

NUMBER 40 October 1, 1974 Reg. Farrar, Editor

CNAC Association No less important, we have heard of the death of King Plouds last year

Harold Chinn, President

It is appropriate as President to have a President's message. However, since I ascended to the position under such sad circumstances, I find it only fitting and proper to make this a tribute to "Sol" Soldinski, President CNAC 1973-1975 - that every effort will be made to carry out his wishes to try and get more members into the association and to attend our meetings and Reunions. Harold T. Chinn, President

Do you remember the ride from Dum Dum into town, up Chitranjan Ave. to Chauringhe, crossing Dharumtala, the maidan on the right, all the street cars converging past the Grand Hotel on the left. Firpo's down Park Street, Khnarni Mansions, Park Mansions to lower Circular Road to Ballygunge Circular Road, to Store Road or Rainey Park. Or perhaps by the Victoria Memorial, past the race course on the right, turning left to Alipore Rd. and on to a fine glass of beer or nimbu-pani and a grilled cheese sandwich under the punka. A nice cool bath, another drink, and then a trip back to town for dinner at the B-A Club (now the site of an office building), possibly at the officers club in Khnarni Estates, or chinese chow at the Nanking in Chinatown. After a few more drinks a stop at the Hawaiian Club and after listening to the closing strains of Aloha and Drifting and Dreaming, a quick stop at the Puerto Rican Club and home. Remember the 500 Club, the Saturday Club, and the Swim Club? Those, my friends, were the days. It's too bad we didn't know that then. I wonder where they are now? We are preparing a Unrectory of former CNAC Employees for avantual publ

Start planning for the next Reunion - Ojai July 1975. We want this to be the best and largest ever.

IN MEMORIUM

Charles "Chuck" Sharp, Jan. 14, 1974 Sygmund "Sol" Soldinski King Clouse, winter 1973 V. Edward Smith, May 31, 1970 H. R. "Pete" Lucas

For CNAC this is a year of sorrow. The gang in Hogy Taw has increased. We have lost Chuck Sharp, the man who guided us through the war years, the man who flew the 1st Hump flight, and the pioneer aviator who came to China to work for a struggling Asian Airline.

We have most recently lost our President Zygmund (Sol) Soldinski, architect of the DC 2 1/2, master mechanic who pioneered in aviation mechanics, who kept CNAC flying.

No less important, we have heard of the death of King Clouse last year. This man took over after Sol wnt home and carried CNAC through the war.

These were the men who were there when it really counted.

CORRECTIONS & CHANGES MEMBERSHIP & MAILING LIST

K.T. Chang (changed) 306 Villa Kyoto 77 Kazankubo-cho Yamashina Kigashijama-Ku Kyota 607 Japan

Mrs. King Clouse (new) Ft. Brown Apartments #602 Brownsville, Texas

Betty (Mrs. Pete Lucas) (changed Box 149 Waverly, Tenn. 37185

Peter Goutiere (misspelled)
Jeff Hanan (misspelled)

Letters returned address unknown
Cyril Pinkava Tommy Wong
Ed Russell Numi Dillo
Charles Sharp

Gordon Tweedy (changed) Elmore Mountain Road Stowe, Vermont 05672

Samuel S.C. Yen, M.D. (new P.O. Box 109 La Jolla, Calif. 92037

Arthur N. Young (new 985 E. California Blvd. Pasadena, Calif. 91106

Floyd & Dorris James (friend Urdaneta Apt. 6 of CNAC) Ayola Ave. cor. Recoleto St. Makati Rical Phillipines, D 708

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We are preparing a Directory of former CNAC Employees for eventual publication, possibly in "Wings Over China." Since no list appears to exist it must be slowly and painfully put together. To help in this we hope you will complete the questionnaire and return it to us.

Stay active -Attend your local meetings. There will be one in New York, Miami, and Los Angeles

Chris Colthorpe wrote me a nice note last year. In it he listed several references to articles about CNAC. It seems these are of general interest. Many might be available in your Public Library.

BOOKS:

- 1) A History of the World's Airlines , R.E. G. Davies
- 2) A History of the American Aircraft Industry , G. Simmons
- 3) Climb To Greatness , J. Rae
- 4) Wings Over Asia Vel. 1 & 2
- 5) I Flew For China , Royal Leonard (A C.N.A.C. pilot)
- 6) Winged Highway , W.S. Grooch (P.A.A. pilot in China 1933-4)
- 7) World Aviation Annual 1948
- 8) China's Nation Biulding Effort, A.N. Young (economic advisor to Nationalist Government sat on
- 9) China- The Helping Hand, A.N. Young
- C.N.A.C. board of directors during part of W.W.ll)
- 10) China Among the Powers , D. Rowe
- 11) Communist Chinese Air Power R. Buescher
- 12) "Aircraft and Anticommunists", China Quarterly William Leary Jr. Oct-Dec 1972
- 13) The China Yearbook
- (Annuals published by Nationalist Govt...

