CHINA NATIONAL AVIATION CORPORATION ASSOCIATION



10186 Idleman Road S.E. Portland, Oregon 97266 September 1972.

To: All members CNAC Association.

From: Art Chin, President.

Greetings from Portland. Time is really flying. It does not seem possible that we are almost ready for our next Reunion.

I hope that sectional Reunions have been held from time to time. I have been trying to get our Chinese members to take a more active part in our Association. We need more stories and participation at the Reunions. You most certainly will enjoy the experience.

This letter will be inclosed with the next issue of "Wings Over Asia ".

Much credit is due Capt. Woods, Mr. Soldinski, Roger Reynolds, Jim Dalby and Rocky Roncaglione for their help in providing articles and photographs.

I am sure that there are many other fine stories that could be printed and I hope that you will send them to Bill McDonald, 2201 Crest Road South, Birmingham, Alabama 35209. He informs me that we have a few stories for Issue number III but that we need at least seven more. Dig down men and let us co-operate. Send a picture of yourself as well as pictures concerning your story.

I urge you all to attend next years Reunion. I think it will be at Ojai, California next July 4th. You will get a notice from the Flying Tigers after the first of the year.

Warmest regards to everyone.

Sincerely,

art Chin

WINGS OVER ASIA

A BRIEF HISTORY

OF

CHINA NATIONAL AVIATION CORPORATION

DC 21/2





WINGS OVER ASIA

Volume II

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by

The China National Aviation

Association Foundation

WARTIME AIRLINE—1941 By Louis Reid From Los Angeles Examiner

Seven young American aviators have the unique honor—today—of keeping China in touch with the outside world.

The job they're doing, come hell, hurricanes, high water—and the Japanese—provides one of the most thrilling sagas in an era which abounds with thrilling sagas.

Between Chungking, in the upper gorges of the Yangtse, and that part of the country still left to the Chinese, they carry more than 2,000 passengers a year, a million pounds of mail, freight and special cargoes.

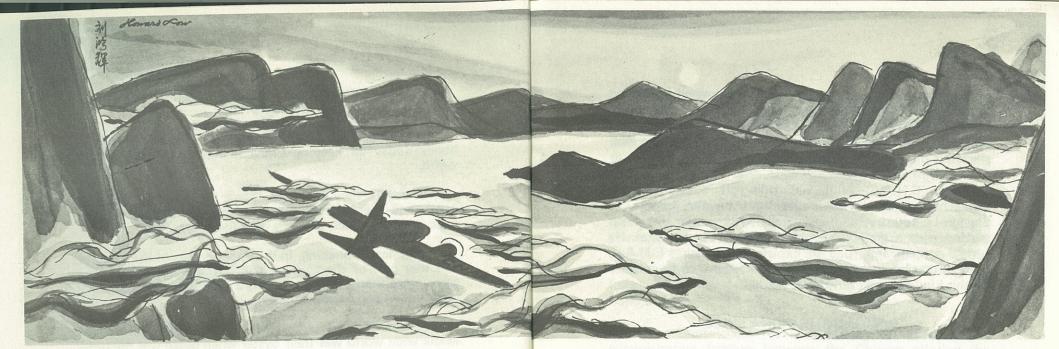
Several of them were formerly tranoceanic pilots. The whole wide world was their oyster when peace was the order and aggression was spelled with a small a.

Suddenly there was war. It came up like thunder out of China 'cross the Bay. The young Americans volunteered for service with the China National Aviation Corporation, which the Chinese in their quaint way call "Middle Kingdom Space Machine Family." C.N.A.C. is jointly owned by the Chinese National Government and Pan American, and though the latter's personnel (as such) was withdrawn at the outbreak of hostilities, it constitutes the key operating officers and flight captains.

In New York, the other day, arrived W. L. Bond, whom Pan American loaned to the Chinese to manage C.N.A.C., with a story of his colleagues which for sheer pluck involved is not surpassed in any war-time operation anywhere.

Though the pilots maintain a strictly commercial service, they make their flights between Japanese air raids. They never fly in good weather. They wait for nights when heavy storms prevail, when conditions are so difficult that Japanese bombers and fighters do not navigate.

Their constant companions on the fringe of the occupied zone are anti-aircraft batteries, which they vividly describe as "red hot cigar butts reaching up for you," and searing searchlights which they liken to "lightning exploding in your face." Inevitably, too, they have had to pay the price.



"THE FLIGHT FROM SHANGHAI TO CANTON, A ROUTE THAT TWISTS THROUGH MOUNTAINS,

CHINA'S LAST LIFELINE

Early in February, 1942, Theodore H. White, Time Inc.'s Chungking correspondent since 1939, left the U.S. for the Netherlands East Indies. The islands were lost while he was at sea, and the Dutch freighter on which he was traveling landed him in Australia late in March, a few days after General MacArthur's arrival. In May White began to work his way to China, via Ceylon and New Delhi, which he reached in time for the All-India Congress in August. Then he took a plane over the Himalayan hump to Chungking, from where he wrote this story of the fugitive airline.

Chungking, March, 1943

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It is easy to fly at night in the warm, closed cockpit of a transport with the round nose of the plane falling before you

CROSSES ISLANDS AND THE OPEN SEÁ, AMIDST AN ALMOST CONSTANT BLANKET OF FOG"

into nothingness and the instrument panels glowing radium green and gold and red in the twilight. It is easy at 8,000 feet when every now and then you can make out the round blur of a city's lights, or the reflected glow of a factory along the course, and the radio is dit-daing gently into the earphones and the compass is zeroed directly on the beam. Then there are only the stars and the purr of the engines and the miles checked off in your mind and evenutally the red and green lights of the home field at the end of the journey.

It is different when you fly by night through a fog, with a spur of the Himalayas only 1,500 feet beneath you and the altimeter reading 18,000 or 19,000 feet. It is different when you know that if one engine fails you cannot stay above the peaks; and that if a north wind is blowing it may sweep you up into the clawing arms of the mountains that stretch down from Tibet; and that if you crash land, you land in the country of head-hunters; or if you weave off course to the south at daylight the Jap scouts from their Burma bases at Lashio, Myitkyina, or Bhamo will shoot you down, perhaps even before you see them. If you are a ferry-command pilot

in the Army "flying the hump," then you know it's war and the crew has the guns ready and you beef like hell, but it's your way of fighting. If you're a C.N.A.C. pilot flying a load of nervous passengers, then you're doing it because you started it and you're going to finish it. You asked for it.

One C.N.A.C. pilot was riding it out on course somewhat south of what the boys on the hump call Shangri-La country, and the parallel tiers of the Himalayas stuffed with a gray-blue wool clouds lay beneath him. He turned around and tried to explain what makes C.N.A.C. work. "You know," he said, "you don't have to be crazy to do this kind of work, but it sure helps."

OPENING THE CHINA SKIES

C.N.A.C. is the China National Aviation Corporation. It is one of those peculiar enterprises whose capital value in dollars and cents might barely equal that of a large American department store; but whose actual value in the war for the control of Asia can only be weighed by history. Planes are today the only means of communication between China and the outside world. Together with the Air Forces Air Transport Command of the U. S. Army, it freights in from India over the mountains and over Japanese opposition all the supplies of military importance that reach the most terribly blockaded country in the world. It survives war, weather, and blockade, first of all because the Chinese insist that it must survive; and second because a group of Americans, who saw and understood what was happening, declared war on Japan four and a half years before the U.S. followed suit.

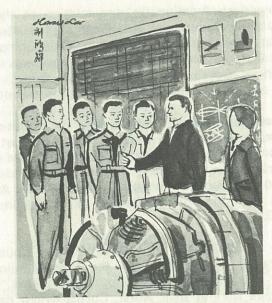
C.N.A.C. is the offspring of two hardheaded collections of individuals: the National Government of the Republic of China, and Pan American Airways. Its origins go back to the late 1920's when Curtiss-Wright was searching the markets of the world for outlets for its aircraft. At the same time Chiang Kai-shek's newborn government saw that an airline was indispensable to the newly united country. The two struck a bargain: Curtiss-Wright, through a wholly owned subsidiary,

North American Aviation Co. (no relation to the present corporation of the same name), acquired a 45 per cent interest in a new company to be known as the China National Aviation Corporation. The other 55 per cent was owned by the Chinese Government. Management rested with the Chinese, operations with American pilots and executives.

Relations were bad from the start: the operation record was poor, accidents were frequent. By 1930, out of eight planes, only two were in working condition. The company was operating only one run, the Shanghai-Nanking-Wuhan (Hankow) route up the Yangtze six times a week. And it was losing a million Chinese dollars a year—then roughly \$300,000.

The chief cause of Curtiss-Wright's troubles was administrative friction between the Chinese piloting the company and the Americans piloting the planes. In 1931, when affairs were at their worst, Curtiss-Wright decided to send out a trouble shooter from the U.S. No one wanted this thankless job except William Langhorne Bond. Bond was a medium-sized, ruddy-faced rebel who had come to aviation by a back door. While Bond was working as a construction superintendent near Cincinnati in 1928, a barnstorming pilot. with headquarters in a nearby cow pasture, had taken him up on his first flight. Bond alighted from the open-cockpit plane convinced that aviation was his meat. He guit his job and went to work for Curtiss-Wright, supervising the building of the Curtiss-Caproni plant at Dundalk, Maryland. It was completed just in time for the 1929 market crash. Bond was assigned the job of whittling the maintenance charges into manageable shape. He went to work on the utility companies and persuaded them to defer charges until the plant was in operation.

