Communist China's Civil Aviation: 1950-1968

Harriett E. Porch
OF THE MANY state-owned airlines throughout the world none seems as intriguing at the moment as the one belonging to Communist China. Perhaps it is the current happenings in China or the general mystique of the Far East that gives wide readership to everything about that country, but to students of law and transportation, the operation of China's civil aviation is especially interesting. Its recent shift of control from civil to military, together with its wide responsibility for different types of services, its problems of acquiring equipment, and its generally slow growth make it unique among the world's airlines.

In most communist states, civil air transportation is an important segment of the planned economy and its growth follows that of the state's needs. In Communist China, however, it is difficult to determine whether or not air transport policies have consciously been a part of industrial growth and locational planning. Passenger and cargo services have, first of all, been aimed at completing the communication link between provincial capitals (although Tibet and Fujian still do not have scheduled service). Further expansion has tended to establish long-distance scheduled routes to large population centers and not necessarily to new industrial centers. Because of the scantiness of information coming out of Communist China since 1958 it is impossible to present a complete picture of Chinese civil aviation. All that can be attempted here is to satisfy some of the curiosity of the Western reader. The following discussion attempts to give something of the background of the present airline, and to detail as much as possible its routes, operations, and special services. Regrettably, the reader may have as many questions when he finishes as when he began; it is only hoped that this study will provide him with somewhat more information.

II. The Post-War Picture

At the end of the war between the Nationalists and the Communists, aviation on the Mainland of 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 as only 17 operational transport planes were available and there was little maintenance equipment and few spare parts for their reconditioning. Aviation fuel was extremely scarce. Finally, the scarcity of trained personnel severely restricted aviation’s recovery. Before the Communist takeover, 47 percent of the pilots serving in China’s civil aviation were Americans. Many of the Chinese crews of the 71 planes detained in Hong Kong (while ownership of the planes was being determined) refused to return to the Mainland and sought employment elsewhere.

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 airline back on its feet 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. The CAB was nominally under the Ministry of Communications, but was actually controlled by the military (People’s Revolutionary Military Committee and its successor, the People’s National Defense Council) until about 1954.

Two separate air carrier companies were established in 1950:

(1) Sovetsko-Kitaysko Aksionernoe Obshestvo Grazhdanskoi Aviatsii (SKOGA) was a jointly owned Sino-Soviet company, 50 percent owned by each government. (This form of Soviet assistance follows the pattern laid down with the European Soviet Bloc countries to assist them in reconstructing their airlines after World War II.) The Soviets furnished Li-2, Il-12, and Il-14 transports (which carry 15 to 32 passengers), maintenance equipment, spare parts, and pilots. The Chinese furnished a few planes plus most of the ground crews, co-pilots, and radio operators. A limited number of Chinese students were sent to the Soviet Union for training as aeronautical engineers and designers.

(2) China Civil Aviation Corporation (CCAC) was owned completely by the Communist Chinese government. It began scheduled operations in August 1950 between Peking and Ch’ingking, but most of its flights were nonscheduled operations in support of the military. CCAC had about 26 United States-built aircraft (only about half of which were operable) that had been abandoned by previous Chinese air carriers. It later obtained most of the planes that had been detained in Hong Kong. During the period from about 1951 to 1956, most of the original domestic air routes were re-established and international routes to the USSR, Burma, and North Vietnam were begun on a scheduled basis.

In July 1952, the CAB abolished CCAC and established a new company, the Chinese People’s Aviation Corporation, which then flew most of the domestic routes. In March 1954, the CAB abolished this corporation and took over its assets directly, operating the services in the east and south of Mainland China. SKOGA continued to operate across the north and in the west.

The following year, the Chinese people undertook their first Five-Year
Plan for development of their economy. Civil aviation was given new tasks: to broaden communication between the capitol and important cities in the provinces and in surrounding regions, and simultaneously, to develop special purpose aviation to serve the agricultural and forest industries, for geologic exploration, and for express and emergency flights.

