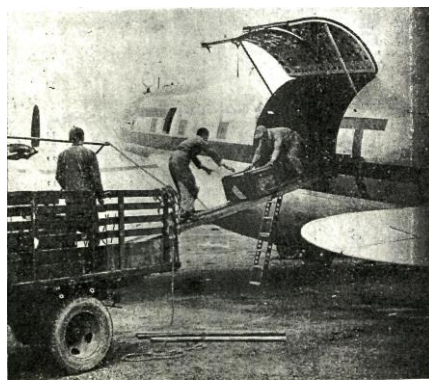
¹²⁰ *CAT Bulletin*, vol. I, no.19, 15 June 48, p.6.

¹²¹ Souder, "Highlights in the history of Civil Air Transport", p.23.

¹²² *CAT Bulletin* vol. I. no.11 of 15 February 48, p.1.

to repeat. [...] I was very impressed with what the CAT ground personnel did in attempting to help the CNAC plane (which was also attempting to make a landing, crashing with fatalities when it did so). Your men burned hundreds of gallons of gasoline and did all they could to provide that pilot with a safe place to land. I want you to know that this effort did not go unnoticed. It only serves to deepen our faith in the reliability of CAT.”¹²³ On 20 February 48, CAT signed a contract with the Sinkiang Provincial Government for airlifting 100 tons of relief supplies from Shanghai to Lanchow, and the very same day, the Chinese Ministry of Communications approved the extension of CAT’s Shanghai-Hankow-Lanchow route to Tihwa in Sinkiang via Suchow.¹²⁴

The first three months of CAT operations under the new name and the new regime brought some new types of operations: Already in August 47, Captain Rousselot had transported Chinese money, but it came out only when he had to jettison the canisters in order to save his aircraft.¹²⁵ It had since become routine even to drop money, and in early March 48, the National Resources Commission thanked CAT for successfully completing a number of hazardous banknote airdrop missions over Anshan.¹²⁶ And until the very end of its operations in mainland China, flying money to interior provinces would be one of CAT’s missions. Another new experience that CAT pilots made during that period was that their aircraft were



IN RECENT MONTHS, CAT planes have airlifted many tons of money - paper and coin - to interior provinces.

(*CAT Bulletin*, vol. III, no.1, 15 November 49, p.32)

buzzed by Soviet fighter planes. This first happened to Captain Robert Buol, while he was flying a C-46 between Tsingtao and Mukden in early March 48.¹²⁷ Another new experience for CAT was that a city that had already been abandoned to the Communists was recaptured by the Nationalists and was supplied again by CAT – something that would happen quite often to Air America in Laos. Here in postwar China, it happened to Chengchow: On 15 December 47, CAT C-46 “539” flew the last service into the city, although the airfield had already been declared closed due to imminent capture by Communist troops; on 15 March 48, CAT operations into Chengchow were again in full swing; but on 7 April 48 CAT had to evacuate Chengchow for the second time in three months.¹²⁸

Sometimes, a quick evacuation required a lot of heroism. Two emergency missions of that period are particularly noteworthy, the one that picked up CAT personnel inside the besieged city of Linfen and the one that rescued CAT personnel from Weihsien. In early March 48,

¹²³ Souder, “Highlights in the history of Civil Air Transport”, p.16.

¹²⁴ Souder, “Highlights in the history of Civil Air Transport”, p.16.

¹²⁵ Leary, *Perilous missions*, p.32.

¹²⁶ Souder, “Highlights in the history of Civil Air Transport”, p.17.

¹²⁷ Souder, “Highlights in the history of Civil Air Transport”, p.17.

¹²⁸ Souder, “Highlights in the history of Civil Air Transport”, pp.10+18.

Linfen, a pocket of anti-Communist resistance in southern Shansi Province, came under heavy attack. When Red troops seized the airfield lying outside the walls of the city, CAT's James R. Stewart and several Chinese employees were trapped. When it became obvious that there would be no military assistance for Linfen's defenders, Willauer ordered Stewart to prepare a landing area for a small aircraft. Then Willauer secured permission from the Governor of Shansi Province to attempt a rescue mission and tried to convince the Chinese Air Force to furnish air cover – but they refused to fly lower than 5,000 feet so that such a flight wouldn't have had any harassing effect on to the enemy on the ground. On 18 March 48, CAT couldn't wait any longer: CAT's chief pilot Eric Shilling volunteered to take CAT's single-engine Stinson L-5 XT-T519 into Linfen, while CAT's James Bledsoe flew cover in his C-46, tossing out small bombs. Making a low-level bomb run in his C-46 had the desired effect to distract the attention of the Communists, so that Shilling could land unnoticed inside the city and evacuate the 2 CAT personnel trapped in Linfen. Of course, airline executives later vehemently denied Communist reports about a "CAT bomber".¹²⁹



Capt. Eric Shilling checks parachute before taking off on crucial rescue flight to embattled Linfen.

Eric Shilling (*CAT Inc. Equipment*, in: UTD/Leary/B22F12) and (in the background) CAT Stinson XT-T519 (photo no. 1-DH53-9-PB4 in: UTD/Hickler)

CAT's rescue mission at Weihsien was even more dramatic: Weihsien, halfway between Tsingtao and Tsinan, had been isolated by the Communists since mid-1947. Weihsien had no radio ground facilities, and the old runway had been built by the Japanese on territory that had served as a graveyard for centuries so that anything larger than a C-47 would probably break thru the surface during take-off or landing. On 12 June 47, CAT's Lew Burridge brought the first CAT plane to Weihsien, in search of business. As the population was delighted about such a link with the outside world, CAT assigned 2 C-47s to the 100 mile run between Tsingtao and Weihsien, bringing in medical supplies, iron nails, water pumps, mail and other things and bringing out hog bristles for export and tobacco for Tsingtao and Shanghai factories. In early April 48, Communist threat became so strong that some CAT personnel wanted to be evacuated. In order to show them that Weihsien was not in any immediate danger – that was what the Chinese military authorities in Tsingtao said – Lew Burridge and CAT's assistant manager John R. Plank flew to Weihsien with a scheduled run on 11 April¹³⁰ and stayed there overnight to calm the employees. But early in the morning of 12 April, the Reds attacked and captured the airfield. District-Commissioner General Chang Tien-tso, who had favored CAT's service into Weihsien, had little confidence in the Nationalist troops garrisoned at Weihsien, and so Plank and Burridge, hoping to repeat the success of Linfen,

¹²⁹ Souder, "Highlights in the history of Civil Air Transport", p.18; Leary, *Perilous missions*, pp.39-40; a photo of CAT's L-5 XT-T519 appeared in *Fliegerrevue* extra, no.25, June 2009, p.100.

¹³⁰ The plane then continued to Taiyuan and was to pick them up later (Anonymous, "Chief Pilot's Office handles wide variety of flight problems", in: *CAT Bulletin*, vol.III, no.3, 1 January 50, pp.5/6).

cleared a landing strip in a schoolyard in the west of the city. As CAT's own L-5 XT-T519 had still to be flown in from Shanghai to Tsingtao in one of CAT's C-46s,¹³¹ Burridge's assistants in Tsingtao asked Vice Admiral Oscar C. Badger for the loan of a US Marine Corps reconnaissance aircraft. He ordered the aircraft – a Stinson L-5 – to be turned over to CAT after all insignia had been taken off, and in the afternoon of 12 April, Richard B. Kruske arrived over Weih sien in the borrowed aircraft. Although the strip was only 400 feet long¹³²



The Stinson L-5 borrowed from the USMC being prepared for the flight to Weih sien, probably taken at Tsingtao on 12 April 48 (UTD/Rousselot, photo no. 1-RR-6-PB8) and its crash-landing at Weih sien (*CAT Bulletin*, vol. I, no.15, 1 May 1948, Chinese cover, kindly supplied by Clarence Fu)

and had a dogleg at the end, Kruske managed to land. But when he tried to leave with Burridge, he ran into a brick wall at about 10 feet of altitude and demolished the aircraft. Fortunately, both occupants were not injured.¹³³ This L-5 was the first of three light aircraft that were wrecked in that operation.¹³⁴ Accompanying Dick Kruske in his own plane, Roger Fay had flown to Weih sien in a Piper Cub, but this aircraft “grazed a wing tip on one of the tall buildings and was lucky to get back to home base in one piece.”¹³⁵

In the evening, General Chang rallied his militia to defend the city. When the Chinese Air Force did not send the planes to drop flares to illuminate the attackers, CAT entered the fight. Burridge removed the landing lights from the wrecked US Marines aircraft, slung them over the shoulders of a soldier and connected them to a battery on his back so that some of the attackers could be detected. During that time, Captain Rousselot circled overhead in a CAT C-47, dropping flares and beer bottles that caused the attackers to take cover. When Willauer flew over Weih sien early the following morning, he saw that the Nationalist divisions were marching to the southeast, apparently on their way to surrender, while Burridge, Plank, and Kruske had moved to the east and were preparing a parade ground as a landing area, this one 550 feet long, located just outside the city. Back at Tsingtao, Willauer arranged a rescue fleet of small aircraft: CAT's own L-5 XT-T519 had arrived by C-46 in the meantime, a local

¹³¹ A photo of CAT's L-5 XT-T519 being loaded into CAT C-46 “392”/XT-T504 can be found in: *C.A.T. Inc. A description of Equipment and Operations*, preserved in: Whiting Willauer Papers, Box 7: Public Policy Papers, Dept. of Rare Books and Special Collections, Princeton University Library.

