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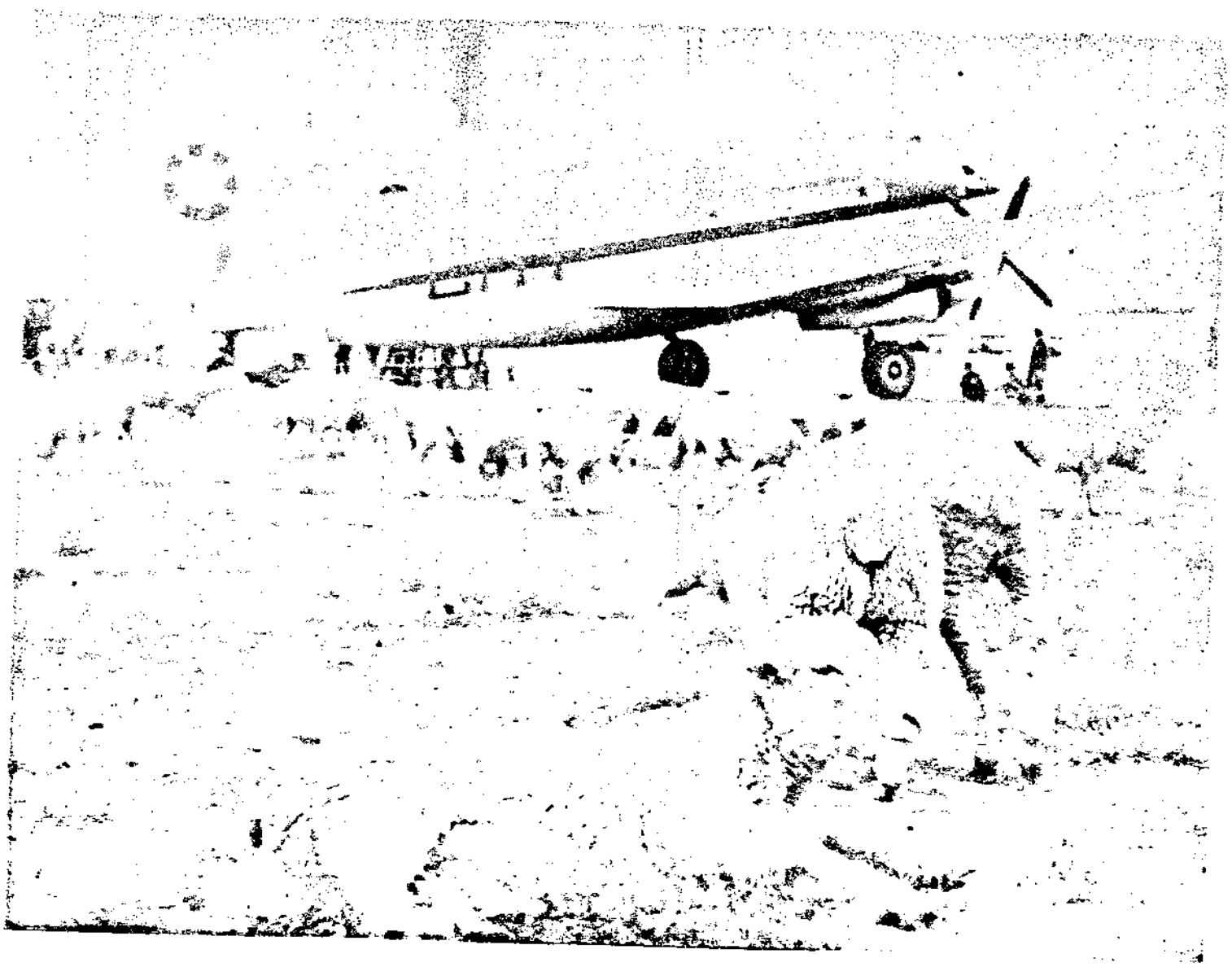

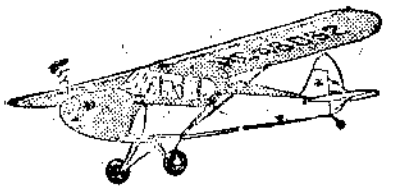

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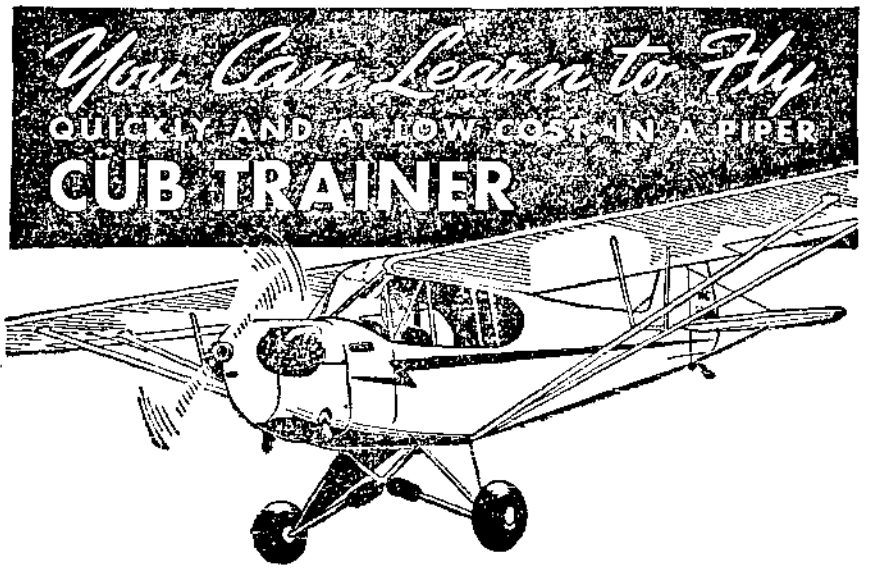

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CIVIL AVIATION NO. 5

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THE COVER

Shows the arrival of a CAT plane at Lanchow airport, Kansu, with 40 New Zealand thoroughbred sheep to improve indigenous North China stock.

International Cooperation in Aviation

By Lin Wo-chiang.
Advisor, C.A.A.

There is no question that the invention of the aircraft is one of the greatest contributions of our time. It has brought about a closer relationship among nations in their economic, cultural, political and social life. The conquest of the air is an epoch-making event;for from now on, the air will be used by humanity, to serve humanity. Of course, we are only talking about the appplication of this new instrument to peaceful purpose —the purpose of transportation of passengers and cargo by air.

However, the inherent potentialities of the aircraft were not fully demonstrated until international air navigation has become practicable—when the aircraft, by observing certain international regulations, could freely circulate from one country to another. Yet,it has taken many years after the appearance of the aircraft, for the world to reach this desirable stage. This was achieved only until 1919, when the International Convention on Air Navigation (ICAN) was signed by the Allied and Associated Powers after the conclusion of world war I. This is especially significant, because previous to this several attempts at producing an international air-code, had failed to secure general agreement.

The first step was taken by the International Juridical Committee on Aviation (IJCA) to formulate an international air-code for the regulation of international air navigation in 1910, during its meeting at Paris. But because many states were then more eager in maintaining national air sovereignty than utilizing this new instrument of fast and convenient transportation, no unanimous agreement on the draft convention was reached. Again, in 1911, the Institute of International Law took up the matter in its session at Madrid, in which another code for promoting international air navigation was presented by Fauchille, an eminent French jurist. The crucial point in this proposed code was, that air navigation should be free to the aircraft of all nations, subject only to the right of subjacent states to make and enforce regulations for their own safety and security. This, too, was not adopted by those states participated in the conference.

However, credit must be given to this draft code, as it contains some of the features to be found later, in both the Paris convention of 1919 and the Chicago Convention of 1944. Although it was not adopted as a basis for multilateral agreement then, it was nevertheless followed by France and

Germany in a bilateral agreement in 1913, permitting aircraft to enter either country.

Then came the war of 1914-1918, which retarded the progress in this direction for five years. In the meantime, urged by the necessity of war, the technique of aircraft construction and the art of air navigation were pushed forward by leaps and bounds. when the war came to an end in 1918, the Allied Powers found that there were thousands and thousands of warplanes, capable of carrying big loads lying idle, and doomed to be scraped. The time was ripe to turn the swords into ploughshares. by an international air agreement, ——to throw open the national "air-fronts" for civil aviation. Hence the success of the CINA of 1919.

A comparison of the world situation regarding aviation in 1919 and that of 1944 -45, will show that there is a marked resemblance between the two. In 1919, the Allied Powers were confronted with the problem, as to how those surplus planes could be utilized for international air communications in times of peace. The United Nations faced the same situation in 1944, when peace and victory had become certain. The late President Roosevelt in his welcome message to the delegates, who attended the Chicago aviation conference in Novembar 1944, said:

"...When either the German or the Japanese enemy is defeated, transport planes should be available (for international air communications)... when both enemies have been defeated, they should be available in quantity...Then, all that will be needed will be to start using the air as a great peaceful medium, instead of a battle area."

If we apply the comparison to the conventions of 1919 and 1944, to the principles stated in these two conventions, to the central international aviation organizations established under both conventions and, to the annexes to these ccnventions, we shall also find that they are similar in essentials. To give a few instances, In Article 1 of the CINA it declares that" The High Contracting Parties recognize that every Power has complete and exclusive sovereignty over the air space above its territory."

This article is reproduced almost word by word in Art. 1 of the Convention of International Civil Aviation (C1CA) of 1944. The right, with certain reservations, of the freedom of "innocent passage" is accorded to contracting states under the CINA. The same right is also given to contracting states, but more fully and less ambiguous, in Art. 5 of the CICA of 1944 (this right has been elaborated into the so-called "Five Freedoms of the Air," in the Internatonal Air Transport Agreement, made in Chicago, 1944).

The CINA established a central international body called the International Commission for Air Navigation, to promote international air navigation, and give facilities and informations, to all the contracting states and non-contracting states interested in civil aviation. Similarly, the CICA set up a central body known as the International Civil Aviation Organization (ICAO) for more or less the same purposes. And, by sheer coincidence, the present Secretary-General (Dr. Albert Roper) of the ICAO was also the man who performed the same function in the old aviation organization.

