

CAAC

THE AIRLINE
OF
COMMUNIST CHINA

By
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Major airports in China today are beautifully landscaped. Above is the Soviet-built H-14 of CAAC at Canton. (Photo — H. L. Keenley, courtesy of the author)

The following article was prepared for the *JOURNAL* from Miss Porch's paper, presented at the Sixth Annual Meeting of the American Institute of Aeronautics and Astronautics at Anaheim, California on 20 October 1969.

Of the many state-owned airlines throughout the world none seems as intriguing at the moment as the one belonging to Communist China. Complete data on civil aviation in China are lacking, however, enough material is available so that historians who study airline operations and compare the changes in airlines over the years can find much to speculate and wonder about.

Soviet assistance is highly touted for creating a "sound civil airline" in China. Perhaps this praise is deserved, especially in the post-1949 period, but American influence should not be overlooked. United States aviation know-how played a significant part in establishing civil airlines in China in the 1945-1949 era as well as the better-known military aviation activities. Although the Soviets were furnishing a few airplanes to the Chinese in this period, the models were obscure and not comparable to the American-made C-46s and C-47 transports supplying China's Nationalist forces.

The positive American influence in China's postwar civil aviation came with General Claire Chennault's return to China in 1945 after retiring from the U. S. Air Force. He established the American-owned civil air line called Civil Air Transport (CAT), at the direction of Generalissimo Chiang Kai-shek, using surplus C-46s. Some of the personnel of the war-time American Volunteer Group (Flying Tigers, later the 14th Air Force) stayed on as mechanics and pilots. Chennault directed CAT in China and later in Formosa until illness forced his return to the U. S. in 1958.

American airplanes made their appearance in other ways too. As World War II ended, U. S. policy toward China became one of an attempt to unify and strengthen the country through continued efforts at cooperation and unification of the Nationalist and Communist camps. American Ambassador (General) Patrick J. Hurley went out of his way to encourage the Communists to negotiate with the Nationalists. Finally Mao Tse-tung agreed to go to the Nationalist capital at Chungking to discuss postwar reconstruction with Chiang Kai-shek. Ambassador Hurley placed a former USAAF Douglas C-47 transport at Mao's disposal for use between Yenan and Chungking. Mao and Chou En-lai used this aircraft to fly to Chungking for meetings in August 1945 — Mao's first airplane ride. When they left two months later they took the airplane with

them for Mao's personal use.¹

That this airplane was well used is borne out in an interview that Anna Louise Strong had with Mao in the caves of Yenan in 1946. She said that she found Mao extremely well-informed on world affairs, then learned that he was using the airplane to bring in journals, newspapers, and books from outside sources.²

As the Communists gained ground during the latter part of the civil war, an untold number of Nationalist C-46s and C-47s fell into their hands. Many of these airplanes are in use in China yet today, in the military service and with the Specialized Services of the Communist airline. Both C-46s and C-47s had been widely used on supply routes to China during World War II, in flights "over the Hump" from India to Kunming, Yunnan. When the Japanese surrendered hundreds were turned over to the Chinese for military use and sold to Chinese operators for civil use.³ In addition, the Soviets later furnished the Chinese with their Li-2, a version of the DC-3 produced in Russia during World War II under license from the United States.*

At the cessation of mainland fighting between the Nationalists and the Communists, aviation in China was in a state of complete disarray. Most of the airfields, airports, and navigational aids had been damaged or destroyed. The airlines had ceased operations; altogether in the whole country only 17 transport airplanes were operational — and aviation fuel was extremely scarce. Even if the trained ground crews could have been found immediately to work, there was little maintenance equipment and few spare parts. Air crews were nearly as scarce. Before the Communist takeover, nearly half of the pilots serving in China's airlines were Americans, who of course did not intend to nor were welcome to fly Chinese Communist transports. In addition, many of the Chinese crews of the 71 airplanes detained in Hong Kong (while ownership was being debated) refused to return to the Mainland and sought employment elsewhere.

*Researchers continue to disagree somewhat on when and where aircraft were obtained for Chinese aviation or where certain aircraft were built, and what their proper names are. For example, Richard Bueschel and this author have done the most research on Chinese-manufactured airplanes for the 1957-1960 period. It is not too surprising that these do not entirely agree because of access to different sources, unfortunately most of it secondary material.