¹³² According to the anonymous article “Chief Pilot's Office handles wide variety of flight problems” (in: *CAT Bulletin*, vol. III, no.3, 1 Jan. 50, pp.5/6), it was a “300-foot long parade ground inside the city, surrounded by tall buildings and a lake on one side”. Leary, *Perilous missions*, pp.40-45, gives a slightly different version of the whole story, but it does not fit with the photo showing 5 CAT pilots at Weih sien at the same time (see below).

¹³³ Leary, *Perilous missions*, pp.40-42; Anonymous, “Chief Pilot's Office handles wide variety of flight problems”, in: *CAT Bulletin*, vol.III, no.3, 1 January 50, pp.5/6.

¹³⁴ Souder, “Highlights in the history of Civil Air Transport”, p.19, speaks of 4 aircraft wrecked.

¹³⁵ (Anonymous), “Chief Pilot's Office handles wide variety of flight problems”, in: *CAT Bulletin*, vol. III, no.3, 1 January 50, pp.5/6.



CAT's unregistered Cub on wheels (photo. no. 1-DH53-10-PB41 in UTD/Hickler) and CAT's Stinson XT-T-519 unloaded (from: *CAT Inc. Equipment*, in: Leary/B22F12)

intelligence unit volunteered another L-5, and L. K. Taylor, head of the Piper agency in China furnished a Piper Cub.¹³⁶

On 13 April, CAT's Edwin L. Trout landed at Weihsien in an L-5, but "on landing he nosed up and smashed the prop. The list of stranded pilots was now enough for a bridge game: Burrige, Kruske, Trout and Plank. The next move was an airdrop. Rousselot flew over, parachuting a new prop for the L-5. With the L-5 fixed up, Kruske and Burrige got away safely. Meantime the Piper with the damaged wingtip was repaired and it, together with Kruske and Rousselot in L-5s, took off again for Weihsien. But in landing the Cub, pilot Marsh Stayner cracked off a wheel. Another plane *hors de combat*... another pilot stranded."¹³⁷ Now there were 5 CAT pilots on the ground at Weihsien: Plank, Trout, Stayner, Rousselot, and Kruske. Apparently, this was the moment, when the photo below was taken.



CAT Captains Trout, Plank (sitting), and Rousselot, General Chang, CAT Captains Stayner, and Kruske in front of CAT's L-5 at Weihsien, probably on 13 April 48 (UTD/Burrige/photobox 1/ photo. no. 1-AB1-1-PB05)

While the Cub had been damaged, "the L-5s got in OK, and took Trout out in one of them. Rousselot, with CAT mechanic Sun as a passenger was not as lucky: a few feet off the ground they ran smack into a brick wall reinforced by a telephone pole. CATs again proved themselves tougher than their machines: Rousse and Sun were OK, the L-5 *kaput*.¹³⁸ And so

¹³⁶ Leary, *Perilous missions*, p. 42; Anonymous, "Chief Pilot's Office handles wide variety of flight problems", in: *CAT Bulletin*, vol. III, no.3, 1 January 50, pp.5/6.

¹³⁷ (Anonymous), "Chief Pilot's Office handles wide variety of flight problems", in: *CAT Bulletin*, vol. III, no.3, 1 January 50, pp.5/6.

¹³⁸ When Captain Rousselot landed at Weihsien, he understood that, with his 200 pounds, it was safer to take out

the number of refugees remained constant. Now there was Plank, Stayner, Rousselot, Sun and a couple of others.”¹³⁹ After the loss of the second L-5, the 3 CAT pilots remained overnight at Weihsien together with 2 damaged planes, while 2 CAT transports circled the city at night, dropping flares, beer bottles and occasionally also a small bomb, in order to keep the enemy away.¹⁴⁰

On 14 April, “Kruske returned and took Stayner out in an L-5. Meantime the Cub’s broken wheel had been repaired and Plank flew himself out in that.”¹⁴¹ In this way, only Rousselot and the Chinese personnel were left at Weihsien. Again, a CAT “bomber” circled over Weihsien during the night to keep the enemy away.¹⁴²

On 15 April, that is “the day after, Stayner in the Cub and Kruske in an L-5 returned for Rousselot and Sun. On landing, Kruske nosed up and wrecked the L-5. That was # 3 on the dump heap. Stayner managed to make it and took Kruske out. That still left Rousse and Sun.”¹⁴³ Willauer managed to get and drop a load of hand grenades and rifle ammunition to the defenders of Weihsien,¹⁴⁴ but Rousselot passed one more night at Weihsien.



Two pictures taken at Tsingtao on 16 April 48 after a successful rescue from Weihsien:
left: Captains Plank, Rousselot, and Stayner (UTD/Rousselot, photo no. 1-RR1-6-PB9); the C-47 in the background is the “Taiyuan” (“239” / XT-T502)
right: Captains Rousselot, Stayner, and McGovern (UTD/Rousselot, photo no. 1-RR1-6-PB6)

The end of the story came on 16 April 48, “when Stayner, shuttling back and forth without incident, evacuated the rest of the stranded CATs. Rousselot was the last to get out, by which time the ‘airfield’ was both *on* fire and *under* fire. Marsh says they took the plane practically straight up to get out of range of the ground fire being aimed at them; at 1,500 feet they finally leveled off to let the engine cool!”¹⁴⁵ Apparently, some of CAT’s Chinese staff members were left to slip thru the enemy lines, if they could. CAT continued to airdrop ammunition to General Chang and the defenders of Weihsien, but the Chinese Air Force did not support him by any bombing raids onto the enemy, and so General Chang died fighting.¹⁴⁶

one of CAT’s slightly built radio operators. Nevertheless, the small plane was still overweight and crashed into a telephone pole, when it tried to take off. Although the 2 occupants remained uninjured, one spectator was killed (Leary, *Perilous missions*, pp.43/4).

¹³⁹ (Anonymous), “Chief Pilot’s Office handles wide variety of flight problems”, in: *CAT Bulletin*, vol. III, no.3, 1 January 50, pp.5/6.

¹⁴⁰ Leary, *Perilous missions*, pp.42/3.

¹⁴¹ (Anonymous), “Chief Pilot’s Office handles wide variety of flight problems”, in: *CAT Bulletin*, vol. III, no.3, 1 January 50, pp.5/6.

¹⁴² Leary, *Perilous missions*, pp.43/4.

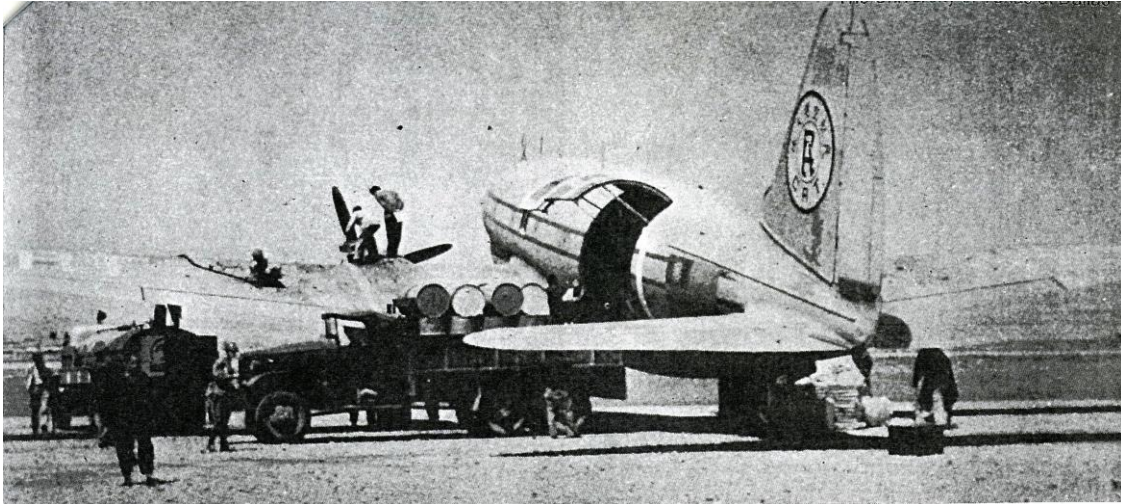
¹⁴³ (Anonymous), “Chief Pilot’s Office handles wide variety of flight problems”, in: *CAT Bulletin*, vol. III, no.3, 1 January 50, pp.5/6.

¹⁴⁴ Leary, *Perilous missions*, pp.44/5.

¹⁴⁵ (Anonymous), “Chief Pilot’s Office handles wide variety of flight problems”, in: *CAT Bulletin*, vol. III, no.3, 1 January 50, pp.5/6.

¹⁴⁶ Leary, *Perilous missions*, p.45.

Of course, in the meantime, that is with the civil war broken out in northeastern China, much of CAT's flying had military purposes, even, if it did not look like that: In March 48, Governor Lu Han of Yunnan Province asked CAT to assign one of its aircraft to a twice-daily shuttle of military supplies between Nanchiao and Kunming. And on 7 April 48, statistics said that "during the past few months, CAT has airlifted well over 6,500,000 pounds of raw cotton from Sian, Tsinan, Weihsien, Paoting, Taiyuan and Chengchow to be processed in the mills of Peiping, Tientsin, Tsingtao and Shanghai."¹⁴⁷ Most of these flights were uneventful, but not



Gasoline for Sian, from where CAT planes are hauling cotton for China's cotton mills.