In comparing the annexes of these two conventions, we find that they cover the same ground, except that the new annexes deal in greater details with those technical rules and

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PUBLIC INTEREST IN AVIATION TO BE CULTIVATED

C. K. Chang

Comissioner, M.O.C.

Civil aviation means more to China than it now does to the United States, Great Britain, and most other European and American countries. To them, air service is but one of the industries which bring them profit; but to us, it is important more for its cultural and political significance than for its economic value. Several hours flight will cover the vast gap between Sinkiang and the interior, which have ever seemed so far apart from each other as Spain was from America in the time of Columbus. It may seem ambitious to expect a railway or highway network established in Tibet, Sikang, Szechwan, Kansu, and Inner Mongolia within a quarter of a century; but it is not impossible to cover, in a few years to come, all these provinces with sufficient air services, which will definitely help a great deal in heightening their cultural level, and bring about a closer contact and hence a better understanding among all the Chinese people who have the luck to inhabit so vast a part in the world.

As a matter of fact, however, too few people in China have paid much attention to the question of devloping our civil aviation. This negligence of our countrymen is clearly manifested in the fact that most of us know very little about the very term "aviation," and only a very limited number of people have interest in aeroplanes, airfields and the like.

In other countries, especially in the United States, aviation has almost become a hobby to many young men and young women. Stamps for airmail or those bearing the various types of aeroplanes, famous airfields, important flights made in the past, portraits of wellknown pilots are enthusiastically hunted by stamp-collectors. Models of aeroplanes have long been favorite toys for children. Aeronautical terms are within the vocabulary of common people. Periodicals and books on aeronautics are being published and widely read. News items on aviation are given quite a space in newspapers.

But in China, how indifferent we have been with all these things! Aeronautic engineering, which was quite a favorite subject for college students some ten years ago, is now one of the least attractive courses in universities. The conclusion of the air agreements with the United States, Great Britain, Siam, and the Netherlands failed to draw so much attention of the public as did the Chinese motion pictures "Eight Years' Separation," and "Before and After Dawn." As a hobby, airmail stamp collection is unknown to most. Except those who frequently travel by air, few know how many airroutes in China and abroad are now operated by Chinese airlines. In a word, "aviation" is still something new to our average Chinese as it was to the Americans at the time when the Wright brothers were working on their experiments.

Some may seek justification of this negligence of the public in saying that it is the development of civil aviation that arouses the public interest but not the public interest that makes possible its development. Well, there might be some truth in this statement.

But the present writer is of the opinion that public interest in a certain field of activity very often encourages that activity to a fairly large extent. As most people in the whole world now believe in democracy, all political parties take it as one of their principles. If the people in a certain place need something which is not produced there, we may be sure that merchants will come immediately to import it from other places.

Viewing the particular significance of civil aviation to China, and realizing the relationahip between its development and public interest, the present writer calls the attention of the government authorities concerned, newspapers, and other institutions of cultural or educational activities to the question of cultivating a public interest in aviation, especially among our countrymen of the younger generation.

International Cooperation in Aviation

(Continued from page 3)

regulations and contain more items (the CINA has eight annexes, but in the CICA there are twelve) which is only natural; since these rules and regulations are put in the annexes to enable them to be constantly revised and augumented to keep pace with the rapid growth of civil aviation.

If we find that these two international air conventions, concluded between an interval of twenty-five years, bear such a close resemblance in their general features, it is because the world situation was, it is now, the same. Today we are very much better off than before in every technical aspect in connection with civil aviation, and the public is also more air-minded than ever before.

But, can we say that the world has advanced much farther in the direction of the freedom of the air than before? Certainly not. If we have, there will be no necessity of recognizing the existence of a "complete and exclusive" national sovereignty over the air, as stated in the current air convention mentioned above. In fact, some state has to this date persistently refused to participate in any international convention which gives a qualified right of air passage to the aircraft of the contracting states. Today, as it was yesterday, Soviet Russia is the only state of importance that maintains such an uncompromising attitude towards international air communications. She has from the very beginning closed her "air-fronts" to the outside world.

As a conclusion to this brief review, it may be stated that we have actually advanced a few steps towards cooperation in international civil aviation in the course of the last twenty-five years; but, evidently, there is still much to be done to "make the air which God gave to everyone" a peaceful means of transportation, and not the means of domination over anyone.

CIVIL AERONAUTICS ADMINISTRATION

T. W. Yen

Chief, Archives Section, CAA

Mr. Ango Tai
Director of CAA

The Chinese Civil Aeronautics Administration came into being in the early part of 1947. According to its statute, the Administration is responsible for the supervision and development of civil aviation in China.

In spite of the insufficiency of personnel and shortage of aviation equipment, CAA has achieved considerable work during the past one year. Many airports of major importance have been modernized and rebuilt and part of the communication network has been completed. For the first time in the history of Chinese civil aviation, a system of air traffic control has been established. Airline's pilots are being examined for competency and aircraft for airworthiness. A series of Civil Air Regulations, both in Chinese and in English, is being published. Notices to Airmen are published by its flight information service which was established at Shanghai in November, 1947. To bring China into close collaboration with other nations, CAA has made use of many of the PICAO and ICAO recommendations in the technical field. Generally speaking, a foundation for the future development of civil aviation in China has been laid down.

The CAA is directly subordinated to the Ministry of Communications. It consists of seven departments, namely: air transport divison, airports division, airways division, flight safety division, personnel office, accounting office and the secretariat.

A brief description of the main functions of these departments may give a more clear picture of the whole organization.

Air Transport Division

The air transport division is composed of three sections. They are planning section, air transport secton and industries section.

In the capacity of planning, the division is going to form a national network of air route to meet the needs of both communication and national defence. In negotiating air agreement with foreign governments it has played an important role. The conclusions of the Sino-American and the Sino-British agreements have facilitated world air travellers to a great extent.

Any change of routes, tariffs and flying schedules must be approved by this division in advance. All information concerning the air transportation system are collected by the division which makes reports to the staff meeting of the Ministry of Communications. Problems of improvement or mismanagement are solved by the Minister on the spot and orders flash out right after the staff meeting.

In addition to the economic regulation of air transportation, the division handles the matters relating to aircraft manufacturing industry. Emphasises are now being made

on handling matters relating to aircraft repairing and maintenance.

Airports Division

The airports division consists of airport planning section, airport engineering section and airport managment section. It is responsible for the provision of civil aerodrome throughout the country. However, it is not a construction agency, the construction work being done by contractors. Local governments may censtruct civil airports, but the construction plan must be approved by the CAA and conform to CAA's standards for location, layout, grading, drainage, paving and lighting.

In the building of airports, CAA's principal aim is to develop a national system of landing areas, each meeting its standards and each forming an integral part of the overall airport patterns.

There are twenty-one airports now operated by CAA. Most of them are taken over from the military aviation authority. CAA makes it an attempt to place the airport operation on a self- supporting basis.

Airways Divison

The airways division comprises four sections: air traffic control, airway engeneering, communications and weather. This division constructs and operates the vast system of civil airways.

The air traffic control system is subdivided into the following categories:

(a) Aerodrome traffic control
(b) Approach control
(c) Area control

The first step being taken is to establish the control agency in various districts.

The division works in close collaboration with the airlines in installing of air navigation facilities and the establishment of communication system. Due to the insufficiency of equipments, it has been confronted with many difficulties. It also cooperates closely with the Central Weather Bureau in providing pilots with up-to-the-time weather information.

Flight Safety Division

The main functions of this division are carried out through five sections: personnel licensing, airworthiness, flight surgery, training and accident investigation.

In performing the task of certification of aircraft and airmen, it endeavours to assure that all civil aircraft shall be airworthy and flown by competent pilots.

It establishes the airmen physical standards and enforces these standards through the medical examiners appointed by CAA.

One of the main functions is the personnel training. A program of training has been worked out. Instructions for air traffic controllers have been completed and the training of radio operators is under way.

The division is also responsible for investigation of air accidents and reports its findings to the public.

The Secretariat

The secretariat consists of a general affairs section, public relations section and archives section, and is headed by a secretary general who is in charge of internal administration management.

The archives section cooperates closely with other divisions in the drafting of civil air regulations. It collects and disseminates information relative to civil aeronautics and acts as an information center for the CAA.