Although the value of civil aviation was acknowledged in 1949, more pressing problems than restoring air transportation faced the Communist government, and little effort was made to put the airlines back into operation until the Spring of 1950. At that time, with Soviet assistance, a Civil Aviation Bureau (CAB) was established to oversee the provision of air transport services.

Two separate air-carrier companies were established in 1950. One was called *Sovetsko-Kitaysko Aksionernoe Obshestvo Grazhdanskoi Aviatsii* (SKOGA), and was jointly owned Sino-Soviet company. The Soviets furnished Li-2 (the Russian DC-3), I1-12, and I1-14 twin engine transports, maintenance equipment, spare parts, and pilots. The Chinese furnished a few airplanes plus some ground crews, co-pilots, and radio operators (former airline employees who had been recruited for this new assignment). A limited number of Chinese students were sent to the Soviet Union for training as aeronautical engineers and designers.

The other air carrier was called *China Civil Aviation Corporation* (CCAC) and was owned completely by the Communist Chinese government. It began limited scheduled operations in August 1950 between Peking and Chungking, but most of its flights were nonscheduled operations in support of the military groups. CCAC had 26 U.S.-built aircraft that had been abandoned by previous Chinese air carrier but, only half of these were operable. During the period from 1951 to 1956, CAC was able to re-establish most of the original domestic air routes and to begin international routes to the USSR, Burma, and North Vietnam on a scheduled basis.

From 1952 to 1954 the Chinese airline and the CAB went through several reorganizations; emerging by the Fall of 1954 as the Civil Aviation Administration of China — CAAC — in charge of not only administration of aviation but as operator of the airline. In October, SKOGA was dissolved and the Soviet interest was transferred to the Chinese. By the end of December, CAAC had taken over SKOGA's planes and operations, integrating all services and routes into a single state-owned airline. In 1962 the agency was raised to general bureau status (higher than a ministry)

and given the new name of *General Bureau of Civil Aviation* (GBCA).

GBCA is responsible for all civil aviation activities. It is administrator and policymaker, and provides and operates the airports, navigational aids, and maintenance facilities. It supervises CAAC's scheduled and non-scheduled passenger and cargo operations, agriculture, forestry, and emergency flights, and the transporting of passengers, mail, and supplies to remote regions.

The GBCA can be viewed more like a combination of the U. S. Federal Aviation Administration and the Civil Aeronautics Board, with CAAC as the operating airline. There is really no "shorthand" name for the airline, but the international timetables still refer to it as CAAC, although this is actually a misnomer. Neither GBCA nor CAAC appears on the airline's equipment, but rather four Chinese characters that stand for "China Civil Aviation."

MILITARY TAKEOVER

The first indication that reactions to the Cultural Revolution might put civil aviation in jeopardy was a quiet announcement in late January 1967. A Japanese correspondent spotted a wall poster saying merely, "People's Liberation Army takes over civil aviation." Reporters in China had already learned that wall posters were not always accurate, but the economic and military import of this one demanded more information. The correspondent tracking it down found that seizure had been ordered by the State Council and the Military Commission of the Communist Party Central on January 26. The reasons were terse — "to protect normal flights and to prepare for war."

Nervous over the disruptions in all transportation, the Party was probably trying to avoid a national interruption of airline service. Also, tight control of the airports no doubt served to discourage rampaging Red Guards from damaging property and equipment or harassing international flights as had occurred earlier when an Aeroflot plane carrying dependents of the Soviet Embassy Staff was prevented from taking off for several hours by a Red guard

The Douglas C-47 and Curtiss C-46 airplanes provided the major part of the Chinese air transport system. Some were used well into the Communist era. Here a USAAF C-47 takes off from the India end of the "Hump" line in latter WWII. (Photo-Courtesy of Harry Gann)



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demonstration.

There is some conflicting evidence as to who is now running the airline, but most reports indicate that airline personnel are still handling the flying and ground operations, and that the role of the military is that of protector and political advisor. There is also the possibility, but no evidence as yet, that the GBCA has been given the responsibility (under military control) for Air Force transports as well as the civil air transports. This action would serve to consolidate maintenance and repair facilities, and much of the specialized air work in which the Air Force often participates.

SUBSEQUENT DEVELOPMENT

In a country as large as China (750 million people in 3.8 million square miles) where surface transportation is far from complete, the demands on air transportation are great. However, the size and operations of China's airline seem entirely too small to meet this demand adequately. In passenger operations, for example, fewer than 300 airplanes provide scheduled services to about 80 cities.* Most capital cities have daily service to Peking, but flights to smaller cities and towns are made once or twice a week.