(*CAT Bulletin*, vol. I, no.19, 1 June 48, p.13)

all of them: On 24 April 48, a CAT aircraft had to jettison a part of its cargo: Capt. Hobbs ordered to dump 11 out of a cargo of 18 bales of cotton when engine trouble developed en route from Kaifeng to Sian.¹⁴⁸ Of course, cotton was also needed for military equipment like uniforms, tents, parachutes etc. Rumors that CAT had dropped bombs around Weihsien had even reached Washington, where some hardliners wanted strong action to be taken against CAT pilots and to threaten them that their passports would be recalled if they participated in future military actions. But official US Government policy calmed down those hardliners. And indeed, CAT, who had 1,002 employees on 31 March 48,¹⁴⁹ did a lot to underline that it was not a secret air force of the Chinese Nationalist Government, but deeply involved in relief and other humanitarian work. On 1 April 48, CAT made a special flight to Hong Kong to carry Swedish apprentice officer L. E. Branden, who suffered a broken back in a fall from the mast of his ship in Shanghai, to meet another plane waiting to take him to Europe for special treatment. Capt. Doug Smith made an extra-smooth take-off and landing.¹⁵⁰ On 15 April 48, CAT's contract to carry the mail for China's Postal Administration was renewed for one year¹⁵¹ – the picture below shows mail bags loaded onto a C-46 at Taiyuan. On 15 June 48, *CAT Bulletin* reported: "Col. Tai An-kuo, CAA Director, in a memorandum requests CAT to reserve, whenever possible, loading space for 50 or less kilograms of mail in each plane in order to improve China's air mail system. CAT is to notify the post office in advance of such space reservations to eliminate delay in mail delivery. The CAA request was based on a proposal of the Shanghai Postal Administration that loading space be reserved for mail matter

¹⁴⁷ Souder, "Highlights in the history of Civil Air Transport", pp.17+18 (quotation).

¹⁴⁸ Souder, "Highlights in the history of Civil Air Transport", p.19.

¹⁴⁹ Souder, "Highlights in the history of Civil Air Transport", p.18.

¹⁵⁰ Souder, "Highlights in the history of Civil Air Transport", p.18.

¹⁵¹ Souder, "Highlights in the history of Civil Air Transport", p.18.

by unscheduled airlines, regardless of whether or not its planes are chartered or special.”¹⁵²

On 9 May 48, a new contract that CAT had signed called for the delivery of 1,400 tons of flour to Taiyuan by 15 July the same year.¹⁵³ On 2 June, General Chennault visited Taiyuan,



TWO-WAY LOADING—Secret of quick turnaround for CAT planes at Taiyuan, Shansi province, is the efficiency of loading. Here, at right, mail bags are being loaded in belly compartment of C-46 while cement, from another truck, is being passed into the secondary cargo hatch. Meanwhile, on the other side of the plane valuable cargo for Taiyuan was being unloaded through the main hatch.

(*CAT Bulletin*, vol. I, no.10, 15 February 48, p.12)

capital of Shansi Province, and was warmly welcomed by the local newspapers: “Since last June, CNRRA Air Transport, at the request of this province, has borne the responsibility of transporting relief supplies and daily necessities for Shansi. Today after reorganization as Civil Air Transport directly under the Civil Aeronautics Administration, Ministry of Communications, the company is airlifting the greater portion of this province’s commodity supplies. [...] We, the *Rehabilitation Daily*, particularly want to point out that because of the continual importation of relief and rehabilitation supplies, factories in this province have been able to continue operations, and prices have not risen beyond all limits. [...] We earnestly hope that Civil Air Transport [...] will continue its efforts to strengthen its transport numbers, so that millions of people in this province will be able to obtain a minimum supply of daily necessities.”¹⁵⁴ In late March, CAT could even announce that on 28 March 48, a baby had been born aboard their C-46 *Hankow* – with Capt. Bus Loane serving as mid-wife –, while en route to Lanchow:¹⁵⁵ No military or paramilitary transport aircraft would have this type of news.

May 1948 brought a lot of changes for Civil Air Transport. Already several months before, CAT had started to build new facilities at Shanghai’s Hungjao Airfield. One of them was a new control tower that had been built on top of an old Japanese pillbox. The other thing was something unique: a new “nose hangar” that could accommodate the front portion of a C-46 so that maintenance and repairs of these parts of an aircraft could go on at all times and with all types of weather outside. This new “nose hangar” had become necessary, because CAT was expecting additional C-46s: In the spring of 1948, it had become evident even to the USA that the Chinese Nationalists urgently needed more transport aircraft, for example to increase the Mukden airlift. In late April 48, Washington declared surplus 13 flyable USAF C-46s,

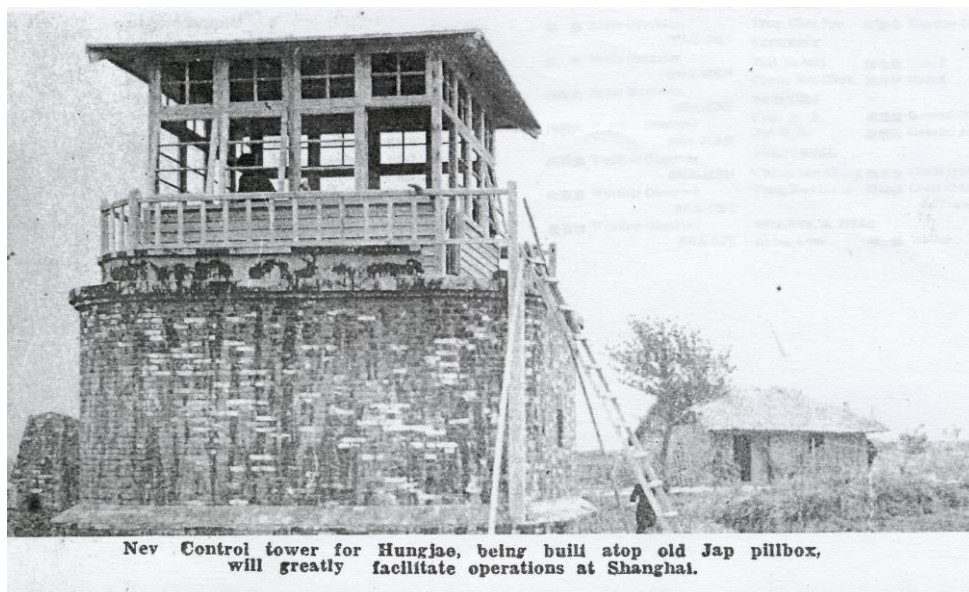
¹⁵² *CAT Bulletin*, vol. I, no.19, 15 June 48, p.5.

¹⁵³ Souder, “Highlights in the history of Civil Air Transport”, p.19.

¹⁵⁴ *CAT Bulletin*, vol. I, no.19, 15 June 48, p.6.

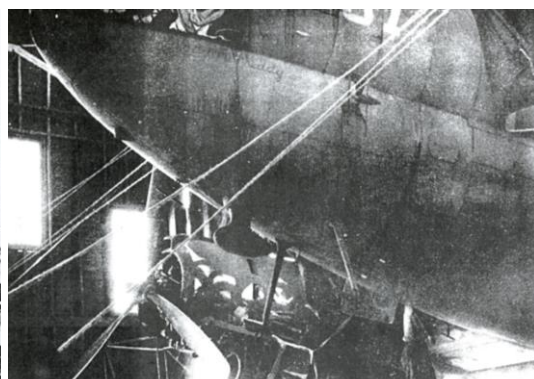
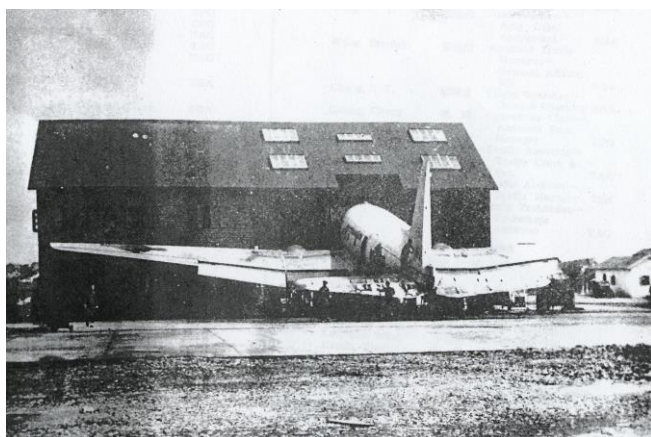
¹⁵⁵ Souder, “Highlights in the history of Civil Air Transport”, p.18.

obliterated all USAF markings and sent the aircraft to Nanking. “Rather than give the C-46s to the Chinese Air Force, which had been using its transports to smuggle cigarettes and other salable items into Mukden, Nanking leased seven planes to CNAC and six to CAT.”¹⁵⁶ That is, on 15 May 48, CAT acquired six C-46 aircraft on a rental basis from the Civil Aeronautics



New Control tower for Hungjao, being built atop old Jap pillbox, will greatly facilitate operations at Shanghai.

(CAT Bulletin, vol. I no.17, 15 May 48, p.12)



(Upper photo) The “In” of Nose Hangar work goes on out of the weather. (Lower photo) The same plane (one of the new ones) from the outside of the hangar, Hungjao Airfield.

CAT’s new “nose hangar” at Hungjao Airfield, Shanghai – outside and inside
(CAT Bulletin, vol. I no.18, 1 June 48, p.12)

Administration of China’s Ministry of Communications.¹⁵⁷ Four of them were operable in June 48.¹⁵⁸ Their identities can be found in the CAT Maintenance Manual of 24 April 50:¹⁵⁹

C-46F	XT-44	msn 22502	ex USAF 44-78679
C-46F	XT-46	msn 22461	ex USAF 44-78638
C-46F	XT-48	msn 22510	ex USAF 44-78687
C-46F	XT-50	msn 22526	ex USAF 44-78703

¹⁵⁶ Leary, *Perilous missions*, p.46.