Personnel Office and Accounting Office

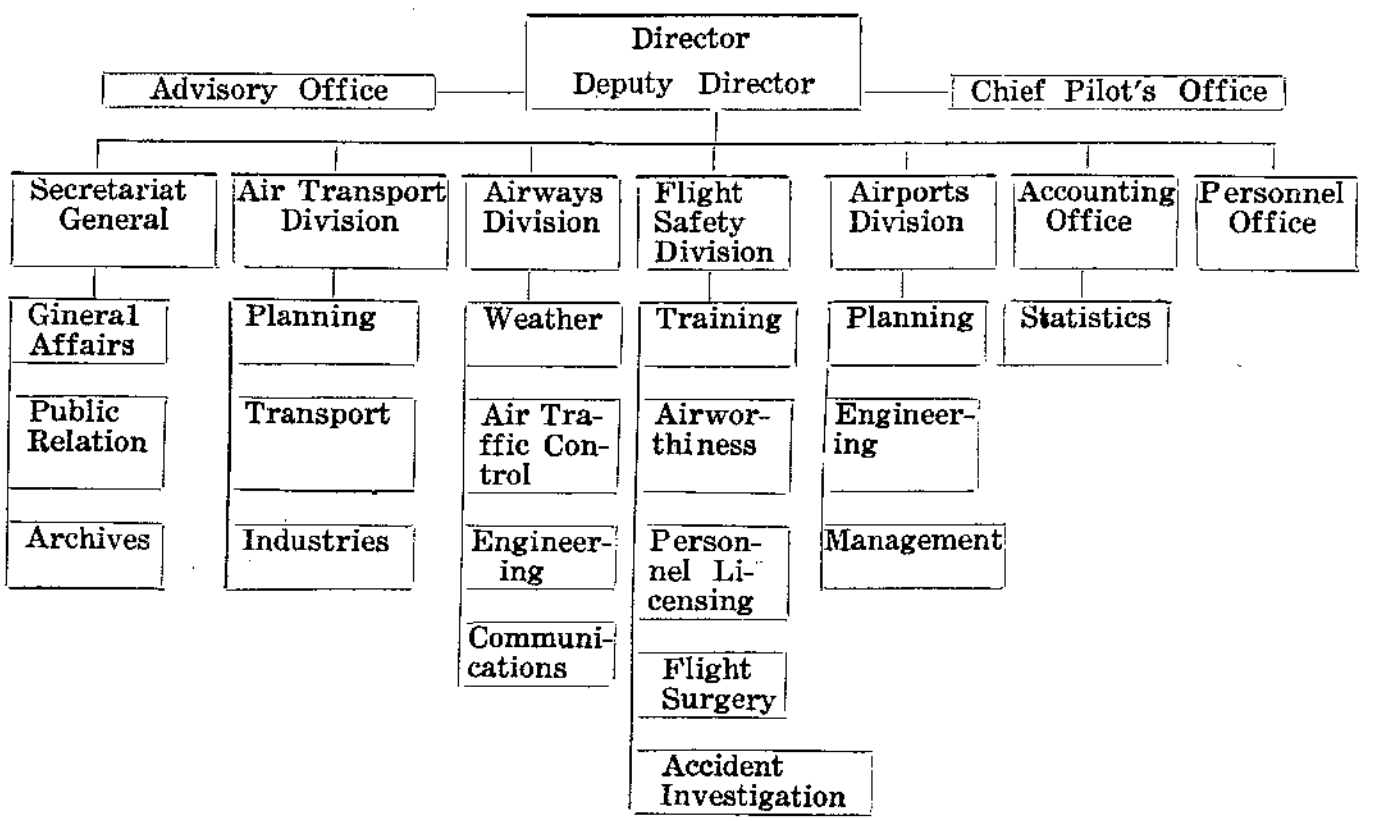
The personnel office receives and examines applications for employment Qualified persons are selected and appointed in accordance with the Civil Service Rules and Practice.

The accounting office has the responsibility of the administration of financial and accounting regulation.

Flying Club

For the purpose of encouraging private flying, the CAA finds it desirable to have some flying clubs. There is a CAA's flying club established at Hung-Kiao airport, Shanghai, with three airplanes (two J-3Cs and one PA-12). It provides a flight training course. Anybody who meets the physical and educational requirements may be admitted to receive training. After the completion of 50 hours' flight indoctrinations, a trainee is eligihle for a private pilot licence and qualified to join the flying club as a member.

CAA Organization Chart



"In its present stage of development, however, CAA has yet to face many difficult problems as regards personnel, resources and technology. Assistance from all circles concerned is undoubtedly needed," said Mr. Ango Tai, director of the CAA.

IMPROVEMENT OF CIVIL AIRPORTS

By Loh-Kwan Chen

Chief, Airports Division, CAA

There has never been a year in the Chinese history of civil aviation like 1947 which witnessed a large-scale improvement of civil airports both for domestic and international air operations. As a result of the rapid expansion of air transport service, it is necessary for the CAA to plan a programme for the devlopment of national airports in order to meet the economical and technical requirements that turn up.

Before and during the war, nearly all the airfields were under the control of the military authorities except a few of them were opened for civil use. The runways built then were of broken stone with length not more than 800 meters, and only designed for planes not heavier than 30,000 lbs and above all, they were poorly drained. But, however, they were in moderate condition for civil use because air transport then were not so expanded as it is at the present time, and types of aircraft used then were only Stinson, DC-2, DC-3 and Junker.

After V-JD ay, a great expansion of domestic air service was seen and the inaugurations of many international air routes made, which, naturally, calls for the urgent demand for more large landing fields. The use of heavier and faster types of aircraft gives birth to the need of larger and stronger runways together with other modern installations required by modern techniques in aerial traffic. Moreover, suggestions have been made by the ICAO that the Lunghwa airport at Shanghai, the White-Cloud at Canton, the Amoy airport and the Shungshan airport at Taipei, have to be reconstructed in accordance with ICAO standards.

As soon as it came into being, CAA has made great efforts to modernize the airports then existing and to construct new airports in order to meet the rapid expansion of air traffic.

Under the CAA improvement plan for civil airports, four airports namely, the Shanghai, the Canton, the Amoy and the Taipei which have been designated for international air ser vices, together with one domestic air traffic center namely, the Hankow, are having the first priority in its construction program. The following is a brief statement of the reconstruction plan of the said airports:

The Lunghwa Airport

The Lunghwa airport, located three kilometers south-west of the Shanghai business center, is classified as a long range regular B-class airport. It serves as a major link in cross country and international air service. A concrete main runway (north-south) of 1830 meters x 50 meters and a concrete apron of 20,800 sq. meters, designed for the use of aircraft of 90,000 lbs gross-weight, were completed in last summer. To comply with ICAO B-class standards, CAA has planned to extend the runway to 2150 meters in length and 75 meters in width. Besides, CAA has planned to construct an east-west asphalt runway of 1500 meters by 60 meters and an asphalt taxiway totaling 4500 meters in length and 25 meters in width.

A terminal building at the Lunghwa airport is now under construction. It is expected to have been completed by the end of this year.

The White-Cloud Airport

The White-Cloud airport, located 10 kilometers North-East of Canton, is classified as long range regular B-class airport. The existing NE-SW main runway of 1400m x 75m and another NW-SE runway of 1200m x 60m were both built of broken stone with one inch thick concrete coating. These runways are far from ICAO standards. CAA has planned to extend the former to the level conformable to ICAO B-class standards, and the latter to 1800m x 60m, both with asphaltic concrete surface. A terminal building with a floor space of 1860 sq. meters is now under construction and scheduled to be completed before the coming Christmas. Although it will not be so spacious as the one at Lunghwa, it will provide all modern installations equal to the latter. It is also intended to have an asphalt taxiway of 4,000 meters by 25 meters with a thickness of 0.5 meter, and night flight lighting system.

The Amoy Airport

The Amoy airport, classified as long range alternate C-class, lies 14 kilometers north of Amoy. The two existing runways, one 1500m x80m (NE-SW) and the other 900m x80m (NW-SE), have neither solid base nor paving surface but of compacted soil covering up with a layer of coarse sand. CAA is now planning to reconstruct the airport to comply with conditions of its class required. The reconstruction work will be carried out in the earliest possible date.

The Shungshan Airport

The Shungshan airport at Taipei, classified as long range C- or D-class, is at present for both military and civil use. The existing E-W concrete runway of 1,000 meters by 80 meters and the NW-SE concrete runway of 800meters by 60 meters are both in usable condition. CAA plans to extend the main runway to conform to standards of its class required for purpose of emergency landing.

The Hankow Airport

As Hankow is not only the center of all domestic air routes but it serves as a refuellings station for all passing planes. Henceforth, it is necessary to have a good airfield there.

The Wuchang airport, located on the other side of the Yangtze River opposite Hankow, offers a great inconvenience for both passengers and freight hauling.

The existing NE-SW concrete runway of 1600m x 80m is in pretty bad shape.

Repairing work has been started with the purpose of maintaining it in usable condition until a new field at Hankow is available.

CAA has chosed Liu-Chia-Mew, which lies 6 kilometers east of Hankow to be the site of the new airport. The surveying work of the airport to come has been completed recently and its construction work is now under design.

The above mentioned is only a few of the construction works on the airport construction program which CAA is going to carry out in the near future. There is a lot more to be done in the development of Chinese civil air traffic. In accomplishing this definite plans have been made by CAA and are ready to be put into practice.

Aeronautical Communications and Navigational Aids

By Nai-Ning Chen

Chief, Communications Section, CAA

The need in China for international aeronautical communication service has arisen on account of the recent introduction of international air transport operation, as the existing facilities operated by individual Chinese airlines are not adequate to meet the present requirements and the immense expansion of international air traffic. So far as commercial aviation is concerned,the only organization responsible for the installation of aeronautical radio stations along the international airroutes as well as the domestic ones is the CAA.

As it is evident that personal flying and the establishment of small-scale airlines for non-scheduled and charter flight become imminent in China, and as it is impractical for them to provide their own communication facilities, CAA has to plan in advance and undertake the said task so as not to strangle the growth of such aviation industry which we expect to come within a decade or two.

The appearances of new types of navigational aids which make instrument flying possible and safe have brought forth the rapid increase of air traffic volume in China as well as in other well-developed air nations. To keep her people from air calamities, China has to furnish communication services. Hence a sound communication system is more than necessary and urgent.

With the objects of expediting the flow of congested air traffic and avoiding aircraft collision, CAA set up recently an Air Traffic Control Service. As air safety is concerned, a nation-wide communication network for the transmission and reception of flight plans, clearances, position reports, flight movement and other ATC messages, is required to be established as soon as possible. CAA is undertaking step by step the installation of Aerodrome Control Towers, Approach Control Stations and ATC communications network to make the efficient and positive control of air traffic a reality.

Furthermore, CAA will also be responsible for (1) the collection and dissemination of meteorological reports, (2) the broadcasting of hourly weather sequence, Synoptic and Pibal data and (3) the airways and terminal forecast through its communications facilities. Besides, the Central Weather Bureau is charged to supply weather data and the preparation of other pertinent information.

Before the inauguration of CAA, all radionavigational aids used were installed and operated by individual airlines. Often, stations of the same function were set up in one location. This is not only a waste of manpower and equipment, but also against the interest of economy of radio frequency spectrums. Non-directional radio beacons using the LF/MF bands are the only type of equipments available now in China, because frequency

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A TALK ON AIR AGREEMENTS

——by K. C. Chow

Chief, Planning Section. C.A.A.