It was this feat of persuasion that sent Bond to China in 1931 as operations manager of C.N.A.C. First reorganization job there was to lay down rules of maintenance and discipline, and to establish the basic principle that C.N.A.C. was not a mere marketing outlet for an American corporation but an airline serving the Chinese.



"It was essential to train hundreds of Chinese mechanics to handle the delicate precision instruments of repair and maintenance."

Nineteen thirty-one was a bad year for the Chinese. The convulsive Yangtze burst its bonds and C.N.A.C. flew medicines, doctors, and surveyors over and through the vast flooded basin until the waters subsided. C.N.A.C. established its first branch line from the parent trunk in that year too, a semi-weekly service from Chiang Kai-shek's government in Nanking to Chungking in the heart of Szechwan. In those days, Szechwan province was an all but independent country. Boats plying the Yangtze between Chiang's domains and Szechwan were fired on. When the war lord of Szechwan heard that the government of Nanking proposed to run an airline into Chungking, he threatened to shoot down the first plane. It took four months of negotiation to placate him, but C.N.A.C. finally established a terminus at Chungking. Though C.N.A.C. still lost a million Chinese dollars in 1931, there was the consolation that the progressive trend into the red had been halted. And there was not even a minor accident on the line.

In 1932 Bond piloted C.N.A.C. through its first clash with the Japanese. The Shanghai war was raging, but Bond saw no reason for calling off the Shanghai-Nanking flights simply because of fighting. He climbed into a plane and rode the regular route, the only passenger there and back, thereby establishing C.N.A.C.'s blithe tradition of refusing to consider military activity a reason for canceling flights. An indignant protest from the Japanese Army to the American consul was relayed to C.N.A.C.'s Board of Directors, and over Bond's loud objections the run was canceled for five days. At which point the Directors decided it was easier to brave the Japanese than Bond's wrath, and informed the Japanese that they planned to keep flying.

DREAMS OF A TRANSPACIFIC AIRLINE

The function of C.N.A.C. during the thirties can only be understood against the turbulent background of Chinese history. Chiang Kai-shek had ridden the great revolution of the mid-twenties to a victory that gave him control of the



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lower Yangtze and all its wealth. The revolutionary surge of that decade broke, as revolutions do, on both geographical and social lines of cleavage. Chiang's central government was attempting to bring this patchwork of confusion into the pattern of a single unified state. This was done by force, bribery, guile, or wisdom as the occasion demanded. But it terrified the Japanese with the specter of a powerful united China to challenge their Oriental ambitions. C.N.A.C. served as one of the most important instruments in Chiang's tool kit. It bound the freshly united elements of China together with quick and vital communications.



"The most turbulent job of evacuation was done for the British when the Japanese broke through in northern Burma. Prospective passengers offered thousands of dollars of passage, and C.N.A.C. posted men with tommy guns at the doors of its planes to make sure they were not rushed by mobs."

China's greatest social need has always been transportation—the millions of Chinese villages in which China's peasants live are pinned relentlessly against the map by a total absence of modern intercommunication. Most travel in interior China is done by horse trail, river boat, or on foot. The trip from Changan (Sian) to Chengtu, which can

be flown in two hours by modern Douglas, takes almost two months on foot. No railroad, bus, or steamer in China ever departs without a teeming, overloaded cargo of passengers clambering on roofs, seats, running boards, sleeping in vestibules and staircases. Against this background of immobility C.N.A.C. stands out as the most impressive agency of speed in the twentieth century.

Nineteen thirty-three marked a turning point in C.N.A.C.'s operational history. In that year Curtiss-Wright was disposing of some of its holdings, among them C.N.A.C. Pan American Airways meanwhile was contemplating bridging the Pacific with an airline, and figured that an airline already servicing China would prove a valuable extension to the transpacific run. Accordingly Pan Am bought Curtiss-Wright's 45 per cent interest in C.N.A.C. (Upon expiration of the contract in 1945, the Chinese Government, if it then has sufficient trained Chinese personnel, may take entire control of the company.)

Pan Am immediately began to pour in personnel, equipment, purchasing power, and operating experience. Harold M. Bixby went to China to represent the American company, and with Bond as operating manager and P. Y. Wong as managing director representing Chinese interests, they went to work.

This was an active year. The Japanese were crowding the Peiping-Tientsin area, and it was politically essential to keep the Chinese flag flying in that sector. C.N.A.C. decided to open a new airline immediately and bluff the Japanese out. This was the only C.N.A.C. line ever to receive a Chinese government subsidy. As it turned out, the line was not only good politics, but good business. It became one of the gravy runs, netting 20,000 Chinese dollars a month during the first eight months of operation. That same year the company opened up what was then one of the most hazardous flying routes in the world—the coastal flight from Shanghai to Canton, a route that twists through mountains, crosses islands and the open sea, all of it contact flying amidst an almost constant blanket of fog.



"When the Chinese armies were trapped in the mountains after the Burma disaster and slowly making their way out over the hills to safety, the Generalissimo called upon C.N.A.C. to supplement the R.A.F. and the U.S. Army Air Forces in feeding the troops by dropping food from the air."

In 1935 C.N.A.C. brought the first multimotored airline equipment to China. A Ford transport was used to fly the mountain route from Chungking to Kunming, a flight too hazardous for single-engine planes. Now a trip that had formerly taken weeks could be made in three hours. C.N.A.C.'s run to Peiping was provided with a new DC-2, and began to show a profit beyond the fondest hopes of the proprietors. The old single-motored planes continued to ply the feeder lines. Operating revenue met operating expenses for the first time.

CHINA BEGINS TO SHRINK

Not all of China's airways, however, were operated by C.N.A.C. A competitor, Eurasia Aviation Corp., sponsored jointly by the Deutsche Lufthansa and the Chinese Government, flew slightly less intense schedules. Today its total equipment consists of only one antique Junker, which flies from Kunming to Chungking to Lanchow to Tihwa, and all German personnel has been eliminated. C.N.A.C. always

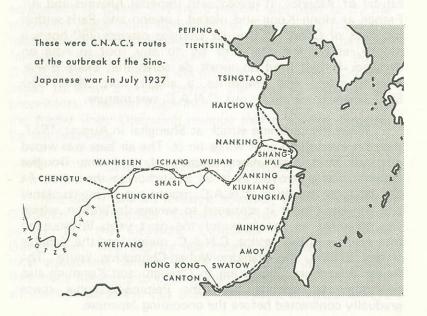
had more "face" than Eurasia with the Chinese public, and singlehanded accomplished a revolution in the market for aircraft in China. Before C.N.A.C. existed, the China market for aviation gasoline, equipment, and planes was dominated by the British. But so successfully did C.N.A.C.'s performance advertise U.S. products that by 1937 they had the Chinese aviation field practically to themselves.

By 1937, C.N.A.C. was operating lines from Shanghai all the way up the Yangtze through Nanking and Wuhan to Chungking and Chengtu. It branched off to the south and serviced Kunming, From Shanghai it serviced Peiping, Tientsin, and North China. It was planned to push even farther north toward Russia. In the South it ran a coastal route to Canton and into Hong Kong. It possessed four Douglas transports and eight minor crafts. Its annual revenue had grown in six years from 600,000 to 5 million Chinese dollars. It had a radio service that covered China, complete repair facilities, and a corps of American and Chinese pilots that matched any other group in the world for skill and daring. It connected with the Pan American Clippers at Hong Kong, and placed the capital of China eight days from the capital of America. It linked with Imperial Airways and Air France at Hong Kong and placed London and Paris within ten days of China. It flew its Douglas carriers 250 hours a month, and stood ready to fly to any spot in Asia on demand. It had bred an esprit de corps that made pilots, ground crew, and machines a single unit. When the Sino-Japanese war broke out, C.N.A.C. was mature.

When the Japanese struck at Shanghai in August, 1937, they hit everything with wings on it. The air base was wiped out, all land installations devastated, and one Douglas Dolphin was destroyed as it lay at anchor on the water. As the Japanese moved in, C.N.A.C. moved out, flying its planes and the equipment it managed to salvage to Wuhan, which was to serve as the base for the next year. Without an interruption in the service, C.N.A.C. maintained the Yangtze Valley lifeline, the Nanking-Wuhan-Chungking route. The feeder lines from Chungking to Chengtu and Kunming also continued to operate, but the Peiping-Shanghai route gradually contracted before the oncoming Japanese.

Japanese guards were already posted at the gates of Peiping while a C.N.A.C. plane was still at the airport, six miles outside the city limits. Pilot "Foxy" Kent, caught within the city walls, was smuggled out in a vegetable cart, disguised as a coolie. He reached the airport and flew his plane out from under the noses of the invaders. With Peiping gone, C.N.A.C. retreated to Tientsin. When Tientsin was lost, C.N.A.C. fell back to Tsinan, and finally to Tsingtao. Always the C.N.A.C. planes were the last to abandon the cities.

Meanwhile, to avoid an international incident, Pan Am was obliged to withdraw its American personnel from C.N.A.C. But the Americans retreated only as far as Manilla. Once out of China, they resigned from Pan Am, and went back to work for C.N.A.C. Thus they took upon themselves the onus of fighting the Japanese, absolving the State Department of responsibility. Bond, who was then in the U.S., also resigned from Pan Am, and flew back to China, this time as Vice President of C.N.A.C.



THOUSAND AND ONE WAR NIGHTS

By 1938 the wartime necessity for speed was cramming capacity loads into every C.N.A.C. flight. New routes were opened up, the Wuhan-Hong Kong and Chungking-Hong Kong being the most famous. Within the first five months of war the Japanese cut China off entirely from her northern and middle seaboard. Only one major outlet to the sea was left: the Canton-Hong Kong area. To reach either of these cities from central China took weeks by river steamer and days by rail, but by plane it was a matter of five hours from Wuhan.