 14) The China Year Book

 The years 1929-1950 contain sections on aviation with subsections on C.N.A.C.)
- 15) The Chinese Year Book

MAGAZINES

- 1) Life Magazine: June7,1948 P.13
- 2) National Geographic: Aug. 1945 P. 231 May 1938 P. 570
- 3) Aviation Week: July 19, 1948 P.51 Feb. 9, 1949 P.47 & P.55
- Aug. 16, 1949 P.31 Nov. 13, 1939. P.24
 Aug. 16, 1948 P.84 April 5, 1937 P.62
 Dec. 17, 1945 P.81 Dec. 2, 1935 P.46
 Sept. 1, 1945 P.20
- 5) Literary Digest: April 30, 1932 P.33 March 19, 1932 P.32 Sept. 4, 1937 P. 9

WHO WE WERE

No matter who you were before, and who you were afterward, for one brief period you were CNAC. The roll that each of us played differed, some were more conspicious, and some had more exciting experiences, but CNAC all.

This column will be continued and consist of sketches of indivdual CNAC.

HUGH ROSS (PETE) LUCAS 1920-1974

Pete was a native of Waverly, Tennessee, and attended elementary school there. Later he was graduated from Battle Ground Acadmey and Vanderbilt University. While at Vanderbilt, Pete began his flying career in the Civilian Pilot Training program. This led to his being an instructor at the Air Corps contract school in Jackson, Tennessee, during the earlier part of World War 11. In 1944 Pete was hired by CNAC and reported to American flyers at Meacham Field, Fort Worth for instrument training.

Pete was well liked by all his associates in Calcutta, Dinjan and the other side due to his jolly nature and natural zest for life. He was also pretty handy with the two little spotted cubes, as some of the boys will agree. When it was all over in 1946, Pete resigned and signed as crew on an old Liberty ship bound for the States.

Pete had a natural business head and got the most pleasure out of a satisfactorily completed business deal. He died suddenly of a heart attach on March 9, 1974, in Waverly, where he was a successful developer, building contractor, and all around business man.

Surviving are his wife, Betty Warren Lucas, of 467 Powers Blvd. Waverly, and one son, John Griff Lucas of Knoxville, Tenn.

THE DRAGON'S WINGS

Correction: I tried to change William Leary's name to Timothy but he didn't like it so please make the correction on your membership list. I must be the one on the weed, certainly not him.

Dr. William Leary, Jr. has written the story of CNAC. Many will remember his visit with us at the Ojai Reunion a few years ago. Now the book is done and will be published early next year by the Univ. of Georgia Press. Advance orders may be placed with the Univ. of Georgia Press, Athens, Georgia, 30601. The price has not been announced. This may not go into many printings so it might be well to get your order in early, and for several copies. Send them to your friends, put one in your Public Library. Dr. Leary's book is named; The Dragon's Wings: The China National Aviation Corporation and the Development of Commercial Aviation in China. In this issue of the CNAC Cannonball there is an excerpt from his book.

The American Institute of Aetonautics and Astronautics bestowed its History Manuscript Award for 1973 for "the best historical manuscript dealing with the science, technology, and impact of aeronautics and astronautics on Society." We add our congratulations on his award.

The China National Aviation Corporation (CNAC), a Sino-American commercial airline that developed air routes in China during the 1930's, pioneered service over the Hump between India and China in 1942. Between April 1942 and September 1945, CNAC flew some 80,000 trips across the Hump, carrying more than 50,000 tons of goods to China and bringing out nearly 25,000 tons. It cost the lives of twenty-five crews.

The following selection from The Dragon's Wings depicts

CNAC's wartime operations from the perspective of the cockpit.

CNAC's pilot group, one of their number has observed,

"was probably one of the most unique in all aviation history,
a wider assemblage of personalities, family and financial
background, aviation experience, and nationalities could
not be imagined." The men came from the United States,
China, Australia, Canada, Great Britain, and Denmark, and
had flown for the American Volunteer Group, the Eagle Squardon,
the North Atlantic Ferry Command, the Royal Air Force, and
the Royal Canadian Air Force. They had more than 1,000
flying hours to their credit, most had an instrument rating,
and many had extensive multi-engine experience. "All were
motivated by a thirst for either money or adventure or both,
and it was impossible to gain much of the first with acquiring
a considerable amount of the latter."