(1) Air Agreements- Bilateral and Multilateral

An air agreement is a document binding two or more nations on the mutual exchange or commercial rights in aviation. The agreement made between any two nations is called a "bilateral agreement" while one made by binding two or more nations is called a "multilateral agreement." Due to complications in international affairs, so far only bilateral agreements have been concluded. Although multilateral agreement is an ideal arrangement for development of international aviation it seems some time is needed to get over obstacles of national prejudices. Several international meetings have been held under sponsorship of the International Civil Aviation Organization solely for discussing the multilateral agreement, bht tue results were failure.

(2) ICAO and bilateral Agreements

During November 1944, the allied countries met at Chicago, U.S.A. and signed a "Convention on International Civil Aviation" and other related documents. This Convention laid down the principles to promote internatioal civil aviation. The meeting created Picao (Provisional International Civil Aviation Organization.) Later it was succeeded by ICAO (International Civil Aviation Organization). PICAO made a resolution to study and formulate a multilateral agreement but previewing the difficulties ahead it also made a resolution to encourage its member states to enter themselves into as many bilateral agreements as possible. It also adopted a standard form of the bilateral agreements for the member states to follow.

The air agreements signed between China and various countries as well as those concluded between many other countries following the Chicago Conference are styled after this standard form. From its name it is obvious that this standard air agreement form "FORM OF STANDARD AGREEMENT FOR PROVISIONAL AIR ROUTE" is purported to establish conditions for the exchange of rights of mutually extending air trasportation services into each other's territories.

(3) Contents of The Standard Form.

The subject matters of the articles contained in The Standard Form are as follows:

ARTICLE I, To introduce the annex.

The Annex is the most important part of an agreement. It shall contain the particulars of the air routes to be established, the names of airports for commercial and noncommercial stops, the limitations on capacity (see (4b)), method of filing tariffs (see (4a)), importation of materials by the airlines and whatever the other conditons to be set out between the countries which are not in contradiction to the principles of the Convention and are not embodied in the standard form of the agreement.

ARTICLE II, The designation of airlines. Uuderstandings of the expediting of operating permit, qualification, and inauguration

of air services.

ARTICLE III, Provision for the right of the airlines already operating to continue their services.

ARTICLE IV, To assure equality and just of treatment to the airlines on matters of use of airports, the importation of fuel, oil and spareparts for the use of aircraft.

ARTICLE V, recognition of certificates of airworthiness and licenses.

ARTICLE VI, Indiscriminative treatment on applying laws and regulations in relation to navigation, clearance, immigration, passports, customs, and quarantine.

ARTICLE VII, Conditions to withhold or revoke a permit to an airline of the other party.

ARTICLE VIII, Filing of the agreement with PICAO, (now ICAO).

ARTICLE IX, Provisions for arbitration to settle disputes.

ARTICLE X, Duration, procedures of amendment, revocation of agreements.

Additional articles may be put into an agreement but these shall not be in conflict with the spirit of the Convention.

(4) Some Important Terms

Some terms have been adopted in air transportation field and are used in many air agreements. Their meanings are explained as follows:

(a) Tariff- A tariff is a schedule prepared by an airline showing the time of arrivals and departures at the places being serviced on its various flights, the rates(for cargo and express) and fares (for passengers) to be charged and the regulations pertaining to carriage, reservations etc.

Naturally every country likes to have control over the tariff of airlines of other countries operating into it. But it would be a great impediment to their business if all the governments of the countries along the routes require their approval to the tariffs. So there is a general provision in the agreements for the airlines operating on the same route to confer each other on new tariffs. In fact the International Air Transport association (IATA, a body composed of nearly all of the airlines operating on international routes) has special committees to determine the rates and fares which all its members shall observe and so unnecessary competions are avoided. Most agreements also contain the clause stating that the contracting states are willing to approve the IATA tariffs. This represents a great progress in interntional air transport.

(b), Capacity- Capacity means the number of passenger seats and/or cargo capacity an air line offers to the public over a certain period, say per week, along a certain route. Again naturally every country does not want airlines of other countries to take away the business of its own airlines. But it is very unhealthy to the development of international air transportation if the capacity is predetermined in any agreement for a certain route. The provision now generally adopted to remedy this is called the "Bermuda Principle". The name came from the Bermuda Agreement concluded Between the United States and Britain at Burmuda Island during 1945. This principle may be illustrated by an example as appearing in the Sino- American Bilateral Air Transport Agreemnt. To quote a section of the annex:

"C. In the operation of the air services authorized under this Agreement both contracting parties agree to the follow principles and objectives:

1.……

2. The elimination of formulae for the predetermination of frequencies or capacities or any arbitrary division of air traffic between countries and their national airlines;

3. The adjustment of fifth-freedom traffic with regard to:

(a) Traffic requirements between the country of origin and the countries of destination;

(b) The requirements of through airline operation;

(c) The traffic requirements of the area through which the airline passes after taking account of local and regional services.

(5) Exchange of Diplomatic Letter

…… "

Attached to an agreement may be several exchange of diplomatic letters between the diplomatic authorities of the contracting parties. These exchange of letters usually deals with matters of temporary nature or particular issues which may be rearranged more easily from time to time without the formalities of amending the agreement. The letters have the same force as the agreement itself.

Up to now China has concluded air trans portation agreements with the The United States, the United Kingdom (Britain) and the Netherlands (Holland). Agreement with Siam is waiting for ratification by the Legislative Yuan.

Agreements with France and India are under study and the other conntries most likely to have air transport agreements with China in the near future are Philippine and Burma because these countries are so closely related to China economically.

Aeronautical Communications and Navigational Aids

(Continued from page 11)

congestion and their improper frequency seperation produce false courses or inaccurate bearings which seriously endanger the safety of air navigation. Moreover, since every available frequency in LF/MF band has been used, new stations are prevented from setting up by individual airlines. Early attempts have been made by CAA in the elimination of all duplication or triplication of equipments, the unification of operating technical standard aimed at economizing the over-all operation cost and saving of frequency spectrum, and considerable acheivement has been made thus far.

As a result of the second World War, many new types of radionavigational aids for civil aviation use came into being. A number of these new devices has been designed to operate in the V. H. F. band which offers more reliable and accurate navigational aids services, facilitates and expedites the regular flow of a considerably large volume of air traffic. For promoting Commercial aviation in China, CAA is going to make the utmost effort for the installation of new navigational aids including the best available electronic devices such as L. F. Omni-Range, V. H. F. Omni-Range with Distance Measuring Equipment, Instrument Landing System (ILS), Ground Control Approach (GCA) and other radar equipment to afford maximum safety of air navigation.

A Glimpse of the Development of Chinese Civil Aviation

by Kohan Wang

No aeroplane did ever appear in the Chinese sky before 1908. It was until 1909 that the vast azure Chinese skies had the chance to be decorated with a flying machine which, however, blared forth the coming of a new age as aviation was concerned. In that year, a French aviator, called Vallon, did a large amount of exhibition flights over Shanghai on a Sommer biplane, but was later unfortunately killed in an air accident. Following Vallon's steps, a Russian pilot in the next year —1910— also gave the Chinese people a flight rehearsal on a Bleriot monoplane in the Legation Quarter at Peking.

Both made by Vallon and the Russian pilot, the exhibition flights have unextinguishably engraved upon the minds of the Chinese people and stimulated them with a current of strong desire and urgent demand for the establishment of aviation in China.

From stimulus siuch as the exhibition flights, Chinese Government began to realize the essence of what aviation really meant towards the reconstruction of a nation. Consequently, actual steps were soon taken.

In 1916, a department for the establishment of aeronautics was set up. But little progress was made.

In 1918, a Bureau for the Planning of Aeronautical Affairs was established under the Ministry of Communications of the defunct Peking Government. A plan of air routes was mapped out and six Handley Page passenger planes were bought by the Bureau in 1919. On April 24, 1920, the first interport trial flight was made by a Handley Page machine between Peking and Tientsin. Another trail flight was made a fortnight later, on May 8, between the two cities. The plane took off at 9:40 A.M. from the Nanyuan airdrome with a group of guests and mail. After three full hours, the machine arrived at the Tientsin race course at 12:40 P. M. with mails and newspapers on board, a return trip was made the same afternoon. The plane left Tientsin at 5 P. M. and arrived at Peking at 8 P. M. This was said to be the first commercial flight ever to be made in China.

In August 1920, the Bureau was amalgamated with the Administration for Air Affairs under the Cabinet, and was further re-organized on February 9, 1921, with the new designation of Bureau of Aeronautics.

Not long after the reorganization of the Bureau of Aeronautics, chartered flights for sight-seeing above the city of Peking were offered to the public. Another airline project was formulated with terminals at Peking

and Shanghai, passing over Tientsin, Tsinan, Hsu-chow and Nanking, with emergency landing airports between every two of the mentioned cities. When the organization of the line was eventually completed, the service got further to Tsinan. From 1921 to 1924 during the summer months, a week-end passenger and mail service between Peking and Peitaiho via Tientsin was also operated.

After the year 1924, the Bureau of Aeronautics was prevented by political unrest from carrying on its activities, and two years later it was eventually abolished.Thus, all attempts in the field of commercial aviation were suspended. It was not until the National Government had established its new capital at Nanking in 1928 that civil aviation resumed its activities.

Not long after the establishment of the new capital at Nanking, steps were soon taken to re-establish commercial aviation on a new basis.

In 1929, a Commission for Aeronautical Affairs was appointed by the Minister of Communications. For the purpose of establishing an air mail service between Shanghai and Chengtu, a fund of $600,000 was appropriated in the postal budget. But the service did not take place immediately. It was after several months of preparatory work that there came to survive the Administration of the Shanghai- Chengtu Airline. In July, the Administration began to operate service between Shanghai and Nanksng. But the volume of airmail carried was very small. Extension of the service would been wrought out had not the amalgamation of the Administration with the China National Aviation Corporation put an end to the former's career.