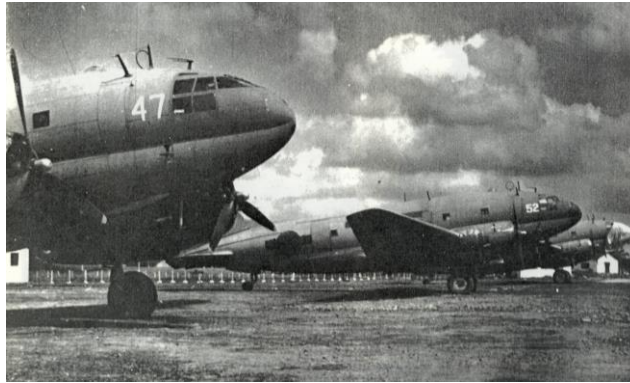
¹⁵⁷ Souder, “Highlights in the history of Civil Air Transport”, p.19.

¹⁵⁸ *CAT Bulletin*, vol. I, no.22, 1 August 1948, p.2.

¹⁵⁹ CAT Maintenance Manual of 24 April 50, at: Whiting Willauer Papers, Box 7: Public Policy Papers, Dept. of Rare Books and Special Collections, Princeton University Library.

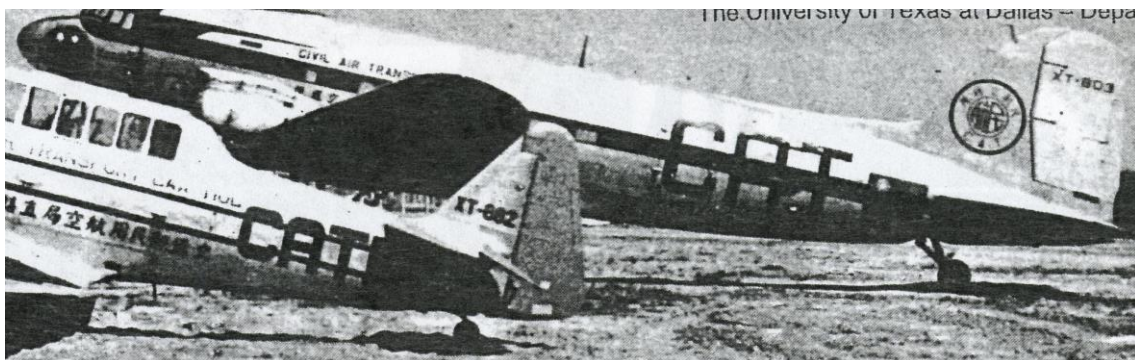
C-46F	XT-52	msn 22466	ex USAF 44-78643
C-46F	XT-54	msn 22370 ¹⁶⁰	ex USAF 44-78547

All of these C-46s have similar histories: They were assigned to Tachikawa on 1 January 48 or 6 April 48 and passed to the FLC (Foreign Liquidation Commission) on 17 June 48. Many if not all of them were painted dark gray with white CAT titles and white CAT emblem.



Three of the six C-46s added to the CAT fleet on a rental basis from CAA, just after arriving at Hungjao Airfield, Shanghai, from Tachikawa AB, Tokyo, in May 48 (*CAT Bulletin*, vol. III, no.2, 1 December 1949, no pag. [p. 5] – the same photo had already appeared in *CAT Bulletin*, vol. I, no.19, 15 June 48, p.11)

Also on 15 May 48, CAT aircraft were “given new serial numbers (for example, C-46s, with numbers starting XT-5.. became XT-8..).¹⁶¹ The new registration system is well known,¹⁶² but the identities of C-47s XT-803 and XT-805 still have to be proven by photographic evidence. So here they are:



Newly painted CAT C-47 XT-803 (“Taiyuan”) in the summer of 1948
(*CAT Bulletin*, vol. I, no.23, 15 August 48, p.13)

¹⁶⁰ The CAT Maintenance Manual gives msn 78547, but the correct msn has been established from Davis/Martin/Whittle, *The Curtiss C-46 Commando*.

¹⁶¹ Souder, “Highlights in the history of Civil Air Transport”, p.19.

¹⁶² With the exception of XT-803 and XT-805, this list was established from the same sources as before, that is from CAT Maintenance Manual of 18 May 50, at: Whiting Willauer Papers, Box 7: Public Policy Papers, Dept. of Rare Books and Special Collections, Princeton University Library, photographic evidence and – for the missing identities – Davis/Martin/Whittle, *The Curtiss C-46 Commando*, whose assumptions for the other C-46s have been confirmed by the official CAT Maintenance Manual of 18 May 50. The identities of XT-803 and XT-805 have been established above from what is known about the names of the C-47s and from photos. Things that happened after May 48 – like crashes – are taken from Souder’s “Highlights”.



CAT C-47 XT-805 (“Peiping”) at Linkiang airstrip, Yunnan Province, in 1948/9
(photo kindly submitted by Ward S. Reimer)

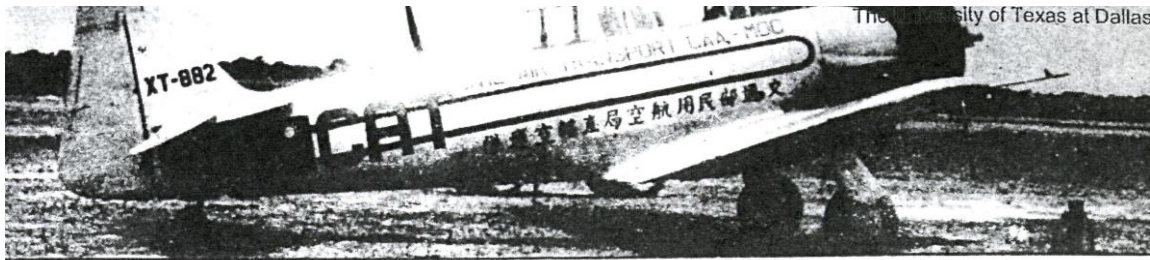
XT-801	C-47B	msn 20681 (“Tientsin”)	ex XT-T501 and “215”	later to N8421C
XT-803	C-47B	msn 20705 (“Taiyuan”)	ex XT-T502 and “239”	scrapped 25 Oct. 48
XT-805	C-47B	msn 27167 (“Peiping”)	ex XT-T503 and “906”	crashed 8 Nov. 49
XT-802	C-46D	msn 22215 (“Hami”)	ex XT-T504 and “392”	later to N8406C
XT-804	C-46D	msn 22218	ex XT-T505 and “395”	later to N8407C
XT-806	C-46D	msn 22228 (“Hankow”?)	ex XT-T506 and “405”	later to N8408C
XT-808	C-46D	msn 22232	ex XT-T507 and “409”	later to N8409C
XT-810	C-46D	msn 22236 (“Lanchow”)	ex XT-T508 and “413”	later to N8410C
XT-812	C-46D	msn 22345 (“Swatow”)	ex XT-T509 and “522”	captured 6 Dec. 49
XT-814	C-46D	msn 22347 (“Shanghai”)	ex XT-T510 (?) and “524”	crashed 17 Mar 49
XT-816	C-46D	msn 22351	ex XT-T511 and “528”	later to N8412C
XT-818	C-46D	msn 22353	ex XT-T512 and “530”	later to N8413C
XT-820	C-46D	msn 22354	ex XT-T513 (?) and “531” (?)	wreck 10 Dec. 48
XT-822	C-46D	msn 22355	ex XT-T514 (?) and “532” (?)	crashed 29 July 48
XT-824	C-46D	msn 22359	ex XT-T515 and “536”	later to N8414C
XT-826	C-46D	msn 22362 (“Tsingtao”)	ex XT-T516 and “539”	later to N8415C
XT-828	C-46D	msn 22363 (“Nanking”)	ex XT-T517 and “540”	later to N8416C
XT-830	C-46D	msn 22366 (“Chengtu”?)	ex XT-T518 and “543”	later to N8417C
XT-881	(?)	?		
XT-882	AT-6	msn ?	ex XT-T5?? and —	
XT-883	Piper Cub	msn ?	ex XT-T5?? and —	

On 28 May 48, CAA-MOC formally signed the agreement with CAT for the airline to continue as a relief and rehabilitation organization thru 1948. Chennault and Willauer flew to Nanking for the signing.¹⁶³ The Chinese version of this contract can be found on a website of the *Local History Office* of Shanghai at <http://www.shtong.gov.cn/node2/node2245/node68464/node68488/node68531/userobject1ai66068.html>. Although the computer-generated English translation of this text is hardly understandable, it is obvious that in May 48, CAT owned 18 transport aircraft (C-47 and C-46) plus 3 light aircraft – see § 17 of the

¹⁶³ Souder, “Highlights in the history of Civil Air Transport”, p.19.

contract. This means that already when the registrations going from XT-T501 to XT-T518 were introduced in October 47, CAT had no more than 3 C-47s: so a CAT C-47 XT-807 or XT-809, which have sometimes been reported for the pre-1949 period, did not exist at this time. Unfortunately, Annex B to this contract, describing CAT's properties (see § 21), is not available.

As to the 3 light aircraft CAT had in May 48, only 2 of them have been identified from photographic evidence. XT-882 was a Shanghai-based AT-6 that in April and May 48 was flown by Eric Shilling and used for DDTing the Shanghai area.¹⁶⁴ In July 48 it was used for emergency meetings at Nanking; in March 49, it was based at Lanchow and flown on feeder services into and out of that city by CAT pilot Marshall Stayner.¹⁶⁵ CAT's Piper Cub was

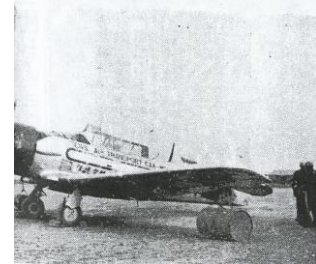


Emergency meetings in Nanking are met with instantaneous flights by this AT-6, constantly in readiness at Hungjao, usually piloted by Erick Shilling.