CAAC's growth has been hampered by a lack of long-range equipment and by operational problems inherent in serving one of the largest and most rugged countries in the world. As can be seen from Table I the growth has been steady but not spectacular. A number of new routes were added yearly, but route mileage and number of passengers carried did not make any significant gains until 1957 and 1958 when turboprop transports were received and long, non-stop routes were begun.

When opposition to the Cultural Revolution developed in 1967, the airline canceled flights to many of the trouble spots or continued them on a priority basis only. From October 1967 through June 1968 the *Official Airline Guide*

* In 1967 scheduled air carriers in the United States had 2,188 aircraft in use serving 521 domestic points and 161 international points.⁴

showed that most flights to central and western China were "temporarily suspended." With some order now being restored in China, schedules may be returning to normal in most places and the backlogs of freight may be dissolving.

Civil aviation in many underdeveloped countries has grown pell mell, with emphasis on the rapid growth of prestige-type airlines plying international routes. This growth has often been catastrophic and has necessitated retrenchment and replanning for the airline to survive. The Chinese Communists, however, did not follow this precedent and chose to practically ignore international route development or the development of a flag carrier. They have, in fact, been deliberate and slow in expanding air service. CAAC operates only four scheduled international routes to Rangoon, Hanoi, Pyongyang, and Irkutsk. China's self-imposed isolationism and the shortage of long-range equipment, plus the expense of operating international routes, have probably influenced these restrictions.

This is not to say that China has no interest in air agreements. On the contrary, she has been making agreements with other countries since 1955, including Iraq and Saudi Arabia, and all of her southeastern neighbors except India and Thailand. However, China seems to prefer to let carriers of other nations handle most of the international traffic.

It is easy to speculate on reasons for the Chinese decision to avoid a large international airline. Perhaps the leaders feel that China's past glories and present power are well-known without advertising it by having a flag carrier; perhaps they are waiting until they have more long-range transports or until some are built in China; perhaps it is their general distrust of the outside world. But whatever the reason, Chinese Communist civil aviation has gone beyond the borders only to the minimum extent needed for Chinese official travel, even when reciprocal rights to other countries have been available. CAAC can expand beyond these limits whenever Chinese Communist policy so desires.

Another point to be kept in mind is that an international airline is expensive to set up and operate. At the time that

Many of the Curtiss C-46 airplanes were eventually left with the Communist China airline in the takeover of 1949. This photo was taken in the Buffalo, N.Y. plant at the height of the production effort, March 1943. (Photo — Curtiss Wright Corporation.)



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the Soviet Union would have furnished equipment, CAAC did not have the technical personnel or ground support equipment needed, and by the time it had gained these essentials, the Soviet Union had withdrawn its aid. Most developing countries can count on foreign aid and credit to establish their international airlines, but China is limited in this area. The immediate costs of "down payment" for an international airline have therefore been higher for Communist China than for many other countries.

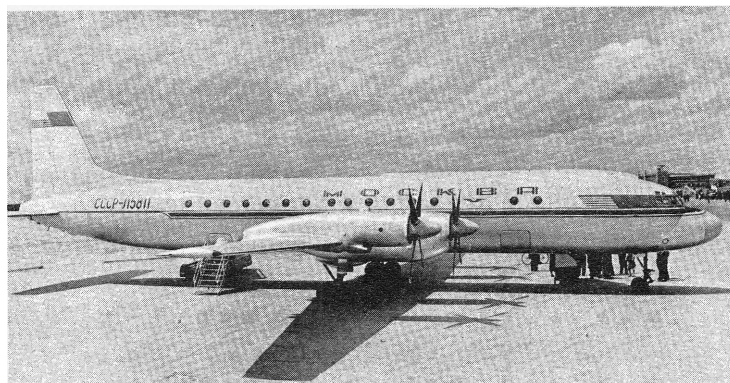
EQUIPMENT

Historically, from 1949 to the recent year, the Chinese airline depended on the USSR for most of its aircraft. Estimated Soviet equipment in use today on CAAC includes: twenty-eight Li-2s, five Il-12s, five PS-84s (similar to Li-2s), fifty Il-14s, and fourteen Il-18s. A report from Hong Kong in 1965 said that China had purchased two An-24s, two Tu-124, and five Mi-6 helicopters, with delivery to be made in late 1965, but it is not known whether these were intended for civil or military use. If they were delivered, the Tu-124s would be the first jet transports for China.