A new pilot journeyed half-way around the world to join CNAC. Starting in New York, he might fly to Miami aboard a domestic airliner, and if he was lucky he would connect there with one of Pan American's Clippers for the flight to Natal on the bulge of Brazil. At Natal he might wait days or weeks for an Air Force B-24 or C-47 being ferried across the South Atlantic to Africa and the Middle East, or he might get a ride with a C-46 from Air Transport Command. A flight of 1,437 miles awaited him, halfway across the Atlantic, to the tiny volcanis island of Ascension for fuel. Another 1,357 miles over the water would bring him to Accra in the British colony of the Gold Coast. He would cross the width of Africa to Khartoum in Anglo-Egyptian Sudan, then follow the Nile northward to Cairo. Here he would most likely have to find new transportation, perhaps an aircraft on ferry to India via Iraq and Iran. Finally, he would arrive at Karachi, the aerial gateway to British India; but he would spend another two or three days flying across India to Calcutta via New Delhi. If his connections were the very best, he might have been able to fly from New York to Calcutta in ten days; otherwise the passage could take a month or more.

His first encounter with CNAC likely came in the person of William McDonald, former member of Claire Chennault's "Flying Trapeeze" acrobatic group of the early 1930's, adviser to the Chinese Air Force, and now assistant to CNAC's Chief Pilot.

McDonald told the new man in a salty Alabamian drawl what

CNAC expected of him: be punctual when transportation calls, fill out your log books properly and legibly, read the bulletin board at least once a day, do not carry more passengers than there are seats on the aircraft. The new man would be warned against smuggling. Remember, McDonald would emphasize, "you are in a foreign country and you will contact Indians, Chinese, Burmese, English and French; use tact and diplomacy in doing business with them. Above all, Do Not Lose Your Temper." Doctor Richards would perform a physical examination; he would probably warn against excessive use of alcohol and describe some of the more esoteric venereal diseases. The new man would learn that the mailing address for Calcutta was A. P. O. 465; Kunming was A. P. O. 627.

Following initial instruction in Calcutta on CNAC's aircraft and procedures, the new arrival would travel to Dinjan for advanced training as co-pilot on the Hump. He would learn that there were a number of routes over the Hump. The northern route, favored during good weather, called the take-off from Dinjan, direct to the local Army Direction Finding (DF) station, then a course of 098° for 112 miles to Fort Hertz DF Station; turn right to 107° for 208 miles to Lake Cheng Hai, then south to a course of 129° for 170 miles to the Army DF station at Kunming. Although this route required a cruising altitude of 19,000 feet to clear all obstacles, it could be flown much lower in good weather if one knew the terrain. The direct route from Dinjan to Kunming followed a course of

112° and could be flown at 16,000 feet. For the southern route, turn to a course of 143° from the Army Df station for 86 miles until reaching the fork of the Tanai River; then come to 105° for 497 miles to Kunming, using the CNAC DF station at Yunlung as a check point. This route could be flown at 14,000 feet, but beware of the Japanese.

A new pilot would learn of the two routes used during instrument flying conditions: eastbound via Yunlung and westbound via Fort Hertz. He would come to know every mountain and every canyon on all the routes. Captain Robert W. Pottschmidt, the soft-spoken check pilot, would have him outline the routes, noting the elevations of the mountains. The new man would become proficient at instrument flying over the Hump. One day he might lose an engine in bad weather and be forced to descend, to 10,000 feet. Maybe he could fly headings that would take him between the mountains - maybe.

As he sat in the right seat over the Hump, his captain might tell him about the four distinct seasonal weather patterns that one could expect on the route. The monsoons came in the summer, bringing nearly constant instrument flying conditions. The seemingly endless light rain at flight altitudes was annoying, but there was not too much wind or turbulence, and the icing level was high enough so that heavy accumulations could be avoided; also, one did not have to worry about the Japanese because the bad weather kept them on the ground. The winter season generally brought clear weather, except

for ground fog in the early morning. Enroute, high winds could be expected, invariably from a westerly direction, and reaching velocities of 100 to 150 miles an hour. The new man would be warned about the need for careful fuel management on the westbound trip. Watch the Chinese ground crews at Kunming: gasoline brought fantastic prices on the black market, and the crews were not adverse to siphoning off a few extra gallons. Spring and fall brought the worst flying weather, with unpredictable winds, frequent and violent thunderstorms, and severe icing conditions. Furthermore, the radio direction finding equipment was unreliable in thunderstorms or during snow and icing conditions.