The formations of Airlines

Civil aviation made its advent in China in 1909, but it was twenty years later that commercial flying received its real impetus through the formation of the China National Aviation Corporation in 1929 to be followed by the formations of the Eurasia Aviation Corporation in 1931 and the South-Western Aviation Corporation in 1934.

The China National Aviation Corporation was authorized to make a contract with the Aviation Exploration Inc., U. S. A., to collaborate in operating air services in China.

The formation of CNAC, of course, brought a ray of hope to the Chinese people as aviation was concerned.

But at the same time as the reorganization of the CNAC was taking place, another contract was concluded between the Ministry of Communications and the German Lufthansa Company with the object of operating an international line from Shanghai to Berlin. Basing upon the contract and the Chindse law, a company was founded known as the Eurasia Aviation Corporation. It was more than half a year which had been devoted to the preparatory work required before the Corporaton was formally inaugurated in February, 1931.

Three years after the formation of the Eurasia Aviation Corporation, another company known as the South-Western Aviation Corporation was organized. It was mainly

under the sponsorship of the Kwangtung and Kwangsi provincial governments that the Corporation was developed. Thc first service between Canton and Lungchow was operated on May 1,1934.

The existence of this Corporation, however, facilitated the Chinese people in the south-western provinces.

On September 1 of the same year, an air route linking up Canton, Meiloo, Kiungchow Pakhoi was established by the Corporation. A weekly service was operated until the inauguration of the southern route of Canton-Hanoi line on April 4, 1937. The Canton-Hanoi line was the first ever established for the purpose of operating an international air service in this country.

Civil Air Activities During the War of Resistance

In spite of political unrest and foreign invasion, civil aviation made great progress after the formations of the three aviation corporations. New routes were operated and airports improved and constructed. The scope of air activities was broadened and enlarged. But just as civil aviation in China was on the verge of developing, the Sino-Japanese war broke out which gave the Chinese commercial aviation in its infant days a fatal blow. Had not the war which lasted for eight long years, civil aviation in China would have come to a more advancing stage than it is now.

During the war of resistance against Japan, Corporations——CNAC, EAC and SWAC——did play a more than important role in the communication field. They helped the Government in the transportation of government officials, civil servants and essential governmental documents to the wartime capital—Chungking. Besides, they transported supplies from the coastal cities to the interior cities spreading in the southwestern parts of the country. In the most difficult and the hardest period of the war, CNAC planes flew over the Himalayas transporting essential materials from India to Chungking. Praiseworthy are these services.

On account of its routes frequently being raided by the Japs, the South-Western Aviation Corporation was forced to suspend its operations in 1938. And owing to the lack of aircraft spare parts and supplies, the Eurasia Aviation Corporation was reorganized in March 1943 with CATC as its new designation by the Ministry of Communications and the Commission of Aeronautical Affairs.

The Rehabilitation Period Saw Rapid Progress in Civil Aviation

During the rehabilitation period—from August 1945 to October 1946—civil aviation made big strides on the road to prosperity. It is said that had not these two airlines —CNAC and CATC — to play the part of transportation, the rehabilitation program would have to continue for at least another two years.

Expansion in every aspect was made, especially in the transport of passengers (mainly civil servants). It was the first time in the history of civil air transportation

that air activities had ever reached such a high peak.

But days of glory are few. Not long after the rehabilitation months, on the very Christmas in 1946, three air accidents occurred within a period of less than twelve hours. Such disasters were known as the black Christmas. As there were more than one hundred casualties, all civil air operations were temporarily suspended by the government until conditions for air activities were improved. Such was the blackest period in the history of Chinese civil aviation.

Besides, the third quarter of the same year, 1946, witnessed the formation of a new carrier known as the CNRRA Air Transport under the command of CNRRA, but it is now Civil Air Transport under the control of the Civil Aeronautics Administration.

CNRRA Air Transport came into being on October 25, 1946, when General C. L. Chennault and Mr. Whiting Willauer obtained a CNRRA contract to operate an unscheduled carrier with the object of transporting relief goods.

Very excellent job has been done by CAT and great contribution rendered to the Chinese people. Take a few instances for example: the repatriation of displaced persons to their native lands, and during those flood days in the province of Kwangtung, CAT planes did a lot of things praiseworthy, such as the transport of a series of survey missions for relief authorities in Kwangtung.

On account of many contributions made, CAT has recently been permitted by the Government to continue its operation for one year under the control of the Civil Aeronautics Administration and was renamed as Civil Air Transport.

The Establishment of CAA

As the end of the year 1946 witnessed the black Christmas, all civil air activities were put in a stand-still condition with the exception of the transport of mail. Under such condition, the whole nation was impatient to wait for the order of resumption of traffic to be given to the airlines. Such impatience gave rise to a strong desire for an appropriate organization to take charge of matters relating to civil aviation. It was under such impetus of the people that the Civil Aeronautics Administration came into existence.

The establishment of the Civil Aeronautics Administration, however, marks the beginning of a new life in Chinese civil aviation.

Prospects of Chinese Civil Aviation

China, being a vast and wide country, needs all kinds of communications especially in these troubled days when surface transport in many sections of the country has been ruined and handicapped by the war. As a result of the insufficiency of surface transport, it is now the best time for the development of civil aviation, and it is unquestionably that Chinese civil aviation has a bright future.

Development of CNAC & CATC

by Tso Ho-ching

CHINA NATIONAL AVIATION CORPORATION

A. Birth of CNAC

In April, 1929, the China National Aviation Corporation, an independent institution responsible to the Government with the Minister of Railways, Mr. Sun Fo, as president, was organized for the operation of air transportatson. The corporation was then authorized to enter into a contract with an American company known as Aviation Exploration Inc. U. S. A., a subsidiary of the Curtiss Company, one of the foremost aviation concerns in America, for the establishment of the Shanghai-Hankow, Nanking-Peiping and Hankow-Canton air lines.

It was provided in the contract that the American company was to supply necessary technical personnel and equipment while the Corporation should pay for its service on a basis of mileage flown provided that the Corporaton could guarantee minimum of 3,900 miles flown everyday. on October 21, 1929, the Shangai-Hankow line was first inaugurated.

Later on, difficulties arose in connection with the jurisdiction over this new enterprise, and the basis of compensation was also unworkable. The Ministry of Communications was then authorized to take over the Corporation. on July 8, 1930 a new contract was concluded between the Ministry and the China Airways Federal Inc., the successor to the Aviation Exploration Inc., and was subsequently ratified by the State Council. As a result, the Corporation was thoroughly reorganized into a limited company with the original title remaining unchanged.

B. Capital

The capital of CNAC was fixed at CNC $10,000,000, which was divided into 10,000 shares whereof 5,500 were subscribed by the Ministry of Communications and the rest by the American company.

In April, 1933, shares held by the China Airways Federal Inc. were transferred to the Pan American Airways. Upon expiration of the term in July, 1945, the contract was prolonged for another five years and the shares of the Ministry were increased to 80% of the authorized capital by an agreement of both parties.

C. Organization

CNAC was organized in accordance with the Chinese law. The power of administration was vested in a board of seven directors with four appointed by the Ministry and the rest by the American company. The board had one chairman and two vice-chairmen. The chairman and one of the vice-chairmen were nominated by the Minisrry and the other vice-chairman by the American company. As to the organization of the Corportion's executive staff, a general manager was appointed by the board, under the ge-

neral manager there were a secretariate and three departments, namely: department of finance, department of operation and department of business.

D. Development

a. Pre-war period

According to the contract, the CNAC opened the following air lines for traffic:

1. Shanghai-Chengtu line: via Nanking, Kiukiang, Hankow, Ichang, Wanhsien and Chungking, covering a distance of 2,037 kms.

2. Shanghai-Peiping line: via Nanking, Hsuchow, Tsinan aud Tientsin, covering a distance of 1,235 kms.

3. Shanghai-Canton line: via Wanchow, Foochow, Amoy and Swatow, covering a distance of 1,543 kms.

CNAC had the exclusive privilege of carrying mail along these air lines, but not that of passengers and freight.

The planes used by CNAC were Stinson planes and Leoning amphibians with a capacity of 4-8 passengers and 700 kgs of load. These new ships can carry 14-20 passengers and 2000-2500 kgs of cargo. The speed was much higher and better comforts were also provided for passengers. Consequently, passengers and freight carried were steadily on the increase.

The following figures will show the progress made:

	Passengers carried	Freight carried (in kgs)	Mail carried (in kgs)
1931	2,784	0	43,712
1932	2,699	0	48,954
1933	4,215	0	57,577
1934	6,729	12,788	70,261
1935	14,812	42,086	73,795
1936	20,198	48,848	102,285
1937	11,610	56,193	93,488

b. Wartime

The general office of CNAC was first located at Shanghai. After the outbreak of the Shanghai Incident on August 13, 1937, it moved to Hankow, and the operations over the Shanghai-Canton line and Shanghai-Hankow line were suspended. Later on, due to the Japanese frequent bombardments, the general office moved again from Hankow to the wartime capital, Chungking.

In autumn, 1938, CNAC was ordered to carry out evacuation of all important government-personnel from Hankow within three days. Despite hard enemy air attacks, the mission was fulfiled as expected. At that time, the following three domestic lines were inaugurated:

1. Chungking-Kweilin line
2. Hankow-Changsha line
3. Chungking-Loshan line: via Luhsien and Suifu.

When the Japanese made their sudden attack on Hongkong, CNAC planes rescued more than 400 important persons in four nights. The possible links between China and other countries were almost entirely cut off after Hankow and Hongkong were occupied by the enemy. In order to meet an urgent need, two lines in addition were established for the maintenance of international communication:

1. Chungking-Rangoon line: via Kunming and Lashio.
2. Namyung-Hongkong line.

The data presented below show the number of passengers, freight and airmail carried:

	Passengers carried	Freight carried (in kgs)	Mail carried (in kgs)
1938	8,016	40,718	64,135
1939	17,200	117,375	102,093
1940	17,527	494,107	73,843
1941	22,583	3,559,695	90,271

It was soon after the Pacific war broke out that Hongkong fell. It put an end to the Kweilin--Hongkong line and the Namyung-Hongkong line. Yet somthing had to be done to maintain the international communication. So CNAC began to operate an airline connecting Chungking with Culcutta via Kunming and Lashio in 1942.