During 1954 a new Chinese People's Congress was elected, and there were certain shifts in internal authority. In aviation, the CAB became the Civil Aviation Administration of China (CAAC) and was put under the direct control of the Ministry of Communication. In October, SKOGA was dissolved and the Soviet interest was transferred to the Chinese. What concessions or payments were involved in this transaction are not known. By the end of the year, CAAC had taken over SKOGA's planes and operations, integrating all services and routes into a single state-owned airline.

III. Administrative Organization of Civil Aviation

The planning, supervision, and direction of each type of transportation in Mainland China are handled by an administration, a ministry, or a bureau. The administrative control of CAAC, as far as government policy was concerned, was shuffled back and forth several times from the Bureau of Industry and Communications to the State Council. Finally, in 1962, it was placed directly under the State Council, where it has remained. The agency was raised to general bureau status (higher than a ministry) and is now called the General Bureau of Civil Aviation (GBCA). This reorganization probably did not cause any changes in the internal organization except to strengthen certain departments, such as international routes, and define directorate and department responsibilities more carefully. The GBCA can be viewed more like a combination of the United States Federal Aviation Administration and the Civil Aeronautics Board, while CAAC is the operating airline. In fact, there is no "shorthand" name for the airline, but for reference purposes the international timetables still use CAAC. Neither GBCA nor CAAC appears on the airline's planes, but rather four Chinese characters that stand for "China Civil Aviation."

The first indication that reactions to the Cultural Revolution might put the airline 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." Wall posters are not always accurate, nor do they give any concrete economic news, but the economic and military import of this one demanded more information. The reporter 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 "to protect normal flights and to prepare for war." Nervous over the disruption in all transportation, especially the rail service between Shanghai and Peking, the Party was probably trying to avoid a national interruption of airline service. Tight control of the airports no doubt served to discourage rampaging Red Guards from damaging prop-
There is some conflicting evidence as to who is 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. The latter role, of course, includes "weeding out the bad seeds and capitalists."

There is no organization chart available for GBCA, but discussions in the Communist Chinese press of various offices and their responsibilities indicate that its organization is much like that of the Soviet Ministry of Civil Aviation and its airline, Aeroflot. Whereas Aeroflot has a territorial administration for every Republic, however, GBCA has only six, which they refer to as "Air Region Adjustment Organizations" (ARAOs) or regional management bureaus. Each of these covers several provinces or autonomous regions and is responsible for all local flights and supporting services in its area, including line maintenance, fueling, and the operation of the airfields, plus servicing the trunk route airplanes. The ARAOs probably have departments to carry out the local and regional responsibilities—much as line and station managers do in the organization of a United States carrier.

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

IV. Specialized Aviation

Because China is basically an agrarian nation, the need for nonscheduled aviation support to agriculture and forestry has taken priority over scheduled services. About 200 to 250 single-engine aircraft (primarily An-2 biplanes, a few Li-2s, and a few helicopters) have been delegated to the provinces by GBCA. This is a low number for the size of the job and the country. The services performed include moving men, equipment, seeds, and breeding stock to newly developing regions, planting fish in lakes, aerial surveying and photography, flying fire patrols, and cropdusting. In 1967 China treated an estimated 4.9 million acres by air—about one-fifth of the cultivated land. This branch of civil aviation serves industry as well by flying technicians, blueprints, instruments, and parts to industrial areas.

Women pilots have been flying in the specialized services since 1952. A number of articles have been written about their experiences while making forest fire patrols, emergency medical flights, flood relief, and freight carrying flights.

As a comparison, the United States treats about 74 million acres annually, and the Soviet Union 113 million acres—both, of course, using many times the number of aircraft used in China. In the United States, over 5000 planes are used in agriculture; in addition, the United States Forest Service uses about 300 fixed-wing aircraft and 200 helicopters.
In a country as large as China (nearly 750 million people in 3.8 million square miles) where surface transportation is far from complete, the demands on air transportation are probably greater than in most countries. However, the size and operations of China's airline are entirely too small to provide adequate service. In passenger operations, for example, only 200 to 250 planes provide scheduled services to only about 80 cities. Most capitol cities have daily service to Peking, but flights to smaller cities and towns are only 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 1, the growth has been steady but not spectacular. A number of new routes were added yearly, but not until the turboprops were received were long, non-stop routes begun.