The new pilot practiced the instrument approach to Kunming. Tune your Bendix to 375 kilocycles and identify the Army DF station. Approach at 12,000 feet from the northwest at an indicated airspeed of 120 miles per hour. Upon crossing the station, lower your landing gear, turn north for two minutes and descend to 10,500 feet. Make a procedure turn (15° of bank) to port, come to the reciprocal course of 180°, and cross the station again at 8,500 feet. Turn to course 195°, continue descent at 1,000 feet per minute until your altimeter registers 6,700 feet (approximately 500 feet above the field). If the airport is not in sight, pull up and follow the missed-approach procedure. If the new man was wise, he would practice this approach over and over again.

An experienced pilot could be checked out in a few weeks, although the average was two or three months. If a new man

did not make the grade within six months, he was sent home. As a CNAC captain, his base salary for sixty hours was \$800 a month, or more than an Air Force colonel made; and the colonels, and others, would probably demonstrate their resentment of this fact. The CNAC captain made 20 rupees (\$6) an hour for time between sixty and seventy hours; over seventy hours, he was "on gold," \$20 an hour. If he was Chinese or of Chinese descent, however, he made 1,600 rupees (\$485) for sixty hours; this kind of discrimation could rankle, especially if the new man was American or Canadian born.

Most pilots flew 100 to 140 hours during a stay of from two to three weeks at Dinjan. Then a pilot would return to Calcutta. Part of his time was spent with refresher courses in radio operation and instrument flying. But mostly he relaxed. If he was so inclined, he read or visited the local scenic attractions, such as they were. He would pay at least one visit to the noisey labryinthine passageways of Newmarket to buy some souvenirs of India for the folks at home. He might go to tea dances or dinner at the Great Eastern Hotel. He probably would spend some time at the British-American Club. Earthier pleasures could be found on Kariah Road.

In Dinjan, he stayed at the CNAC bungalow, located on a tea plantation about five miles from the airport. "The C.N.A.C. building," one pilot recalled, "like all others in the district, was set high on stilts to be well above the muddy floods of the monsoon season, but it was a giant, being

a hundred feet wide and forty feet deep, with a huge porch covering the entire front and one side. The roof was steeply pitched and covered with a foot-thick layer of thatch to repel the heat of the sum as well as shed the rain. The main floor of the building consisted of four large rooms, three of them in all containing about forty beds and double-decked bunks. The fourth room, which was the largest, was the lounge, and around its huge fireplace were grouped half a dozen comfortable leather chairs and an enormous couch. Elsewhere in the room were card tables, writing desks and bookcases, a radio and a phonograph. The favorite record of one of the native servants, Putlao, was an Andrew Sisters' rendition of 'Down by the Ohio!' He played it every morning to wake the pilots."

Miss Major, who later married Hugh Woods, ran the mess, and the food generally was excellent, especially compared with Army messes. Sweet-and-sour pork was a favorite dish. The pilots argued a good deal, usually about the performance characteristics of various aircraft and women. They played cards. And they probably drank too much, despite McDonald's plea "to drink more oxygen and less whiskey."

The average CNAC pilot did not know very much about the relationship between CNAC and the Chinese government, and he did not really care. His attitude toward the natives, Chinese and Indian, ranged from affection to intollerance. He probably did some smuggling; surely, he believed that everyone else was doing some. He looked down upon the Army and took pride

in the fact that CNAC flew when the Army remained on the ground.

He was afraid, but he felt a bit heroic, and he was determined to get the job done.

If he survived, he would come to look back on the war years with a good deal of nostalgia. The bad times would tend to blur in his memory, and the good times would stand out. The tales - Al Mah playing his saxaphone at 18,000 feet, Hockswinder's landing in the Ganges River, Jimmy Scoff's escapades on Kariah Road - would grow taller with each passing year. Whether flying for the airlines, ranching, or running a gasoline station, he would remember his work - and his youth - with pride.

It is a month late but Happy Anniversary Mac and Peggy

You are invited to be present at a reception following the marriage of Margaret Cameron Spain to William Clifford M. Donald. Fr.

Five to Seven p.m.
Tuesday August first
Nineteen hundred forty four

"300" Club Twenty five Theatre Road Calcutta, India