The first break from sole dependence on Soviet equipment occurred in 1961 when six British Vickers Viscount turboprops were purchased by the China National Machinery Import and Export Corporation on behalf of the Civil Aviation Administration of China (GBCA's predecessor). Four of these were delivered in 1963 and two in 1964, to serve as the backbone for the long-distance, non-stop routes.

CAAC also uses a variety of small (5-10 passenger) propeller-driven aircraft, largely based on Soviet designs and built in China under license. These include about 300 An-2 single-engine biplanes (most of which are used by the Specialized branch), 50 Peking and 10-15 Capital twin-engine monoplanes, the latter based on the An-14.

There are about fifteen Mi-4 helicopters in use, also built in China under license from the USSR. In 1967 China purchased fifteen French Sud-Aviation Alouette jet helicopters, some perhaps for military use. If all the aircraft ordered are used in the civil fleet, CAAC would have a total fleet of about 35 helicopters and 480 fixed-wing aircraft, but only 22 of these fall in the long-range category.



As the American influence was supplanted by Soviet, the re-equipment of China's airlines relied on such as this 11-18 Moskva. CAAC had twelve in operation in the mid-1960's.

As a new sense of order and control is established in China, it may be anticipated that resources for the expansion of aviation will become available.

REFERENCES:

- ¹ Bueschel, Richard M., *Communist Chinese Air Power*. New York: Praeger, 1968. pp. 12-13.
- ² Strong, Anna Louise. "Reminiscences on Interviews with Chairman Mao Tse-tung on the Paper Tiger." *China Reconstructs*, November 1966, pp. 4-8.
- ³ Bueschel, p. 119.
- ⁴ 1968 *Air Transport Facts and Figures*. Air Transport Assn. of America, Washington, D.C., 1969.

ABOUT THE AUTHOR

Miss Harriett E. Porch is a native of Colorado, attended University of Denver, has a Master's degree in transportation and BSBA in Airline Airport Management. She is presently editor and staff researcher with The RAND Corp., Santa Monica, and her works include published reports on civil aviation in communist countries and the U.S. missile safety program. Her aviation career started during Korean War as Link instructor for Navy, later in Flight & Ground Safety for United Air Lines. Currently active in aviation education, she serves on the Board of the National Aerospace Education Council, as well as being LCdr in Naval Reserve, Los Alamitos. She has little time for hobbies but admits to spending time poking around the Colorado Rockies as amateur prospector.

TABLE I

CAAC PASSENGER AND FREIGHT OPERATIONS, SELECTED YEARS 1950 - 1968 (available data)

	1950	1952	1954	1956	1957	1958	1959 EST.	1964 EST.	1968 EST.
1. Unduplicated route (kilometers)	11,387	13,123	15,243	19,082	26,445	32,995	36,000	39,000	44,000
2. Freight, including mail (metric tons)	767	2,047	4,734	7,926	7,779				
3. Number of Passengers carried		70,000			258,000				
4. Number of cities served	5	13		29	42 ^b		70 ^c	76 ^c	81-86 ^d

a The Chinese Communists put a freeze on statistical information beginning in 1959; 1964 and 1968 figures are estimates.

b Including Mandalay, Rangoon, Irkutsk, and Hanoi.

c Including Mandalay, Rangoon, Hanoi, Pyongyang, and Irkutsk on a scheduled basis; Ulan Bator on a nonscheduled basis.

d There are 52 cities in the main trunk route, 25-30 on local routes, and 4 on international (Rangoon, Hanoi, Pyongyang, and Irkutsk).

Sources:

Line 1. 1950-1958: State Statistical Bureau, *Ten Great Years*, Foreign Languages Press, Peking, 1969, p. 144; 1959: *Pravda*, Moscow, December 8, 1959, p.3; 1960: *The Aeroplane and Astronautics*, March 8, 1962, p. 245; 1964: Peking radio, broadcast, November 16, 1964.

Line 2. 1955 *Statistical Abstract*, Peking, 1956, p. 45; Peking Review, April 8, 1958, p. 19; and Yu N. Kapelinskiy, et al., *Development of the Economy and Foreign Economic Contacts of the People's Republic of China, 1959*, translated from the Russian by JPRS, U. S. Department of Commerce, May 23, 1960, No. 3234, p. 327.

Line 3. *Peking Review*, April 8, 1958, pp. 18-19.

Line 4. Route maps; State Statistical Bureau, *op. cit.*; and various news sources.