Passenger priority lists yards long grew up around each flight. Such key trips as the Wuhan-Hong Kong and the Chungking-Hong Kong runs required weeks of waiting before transportation was available. Furthermore, schedules were maintained in air dominated by the enemy. There was no precedent for such an operation, and C.N.A.C. was obliged to develop techniques as it went along. It was operating on the theory that if C.N.A.C. planes didn't bother the Japanese, the Japanese wouldn't bother them. For a year this had worked. But on August 24, 1938, Pilot Hugh L. Woods and a crew of four flew out of Hong Kong with fourteen passengers. It was a fine day, and wing markings were clearly visible. Half an hour later five Japanese plans dove on the transport, guns blazing. Woods managed to land the plane on a river, but the Japanese planes flew low and methodically machine-gunned the hulk back and forth, until all but one passenger and two of the crew were killed. Woods and the radio operator crawled out, swam to shore and escaped.

But C.N.A.C. was determined to maintain schedules. To do this it decided to fly at night when the Japanese didn't, or in weather so bad that the Japanese couldn't. The hours of take-offs were kept secret. For two weeks C.N.A.C.'s pilots practiced night flying and landings on Hong Kong's handkerchief-sized airdrome. And twice the Japanese pounced on the intermediate refueling base at Kweilin, trying to catch the grounded airliners. Both times the planes escaped, but extra gas tanks were henceforth attached to

planes on the Hong Kong run so that the flight could if necessary be made nonstop.

C.N.A.C.'s Hong Kong run became one of the most extraordinary adventures in war transport. Planes would leave Chungking at dusk or shortly thereafter, wing through the dark with every light doused, and soar over the Japanese lines night after night. Often a battery of searchlights would prod the night trying to strain the airliner out of the dark, and anti-aircraft would open fire. Then the pilot would twist and turn while his frightened passengers huddled in the plane's thin shell, sweating with fright, clutching anything handy for support, and scarcely breathing. At last Hong Kong would come into sight, a brilliantly lit mountain peak strung with spiral cords of light that marked its roads, and in the heart of it the city itself, with red and green and blue traffic lights. neon-lit shop windows, glittering and gay, complacent and peaceful. Passengers would pour off onto the dark airport, the pilot would go in for a cup of coffee, and in two hours back the plane would go, to run the gauntlet to Chungking.

ARKS OF THE SKIES

On October 22, 1938, the Chinese Government warned C.N.A.C. that the river port of Wuhan was doomed and could not hold out longer than three days. Chief Pilot Charles Sharp and Pilot Royal Leonard, both experienced night flyers, were detailed to bring out the top personnel of the Chinese Government, whose duties would keep them at headquarters until the very eve of evacuation. For three days the transports worked in and out of Wuhan carrying out passengers, the crew getting five hours sleep each day, coming in and out of the bombpocked airfield only by night by the light of seventeen oil lamps. The last trips out were nightmarish. Each fourteen-passenger plane carried thirty passengers or more. In the last three days C.N.A.C. flew out 296 essential personnel of the Chinese government. All flights took place under the nose of the unopposed Japanese air force.

C.N.A.C.'s own staff was being evacuated from Wuhan by Commodore flying boats. The tightly packed sequence of

flights was upset by frequent air raids, and on the night of the twenty-fourth the Japanese moved in while the Generalissimo and Madame Chiang Kai-shek were still in the city. The pilot of their own transport, a German named Eric Just, refused to fly them out, on the grounds that he would not be familiar with the territory, and had never flown at night. (Just is now in Germany reportedly in charge of blind flying.) The city was ablaze by afternoon, and roaring fires marked both banks of the Yangtze in red. In between walls of flame late in the afternoon Chief Pilot Charles Sharp brought in his plane. He put the Generalissimo and Madame aboard and as dusk fell, under an ineffective rain of Japanese bullets, took off for Changsha and safety.

The most turbulent job of evacuation was done for the British when the Japanese broke through in northern Burma. Prospective passengers offered thousands of dollars for passage, and C.N.A.C. posted men with tommy guns at the doors of its planes to make sure they were not rushed by mobs. Night flights took off from fields lit only with oil lanterns, and sometimes as many as seventy-four passengers were carried in regular twenty-one passenger DC-3's. One pilot walked back to the toilet compartment on his plane, and when he opened the door out tumbled six little children whom someone had stuffed inside.

Early on Monday morning, December 8, the telephone bell jangled Bond awake. It was Captain Ralph, commander of the Philippine Clipper then in Hong Kong. He said he had just received a radio telling him not to proceed to the Philippines that day. But simultaneously he had received orders from the British to leave Hong Kong immediately. Did Bond know what the score was? Bond didn't. Five minutes later, Ralph rang again—he had been informed that Japan had declared war on Great Britian and the U.S. and what was he to do? Bond suggested that C.N.A.C. lend the Clipper a pilot to navigate the giant ship to some interior Chinese lake. He, Bond, would come right over to the airport.

Bond reached the waterfront just as Hong Kong's first air alarm sounded, and all transport across the bay was

suspended. By the time he got to the field half an hour later, the blitz had struck. The Pan American Clipper was riddled and wrecked, and C.N.A.C. lost three DC-2's and four Condors. When the alarm was lifted, all of the C.N.A.C. personnel was on hand. First job was to get the planes off the field, and Americans and Chinese alike pushed them onto a nearby street and spaced them 300 feet apart. Then the alarm again, and into shelters. Fifteen minutes of waiting followed and when no Japs appeared, C.N.A.C. personnel went back to work without waiting for the all-clear. The entire staff joined the airfield coolies who could be impressed for labor, and the planes were hidden under straw. Then they sat down to wait for darkness.

At swank Peninsula Hotel, Bond was arranging by rough rule-of-thumb judgment a list of priority passengers. Everyone who knew any C.N.A.C. staff wanted to go, and Bond had hundreds of personal and government friends. It took the judgment of Solomon to decide how much weight-space would go on Chinese Government personnel and how much on materials vital to keep C.N.A.C. running for the duration. (Hong Kong had been C.N.A.C.'s main base and depot for supplies coming from America.) In Hong Kong were Madame Kung, wife of China's Minister of Finance, and her family. Madame Sun Yat-sen, widow of China's George Washington, was there, and K. P. Chen, chief of the Currency Stabilization Board, and half a dozen other top-ranking officials. In addition, there were the American personnel of the Clipper crew, C.N.A.C.'s own staff, and hundreds of Chungking dignitaries, all of whom sent Bond telegrams insisting that their families and friends be taken off on the first plane.

As soon as dark settled the first DC-3 was rolled out on the runway, loaded with C.N.A.C. staff, and sent to Namyung, the nearest safe airdrome. At seven-fifteen the second DC-3 took off. At seven-forty-five a DC-2. By midnight two planes out on runs at the time of the first raid had come to the rescue.

Within twenty-four hours the Japanese began closing in on Hong Kong from the mainland, and the airfield lay on the

mainland side. By Tuesday evening, December 9, the fate of the colony was evident. The Japanese guns were within range of the field, and every now and then someone would stop and listen and say, "Don't you think they're a bit nearer?" By Thursday the show was over. In two nights over 400 passengers had been carried out, plus a large amount of vital spare parts, in the teeth of Japanese air force and artillery.

NEITHER SNOW, NOR RAIN, NOR JAPS. . .

Today C.N.A.C.'s main job is military rather than commercial. Its operations are blanketed in wartime censorship. Where its planes land and where they take off is not told. Lend-lease is supplying the Chinese Government with a number of American transport planes, which C.N.A.C. pilots fly back and forth between Chungking, Kunming, and India. What they carry in is a military secret; what they bring out is of vital importance: tin ingots, mercury, tungsten, and antimony bars for U.S. munitions making.

On seven different occasions C.N.A.C. planes have been shot down or machine-gunned by the Japanese. Pilot "Foxy" Kent was killed in 1940 when he made an emergency landing at Changyi, to avoid an air raid at Kunming. Japanese pursuit planes saw him land, flew low and machine-gunned passengers and crew as they streaked for cover across the field. All were killed. Of the four pilots who came to work for C.N.A.C. in 1938 when the then Captain Chennault closed his flying school, two have died in flying. But Frank Higgs of Indiana, who inspired Milton Caniff's famous comic-strip character Dude Hennick, friend of patrician Raven Sherman, is still at work.

The first Chinese pilot was California-born Donald Wang, who made the grade in 1934. The next two Chinese pilots were also American-born: Joey Thom of Chicago, who was killed in an electric storm in 1941, and the far-famed Baltimore Moon Chin, who, among other exploits, made the first flight across the Himalayas. It was 1936 before C.N.A.C. had trained its first Chinese-born pilot, Hugh Chen. Chinese pilots receive 2,000 rupees a month, and are the highest paid

Chinese salaried men in the country. American pilots receive from \$800 to \$1,600 a month, depending on the number of hours flown. For flying done in excess of seventy hours they receive \$20 an hour. This is higher than the average rate of pay on U.S. airlines but lower than the pay in the Atlantic Ferry Command, which is certainly no more hazardous.

To keep the planes in flying condition C.N.A.C. personnel has had to work miracles. One DC-3, trapped on the ground at Ipin (Suifu), was machine-gunned by the Japanese, and a wing demolished. The repair crew at Hong Kong strapped the spare wing of a DC-2, the only one available, to the belly of another DC-2, flew it to Ipin, and did a rough and ready patching job that enabled the "DC-2½" to fly to Hong Kong and safety. To keep their planes fueled C.N.A.C. executives have occasionally had to make a deal, as when they bribed the Japanese Navy and smuggled 30,000 gallons of high-octane gasoline through the Japanese lines into China.