CAAC's total route mileage is now estimated to be 44,000 kilometers. The major trunk routes serve 52 cities, the majority of them having populations of 100,000 and over; local routes give another 25 or 30 smaller towns and cities scheduled air service. When opposition to the Cultural Revolution developed in 1967, the airline canceled flights to many of the troubled spots or continued them on a priority basis only. From October 1967 through June 1968 the Official Airline Guide (OAG) showed that most flights to central and western China were "temporarily suspended." It is puzzling that this was even admitted, and it apparently was the cause of some embarrassment, for subsequent issues of the OAG have just listed international schedules, and only nine domestic schedules. Air freight has been especially affected because connecting rail and truck lines were often severed. Reports of backlogged freight continued through the summer of 1968. Shortages of aviation fuel have also been reported at some airports, resulting in canceled flights. With some order being restored in China at this time and with the military still in control of civil aviation, schedules may be returning to normal in most places.

B. International Routes

Civil aviation in many underdeveloped countries has grown pellmell, with emphasis on the rapid growth of prestige-type airlines flying 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

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3 Heymann makes the point, "There seems to be an irresistible compulsion in many underdeveloped countries to pursue illusions of grandeur and the trappings of national prestige. Their political leaders, being under pressure to demonstrate quick dramatic progress, lavish attention on the monumental development of their capitol cities. An international airport, a palatial air terminal, modern jet aircraft. . . these visible symbols of modernism are eagerly acquired with little regard for cost or practicality . . . ." See Heymann, Civil Aviation and U.S. Foreign Aid: Purposes, Pitfalls, and Problems for U.S. Policy, the RAND Corporation, R-424-RC, Jan. 1964, pp. 20-21.
### TABLE 1
**CAAC Passenger and Freight Operations, 1950-1968**

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<td>2. Freight, including mail (metric tons)</td>
<td>11,387</td>
<td>10,497</td>
<td>13,123</td>
<td>13,971</td>
<td>15,243</td>
<td>15,511</td>
<td>19,082</td>
<td>26,445</td>
<td>32,995</td>
<td>36,000</td>
<td>39,000</td>
<td>44,000</td>
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<td>3. Freight turnover, including mail (thousand ton—km)</td>
<td>767</td>
<td>—</td>
<td>2,047</td>
<td>3,607</td>
<td>4,734</td>
<td>4,711</td>
<td>7,926</td>
<td>7,779</td>
<td>—</td>
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<td>4. Number of Passengers carried</td>
<td>820</td>
<td>—</td>
<td>2,430</td>
<td>4,466</td>
<td>5,602</td>
<td>5,143</td>
<td>8,254</td>
<td>8,250</td>
<td>13,310</td>
<td>15,580</td>
<td>—</td>
<td>—</td>
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<td>5. Passenger kilometers (thousands)</td>
<td>—</td>
<td>—</td>
<td>70,000</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>258,000</td>
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<td>6. Number of cities served</td>
<td>9,780</td>
<td>—</td>
<td>24,090</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>79,870</td>
<td>108,990</td>
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**Key:**
- Not available.
- The Chinese Communists put a freeze on statistical information beginning in 1959; 1964 and 1968 figures are estimates.
- Including four foreign cities: Mandalay, Rangoon, Irkutsk, and Hanoi.
- Including six foreign cities: Mandalay, Rangoon, Hanoi, Pyongyang, and Irkutsk on a scheduled basis; Ulan Bator on a nonscheduled basis.
- There are 32 cities on the main trunk route, 25-30 on local routes, and 4 on international (Rangoon, Hanoi, Pyongyang, and Irkutsk).