(*CAT Bulletin*, vol. I, no.21, 15 July 48, p.11)



PROVIDING FEEDER SERVICE into and out of Lanchow is CAT's AT-6, ably piloted by Marsh Stayner.(J.H. Hou)



(*CAT Bulletin*, vol. I, no.23, 15 August 48, p. 13, and vol. II, no.3, 1 April 49, p.18)

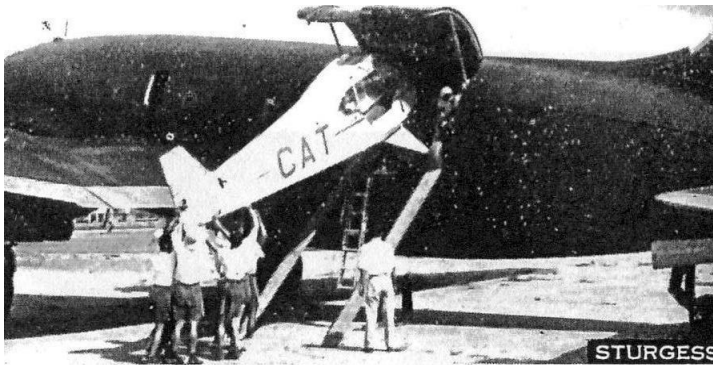


CAT's Piper Cub: unregistered and on wheels in 1948 (photo. no.1-DH64-7-PB5 in: UTD/Hickler) and as XT-883 in late 1949 (*CAT Bulletin* vol. III, no.1, 15 November 49, p.9)

¹⁶⁴ *CAT Bulletin*, vol. I, no.17, 15 May 1948, p.7.

¹⁶⁵ Scheduled AT-6 services to Ninghsia and Sining had been started in January 49 (*CAT Bulletin*, vol. II no.9, 1 February 49, p.7).

unregistered in 1947 and sometimes flown on floats, when it was used for flood relief work (see above, p.10). In April 48, it had wheels and saved several lives at Weihsien (see above, p.25). In May 48, it was reregistered as XT-883, and in late 1949, XT-883 was put on floats again and used for bird watching in Hong Kong harbor.¹⁶⁶ One day, it left Hong Kong...



A CAT Piper Cub being loaded aboard a CAT C-46 at Kai Tak Airfield.



The fuselage of the Cub is lashed to the 46's deck.

(*CAT Bulletin*, vol. IV, no.9, October 1951, p.21)

Together with the new contract, CAT's aircraft received a new livery and a new tail emblem in May 1948, as this photo of CAT C-46 XT-812 shows. The new tail logo was red



CAT C-46 XT-812 (in: UTD/Burridge, photo no. 1-AB1-1-PB18A)



Tail of CAT C-46 XT-826 in: *CAT Bulletin*, vol. III no.1, 15 November 49, p.18;
Photo of CAT C-46 XT-802 used with kind permission from Vincent Ma

¹⁶⁶ See the text and the photos in *CAT Bulletin* vol.III, no. 1, 15 November 49, p.9, published above; another photo of CAT's Piper Cub XT-883 appeared in *CAT Bulletin*, vol. IV, no. 9, October 1951, p. 21.

and black on aluminum, and the Civil Aeronautics Administration of the Chinese Ministry of Communications, which now controlled Civil Air Transport, prescribed the English and Chinese text to be written inside the tail emblem and on the side of the fuselage, as a note published in *CAT Bulletin* shows. The interesting point about this agreement of 28 May 48

Under CAA order No. 25-7505 of April 29, 1948, CAT is directed to paint the following on the bodies of its planes:

「交通部民用航空局直轄空運隊」

“Civil Air Transport, CAA, MOC”

and on the tails:

「民航空運隊」

“Civil Air Transport”

The word “great” which is inserted in the original Chinese translation of CAT, is eliminated.

(*CAT Bulletin*, vol. I, no.18, 1 June 1948, p.5)



There can't be any doubt of the name of our airline, with the complete new title painted on the side of every CAT Ship, as above.

(*CAT Bulletin*, vol. I, no.21, 15 July 1948, p.11)

(whose English version is not available and whose Chinese version,¹⁶⁷ read in a computer-generated English translation only, is hardly understandable), is that this agreement apparently calls the new company part of the “Chinese Air Force”. For on top of the contract we read:

“Civil Aviation Authority and Ministry of Communications KMT Chennault, Wei Laoer signed contract established the Chinese air force”

and § 31 of the contract (which also contains the signatures) is given as:

¹⁶⁷ At <http://www.shtong.gov.cn/node2/node2245/node68464/node68488/node68531/userobject1ai66068.html> , published by the *Local History Office* of Shanghai.

“(31) 37 years of the contract in the Republic of China signed on May 28, which take effect from the same day.

**Civil Aviation Authority Signature Dai Anguo
Air Force Signature CLChennault (Claire Lee Chennault)
Whiting Willauer (怀丁魏劳尔)”**

It is interesting to note that *CAT Bulletin* of 1 June 1948 reports the signing scene in a way that slightly differs from the one given by the *Local History Office* of Shanghai.¹⁶⁸ According to CAT, the contract was signed by Col. Tai An-kuo, Director of CAA, while Chennault and Willauer represented CAT, and Dr. Li Ching-lu (MOC) and Dr. Wang Wen-Shan (CAT Nanking) were also present at the signing.¹⁶⁹



(*CAT Bulletin*, vol. I, no.18, 1 June 1948, p.9)

Whatever the real meaning of the term “Air Force” in the computer-generated translation of the Chinese version of this contract is, it is evident, that many of CAT’s flights were then operated in support of the Nationalist Chinese Government and its military against Communist forces. This also explains why on some CAT flights there were Chinese Nationalist troops working as what Air America would later call “kickers”, that is pushing sacks of rice and other goods out of the back doors of CAT aircraft. On 1 July 48, *CAT Bulletin* reported that “from Peiping and Chinchow 9,000 tons of military food were to be sent

¹⁶⁸ At <http://www.shtong.gov.cn/node2/node2245/node68464/node68488/node68531/userobject1ai66068.html> .

¹⁶⁹ *CAT Bulletin*, vol. I, no.18, 1 June 1948, p.9.



↑

NATIONALIST TROOPS ABOARD CAT PLANE push rice out doors to Tsinan's defenders. Due to heavy ground fire, drops had to be conducted from altitudes of 6000 feet.



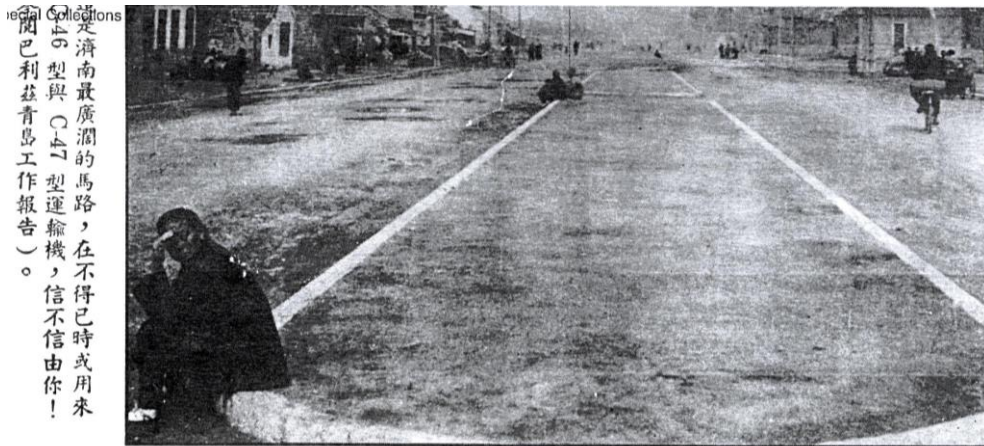
(*CAT Bulletin*, vol. II no.2, 1 October 48, p.10)

to Shenyang during the period from May 1 to July 31 and 1,400 tons will be delivered into Taiyuan before July 15. [...] We have concentrated the majority of our fleet in this area. For the Chinchow and Shenyang shuttles, we have been making as many as five shuttles per plane per day. It works out that we are hauling from 120 to 150 tons a day of the essential food into Shenyang. On inbound flights, the planes carry food only and on outbound trips, passengers, baggage and cargo are hauled. Besides flying food into Shenyang from Peiping we are also airlifting food from Peiping into Taiyuan.”¹⁷⁰ On 15 August 48, *CAT Bulletin* stated: “During a recent, typical month, CAT planes flew in 1,400 metric tons of *Army food* alone. It’s a military axiom that a soldier fights best on a full belly; with CAT now the only civil airline flying into Taiyuan, the Marshal’s men look to CAT to supply the means of battle. [...] Current contracts between C.A.T. and S.P.G. [Shansi Provincial Government] call for airlift of military supplies from Peiping, Shanghai, Chengchow and Sian. / Outbound, C.A.T. planes are carrying many of the goods for which Taiyuan has become famous; things like iron wire and bars, cement, and products from Taiyuan factories.”¹⁷¹ There is still another aspect that might explain the term “Air Force” in the contract: After consultations with CAA, CAT obtained permission to use several Chinese Air Force (CAF) airfields, that is those of Nanking, Sian, Lanchow, Suchow, Chengchow, Taiyuan, Ninghsia, Peiping, Changsha, Hengyang, etc. for scheduled flights, Chinese Air Force airfields in Shengyang (Mukden), Changchun, Chinchow, Paoting, Shihchiachuang, Tsinan, Tsingtao, Weihsien, Linyi, Hsuchow, Haichow, Linfen, Kaifeng, Paotow, Hami, Tihwa, Liuchow, Kunming, Mengtze,

¹⁷⁰ *CAT Bulletin*, vol. I, no.20, 1 July 1948, p.3.