All this meant blazing trails over the Himalayas to open new aerial "Burma Roads" over which all supplies now reach China. This involved flights over vast areas for which there were no charts, no landing fields, no radio or light facilities, where inhospitable mountains or soggy rice paddies awaited forced landings. It was essential to train hundreds of Chinese mechanics to handle the delicate precision instruments of repair and maintenance. C.N.A.C. claims it has never missed a day's schedule, nor refused an assignment.

When the Chinese armies were trapped in the mountains after the Burma disaster and slowly making their way out over the hills to safety, the Generalissimo called upon C.N.A.C. to supplement the R.A.F. and the U.S. Army Air Forces in feeding the troops by dropping food from the air. And when the A.V.G.'s were making history, C.N.A.C. pilots, because of their night-flying experience and vast knowledge of the country, acted as transport auxiliaries for Brigadier General Chennault, leading the squadron nightly to new hideouts, and moving them again after Japanese reconnaissance planes had discovered them during the day.

Last year when the A.V.G.'s disbanded, fifteen pilots went to work for C.N.A.C., and are now ferrying the lumbering transports over terrain that once echoed to the chatter of their guns.

These are the men who, together with their colleagues in the Air Transport Command, are flying their drab green-brown camouflaged Douglas transports from India through the mists and over the mountains to China, bringing her the military supplies she so bitterly needs. But not content with throwing out this one lifeline, C.N.A.C. is now operating a new transport service from Chungking to the Russian border, so that China, cut off from all but aerial communication, may have a second link with the outside world.

ONLY GOD KNEW THE WAY By C. J. Rosbert as told to William Clemons Reprint Saturday Evening Post



C. J. Rosbert

They had one chance in a million. The story of an air crash three miles up in the Himalayas and the perilous descent of the two survivors.

In broad daylight, the flight over the hump of the Himalayas from India would be a magnificent experience. But while prey-hungry Jap Zeros ride the skies, we who fly the transports over China's areal

Burma Road must hide from good weather and seek the bad for our very lives. On our last flight from India we took off into a pea-soup fog, and a few minutes out of our base the monsoon rain was flooding down the winshield in torrents. At 12,000 feet the rain turned to snow. We couldn't see our wing tips. That meant we were safe. As well as the Japs like pot shots at our unarmed and always overloaded transports, no self-respecting combat pilot would fly in weather like that. With another few thousand feet, we'd be over the hump and the worst would be behind us.

My copilot, Charles (Ridge) Hammel, was a veteran of Pan American's famed "Africa Corps." A past master at desert flying, he distrusted this land of three-mile-high peaks. With seventeen other Flying Tigers, I had enlisted with Pan American Airways in the China National Aviation Corporation when the U. S. Army took over General Chennault's little squadrons. As our Douglas C-47 kept climbing with her heavy load, Ridge's face broken into a grin and he reached back to pat our Chinese radio operator, Li Wong, on the head.

"We're okay now," he reported. "Another thousand feet and we'll be clear of the hump. Another hour and you'll be home!"

But we couldn't get that last thousand feet. Even while Ridge had his back turned, I could see a thin layer of ice spreading over the windshield, then over the wings. In less time than it takes to tell it, that thin film grew into a layer six inches thick. We started to drop, not in a dive, but slowly. Then we lost the last slit of visibility. All the windows were frozen over solid from the inside. I pressed the palm of my bare hand up against the glass until I could feel the skin stick, then I switched palms. Just before both hands turned numb, I had managed to melt a little two-inch hole. I saw that we were passing through a cloud. Suddenly it opened and dead ahead loomed a jagged peak.

"Look out!" I yelled. "There's a mountain!" Grabbing the controls, with my eye still glued to the tiny opening, I swung the ship violently over into a bank. We missed the face of that cliff by inches. Then my heart stopped. A huge dark object swept by. A terrible scraping noise tore under the

cabin; an explosive crash struck right behind me; the engines raced into a violent roar. Something stabbed my ankle, an intense pain shot through my left leg. Then, suddenly, we were not moving. Only the falling snow broke the silence.

I don't know how long I sat there before I heard Ridge's voice. It seemed to come from far away. "Get out of that thing before it catches fire!"

I heard my own voice answer, "Come on back in. You'll freeze to death out there."

My shocked brain told me the ship wouldn't burn. Both engines had been torn off when we hit. The cabin was intact, except for the radio station, which was crumpled like tissue paper. Wong lay sprawled in the aisle behind the cockpit. I struggled out of my seat to reach him. I held his wrist; there was no pulse. I put my arm under him, and a broken neck dropped his head back between his shoulders.

Ridge huddled against the rear bulkhead. He was badly cut about the face and hands. Little rivers of blood dripped down on his flying jacket, and he was holding his left ankle. His right eye was closed and the swollen flesh around it was already discolored.

I struggled to stay conscious. Nothing seemed very real. I tried a step, but my left ankle turned under me. The pain almost took my breath away. I looked down. I seemed to be standing on my leg bone, and my foot was lying at a right angle to it. Holding on to the roof supports, I swung myself down beside Ridge. For several minutes we just lay there looking at each other.

Finally he spoke. "What happened?" "We hit a mountain."

This is certainly a crazy conversation, I thought. Things like this don't happen. You hit a mountain at 180 miles an hour, and that's that. Together, we thanked God for being alive, and all my life I will make deep and humble

acknowledgment to God that I do not take any credit for our rescue. The fact that we were the first white men to come out of that unknown section of the Himalayas has little to do with it; it is partly the knowledge that in any one of a hundred different instances death awaited a wrong decision, when we had neither the knowledge nor experience for our choice; and partly the marvelous chain of coincidences—or "miracles," as Ridge and I called them—that led us through forty-seven days and nights, into and out of another world and back to civilization again.

We took stock of our situation. The plane was lying at a thirty-degree angle. Outside, a zero wind drove the snow in swirling gusts, but, by huddling close together, we could keep from freezing at night. The first rule of a crash is to stay by the ship. It's much easier for searching parties to spot a plane than it is to sight a person. In our case, we were both in such bad shape that we had no other choice. My leg was continually throbbing and even the slightest movement would send shocks of sickening pain through my whole body.

Ridge was only slightly better off. His left ankle pained him—it proved to be badly sprained—but he managed to move about. Dragging himself over and about a jumbled cargo of machinery, he found our parachutes, which we spread out to lie on. He also found six tins of emergency rations, equivalent to three meals apiece. We figured we could stretch these out for six days, possibly longer. Because of his condition, the steep angle of the plane and the high altitude, the quickest trip Ridge was able to make over the twenty-five feet to the forward part of the ship and back again took nearly an hour. Just locating our parachutes and the rations took up the whole day, and we fell asleep from exhaustion—a sleep broken frequently by the pain from our injuries or a nightmarish awakening to our predicament.

By daylight, the snow had stopped. The scene almost took my breath away. Glistening, ice-encrusted peaks darted up all around us. Then I looked in the direction in which the plane had been headed, and yelled to Ridge. Together, we stared at the ugly, jagged peak. If we had gone another fifty

feet we should have been crushed against it like an eggshell. Our steep bank away from the peak had miraculously paralleled the slope angle of the mountain, so that, when we hit, the plane simply slid along the face of the cliff. One outcropping of dark rock, 100 feet back, had caught the left engine, forcing us to a stop. Had it not been for that one rock we should have catapulted directly into a second peak another fifty feet ahead.

We were perched 16,000 feet high, up against one of the peaks of the Himalayas somewhere in the Mishmi Mountains, on the frontier of Tibet. We did not know in what direction we should head to get out, what we should look for, how we should plan. The slim chance of our being sighted by searching planes was buried under the two feet of snow which had covered the plane in the night. That meant we'd have to manage our own escape. We studied the topography of the mountain, debated various courses and finally picked the side which we felt offered the best chance. Five thousand feet below, possibly five miles away, was the edge of timber line. A sharp crease in the mountain and a junction with another ridge suggested that there might be water there. If there was water, it might lead to a river, and a river might run beside a house or a village. It wasn't much of a promise, but it gave us hope.

In five days, we estimated, our ankles would have improved enough to allow us to move without blacking out every few steps. We considered for hours what we would take with us. We could afford to carry only what we absolutely had to have. In Wong's clothing we found a deck of cards. We would play gin rummy until we were exhausted, would sleep for a few hours, then start all over again. We discovered a gallon jar of soft-drink sirup, which we mixed with snow to drink. We recited navigation lessons, talked over our kid days, compared fighting in Burma with flying in Africa—anything to keep from thinking of the over-whelming odds against our ever getting out of this alive. By the end of the third day, we couldn't stand waiting any longer.

At dawn we started out. We knew we had to make it down to timber line before dark, because we could never live

through a night on that unprotected slope. Our injured ankles turned under at every step, and we began to flounder. The slope was so steep that we kept falling, and the struggle to get on our feet again would sap every ounce of strength we could muster. In four hours of almost superhuman effort we had covered scarcely 200 yards. It was hopeless. We just managed to get back to the shelter of the plane with the last streaks of daylight.

Gripped with despair, we lay awake most of that night. We had only one full emergency meal left between us. We had to get down the mountain. But how? Finally from sheer fatigue, we dozed off. I was awakened by Ridge, who was prying up one of the extra boards used to reinforce the floor. A sled! Now we were riding the crest of hopefulness again. Why hadn't we thought of that before? While it was still dark we pried braces off the side of the cabin and made splints. We tore our parachutes into strips, bandaged our ankles, then set the splints and wrapped yards of the silk around them until our injured legs were fairly stiff. What was left we wrapped around our hands and feet for protection from the cold, except for two long runners which we used to strap ourselves to the sleds. By daylight we were on our way.