But at that time the Allied war situation was getting worse and worse everyday; Lashio was seized by the enemy in the Yunan-Burma campaign. Another airport was set up in Tingkiang, India, instead.

Then an important special mission was carried out by CNAC and that was to import materials from India for the government.

The planes had to fly over the most-rugged flying terrain and the highest ridge in the world—the Hump—and these vital air lines were partly exposed to the attacks of Japanese fighters. The personnel in the service had to risk their lives. Many of them died as martyrs. The following are the lines of memory:

1. Kunming-Tingkiang line
2. Suifu-Tingkiang line
3. Luhsien-Tingkiang line

The planes flying over these lines were the American-built C-53, C-46, C-47A and C-47B which were furnished on the Lend-lease basis.

The following list will show passengers, freight and mail carried by the CNAC planes during the period from 1942-1945:

	Passengers carried	Freight carried (in kgs)	Mail carried (in kgs)
1942	26,867	4,298,309	55,019
1943	33,224	19,611,124	61,183
1944	39,263	27,090,690	93,783
1945	57,670	27,307,691	256,592

The amount of the imported materials in 1945 reached 19,351,482 kgs.

c. Post-war Period

In 1945, when the war ended, the general office of CNAC moved back again to Shanghai. The problem of communication was found to be more important and more difficult than ever. The domestic surface transportation was in a state of temporary chaos. For all that, we had still to maintain communication between the major cities to the end that we might carry officials to the reoccupied areas and carry out the repatriation plan. CNAC then was ordered by the government to open seven air lines for traffic, viz.:

1. Chungking-Shanghai line
2. Chungking-Hongkong line
3. Chungking-Peiping line
4. Shanghai-Peiping line
5. Shanghai-Hongkong line
6. Shanghai-Taiwan line
7. Kunming-Hanoi line

The planes which had originally flown between China and India were then used for the new established air service. The number of passengers carried in 1945 was 47 times that in 1931, 6 times that in 1936, the most profitable year of CNAC; the amount of airmail 19 times the figure in 1931, 8 times the figure in 1936; and the

amount of freight carried 145 times as much as that in 1936.

As soon as the rehabilitation work was accomplished, CNAC gave an eye to the international air service. Six DC-4s known as Skymasters were purchased to fly over the following lines in order to provide a round-the-world service and a network throughout China:

1. Shanghai-Tainan line: via Taipei
2. Shanghai-Tainan line
3. Shanghai-Sian line: via Nanking and Chengchow.
4. Shanghai-Kunming line: via Hankow.
5. Shanghai-Lanchow line: via Nanking, Chengchow and Sian.
6. Chungking-Kweiyang line
7. Chungking-Sichang line
8. Peiping-Mukden line
9. Shanghai-Manila line: via Hongkong.
10. Shanghai-San Francisco line
11. Tainan-Hongkong line
12. Amoy-Hongkong line

The following list will show the passengers, freight and mail carried by the CNAC planes in 1946 and 1947:

	Passengers carried	Freight carried (in kgs)	Mail carried (in kgs)
1946	202,510	8,826,000	1,162,000
1947	173,317	14,146,162	2,451,465

Freight carried in 1947 increased 37% over 1946,air mail 88.2%. But 29,193 more passengers were carried in 1946 than in 1947 on account of rehabilitation.

At the end of 1947, CNAC had 47 planes of which 39 were seviceable, three times as much as that in June, 1934; and 3,982 employes were on the CNAC's payroll, including 51 pilots, 50 co-pilots and 45 radio operators.

In March, 1948, the CNAC planes flew over 35 airlines, serving 38 cities and covering a total distance of 41,300 kms.

It is recently learned that CNAC has made an attempt to open another international air line to link up China with Japan and that the negotiation is now in progress.

CENTRAL AIR TRANSPORTATION CORPORATION

A. Eurasia Aviation Corporation

a. Birth of EAC

While the CNAC was reorganized, another contract was concluded between the Ministry of Communications and the German Lufthansa Company. This contract privided for a company known as the Eurasia Aviation Corporation which was under the Chinese law to operate international air lines between Shanghai and Europe. Negotiations had been started as early as 1928, but the contract was not signed until February 21, 1930. After eight months' preparation, EAC was finally inaugurated in February, 1931.

b. Capital

The authorized capital of EAC was originally CNC$3,000,000 but was increased to CNC$5,100,000 in 1933, to $7,500,000 in 1935, and to $9.000,000 in 1936. Two-thirds of the capital were subscribed by the Chinese government and the remainder by the German company.

c. Organization

The power was to be vested in a board of nine members of whom six were designated by the Ministry of Communications and the rest by the German company. One

chairman and two vice-chairmen were elected among the members. The chairman and one of the vice-chairmen were nominated by the Ministry and the other vice-chairman by the German interests. Under the general manager whom was appointed by the Board of Directors, there were two departments—operation and business—and a secretariat.

d. Development in pre-war period

According to the contract, EAC was permitted to operate the following air lines from Shanghai to Europe:

1. via Nanking, Tientsin, Peiping, Manchuli and Siberia.

2. via Nanking, Tientsin, Peiping, Outer-Mongolia and Soviet Russia.

3. via Nanking, Sian, Lanchow, Sinkiang province and Soviet Russia or Minor Asia.

But the Japanese invasion of Manchuria and the political turmoil in Sinkiang made the realization of the plan impossible. EAC was compelled to operate only the following three domestic air lines:

1. Shanghai-Manchuli line: via Nanking, Tientsin, Peiping and Linsi (total length 2510 kms). This was the first air line that was opened by EAC for traffic, which was inaugurated in May, 1931. In September, the Japanese invaded Manchuria and the section from Peiping to Manchuli was compelled to suspend operations. On February 22, 1932, EAC's aerodromes in Shanghai were seriously damaged by the Japanese air raids; EAC was obliged to limit its service to the line between Nanking and Peiping.

2. Shanghai-Sinkiang line and Peiping Loyang line:

The former via Nanking, Loyang, Sian, Lanchow, Suchow, Hami, Urumchi to Tchukuchak (total length 4,050 kms) was the third line the contract provided for. On April 1, 1932, a regular air mail service along the Nanking-Sian section was inaugurated. On May 8 of the same year, the line was extended westward to Lanchow. The section between Lanchow and Urumchi, a distance of 1,675 kms, which is the most dangerous part for its high mountains and long stretches of deserts was finally opened to the public in May, 1933, through the persistent efforts of the EAC's personnel. Another air line from Peiping to Loyang was also established to connect the Shanghai-Sinkiang line.

3. Peiping-Canton line and Lanchow-Ningsia line: The former via Taiyuan, Loyang, Hankow and Changsha, 2,200 kms in length, was operated in May of 1934. On June 15 of the same year, the latter was established (total length 400 kms).

The following list will show the number of passengers, freight and air mail carried by EAC planes from 1931 to 1937.

	Passengers carrried	Freight cariedr (in kgs)	Mail carried (in kgs)
1931	941	4,151	412
1932	652	16,391	2,858
1933	1,072	43,192	4,170
1934	2,199	58,881	8,796
1935	3,597	114,386	19,420
1936	7,775	201,257	19,335
1937	11,600	189,079	101,017

e. War-time development

After the Sino-Japanese war broke out,

the general office of EAC moved to Sian, later to Kunming on account of the enemy's air raids.

The air lines flown by EAC planes then are as follows:

1. Kunming-Hanoi line
2. Kunming-Chengtu line
3. Hankow-Sian Line
4. Chungking-Hongkong line: via Kweilin and Canton.

The line between Hankow and Hongkong via Changsha and Canton devoted much to the maintenance of international communication, and EAC also paid special attention to it.

In August, 1941, China broke off diplomatic relations with Germany.

The German shares were transferred to the Ministry of Communications and EAC was reorganized into a government owned corporation.

From 1938 to 1942, EAC air lines are as follows:

1. Chungking-Hongkong line: via Kweilin
2. Chungking-Hami line: via Sian, Lanchow, Lienchow and Suchow
3. Chungking-Lanchow line.
4. Chengtu-Lanchow line
5. Kunming-Kweilin line
6. Namyung-Hongkong line

The following figures will show the passengers, freight and air mail carried by the EAC in the same period:

	Passengers carried	Freight carried (in kgs)	Air mail carried (in kgs)
1938	6,641	98,193	60,483
1939	11,555	313,301	107,591
1940	11,048	443,385	85,746
1941	6,477	592,045	103,047
1942	3,986	51,065	44,860

B. From EAC to CATC

In the winter of 1941 when Hongkong was being invaded by the Japanese, the Kweilin-Hongkong line and the Namyung-Hongkong line had to be suspended. The damage of EAC was heavy. Only one transport and three small planes were left. One year later, this only transport was also deemed unserviceable.

In May, 1943, EAC was reorganized jointly by the Ministry of Communications and the Commission for Aeronautical Affairs and retitled as Central Aviation Transportation Corporation.