**Sources:**
carrier. They have, in fact, been deliberate and slow in expanding air service. CAAC operates only four scheduled international routes: Rangoon, Burma; Hanoi, North Vietnam; Pyongyang, North Korea; and Irkutsk, USSR. 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 including all of her southeastern neighbors except India and Thailand. China seems to prefer to let carriers of other nations handle most of the international traffic. Pakistan International Airlines and Royal Air Cambodge were the first non-Communist airlines allowed to fly into Communist China, beginning service to Canton and Shanghai in 1964. Indonesia's airline, Garuda, became the next to serve China, opening a route from Jakarta to Canton in early 1965. This service was discontinued in the fall of 1967 when the two countries broke diplomatic relations. Air France began service into Canton and Shanghai on 20 September 1966. Aeroflot's service to Peking is now irregular but CAAC, North Korea's newly designated airline, flies into Peking once a week.

Japanese interest are also quite eager for a route to China. A group of Japanese businessmen have been trying to get permission from both their government and from China to begin air service between a southern city in Japan and Shanghai. China was asked in 1965 for permission to operate nonscheduled services, and it is understood that the request was renewed informally this summer during talks in Peking, but without success.

As to reciprocal agreements, the Chinese Communist government and the government of Ceylon discussed air service as far back as 1961. Both sides signed their conference papers, but no further progress has been reported. A tentative agreement was reached in May 1965 with the United Arab Republic for service to China, but details have not been announced nor have negotiations continued. Talks were begun about the same time with Afghanistan, although in this case the details of an agreement may still be under discussion. CAAC flew a trial run over the proposed Peking-Urumchi-Kabul-Karachi route as long ago as March 1965, using a four-engine Il-18 turboprop.

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 could have expanded beyond these limits had Chinese Communist policy so desired.

Another point to be kept in mind is that an international airline is
expensive to set up and operate. At the time that 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 most of 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 or "down payment" for an international airline have, therefore, been higher for Communist China than for many other countries.

C. Passenger Operations

Although China scorns the international organizations such as IATA and ICAO, most of the airline passenger operations such as ticket sales, weight limits on baggage, passenger handling, and refreshments in route, follow those of other airlines. Of course, CAAC does not patronize aviation underwriters but it apparently does subscribe to some idea of passenger liability. On domestic flights, for example, an added charge is a compulsory insurance premium at the rate of 0.5 percent of the published fare.

On board the aircraft a stewardess announces the route and altitude to be flown, time enroute, and estimated time of arrival. Passengers have remarked that among the most agreeable features of the cabin service is the frequent provision of wet towels—cold in the humid south, hot in the cooler north. The aircraft are spotlessly clean. The Cultural Revolution brought about a change in aircraft interior decor, however. All planes now have a large portrait of Mao Tse-tung mounted at the front of the cabin and placards of his sayings around the walls. The stewardesses hastily perform their duties and then read and sing the displayed quotations. On many flights the cabin becomes a classroom in which the more devout passengers may learn the sayings from the little red book or discuss revolutionary thought.

There has been no clue in official reports as to the number of passengers carried or the passenger-kilometers. A freeze was put on these and other statistics in 1958. Even the 1958 figures are suspect, so it is extremely hazardous to estimate such data. Noting that the routes have been expanded (as noted in news bulletins), we can only assume that passenger and cargo figures have also increased somewhat.

Passenger traffic on CAAC will probably not increase to any great extent unless the government and the newly created Revolutionary Committees make changes in their travel policies. We have no way of knowing what percentage of workers is being moved by air to new locations, but this could be increased at any time since these people are relocated at government expense. Air travel, even with a cut in fares is beyond the reach of many workers, who, with per capita incomes of about $100 per year, will continue to travel by bus or train. Probably the primary factor in determining domestic transport growth will be the extent to which the regime decides that it is better to have key people use air travel rather than take surface transport or do business by mail. We do not know enough about the Chinese Communist attitudes toward business travel to be able to pre-
dict aviation growth on this basis, but it seems that an increase in official travel rather than personal travel will determine the growth of civil air traffic.