We literally flew for the first 100 yards, but when the slope flattened out, the ends of the boards plowed deep into the soft snow. The struggle to get off, pull them out, set them flat, pile on and get started again was almost as difficult as our walking had been. We threw away everything we could possibly get along without. Even that didn't help enough. Finally, Ridge got his board sliding, only to have it hit a rock and send him sprawling down the slope. He rolled fifty yards before he was able to stop. Inspired, I started rolling after him. I rolled fifty yards too. Then we hit upon a technique. Lying on our backs, holding our injured feet in the air, we slid on the seat of our pants, rolled over on our sides—sometimes on our heads—ten, twenty, fifty yards at a time.

The slides grew steeper and steeper until, finally, within sight of timber line, we struck a slope that was almost 500

feet straight down. If getting out of the plane alive was a miracle, we both felt it would take another miracle to get down to the bottom alive. Because Ridge had a little better control with his sprained ankle than I had with my broken leg, he took the risk first. I watched him hurtle downward in a cloud of snow and suddenly disappear. I heard him scream. The most welcome sound I ever knew in my life was Ridge's voice, breaking that awful silence. It sounded weak and far away. "It's okay, but it's rough. Come on down." I slid over the edge, took a deep breath and shoved with my good foot. Finally, I hit solid earth with a crunching jolt. As I lay there, afraid my back was broken, I heard a sound of rushing water. Just before darkness settled, we reached a stream in a steep-walled gorge.

Soaking wet and so weary that we could scarcely move, we found a cave, so small that the two of us could only half fit into it. We tried to make a fire by kindling some twigs with what papers we had with us—our passports, photographs of my wife Marianne, my license cards, address book. In our anxiety to get a tiny bit of warmth, we destroyed every tangible bit of evidence we possessed to prove that we had a home, a family, a country. But the wood was soaked through and we gave up. We took off our wet outer clothes and hung them up, hoping they might dry during the night, and, with our arms around each other, we tried to get some rest.

Looking back on that ordeal now, I cannot see how we could have made it. With our bad ankles, the best we could manage was a painful hobble. We could not follow along the bank because, for the most part, the river flowed through walls of sheer solid rock. We could not use the river itself because it raced through boulder-strewn rapids and over deep falls. Our only chance was to climb over the rough, jungle-covered mountains, keeping the river in sight as best we could.

For three days we crawled up and down those tortuous hills, taking one half bite of our last remaining ration at daylight and dusk, huddling together on the ground at night. Near the end of the eighth day we had to turn back to the

river. The peaks were too steep to climb. We struggled over and around the boulders, half in, half out of the water, until suddenly, the river dropped off into a series of steep falls. It was impossible to go forward. On both sides the walls of the canyon were almost vertical. We were at the end of our strength. We had spread one day's normal emergency minimum over eight days, but had swallowed the last bit of it that morning.

Numb, unable to think it out, we sat down beside each other and stared at that solid rock wall. Suddenly, Ridge leaned forward. A long heavy wire or vine was hanging down the side of the cliff. We tried it for strength. It held. Someone had at least been up the river this far. Foot by foot, we pulled and clambered our way up the wall. At the top, we found another sign. Saplings had been notched as if to mark a trail. With lighter spirits than we had had in many days, we hobbled on, and for three days more we drove ourselves through the brush, over boulders, up and down the hills, looking for those all but indistinct marks.

Our first day without even a bite of food left us with an intense empty feeling. After twenty-four hours, the emptiness turned into a steady dull ache and a feeling of intense weakness which left us wondering, each night, how we could recover enough strength for the next day's march. We searched continually for anything we could get into our mouths. We tried most growing things with stalks or stems.

At the very peak of our hunger, however, another miracle befell us. I fished from the stream a piece of fruit which looked and smelled like a mango. The taste was indescribably vile; it seemed as if someone had struck me a blow in the mouth. I retched horribly and rolled on the ground in agony. But on the verge of starvation you will try anything. Ridge had to try a bite, too, and he went through the same torture. But there is some good in everything. Our stomachs were numb for the next three days. Even starving as we were, we could not bear the thought of food.

On the thirteenth day we reached the practical end of our endurance. The stream divided and went down two

valleys, exactly opposite. Which way should we turn? Because we were facing east, we took that direction. Had we had the strength to think, we would have chosen the westward valley, since in that direction lay Burma and our course from India. To the east, we realized afterward, lay only the wild mountain frontier of Tibet.

That turn to the east was the fourth in our chain of miracles. After an hour, we broke into a clearing. The hut had been burned to the ground, but it was a sign that human beings had lived here. Somehow, we found new strength. Later in the afternoon we found the prints of a child's bare feet in the mud, and then in the last few minutes of daylight, we dragged ourselves over a hill, and there was a thatched roof. The hut, made entirely of bamboo, stood on stilts about four feet above the ground. The door nearest us was securely latched. So was the center door. When we got no reply to our knock at the last door, Ridge threw himself against it and we sprawled inside. It was so dark and the air was so thick with smoke that we could scarcely see. A big pot was boiling over an open fire in the center of the room. Then we made out the huddled forms of two very old women to whom six nude, wild-looking children were clinging. At the sound of our voices, they appeared to be even more frightened. We tried our few words of Chinese. Finally, by gestures, we tried to tell them that we were fliers and only wanted food but the children kept pointing to the old ladies' eyes. One, we learned, was totally blind, the other almost so.

The children later gave us each a gourd. But instead of ladling out the food, one of the old women simply picked up the boiling-hot cooking pot in her bare hands and passed it around while each of us, and then the six children, scooped out a gourdful of the food. Ridge and I were so impressed with this witchery that, starving as we were, we momentarily forgot all about eating—until our gourds got so hot we had to set them on the floor. Almost immediately, with hot food inside and the hot fire outside, we rolled over on the hard bamboo floor and went sound asleep.

Eighteen hours later the hundreds of wood ticks we had attracted in our wanderings chewed us awake. Sunlight was

streaming through the open door and some of the smoke had cleared. The faces and bodies of the women—such as showed outside the aged, ragged blanket-like cloth they wore draped over one shoulder and around their middles—appeared to be encrusted with a lifetime's exposure to dirt and wood smoke. Their hair was long and coarse, and around their heads each wore a wide metal band.

It was on our third day there that the two oldest children disappered. Late in the afternoon they returned with three men who stepped right out of the Stone Age. They had broad flat foreheads, cheekbones and noses, and mops of long shaggy hair. They did not even have sandals on their wide, strong feet, and their legs were bare to the thigh. Each wore a sleeveless leather jerkin that reached to a small loincloth, and carried a long swordlike knife on one hip and a fur-covered pouch on the other. These costumes were typical of all the Mishmi people we saw until we walked out of this strange world nearly a month later. Their long matted hair hung down over their shoulders, from each ear dangled an ornament made from silver coins, and chains of beads, animal teeth and coins were draped about their necks. They were cheerful, hospitable, interested little men.

By a carefully-thought-out sign language, we explained as best we could that we were flying men who had crashed into one of their mountains, and who very much wanted to return to the white man's country. They smiled continously, nodding their heads in what appeared to be perfect understanding, but which we knew was complete bewilderment. Finally, they could resist no longer. They had to feel our clothes, try our shoes, run the zippers up and down the front of our flying jackets amid roars of gleeful laughter, blink their eyes in childlike amazement when we let them turn on our flashlight, listen with over-widening eyes to the ticking of our watches.

After a while they left us, but our act must have made a hit. That same night two others arrived, one a young boy. From their pouch they offered us two eggs, a sweet potato and a handful of boiled rice, and then invited us to come

with them. Because their food was better, and thinking they might be from a village from which we could send word to the outside, we decided to follow them. Apparently elated, they simply took off their knives, swung their fur-covered pouches around until they rested on their stomachs, and rolled over beside us to spend the night.

Next day, after eight hours of struggling with tortured and bleeding feet over a primitive mountain trail that would have been covered in two hours by our native friends alone, we managed to reach the door of another hut, a bigger one. We fell onto the floor, exhausted.

When we woke, we discovered that friendly hands had carried us inside to a pallet in one corner of the big room. The three men who had brought us were here, and four others, apparently all of the same family. Fifteen women also lived in the house. In the two weeks we were there Ridge and I never did get all the children counted.

WHERE TIME TURNS BACK

There, in that primitive smoke-filled hut, deep in the heart of the Himalayas, Ridge and I held court for two incredible weeks, receiving scores of these longhaired, leather-jerkined, bare-legged men of the Stone Age. Their implements were cut from wood or stone and, from what we could learn they had never heard of Chinese or Indians, let alone Americans. After days on the trail and in their smoke-filled huts, we were as dark-skinned as they. It was not until Ridge felt strong enough to walk and had gone out in the rain that the natives discovered we were white. It produced some awe, at first, and then a curiosity which expressed itself in sly, quizzical looks from all except the children.

To entertain them, Ridge and I repeated, over and over again, our gestured description of our flight, our crash and the display of our clothing and equipment. Not knowing how long we might have to stay in this strange land, we had tried to learn the language. We learned to count up to twenty and

mastered, altogether, about 200 words of their dialect. They had many peculiar customs, but their one characteristic which never ceased to startle us was their imperviousness to certain kinds of pain. The men would sort through the red-hot coals with their bare hands to find a tinder with which to light their pipes. One of them, trying to get us to unwrap the bandages from our ankles to see what was under them, rubbed his hand over his own ankle in a gesture. For the first time, apparently, he discovered a large round bump, like a cyst, on his ankle bone. He simply drew his knife, sliced off the bump with one deft blow and, with the blood streaming down his foot, returned the knife to the scabbard and kept right on talking to us as though he had simply brushed away a fly.