Yet from the following figures it is obvious that the CATC was facing a depression of business in 1943 and 1944:

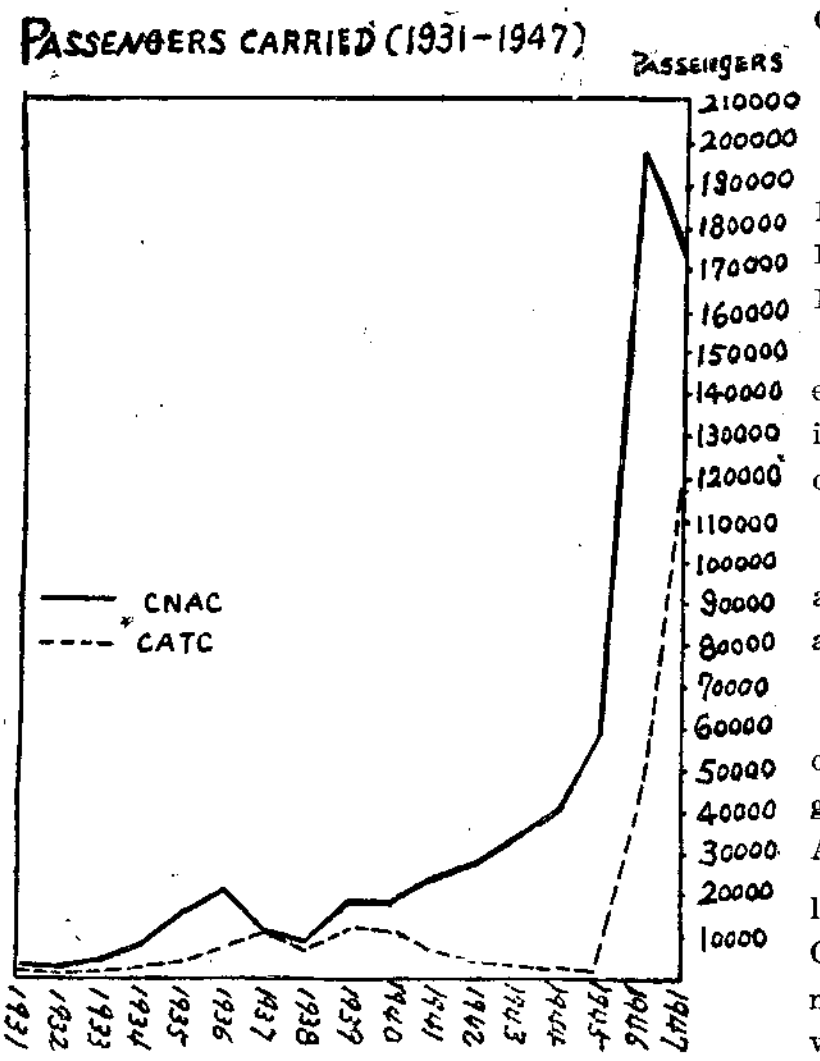
	Passengers carried	Freight Carried (in kgs)	Mail carried (in kgs)
1943	2,388	52,349	27,605
1944	560	80,208	2,114

C. Post-war Development of CATC

After the unconditional surrender of Japan, CATC bought a considerable number of army transports to operate the following new-established air lines:

1. Chungking-Shanghai line: via Hankow and Nanking.
2. Chungking-Hongkong line: via Canton.
3. Kunming-Canton line
4. Shanghai-Peiping line: via Nanking and Tsinan.
5. Canton-Hankow line

The following figures will show the passengers, freight and mail carried by the



CATC planes from 1946 to 1947:

	Passengers carried	Freight carried (in kgs)	Mail carried (in kgs)
1945	1,624	270,000	2,000
1946	45,479	3,914,000	197,000
1947	116,080	13,658,197	1,492,228

By the end of 1947, there were 2,349 employes on the CATC's payroll, including 39 pilots, 27 co-pilots and 27 radio operators.

In March, 1948, CATC operated 24 air lines which served 28 cities, covering a distance of 23,681 kms.

The war hindered the development of CATC, and the victory has finally given it the best opportunity of advance. As for the traffic condition and installations, CATC is not yet a match for CNAC; but from the above data, it can not be denied that CATC is working its way up.

Civil Air Regulations Promulgated

Title	Part No.	Date effective
Civil Aircraft Registration Rules	CCAR 02	Nov. 1, 1947
Pilot Licensing Rules	CCAR 11	Oct. 1. 1947
Air Traffic Controller Licensing Rules	CCAR 13	Nov. 1, 1947
Physical Standards for Airmen	CCAR 19	Nov. 1, 1947
Airworthiness Certification Rules	CCAR 31	Apr. 15, 1948
Foreign Air Transport Operation Regulations	CCAR 45	Dec. 1, 1947
Civil Aircraft Registration Marking Rules	CCAR 49	Nov, 1, 1947
Air Traffic Rules	CCAR 61	Sept. 1, 1947
Aircraft Lights and Visual Signal Rules	CCAR 69	Feb. 1, 1948

Note—The above premulgated reunlations are for sale at the CAA Shanghai Office, Sasson Building, Tien-Tze Road, Shanghai.

NEWS BRIEF

(1) Extension of CAT'S Operation

The CNRRA Air Transport, known as CAT, directed by Major-General C. L. Chennault, has been given permission by the Executive Yuan to extend its operation for one year with the new name "Civil Air Transport" directly under the charge of the Civil Aeronautics Administration.

(2) Nanking-Honkong Service Inaugurated

CATC has inaugurated a new service from Nanking to Hongkong via Nanchang and Canton with two round-trips weekly since April 15. Flights from Hongkong to Nanking are scheduled on every Monday and Thursday, from Nanking to Hongkong on every Tuesday and Friday.

As a result of the new service, CATC's Shanghai – Foochow — Nanchang — Hankow service was temporarily suspended.

(3) Terminals at Shanghai and Canton Under Construction

Fifty percent of the construction of the terminal building at Lunghwa airport, Shanghai, has been completed since its commencement on Last December 12. The terminal will be air-conditioned. It is expected to be completed before the coming October.

The construction of the terminal building at the White-Cloud airport, Canton, was started on April 28. It is also expected to be completed before the end of the year.

(4) Tong-Tar Airport Opened for Civil Use

The Tong-Tar airpoat at Shenyang has been opened recently for civil use. And the maximum take-off grossweight for C-46 from this airport is limited to 47,000 lbs by the CAA.

(5) Nai-Ning Chen En Route to Geneva

Mr. Nai-Ning Chen, chief of the Communications Section of the Airways Division, CAA, left the capital on April 25 for Geneva representing China to participate the International Aeronautical Radio Administration Conference which will take place in May.

(6) Aircraft Dispatcher Training to Be Inaugurated Soon

For promoting the standard of aircraft dispatchers of CNAC and CATC, the CAA training centre at Shanghai will soon open a training class for them.

The training period will be one month. After completion, the trainee is eligible for a CAA aircraft dispatcher's certificate.

The training program will start in May.

(7) Weather Minimum Over Main Airports

Weather minimum over main airports throughout the country has been prescribed by the Civil Aeronautics Administration as follows:

Unit: Ceiling——foot
Visibility——mile

Name of City	Name of Airport	Location	Regular Airport				Alternate Airport			
			Take-off		Landing		Take-off		Landing	
			day-time	night-time	day-time	night-time	day-time	night-time	day-time	night-time
Amoy	Hoshan	E 118°7,′ N 24°32′	700- 1	——	700-1	——	800-2	——	800-2	——
Chungking	Sanhupa	E 106°34,′ N 29°32′	1000- 1	——	1000-1	——	1000-3	——	1000-3	——
Canton	Peiyuen	E 113°16.′ N 23°12′	400- 1	800-2	400-1	800-2	600-2	1000-2	600-2	1000-2
Hankow	Hsuchiapeng	E 114°20,′ N 30°36′	400- 1	800-2	400-1	800-2	600-2	800-2	600-2	800-2
Kiukiang	Shihlipu	E 115°58,′ N 19°43′	1000- 1	——	1000-1	——	1500-3	——	1500-3	——
Nanking	Mingkukong	E 118°49.′ N 32°3′	500- 1	800-2	500-1	800-2	800-1½	800-2	800-1½	800-2
Peiping	Siyuan	E 116°15,′ N 39°58′	400- 1	——	400-1	——	800-2	——	800-2	——
Shanghai	Lunghwa	E 121°26,′ N 31°11′	400- 1	800-2	400-1	800-2	600-2	800-2	600-2	800-2
Sian	Sikwan	E 108°53,′ N 34°15′	700-1½	——	700-1½	——	1000-2	——	1000-2	——
Tsingtao	Chang Kow	E 120°20,′ N 36°10′	800- 1	——	800-1	——	1000-2	——	1000-2	——
Tientsin	Chang kwei-chwang	E 117°21,′ N 39°8′	400- 1	——	400-1	——	800-2	——	800-2	——

Note: (a) The above weather minimum is effective on March 1, 1948.

(b) The airports at Nanking and Canton are not opened for night operations at present untill further notice made by the CAA.

(8) Second Assemblp of ICAO to Be Convened in June

The Second Assembly of the International Civil Aviation Organization will be convened in June 1, 1948, at the United Nations Buildings in Geneva. The meeting will last for about three weeks. Agendas for the Assembly have been transmitted to ICAO's 46 member-states and 22 non-member-states. Besides, 15 international organizations have been invited to attend the meeting.

TO OUR READERS

The "Civil Aviation" is published monthly by the Civil Aeronautics Administration. Previous issues are all published in Chinese. This issue is a selection of articles in English which are largely reviews of the development of Chinese civil aviation. Comments on this publication are sincerely welcome. —Editor.

Aviation

Lt.Col.Tso Chi-Chang

Lt. Col. Tso Chi-Chang, who was born in 1908 at Li-Ling, Hunan, is a graduate of the Central Military Academy and The Central Aviation Academy. Between 1930-1937, he served as CAF pilot and accumulated a total amount of more than 3000 flying hours. He then made his advance study at the Army University. Later he was made assistant Chief of Staff to the CAF Headquarters of Chungking. In 1945, CAF assigned a group of officers for familiarization of commercial airline operation with Trans-World Airlines in Kansas City, U. S. A., and he was appointed in charge of the group. Meantime he himself also studied the general management of air transport. He is now Deputy Director of CAA.

Mr. Chen Loh-Kwan

Mr. Chen Loh-Kwan, born in 1901 in the province of Checkiang, was graduated from the Department of Civil Engineering of the University of Illinois, U. S. A. Returning to China in 1925, he joined the Tsingtao-Tsinan Railway as a structural engineer. In 1927, he was appointed municipal engineer of Nanchang. During the period from 1930 to 1935, he had been professor of engineering at the Chiao-Tung University and the St. John's University and was later appointed Dean of the Engineering College of the Great China University.