¹⁷¹ *CAT Bulletin*, vol. I, no.23, 15 August 1948, pp.2+8.

Haihow and Peishihyi at Chungking for unscheduled flights, and to use other Chinese Air Force fields whenever necessary upon submission of application according to regulations.¹⁷² Apart from this, the local authorities at Tsinan even turned a street into an airstrip for C-46s and C-47s, in case of future emergency. In mid-August, CAT flying in the north was mostly



This broadest street in Tsinan is being turned into an airstrip capable of handling C-46's and C-47's, in case of future emergency. (See "Burridge Reports".)

(*CAT Bulletin*, vol. I, no.20, 1 July 1948, p.12)

limited to military supplies, as *CAT Bulletin* noted on 15 August 48: "A majority of our fleet is now operating up Northeastern way, hauling military food. Recently, this office has been flooded with requests from commercial concerns for airlifts of sugar, saccharin, piece-goods, rubber shoes, leather, drugs and other miscellaneous merchandise from Peiping or Tientsin to Shenyang. These merchants hold permits issued by General Wei of the Northeast Bandit Suppression Headquarters at Shenyang. We are not able to accept these airlift requests because we are sticking to our firm policy of hauling only food – for military and civilians – into Shenyang; nothing else but food."¹⁷³ A new task for CAT planes based at Peiping began on 31 August 48: 2 to 6 flights a day were going to Chengteh, bringing in desperately-needed food and taking out wounded soldiers.¹⁷⁴

Nevertheless, the contract with MOC-CAA also mentions some scheduled air services in § 12, although the meaning of the text is not clear: It could mean that CAT flew these services

“(12) Air Force air transportation of passengers and cargo to any legitimate e-mail of scheduled flights as follows:

**The first line of Shanghai - Nanjing - Hankou - Xi'an - Lanzhou - Suzhou;
The second line of Shanghai - Nanjing - Zhengzhou - Taiyuan - Ningxia;
The third line in Tianjin - Beijing - Taiyuan - Xian;
The fourth line Hankou - Changsha - Hengyang - Guangzhou;”¹⁷⁵**

on a more or less regular basis or that CAT was allowed to fly them in spite of the fact that they were also routes of other scheduled airlines. The text probably has the second meaning, because CAT's services in the period between 31 May – when the company had 1,168 employees – and the end of July 48 were mainly emergency flights: In June 48, CAT hauled

¹⁷² *CAT Bulletin*, vol. I, no.18, 1 June 1948, p.5.

¹⁷³ *CAT Bulletin*, vol. I, no.23, 15 August 1948, p.6.

¹⁷⁴ *CAT Bulletin*, vol. II, no.1, 15 September 48, p.5.

¹⁷⁵ At <http://www.shtong.gov.cn/node2/node2245/node68464/node68488/node68531/userobject1ai66068.html> , published by the *Local History Office* of Shanghai.

from Peiping to Mukden 60 tons of seed rice, 30 tons of hybrid seed corn, and 130 tons of kaoliang and farm equipment for the China Relief Mission. In July, the company airlifted 120 to 150 tons of food every day to Mukden, when planes shuttling from Chinchow often made as many as 5 roundtrips per day each. Another problem was the city of Tsinan: On 15 July 48, Wang Yao-wu, Governor of Shantung, appealed to CAT for more help in alleviating supply problems at besieged Tsinan. And there were also medical supply flights: On 25 July 48, CAT received a letter from the United Press, which thanked the company for especially rerouting an aircraft to fly penicillin to Peiping, a service which the UP credits with saving the life of their correspondent Bob Burton.¹⁷⁶ Finally, CAT was even able to do some purely commercial work, airlifting 3,600 pounds of baby fish from Canton to Tainan, Formosa in June 48. The East Asia Fishing Company, that is the shippers, were so happy with the results that in the following years, this company always turned to CAT for its required airlift. For a company spokesman wrote to CAT in June 48: "When other airlines have hauled our spawning fish, only 5 % were alive on arrival. CAT has created a notable record by hauling them with more than 90 % of them remaining alive..."¹⁷⁷

Then, on 29 July 48, CAT had its first fatal accident: C-46 XT-822 crashed on take-off from Tsingtao, killing 16 soldiers and the crew of 3.¹⁷⁸ The crew had consisted of Captain Clyde T. Tarbet, a 29 year-old pilot who had already flown in China since March 1945, 32 year-old co-pilot Har Yung-shing, who had graduated from the Central Air Force Cadet School in 1941, and 31 year-old Flight Operator Chan Wing-king. The aircraft had been assigned to a shuttle run between Tsingtao and Tsinan and had already made 2 four-hour round trips that day, carrying rice, ammunition, and troops into the beleaguered city. "The accident took place shortly after 5 P.M. Thursday afternoon, July 29. Employed all day on the shuttle run between Tsingtao and Tsinan, the C-46 took off from Tsingtao for a final run to Tsinan. Upon gaining an altitude of about 100 feet, the plane's nose went up sharply, with the plane falling back onto the runway in a spin. So far unconfirmed reports state that the plane burned after the crash, and that the wreckage blocked the runway for several hours." One explanation of this accident was that the ground staff had failed to remove the gust locks from the control surfaces and that the crew had not checked that point,¹⁷⁹ but this assumption has also been contradicted.¹⁸⁰

But of course, in spite of this tragic accident, CAT had to continue business as usual, and the company could do so, because at no time it had all of their aircraft in the air. In July 48, the Communists sent 150,000 troops against Taiyuan,¹⁸¹ and so, by 1 August 48, CAT completed the evacuation of a large group of missionaries and other people from Taiyuan, during the month of August, several CAT planes flew new banknotes to the interior of China, on 1 September 48, CAT signed a contract with the Northeast Salt Administration to airlift 140 tons of salt from Chinchow to Mukden, and between 4 and 6 September, a CAT plane

¹⁷⁶ *CAT Bulletin*, vol. I, no.23, 15 August 1948, p.2.

¹⁷⁷ Souder, "Highlights in the history of Civil Air Transport", p.20; *CAT Bulletin*, vol. I, no.19, 15 June 48, p.7.

¹⁷⁸ The identity of this aircraft is only given in Davis/Martin/Whittle, *The Curtiss C-46 Commando*, p.110.

¹⁷⁹ Leary, *Perilous missions*, p. 48; quotation from: *CAT Bulletin*, vol. I, no.22, 1 August 48, p.3.

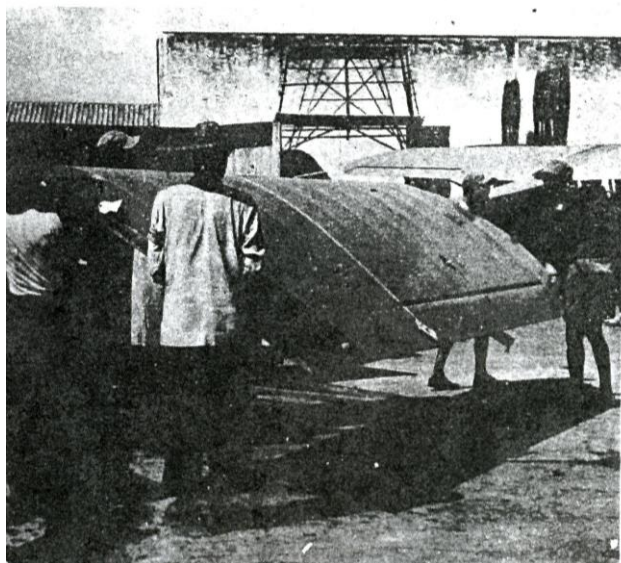
¹⁸⁰ Felix Smith, *China Pilot*, pp.85-87. He has another explanation: "A couple of days later while preflighting the airplane I saw a screwdriver on the floor of the empty belly compartment. I climbed in and unscrewed the inspection plate on the aft bulkhead. I saw cartons of cigarettes stuffed below the elevator cables. If we ran into turbulence they'd be tossed around and perhaps jam the elevator cables. We could lose our up-down control. We'd be helpless while the airplane pitched up to a stall or down into the ground. Perhaps this had happened to Tarbet and his crew, who were dead, while colleagues and historians called them careless. Colonel Lee, our security chief, flew up from Shanghai to say, 'I shall apprehend the criminals.' But other pilots found cigarettes similarly hidden, and we added one more item to our preflight checklist: 'Check vulnerable places for cigarettes.' When we found them we threw them away. After the smugglers lost their business investment a few times they abandoned the practice" (p.95).

¹⁸¹ Leary, *Perilous missions*, p. 55.

dropped leaflets over Tsingtao.¹⁸² Between 13 and 18 August 48, CAT mechanics at Canton assembled 6 Piper PA-11s for the Kwangtung Government.¹⁸³ “The Kwangtung Government recently purchased six PA-11s for use in municipal and provincial police work and for other routine duties such as observing river levels. The various parts – fuselages, wings and engines – came separately crated. Five were land planes and one was mounted on floats for use on Pearl River. CAT crews started work on the planes August 13, and completed the job in five days. Working under the blistering tropical sun, CAT engineers and mechanics spent nearly 550 man-hours on the job.”¹⁸⁴

CAT MECHANICS ASSEMBLE NEW PA-11's for Kwangtung Government. (See story on page Two) Left below, mechanics prepare to fit wing to fuselage. Right below, in foreground is PA-11 especially fitted with pontoons for river work.