What work was done was managed by the women. The men, for the most part, sat about the fire, which the women tended, conversing with much raucous laughter, smoking their long bamboo pipes, into which they would stuff dark, stringy, home-cured tobacco. I had never smoked before, but I became an inveterate tobacco fiend with the pipe they made for me. We began to smoke opium, not only because it was expected of us but because we thought it might help us to sleep. It did not have the slightest effect on us. Later, we were told that, had we stopped smoking and then started again, we might have become addicts.

Late one evening an elderly trader from the Tibetan hills, wearing a great wide bamboo hat and carrying an ancient flintlock musket over his shoulder, appeared. Two bearers lugged huge bags of lumpy red sand, which, we learned, was salt. We told him our story, which by this time had become a mechanical routine. The trader, who told us he had known a white man once and had seen others in his lifetime, wanted us to go with him. We explained that in about five days more our ankles would be strong enough, and then we would follow him. He seemed disappointed, and several times that evening came back to us, motioned for our pencil, which we used for one of our stock demonstrations. We did not want to part with what might be our only means of getting word back to civilization, so we shook our heads.

Finally he gave up, signaled to his porters and disappeared into the night.

A few days later his son appeared, a fine-looking youngster wearing earrings and a necklace of large silver coins. With elaborate gestures he presented us with a chicken, a pinch of tea and a bowl of rice from his bag, and then he, too, evidenced a peculiar interest in the pencil. To keep in his good graces, since his father might be the one to get word to the outside, I tore off a corner of my flying map and wrote this note: We are two American pilots. We crashed into the mountain. We will come to your camp in five days.

He snatched the slip of paper from my hand and disappeared. We concluded that he wanted the note for a souvenir, and that in five days he would return to lead us to his father's hut. By noon on the fourth day he was back. Although obviously tired from a long, hurried march, he was beaming. He first sat crosslegged before us, took four eggs out of his pouch and presented them to us, then left the hut and returned with an envelope. It was a standard India state telegraph form sealed with wax. With hearts beating like trip hammers, Ridge and I clawed the envelope open. It contained a message from Lt. W. Hutchings, the commanding officer of a British scouting column then about four days' march away. He was sending rations by the messenger, and a medical officer with aid would follow shortly.

MOUNTAIN JUBILEE

Ridge and I were delirious at the good news. We hugged each other and cried like a couple of babies. The boy explained to our houseful of hosts and hostesses, and they, too, joined in our jubilation, heaping more wood on the fire, breaking out bamboo stocks of some alcoholic corn drink and dancing and shouting about the room. In an hour or so, the porters arrived with the supplies, and we shared cigaretes, matches, salt and tea with everyone in the hut. The matches and white salt they put in their personal treasure pouches, the tea they brewed, and the cigaretes they smoked with a religious ritual, deeply inhaling each little puff. It was

daylight before any of us in the hut slept. It was a night to celebrate.

It took Capt. C. E. Lax, the British medical officer, two days longer to make the trip than the native messengers had required—days that seemed hundreds of hours long—but never was anyone made more welcome. He told us that no white man had ever set foot in this country before and, had it not been that the British column, because of the war, had penetrated even as close as four days' march, we might never had been found. It was one chance in a million, and we had hit it. Another of our miracles.

Tired as he was, he got our clothes off immediately, gave us a thorough goingover and patched up more then twenty cuts and bruises and bumps on each of us. Ridge's ankle had been badly sprained, but was now in pretty good condition. Mine was fractured, but it had healed over, and this was no place to try to put it back in place. In the morning we would start for the nearest camp, with his native boys to help us over the rough spots. From that camp possibly they could get a plane in to pick us up.

THE ROCKY ROAD TO HOME

Long before dawn, Ridge and I were urging the doctor to start. Such a swift change of fortune had unsettled us a bit, and we both confessed to a heavy tug at leaving these strange people who had been so kind and so hospitable to a couple of strangers who, dropping suddenly out of another world, had been taken into their family and treated as brothers through these many days. We divided among them everything we had—the pencil, the flashlight, everything out of our pockets, and then borrowed all the ilver coins the captain had, in an effort to express our appreciation. They, too, seemed to regret our going, and accompanied us to the edge of the clearing as Ridge and I, leaning on the shoulders of the two native messengers, followed the doctor down the rocky trail.

It took sixteen more days of hiking to get out of the mountains, but hiking on a full stomach, resting at night in

shelters on grass pallets, swathed in blankets. Over the tough places, our little native helpers, who weighed fifty pounds less than either Ridge or I, carried us, resting in a sling swung from their foreheads. Up the sides of cliffs, along boulder-strewn river beds, on cable-slung bridges that Gurkha engineers built ahead of us over monsoon-fed raging torrents, these little men led or carried us until, finally, we reached the crest of the last mountain range. There, below us, in a lovely green valley on the banks of a great river, lay a little British frontier station, a sight as welcome as the sky line of New York.

A truck hurried us back to our India base to our friends. Ridge would be ready to fly again in a month. They wouldn't let me stay. Pan American had a plane waiting, and in five days I was home, and in the hands of a Seattle specialist who was to re-make my ankle. I found that my wife, Marianne, had never lost hope of my return. She was singing with a hotel orchestra a song written in her honor—I'll Be Waiting.



Charles (Ridge) Hammel

Before we left, they traced our course. The strange world we had come from was only ninety minutes—flying time—from our base. The doctors could not understand how, with one broken ankle and one badly sprained, we had lived through the hundreds of miles we walked. He called it a miracle.

THE LAST DAYS OF C.N.A.C. IN HONG KONG, 1941 By Z. Soldinski

The story about C.N.A.C.'s exodus from Hong Kong, must go back aways to give credence and understanding of the awful nightmare facing us and cannot be told in one sentence.

P. W. Wong was the Managing Director, Chuck Sharp was Operations Manager, Z. Soldinski, Chief Engineer and Director of Maintenance. Bill Bond was Vice-President, and he was in and out, and never long at any one place.

The airport, and all aeronautical activities in and out of the Crown Colony, were under direct control of Lt. A.J.R. Moss, the Director of Civil Aeronautics. Max Oxford was his deputy and also a member of the Crown Intelligence team.

We also had the constant advice and information of Herman Noether; who was in charge of the Chinese Intelligence.

For some time prior to December 8th, Sharp and I had almost daily contact with the Intelligence people. We were constantly told "that it seemed imminent the Japs would strike", but not when; however it was surely getting closer all the time and we could really feel it.

In the meantime, it was decided that it would be prudent to look for another route into China from some part of the free world besides Hong Kong and Rangoon. We were told both would be untenable, as well as that Lashio would fall.

An expedition was set up by CNAC with the permission and advice of the British to survey what later became the Hump. A British geographer was to go on the flight to make maps. The most sophisticated instruments obtainable at that time were brought out to Kai Tak, to be installed in the airplane. Chuck decided that he would head the expedition and captain the aircraft. We debated which airplane he would take, and it was decided on a DC3.

Chuck asked me to set up the airplane; I had our Chinese engineer Loy Locke help me make up the installation plans. We called in B. L. Chang, my metal foreman, for the job and Joe Chow to supervise the installation of the instruments. A table was set up with drafting instruments. Flight instruments and a special barometer were installed for the geographer; all was set.

The flight crew besides Chuck was chosen and we decided to send a mechanic along for extra insurance, so we asked Arnold Weir if he wanted to go, and BOY! was he ever ready!!

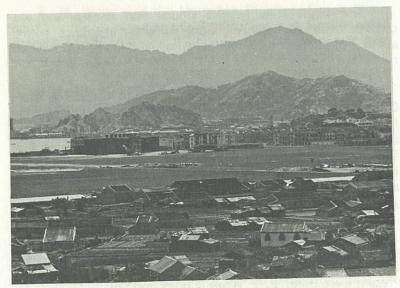
The flight went on a routine flight to Kunming, then Chuck flew to Lashio and overnighted there. Next day he flew direct to Assam, where they conferred with local people, and stayed the night. Next morning, Chuck took off for the first known direct flight over the Hump and direct to Kunming. They checked summits and peaks, measured same, and the Britisher came up with a pretty darned good map. And thus, the Hump was born!

In the meantime we operated as usual. But Chuck and I got some disquieting news from Intellignece, and we notified Bond and P. Y. Wong. Bond called a meeting a few days later. Present were Bond, P. Y. Wong, Chuck and Sol.

The gist of the meeting was to make plans for an evacuation of Hong Kong in case of an attack. Each one was to make a list of key persons to be evacuated in priority sequence. P. Y. Wong was to list the business people, Chuck, the flight personnel, and Sol, the ground personnel and equipment and tools.

The plan was for as many flights each night to Nanyang as possible by freighters and to lay over there in the daytime, camouflaging and hiding the airplanes. The DC2's and the DC3's, to fly two flights to Nanying and then a flight to Chungking: As it happened it didn't turn out this way.

We asked the British how long could they hold out in case of an attack, they told us ten days to two weeks for Kowloon and the New Territories. They sure were over-optimistic. Came Monday, Dec. 8th, 1941. My phone rang at about a quarter to six A.M. Of course it was still dark. Tom Heinie was calling, he had just received a call from Elsie Soong, she told him the Japs blew up Pearl Harbor, destroyed Clark Field and that we probably would get it at dawn. I asked him to call Chuck Sharp, and said that I would get to the



Notice the burned out planes in front of the big hanger

field as fast as I could. I told my family to get to the air-raid shelter and stay there, as I left for the airport. Now Sunday night was a zero night. All the freighters were serviced and loaded, but did not fly, so they were parked on the ramp, ready for flight.