This does not, of course, preclude the resumption of non-official travel in small volume, particularly travel by foreign tourists, journalists, and delegations, and so on. The regime can always relax travel restrictions where airline capacity is not fully utilized for official travelers, add flights to places that Party officials want foreigners to visit, and the like. It is also quite possible that a relaxation of Chinese Communist ideology on incentives for workers might lead to developing a small domestic tourist trade in which the Chinese equivalent of the USSR’s Stakhanovite workers would be flown to tourist resorts. But predicting the probability of such a development involves predicting the evolution of Chinese Communist ideology, which is even more hazy than the future of official travel on CAAC.

VI. CIVIL AIRFIELDS

Although the development of civil aviation in Communist China has been slow, the industry gets its share of funds for capital construction, most of which go into new or extended runways. Many airfields with paved runways were constructed in northeast China in the pre-Communist period by the Japanese, and in southern China by the Americans. Many of these airfields are still in use and have been expanded. Except for those airfields serving international flights and those used jointly with the military, few have adequate night lighting or all-weather facilities.

The best-equipped civil airports in China are Shanghai and Canton. They have paved runways, navigational aids, and complete lighting facilities. The terminals, beautifully landscaped and with sculptured gardens, have modern shops, snack bars, barber shops, dining rooms, banks, and post offices. During 1966, before travel was restricted, western visitors reported that they were greeted courteously at all airports, that their baggage was handled well, and that the planes were on time. Since 1967, Red Guards and other revolutionary groups have often been present at the terminals to “entertain” the waiting passengers with songs and recitations of Mao Tse-tung.

VII. EQUIPMENT

The Chinese airline still depends on the USSR for most of its aircraft. Estimated Soviet equipment in use today includes: twenty-eight Li-2s, five II-12s, five PS-84s (similar to Li-2s), fifty II-14s and fourteen II-18s (including five ordered in 1967). A report in 1965 said that China had purchased two An-24s, two Tu-124s, 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

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4China Trade Report 23 (Sept. 1961) (Published by Far Eastern Economic Review.)
turboprops were purchased. These were delivered in 1963 and 1964 and serve as the backbone for the long-distance, non-stop routes.

CAAC also uses a variety of small (5 to 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 (about 200 of which are used by the Specialized branch), 50 Peking and 10 to 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 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, only 22 of which fall in the long-range category.

The Chinese Communists seem to have made very little progress in establishing a transport aircraft industry. Although several aircraft factories are known to exist, China admits to only the Shenyang plant. This plant has been building both civil and military aircraft for a number of years. There is still some reliance on imports for many parts, including radios and instruments, and even some engines have had to be imported. Although tires were imported for a time, the rubber industry now reports that it can supply enough tires for domestic use. This probably includes aircraft tires of all sizes, although it is doubtful that there is much, if any, production of synthetic or oil-resistant rubber as yet.

With only small imports of aviation equipment possible, the growth of aviation manufacturing must depend on the progress of allied industries: aluminum, plastics, steel, instruments, petroleum, to name a few. These were beginning to develop in the late 1950's, but when in 1960 the Soviet Union withdrew both its technical and material aid, many of these industries nearly ground to a halt. They had nearly recouped and were increasing their output by 1966-1967, only to be slowed down again by the antics of the Cultural Revolution. The present state of both aircraft and spare parts manufacturing is not known.

VIII. Conclusion

As a new sense of order and control is established in China, it is anticipated that resources for the expansion of aviation will become available. Once additional long-range equipment can be obtained and other aging equipment replaced, it will not be surprising to see CAAC exercise some of its bilateral agreements and sign others. On the domestic front, growth will continue to be slow, with perhaps improvements in schedules and local services as the first order of business. Emphasis will still remain, however, on the Specialized Services in support of agriculture and industry. Even when CAAC expands, it seems unlikely to become a major competitor in world aviation, although it will make continuing attempts to impress neighboring countries. In the meantime, a careful watch of what is going on in aviation offers clues to the outcome of the Cultural Revolution and the success or failure of the central regime and the Revolutionary Committees in the provinces.