下二圖：廣州天河機場上本隊機械人員正在加緊裝理那些 PA-11 型小飛機，這些都是粵省府自美訂購的。（請參閱廣州來訊）



(CAT Bulletin, vol. I, no.24, 1 September 48, p.12)

On 8 September 48, CAT inaugurated its first scheduled flight, when Captains Bigony and Hobbs took off from Shanghai in their C-46 XT-826 (“Tsingtao”) for the new weekly Shanghai-Nanking-Wuchang-Chengtow-Sian-Lanchow run, that is a slightly modified route compared to the one given in § 12 of the contract. There were 5 passengers plus mail on board, and on the return flight, a *New York Times* correspondent rode in the aircraft. The planes left Shanghai for Lanchow each Wednesday, returning to Shanghai on Thursday. Before, CAT planes had made only occasional flights to Lanchow.¹⁸⁵ The month of September brought another new type of service, as on 24 September 48, a CAT C-46 hauled tin ingots from Kunming to Haiphong and so made the Company’s first flight into French Indo-China, that is its first international flight. But there was also business as usual in September, like bringing spare parts to Tsinan enabling the local power company to repair the electric current and water supply for the city or like airlifting exportable cargo.¹⁸⁶

¹⁸² Souder, “Highlights in the history of Civil Air Transport”, p.21.

¹⁸³ The following 6 PA-11s are known to have been exported to China in June 48: msn 11-1508, 11-1509, 11-1510, 11-1525, 11-1544, and 11-1549; 11-1544 later became B-11103 on Taiwan (Burnett/Slack/Davis, *South-East Asia Civil Aircraft Registers*, p.22).

¹⁸⁴ *CAT Bulletin*, vol. I, no. 24, 1 September 48, p.2.

¹⁸⁵ Souder, “Highlights in the history of Civil Air Transport”, pp.21/2; *CAT Bulletin*, vol. II, no.1, 15 September 48, p.2.

¹⁸⁶ Souder, “Highlights in the history of Civil Air Transport”, pp.21/2; *CAT Bulletin*, vol. II, no.1, 15 September 48, p.6.

A sadder type of business, which in the meantime had become quite common in war-torn China, was evacuation. Decades later, under its new name Air America, the Company would become famous for its policy to be “First in – last out”. This heroic tradition was started here in China during the civil war, when more than once CAT planes were the last to fly out of a beleaguered city: In late September 48, a couple of days after CAT had flown in urgently needed spare parts for the local power plant, CAT had to evacuate its station at Tsinan. A CAT plane – with Captains Carleton, Richardson, and Burridge aboard – was the last civil aircraft to leave the city. During the last 6 months before that evacuation, CAT had made 1,266 relief flights to Tsinan alone.¹⁸⁷ On 17 September, Lew Burridge heard that the airfield was in danger of capture and ordered an immediate evacuation of CAT’s staff. But when Captain Shilling arrived on 18 September, only half of CAT’s staff had been able to find its way to the airfield. So Burridge returned later in the day and picked up the remaining CAT personnel plus some guards who had run to the CAT C-46. CAT continued to airdrop rice to the city’s garrison, but a couple of days later, Tsinan fell to the enemy.¹⁸⁸ The next to follow was Chinchow. On 26 September 48, CAT evacuated its station there. This time it was CAT Captain Bill Wingfield who flew in the last civil airliner to visit the falling city and evacuated all CAT and other personnel. During his take-off from Chinchow, shells were landing on the strip. “While on the way from Mukden to Peiping, Winfield radioed Chinchow to see if there was any chance of rescuing the last of CAT’s staff, including Paul Keng, Robin Lo, Y. C. Yao, N. F. Wang and C. Y. Nie. Getting lower clearance, he landed and parked as far as he could get from the 100 drums of gas still remaining on the field. No sooner had the CAT people clambered aboard than the Commies lobbed a shell that burst 300 yards away.”¹⁸⁹ On 23 October, CAT hastily evacuated Paotow station, and on 1 November, they evacuated a load of bank employees from Chengchow.¹⁹⁰

Indeed, flying had become quite dangerous for CAT: On 27 September 48, Marshall Yen Hsi-shan telegraphed that several CAT aircraft had gotten bullet holes while taking off from Taiyuan. On 5 October, C-46 XT-826 – while en route from Tsingtao to Mukden – was dangerously buzzed by 2 Russian fighters in the vicinity of Port Arthur. The following day, C-46 XT-824 was buzzed by several Russian Fighters in the same area,¹⁹¹ and the same happened to CAT Captain Davenport in C-46 XT-830 on 20 October. But CAT continued its relief flights to Mukden. Between 1 and 20 October, CAT planes had flown 1,289 long tons of food to Mukden and had evacuated 10,079 persons from the city. During one of the last flights from Mukden to Peiping, that is on 28 October, an aged Chinese man recovered his

23	SHA-TAO-MKN	5.0	"	822	
24	MKN-TSN-MKN-TSN-MKN-TAO	12.0	"	822	20
25	TAO-MKN-TSN-MKN-TSN-MKN-TSN	13.2	"	822	10
26	TSN-MKN-TSN-MKN-TSN-MKN-TAO	13.1	"	822	7
28	TAO-TYN-TAO-TYN-TAO	10.4	"	830	
29	TAO-MKN-TSN-MKN-TAO	9.8	"	830	
Oct-2	TAO-MKN-TSN-MKN-TSN	9.6	"	820	

In late September 48, the Mukden (MKN) airlift, flown from Tsingtao (TAO) and Tientsin (TSN), sometimes required more than 13 hours of flying per day
(Page from Doc Johnson’s log book kindly supplied by his son James on 14 February 2013)

¹⁸⁷ Souder, “Highlights in the history of Civil Air Transport”, pp.22-25.

¹⁸⁸ Leary, *Perilous mission*, pp.48/9; *CAT Bulletin*, vol. II, no.2, 1 October 48, p.2+8.

¹⁸⁹ *CAT Bulletin*, vol. II, no.3, 15 October 48, p.7.

¹⁹⁰ Souder, “Highlights in the history of Civil Air Transport”, pp.22-25; *CAT Bulletin*, vol. II, no.3, 15 October 48, pp.2+7.

¹⁹¹ *CAT Bulletin*, vol. II, no.3, 15 October 48, p.4.

hearing, which had been lost for 20 years. On 1 November, however, CAT had to evacuate its station in the city of Mukden, and again it was CAT who flew the last civil airliner out of the city, before Mukden fell to the enemy on 2 November 48. At that time, CAT had flown 17,208 long tons of cargo to Mukden alone since 1 January 48.¹⁹²

After the end of the Mukden airlift, many of the things to be mentioned in CAT's history during the rest of the year are far less dramatic, especially in the south: On 24 October, several CAT planes dropped leaflets over several Chinese cities; on 25 October, one of the C-47s – XT-803 – was scrapped. During the following days, CAT flew 6 loads of banknote paper, ink, and printing machine parts from Shanghai to Lanchow, and on 1 November, the company delivered life-saving medicine from the US Navy depot at Tsingtao to Peiping. On 27 December, CAT C-46 XT-802 (Captains Tingle and Snoddy) flew a load of Chinese Mohammedans from Canton to Lanchow, and the main danger was not the war, but bad weather. What was really new in those days, were 2 things: nightly airdrops and CAT's partial retreat. After the airfield of Taiyuan had become unsafe, the only way to supply the beleaguered city were airdrops. So on 2 November 48, CAT pilots Wingfield and Rousselot made the company's first successful nightly airdrops at Taiyuan, with ten airdrop flights to follow per day.¹⁹³ Indeed, in October 48, Communist troops again attacked the city of Taiyuan, and, although Taiyuan held out, the rest of Shansi province fell to the enemy.¹⁹⁴

The other new thing in CAT's history was that in the meantime, that is during the final months of 1948, the military situation in China had deteriorated to the point that some of CAT's main bases and offices had to be closed. Nanking and Shanghai were threatened by Communist troops so that on 12 November, Martial law was introduced in both cities. On 8 November, CAT closed its office at Peiping, evacuating most of the personnel. In order to maintain needed service to Taiyuan, Sian, Lanchow, Hankow, Canton, Hsuechow, Liuchow, and Kunming, aircraft were shifted to other operating bases. On 15 November 48, CAT started a slow and gigantic process of removing its main operating base and head office from Shanghai to Canton – the first to go were engineering, heavy equipment and families. Although the original plan had been to use ships, the deteriorating military situation made it necessary to change plans, and so on 15 November the air evacuation of CAT's main base began. This was particularly difficult, as CAT could not stop its services during the move: CAT's Engineering and Supply sections really did a tremendous job, as all missions were continued, and a daily average of 14-15 planes was kept in service and flying at all time.¹⁹⁵ On 15 November 48, *CAT Bulletin* noted: "Due to Nationalist military reverses in the North and the fall of Mukden, CAT has been forced to change many of its important flight routes. For the past months, CAT has concentrated almost exclusively on supplying Mukden, Chinchow, Tsinan and Chengchow. Now all those cities have fallen to the Reds. Without the loss of even a single day's time, CAT's fleet was shifted to cities in other areas of the nation. Today, frequent ports of call include Sian, Lanchow, Hankow, Taiyuan (mostly drops only) and Canton, with irregular trips to such cities as Liuchow, Kunming and Hsuechow. Tsingtao remains a busy center of CAT operations. Considerable business has been secured for CAT's new routes on both round-trip and single contract basis."¹⁹⁶ As to supplies to be flown to Taiyuan, Tsingtao – where Lew Burridge was in overall command of the airlift – remained CAT's major base, with Tientsin (280 miles from Taiyuan) and Peiping (250 miles away) as the primary staging areas.¹⁹⁷

¹⁹² Souder, "Highlights in the history of Civil Air Transport", pp.24-26.