When I arrived, the P.A.A. Clipper was still at the dock. Lt. Moss was trying to get the crew to take it out. They had more than ample fuel to fly to Rangoon or Calcutta, but the Captain said that he would have to wait instructions from San Francisco; they had been there over two hours.

Dawn began to break, I was heading for my office and telephone, when someone shouted "Hark, airplanes." They jumped into a drainage ditch and I jumped into my car and away. I lived only a short distance from the airport, so I was home in a hurry and called Chuck. Then I called Lee Taylor; he lived on a hill overlooking the airport and with him lived Ski Sydlowski, and Dusty Roads. I told him to get to the airport as soon as the Japs left, that I'd be there.

I drove into the field, Heine, Chuck Sharp and Price joined us. Everything outside the hanger was afire; so was the P.A.A. Clipper, three DC2's and three Condors were also destroyed as was an Eurasia J.U. 52 on the north side of the hanger. We opened the hanger doors, all the airplanes inside were intact. The Chinese ground personnel and the Foreign flight personnel were swarming in. The Airport Fire Department started to douse the burning craft. I told them to stand off and save the liquid, as they couldn't save anything, anyhow.

In the hanger were CNAC's DC3, a Condor and a Vultee, Eurasia had a JU52.

The Japs dropped one only, a 100 kilo bomb into the hanger. It hit and penetrated the roof, struck the cement floor, burst open, but did not explode. MAN! picric acid was inches deep!

We decided to pull the DC3 out and hide it in the little village north of the field. Gimpie Price jumped on the tractor, Jimmie Porter climbed into the cockpit to ride brake. Heinie climbed aboard the tractor; I handed them a pair of bolt cutters to cut a hole thru the chain-link fence. A group of Chinese volunteered to hide the airplane. The villagers didn't like it and threatened to burn the plane. Moss had an armed guard placed at the airplane. A DC2 and a DC3 were en route and would be in after dark.

Bond was staying at the Repulse Hotel, so could not get to Kai Tak as the ferries were tied up. P.Y. Wong was sick and moved his bed into an air raid shelter. He never did go out with us.

Now pandemonium hit: everybody milling around. I called Sharp into his office and told him it would be impossible to get anything done under such conditions. All non-essential people had to be removed from the airport. Chuck called a meeting of all flight personnel. He told them all to go home except one or two pilots, and to get ready for evacuation. Those with families would be the first to leave. A

limit of ten pounds of baggage was placed into effect. Chuck started his packing of essential records aided by the two pilots. In the meantime I called our supervisors, Chinese and Americans of maintenance and communications into a meeting. Of course our plan to fly personnel out for a week or ten days, as intelligence had told us before, went up into smoke.

Price and Wah were to pick up as much communication equipment as they could carry and get all hands ready to load, Joe Chow to do the same in line of instruments.

Jim Lotta was directed to get together as much line maintenance parts and equipment for the engines as he and his men could, package and weigh them.

Sien, our stockroom manager, was a marvel. He was already systemically packing essential parts, wrapped, boxed and identified. Tom Heinie and Lee Taylor were doing their bit, as were Loy Locke and Y. Y. on spares.

Of course, we realized the Japs would be back soon as they got re-loaded. We had two men outside the hangar listening and watching for aircraft. Lt. Moss had men on the tower doing the same. We agreed that as soon as we got the word, we would all disperse. And sure enough, it wasn't long in coming. The Yell went up! Most of us sped to Lee Taylor's house as it was ideal and located on the hill, and many big boulders affording good shelter. This run, the Japs took a look at Kai Tak, but went on to the docks and Wharfs and bombed the island. I took some good pictures of this, only to have my film stolen by Harrison Foreman in Chungking.

The Japs left, and we took for granted that they would not bomb or destroy the hangar, as they wanted it intact. We went back to work. Chuck and I had our personnel all set to leave that night. Bond called and said that he could not get over to Kowloon, he was at the town office. He asked Chuck if we had the Clipper Crew on the list for the first airplane to Chungking. The answer was, "Hell no! They lost their airplane, let them stay, we have too many of our

own people to get out." Bond, of course, over rode us and we had to send them out. Bob Engle and his wife were on the same airplane.

As stated before, we had a Condor and a Vultee in the hangar. The Vultee was a heap of junk, that the C.A.F. gave us for a Trainer. Lee Taylor was assigned to get it flyable and to work day and night on it with a picked crew. Ski Sydlowski was assigned with a crew to try to get the Condor: also to work day and night. The Condor had ground-looped upon landing with a load of Wolfram ore and damaged.

Night fell and bedlam broke loose; the families of the employees burst in on us; the hangar was a mass of pushing and shouting people who all wanted on the first airplane out. We had to get Lt. Moss to have his guards remove them, lock the gates and only allow authorized personnel to enter. That gate turned into Hell.

The DC3 was hauled in, and then loaded, and made two trips to Nanyang, and then on the Chungking. The DC2 serviced and did likewise; each with their allocated numbers of personnel and family members.

Moss came down with a message direct from Headquarters in Chungking. It was a list of Chinese Government officials that had to be evacuated, among them Madame H. H. Kung.

We kept dismantling machinery, for if the British Intelligence was even partially correct about hold out, we would have the Condor flying, in which, we could pull out most of our equipment. That too, was certainly not the case.

In the meantime, more bad news. Hal Sweet was on his way in from Rangoon with a bad engine. Boy! did we need airplanes!

So, we sweated Hal in. After unloading, we started on the engine. Bad news again; it had to be replaced and we didn't have one ready to go. Chuck and I had a conference would be waiting to carry the gas, right through the Jap lines. Somehow, there wouldn't be any Japs in that area for a day of two (Macao).

So, we used this gas to fill the airplane tanks. When the last trip was made to Nanyang that night the airplane was loaded with passengers and crew who were brought in early, as cars were being stopped and robbed. By this time all our coolies had left and it was getting close to dawn. Dusty and I had carried so many tins of gas, that I thought my arms would pull out. The crew were on the wings dumping it into the tanks.

Then, I ran over to see how Lee Taylor was making out. He had run Vultee and had a couple of small items yet to do; said he'd be ready. Hugh Chen was standing by; he was to fly it out. I must say, that Hugh wasn't the happiest man at that time. And thru the commotion, no one reinstalled a compass that was removed.

Chuck and I went over to Ski; he thought he would be ready for the next night. Moss walked over and told us either to leave or get off the airport as they were about to seal the airport. We asked him about the Condor. He said maybe it would be allowed to fly out, but he didn't think the airport would be open for a landing as the Japs were already top of the mountains surrounding the airport. Ski said he would fly the Condor out if permitted.

We walked over to our airplane, my family was aboard and had a couple of Dachshunds and Chuck's fiancee had a bull dog. "Little Joe" McDonald was going out as co-pilot and Chuck was flying. Little Joe took one look at the load and said, "this son-of-a-bitch will never get off", and Chuck says, "well let's try it", and we climbed aboard. I waved to Ski and closed the door. The field was a quagmire of mud, and Little Joe was right, it didn't take off, Chuck just flew it off the sea wall. As we were leaving, day was just breaking and the R.A.F. set all their airplanes and equipment afire. The field was lit up like the Astoria Ballroom.

The airport was sealed. Ski and Dusty and his Chinese mechanics were not allowed on the airport the next morning. Two pilots flew to Kweilin Thursday night, but were notified Kai Tak was sealed and the Japs were at the gates preparing to take it over. Later I learned the Japs sent word to Moss that they would behead any and every man that caused damage to or in the hangar. Nice people, those Japs!!!

Ski and Dusty were taken prisoners. The Chinese scattered and eventually all showed up except T. S. Ling. Ski was beaten unmercifully, and the story has it that Dusty was beheaded by the Japs. Later, he skipped out and walked to Kweilin, where we picked him up. We were sure glad to see him.

Shortly after we left, Hugh Chen and Lee Taylor took the Vultee off and Hugh being one of the flight crews on the coast previously, had no trouble navigating with only a Boy Scout compass as it was now daylight.

We had a wonderful team. But as Chuck landed in Chungking, the news media, who had it in for the Kungs saw our dogs and made a hell of a fuss about it; accusing Madame Kung of hauling the dogs, when they were not even on the same plane with her.

Now that we are in Chungking, another era starts. We only have our bare hands and a strong will and determined that we will build and operate!

Now, as time marches by and we look back with saddened and wet eyes and our vision blurred, and we think of our team and our comrades: Hal Sweet, Royal Leonard, Foxy Kent, Pop Kessler, Arnold Weir, Barney Wong, Frank Higgs, George Wong, N. K. Loo, Syd DeKanzow, Joy Thom, Schuler, Scott and Heinie and Dusty and so many others of that era, are all gone to the great Beyond! May God let them rest in Peace!

Personally, I did receive a very touching Citation for my part, from the Minister Pang, which follows.

January , 1942.

Certificate No. 26

At time of evacuation from Hong Kong after the outbreak of War on December 8, 1941, all C.N.A.C. flight and ground personnel, who did not care of the tremendous situation, worked day and night either on airplanes or on the airfield to ship Government officials and materials away from Hong Kong.

In the special meeting of the Board of Directors, it has been decided to issue this certificate to Mr. Z. Soldinski to record and to encourage his bravery and loyalty in line of

(Chopped) H. P. Pang, Chairman of the Board of Directors,

Translation

China National Aviation Corp.