He was the founder of the *China Oil Products Company* at Shanghai, the manufacturer of Chinese lubrication oils. In 1936 he joioned the Chinese Air Force taking charge of the construction of military air bases in the south-western provinces and was later appointed chief engineer of air field construction.

After V-J Day he resigned from military service and joined the Civil Aeronantics Administration as chief of the Airports Division.

Personages .....

Mr. Moon F. Chin

Mr. Moon F. Chin, vice-president and chief of the operational department of CATC, is a Cantonese brought up in Baltimore, U. S. A.

He had been co-pilot, pilot and vice-chief of the operational department of CNAC. He left CNAC and joined CATC in 1945 as chief of the operational department.

Capable as he is, he is the first Chinese pilot to fly over the Hump of the Himalayas. He is also the first person who flew from the southern part of Sikiang to India together with General P. T. Mow.

Recently, he piloted a C—46 plane to explore the Amne Machin range and discovered an unnamed mountain of 20,400 feet which is said to be the highest peak of the Amne Machin.

He has been publicly honoured as "China's Al Pilot" on account of his excellent skill.

Mr. Yuan Pao-Kang

Mr. Yuan Pao-Kang was born at Shanghai in 1912. He had been admitted in 1931 by the St. John's University, Shanghai. Being interested in flying, he quitted St. John's and joined the Central Aviation Academy in 1934. After graduation from the Academy, he served the Loyang Branch and the Canton Branch of the Academy in 1937 as an instructor. In 1938 he was promoted to captain of the 26th and the 29th squadron of the Chinese Air Force. A brave and capable fighter, he had shot down 7 Japanese planes during the war of Resistance.

He is now chief of the Airways Division of the Civil Aeronautics Administration and also Chief of the CAA Aeronautical Telecommunications System, Shanghai.

Mr. T. T. Chen

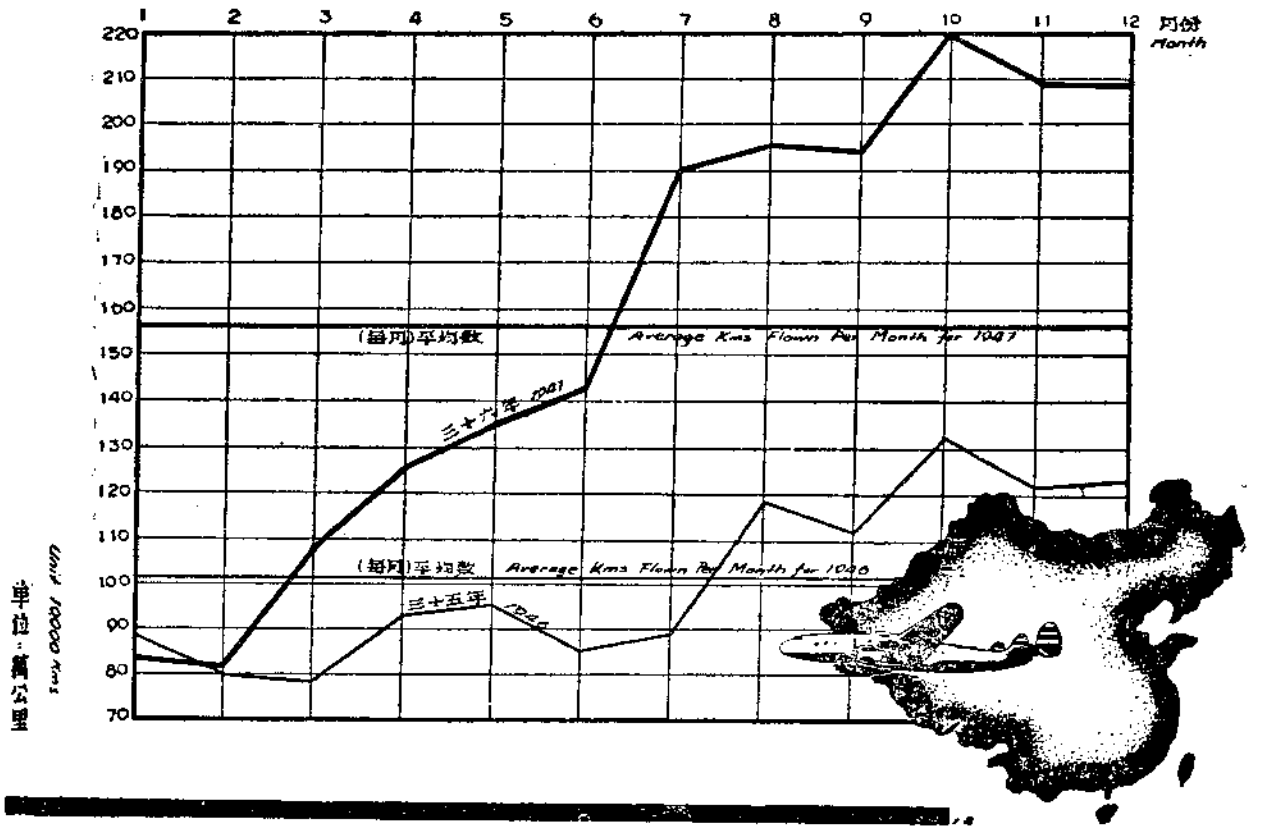
Mr. T. T. Chen was born in 1910 in the province of Checkiang. Graduated from the Department of Civil Engineering of the National Tsing-Hwa University, he had been engineer of the National Resources Commission and had visited many European countries for their hydraulic engineering developments on behalf of NRC, chief of water power surveying party of NRC, chief engineer of the Tien-Men-Ho Water Power Project of the Ordnance Department, director of the Tai-Chun Harbour Project of the Taiwan Provincial Government and special commissioner of the Ministry of Communications.

He is now chief of the CAA Engineering Bureau of Lunghwa Aerodrome, Shanghai.

STATISTICS

飛行公里 KILOMETERS FLOWN

三十五年—三十六年 1946-1947



Kilometers Flown

Month	1946			1947			
	CATC	CNAC	Total	CATC	CNAC	CAT	Total
1	162,230	718,245	880,475	346,364	480,210	5,520	832,094
2	137,102	664,470	801,572	345,001	442,536	27,600	815,137
3	143,485	638,795	782,280	425,496	610,155	51,810	1,087,461
4	153,525	786,065	939,590	520,834	658,632	89,220	1,268,686
5	232,802	722,260	955,062	522,079	665,410	102,022	1,351,511
6	221,348	634,260	855,473	482,510	781,724	161,208	1,425,442
7	208,999	688,965	897,964	615,350	958,524	334,536	1,908,410
8	260,540	936,965	1,197,370	606,971	937,243	421,672	1,965,886
9	318,480	794,115	1,112,595	623,535	987,949	336,100	1,947,584
10	418,345	907,350	1,325,695	718,224	1,030,720	452,311	2,201,255
11	428,807	789,750	1,218,557	692,769	957,566	450,724	2,101,059
12	440,325	779,845	1,220,170	703,674	945,381	* 450,724	2,099,779
Total	3,125,988	9,060,815	12,186,803	6,602,807	9,456,050	2,945,447	19,004,304

* Estimated

APPENDIX

CAA OFFICERS

Title	Name		Telephone No.
Director	Ango Tai	(戴安國)	35836
Deputy Director	Chi-Chang Tso	(左紀彰)	35836
Advisers	Wo-Chiang Lin	(林我將)	
	Hui-Ming Hsing	(項惠民)	
Secretaries	Ke-Seng Mao	(毛克生)	35839
	Chia-Nai Yuan	(袁家鼐)	35839
Chief Pilot	Hsun-Yen Lai	(賴遜岩)	
Secretary General	Heng-Pin Nieh	(聶恒斌)	35839
Chief of General Affairs Section	Ke-Seng Mao	(毛克生)	35839
Chief of Public Relation Section	Ye-Chun Sun	(孫以鑒)	35839
Chief of Archives Section	Tang-Wen Yen	(嚴當文)	35886
Chief of Air Transport Division	Li-Kung Shaw	(蕭立坤)	35880
Chief of Planning Section	Kwang-Chen Chow	(周廣誠)	35880
Chief of Air Transport Section	Mitchell Leo	(劉謀佶)	35880
Chief of Industrial Section	Yao-Nien Tsu	(朱堯年)	35880
Chief of Airways Division	Pao-Kang Yuan	(袁葆康)	35958
Chief of Airways Engineering Section	Yen-Sun Chuang	(莊延生)	35958
Chief of Meteorological Section	Jiun-Shi Guh	(顧鈞禧)	35953
Chief of Communications Section	Nai-Ning Chen	(陳乃甯)	35958
Chief of Air Traffic Control Section	Chi-Fan Yang	(楊起藩)	35958
Chief of Airports Division	Loh-Kwan Chen	(陳六琯)	32355
Chief of Airport Management Section	Yang-Chang Kuo	(過永昌)	32355
Chief of Aerodrome Engineering Section	Chian-Long Lee	(李乾龍)	32355
Chief of aerodrome Planning Section	Ih-Tsing Yen	(顏挹清)	32355
Chief of Flight Safety Division	Be-Chao Fan	(范伯超)	35982
Chief of Training Section	Hwai-Chi Ching	(靳懷習)	35982
Chief of Airworthiness Section	Wan-Chieh Tien	(田萬傑)	35982
Chif of Personnel Licensing Section	Kaun-En Hsiao	(蕭灌恩)	35982
Chief of Accident Investigation Section	Tze-Ho Tien	(田之禾)	35982
Chief of Flight Surgery Section			
Chief of Personnel Office	Shih-Kun Wang	(王世坤)	35882
Chief of Accounting Office	Nei-Ling Hsi	(奚彥齡)	35835

交通部民航局直轄空運隊

陳納德將軍主持

我們的宗旨

加強空運服務人民

促進航空事業的發展

我們的成績

1947年中空運7,318,694噸里

以上的救濟物資

總辦事處

上海中山東一路十七號七樓

電話

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中華郵政登記認爲新聞紙類
內政部雜誌登記證京警國字第三七八號