¹⁹³ Souder, "Highlights in the history of Civil Air Transport", pp.24-28.

¹⁹⁴ Leary, *Perilous missions*, p.55.

¹⁹⁵ Souder, "Highlights in the history of Civil Air Transport", pp.26-27.

¹⁹⁶ *CAT Bulletin*, vol. II, no.5, 15 November 48, p.2.

¹⁹⁷ Leary, *Perilous missions*, p.58.

Of course, there were more supply and evacuation flights, and the most famous of them was probably the battle for Hsuehchow: On 5 November, 8 CAT planes started a 'round-the-clock service' for the hard-pressed Government forces at Hsuehchow, flying food and medicines in and bringing wounded soldiers out, "operating as a paramilitary adjunct of the Nationalist Air Force."¹⁹⁸ During the flight, CAT crews could only offer a drink of water, and those wounded who survived the flight, found Shanghai hospitals very poor and completely overcrowded. On 30 November 48, CAT aircraft waiting at Hsuehchow airfield were literally mobbed by panicky soldiers so that the crew had to chase them away by running up the engine to full power and CAT had to abandon the airlift. On 1 December 48, Hsuehchow fell to the enemy.¹⁹⁹ By that time, Hsuehchow's surviving defenders "drew up in defensive positions about sixty miles southwest of the city. CAT began airdrops with ten aircraft based at Nanking."²⁰⁰ But due to heavy anti-aircraft artillery, the drops had to be made from about 2,000 feet, and so many of the parachutes drifted into the Communist camp. By 11 January 49, all supply flights were stopped, because there were no Nationalist defenders left. "CAT had performed admirably during the battle of Hsuehchow. Between November 23, 1948, and January 11, 1949, the airlines had transported 37,136 troops, 135 tons of ammunition, and 1,501 tons of rice, cakes, and biscuits."²⁰¹ "The end of CAT's 'Operation Hsuehchow' (airdropping of food and military supplies in the Hsuehchow-Pengpu zone) has coincided with the denouement of a touching tragedy in China's war against Soviet aggression. A badly-mauled Nationalist army group, commanded by General Tu Li-Ming of Burma fame, was holding its ground courageously. Following Government evacuation of Hsuehchow, Tu's armies were tightly hemmed south of the city by superior Communist divisions. Cut off for weeks from all overland communications with Free China, Tu's army group fought valiantly on what few supplies could be obtained through airdrops. With reinforcements out of question, General Tu nevertheless bravely ignored Communist invitations to surrender, hanging on tenaciously to his ever-diminishing pocket. A distinguished fighter and leader of men, Tu had made his decision: to go down fighting. It was just one day before General Chennault received General Tu's New Year greetings that Nanking reported loss of radio contact with Tu's armies, asking all civil airlines to halt airdrop flights to the Hsuehchow area. About the same time, the San Francisco radio reported picking up a Communist broadcast stating that Tu's army had been annihilated and the General himself captured. Here is the text of Tu's New Year greeting to General Chennault: 'Dear General Chennault: Despite the increasingly severe attacks of the Communist "bandits", the officers and men under my command – bathed in blood and oppressed by hunger and cold – are keeping up the fight. The untiring efforts displayed by members of your esteemed airline in helping the airdrop have lifted our morale and struck fear into the hearts of the "bandits". Our troops at the front are overjoyed at the sound of an approaching airplane. Considering this friendship of yours, I can not but express my sincere gratitude. In the meantime I wish you a Happy New Year. (Signed) Tu Li-Ming.'"²⁰²

Another beleaguered city that was supplied by CAT at that time was the city of Taiyuan. As has been shown above, early as late 1947, CAT had evacuated people from Taiyuan, starting with Japanese repatriates in October 47. On 20 December 47, CAT had flown a party of newsmen from Peiping to the besieged city of Taiyuan to interview Marshal Yen Hsi-shan, and then back to Peiping. In the summer of 1948, CAT flew mail and 1,400 tons of flour to Taiyuan, and missionaries were evacuated from Taiyuan. On 27 September 48, Marshall Yen

¹⁹⁸ Leary, *Perilous missions*, p.51.

¹⁹⁹ Leary, *Perilous missions*, p.51.

²⁰⁰ Leary, *Perilous missions*, p.52.

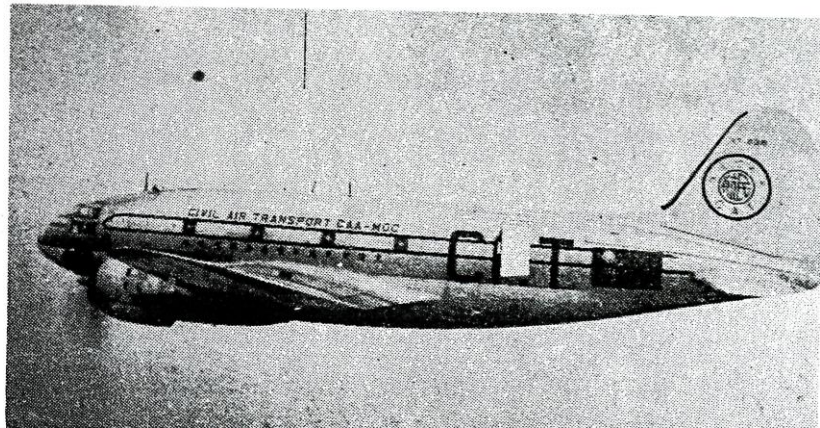
²⁰¹ Leary, *Perilous missions*, pp.52/3.

²⁰² (Anonymous), "Farewell from a valiant soldier," in: *CAT Bulletin*, vol. II, no.9, 1 February 1949, p.3.

Hsi-shan telegraphed that several CAT aircraft had gotten bullet holes while taking off from Taiyuan. As the airport was no longer safe, CAT made the company's first successful nightly airdrops at Taiyuan on 2 November 48. But CAT also continued to land at Taiyuan, and so on 10 December 48, CAT's C-46 XT-820 – flown by Captain Dutch Brongersma and co-pilot Jim Campbell – was wrecked on take-off from Taiyuan airfield. As the field had been under shell fire at that time, a shell fragment had probably caused a wheel to collapse so that the aircraft veered sharply into the cliff close to the narrow runway. Fortunately, no one was hurt.

3pedel. Cal. 0000
**picies CAT's continu-
 ing major role in Tai-
 yuan's heroic defiance
 of Communism. Doors are
 removed to facilitate
 rice-drop operation.
 (Capt. Bill Welk)**

這就是空投太原
 本隊C-46型機
 英姿，牠完成了
 艱巨的任務啊！



CAT C-46 XT-828 over Taiyuan
 (CAT Bulletin, vol. II, no.14, 15 April 49, p.14)

But CAT even augmented the number of flights to Taiyuan: Between 16 and 29 December 48, CAT made 109 flights to the beleaguered city; in a single record day, 30 flights were made, most of them drops. "Impressive as CAT flights to Hsueh-Taiyuan areas have been, the figures don't begin to tell the story. Before, supplying the hard-fighting Marshal Yen was a matter of short flights from Peiping and Tientsin. Today, with the loss of those two cities, flights must be made from Tsingtao, Shanghai, and Nanking: 5 or 6 hours for each round-trip. Capt. Norman Schwartz described some of the difficulties encountered: 'Yesterday we made the trip to Taiyuan in 6 hours. The temperature was 15 degrees below zero centigrade. With both cargo doors wide open, the cabin was unbearably cold. Up front we could close the compartment and stay reasonably warm (?), but the drop-soldiers were blue with cold by the time we got back.' Joe Rosbert, CAT's operations Head, describes other difficulties encountered: 'Alternate fields, in event of trouble, are few and far between. In the case of Taiyuan, it is several hours' flight to the nearest alternate. Similarly, with the loss of many key northern cities, weather stations have had to be given up which once supplied valuable data. Today, flying long distances, weather is all too often a factor impossible to predict. In view of these hazards, the 60,000 pounds of food and military supplies carried to Marshal Yen in a single day constitute an impressive accomplishment.'"²⁰³ On 28 December, Captain John

²⁰³ Ed Souder, "CAT December operations", in: *CAT Bulletin*, vol. II no.8, 1 January 1949, p.2.



SKIPPER OF PLANE 824, which brought the marshal to Nanking from Taiyuan, was John Plank, with D. Pao as co-pilot and T. Y. Lu as flight operator. This is the crew.

駕駛824號機載閩主席飛京之人員



MARSHAL YEN HSI SHAN just before he embarks for the ride to Nanking. Capt. Plank took this picture at Taiyuan airfield

閩 錫山主席在登機飛京前之影

(Both photos in: *CAT Bulletin*, vol. II, no.8, 1 January 1949, p.15)

Plank and his crew, co-pilot D. Pao and flight operator T. Y. Lu, took CAT C-46 XT-824 to Taiyuan and made a hazardous landing there in order to fly Marshal Yen Hsi-shan to Nanking for a very important conference.²⁰⁴ CAT crews showed the same heroism also at other places, and so on 30 December 48, Captain Brooks received a commendation from the Chinese Ministry of Defense for a “perfect drop” into Hsueh battle area. Brooks’ C-46 had been dangerously damaged by a shell fragment striking the carburetor, but he managed to bring the plane safely back to Nanking.²⁰⁵

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²⁰⁴ *CAT Bulletin*, vol. II, no.8, 1 January 1949, p.15.

²⁰⁵ Souder, “Highlights in the history of Civil Air Transport”, pp.27-29.