THE EVACUATION OF HONG KONG By Roger Reynolds

On December 8th Pacific Time, which was Pearl Harbor Day, CNAC was badly hit in Hong Kong. Most of our ships had been on Kai Tak Airdrome at the time of the first surprise Japanese bombing and several were completely destroyed, including two of the remaining Condor transports used for flying magnesium ore out of China.

We knew that, even if Hong Kong managed to hold out, the airdrome, which was on the Kowloon side of the harbor, would continue to be an enemy objective and would certainly be in Japanese hands within a few days. Accordingly, plans, which had been formulated months before for the evacuation of company personnel and their families, were put into operation. Trained ground personnel are as important to an airline as its pilots.

Frank Higgs lived close to the airdrome and was one of the first to arrive at the scene of the bombing. He broke down fences and moved those ships that were undamaged off the field in time to escape the advancing enemy. When the Japanese arrived, the only thing left on the airdrome was the wrecks of the planes they had hit on their first pass.

Emil Scott was awakened that morning before the bombing by a telephone call from the American Consulate, informing him that Manila had been bombed. His wife was in Manila. Then Scotty heard airplanes overhead and dashed outside just as the bombs started whistling down. They landed on all sides, the closest destroying the house next door.

By noon, the first evacuation flights out of Hong Kong were under way, a grind which continued until the Tuesday morning following the attack. Most of the pilots flew five or more trips a day to a Chinese airfield a hundred and fifty miles from Hong Kong.

Hundreds of people clamored to be taken, but, even flying every possible minute and packing as many as 70 people into a ship built to carry a third that number, time was too short to evacuate more than a fraction of them. Priority was given to passengers authorized by the Generalissimo. Others stood by, hoping for a vacancy or an opportunity to stow away. One Chinese woman was found on at least three ships. When asked to show her authority to leave, without uttering a word she would collect her bundles and climb off.

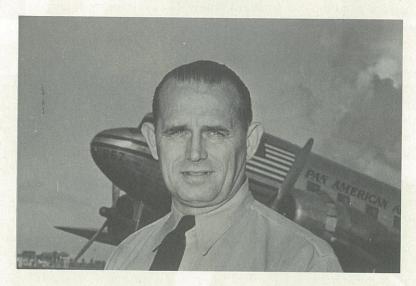
Madame Kung, the wife of the Finance Minister, arrived at the airdrome with 1,200 pounds of baggage. No one was allowed more than one suitcase weighing ten pounds! She was greatly concerned, as a portion of her luggage consisted of government documents. The pilots promised her that her baggage would be taken care of and persuaded her to climb aboard. It was taken care of. It was burned where it was piled.

The "scandal" of the evacuation was caused by the CNAC dogs. On one of the last flights, the ship went directly to Chungking. When the plane landed and the cabin door was opened, dachshunds tumbled out. People waiting on the airfield assumed they belonged to Madame Kung and blamed her for bringing out a load of animals when important people were left behind. Actually, the dogs deprived no one of a place, since they could be fitted into places where there was no room for a passenger. Moreover, the scandalized onlookers should have known that Madame Kung was allergic to dogs.

Most pilots who flew for CNAC will remember Frank Higgs, but few will recall Emil Scott or me. The three of us, plus another CNAC pilot, Bob Angle, were close friends, as we constituted a group of Army Air Corps pilots who had resigned active duty in Hawaii to join Chennault in China. Scotty and I were particularly close friends as we had been together in the 19th Fighter Pursuit Squadron, organized originally by Chenault. Higgs and Angle had been in the Sixth. On arriving in China in Jaunary 1938, we were split up. Frank was in charge of the Intermediate Training Center and Scotty in charge of the Primary. I had the Fighter School at Kunming before joining Central Aircraft Manufacturing Company in Loiwing, China, as their Test Pilot.

Scotty was killed while flying for CNAC early in 1942. I flew for CNAC during 1944 and 1945, but at the time lived with my wife in Darjeeling. Hence, I did not have the off-duty association with other pilots in Calcutta which makes for remembered friendships.

MY STORY OF THE DC-2½ By Zygmund Soldinski



Really it is an episode rather than a story, and as time marches on, it gets harder and harder to recollect all the details.

CNAC by virtue of circumstance, based their main maintenance base in Hong Kong, under my management. Airplanes would originate out of Hong Kong for the Chinese hinterland and Burma, always grossed out and over-grossed as the pilots well knew and understood. Fortunately, we (CNAC) had without a doubt the world's finest flight and maintenance personnel, who were endowed with an abundance of intestinal fortitude—"Guts", as this story will bear out.

This particular flight in question started out as a very routine flight from Hong Kong into and through the hinterland of China. Capt. Woods was the Pilot. As always he had a full gross load plus. Before leaving Chungking for Chengtu, he was advised and was aware that the Japs were roaming the skies in that area.



Jim Dalby

Z.M. Wong

Left to Right - Mr. Bond, The M.D.



Dr. L. J. Richard



Capt. "Pop" Kessler



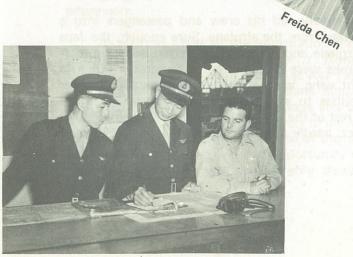
George Wong



Martha Louie



Capt. Frank "Dude" Higgs

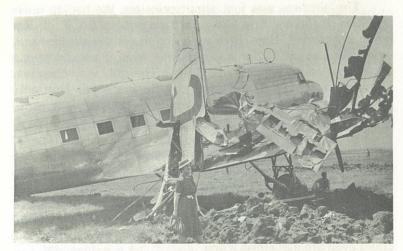


Chen with onlookers

I might elaborate some on the "Ball" at this time. The Chinese could not afford the Air Raid Warning Systems that we had in the United States, excepting a few at the larger cities like Nanking, etc. Those of course were lost to the Japs under occupation. However, ingenious as the Chinese are, they devised the "ball" system and it was very effective. They had a pole or tower set up along the heights, with a pulley and rope. As soon as the Japs would take off from Nanchung or any other field, the first observer would hoist a Ball aloft; the man on the next height would sight it, and he would heist a Ball and so forth on whatever route the raiders would take. So, long before the Japs would get to a city, it was aware that a raid was in the making. At first the Black Ball was raised aloft. Once it was ascertained that the raid was meant for a particular city, airport or other area, a Red Ball would replace the Black, and the populace would take off for the air-raid shelters. Some of the cities, especially the larger ones, would have a siren or two for night use, and to supplement the Red Ball, also the Chinese were very adept in making a terrific din with metal gongs.

So, as Capt. Woods headed for Chengtu, he decided to land at Suifu, a small field where we had a radio and field office to get any information relative to the Jap activity. Fortunately for him and his passengers it turned out to be a blessing. The Red Ball went up in Chengtu, as somehow the Japs had sneaked through the area warning system undetected. They got the word there at Suifu and almost simultaneously the Japs were overhead.

Woody hurriedly led his crew and passengers into a wooded area away from the airplane. Sure enough, the Japs spotted the airplane and immediately started bombing it. A number of bombs were dropped; one a hundred (100) Kilo struck the right wing, went through it and exploded under the wing. Needless to say, the wing was blown to jagged splinters. The rest of the airplane was also badly damaged. As a matter of fact, hardly a square foot of it escaped extensive damage.



This is the DC-3 bombed. The lady is a missionary. Her camera took this shot.

Woody and the crew used good judgment, as they moved the damaged airplane to a wooded spot and had it very effectively camouflaged. A Mrs. Brown, one of the passengers took some excellent pictures of the plane.

Woody got the information to us in Hong Kong. We knew the Japs would not be satisfied, but would return to destroy the airplane, so time was of the essence. In the meantime, Capt. Royal Leonard was dispatched from Chungking to Suifu to pick up Woody and his crew and passengers.

As soon as I had all the information and facts in hand I started the "think machine" going. P. Y. Wong, our managing Director, came to confer with me at Kai Tak. Chuck Sharp ("Apple Dumpling"), our Operations Manager and Chief Pilot, was out on a trial and as always and usual, Bond was never present in a crisis. So, it was up to me and P. Y. I want to say here that P. Y. Wong was one of the most considerate and kindest men I have ever had opportunity to work with or met in my life. He was considerably shook up over this incident.

The airplane was just about priceless. We had to nurse and care for every one like new born babies. So, P. Y. was much concerned. How were we going to get the airplane out; what were we to do for a wing? And, even if we did have a wing, how could we get it to Suifu? The only way open was to ship to Rangoon and over the Burma road. Not only would that take months, but it would be impossible to move the wing over the road.

Since P.A.A. was our purchasing agent, I wired for Mr. Bixby asking him to contact Douglas at once and start a wing for us. But the unpleasant rub was the neutrality law. Airplanes or parts could not be shipped aboard U. S. ships. Bixby found a foreign carrier to transport the wing to Hong Kong. Understandably it would take time before the wing could even arive at Hong Kong.

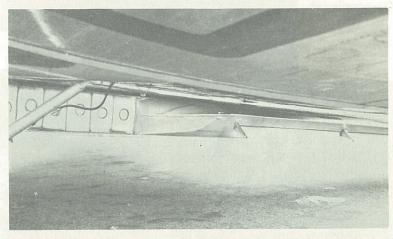
In the meantime, P. Y. and I went into the bar. (In Hong Kong, we had a bar in the hangar—the British like their comfort)—had a couple, and all the time the wheels were spinning in my head. I told P. Y. I would work out something and I'd let him know; what?

I walked out into the hangar. We had a DC-2 going through overhaul. As I looked at one of the wings, I couldn't help but wonder. It was certainly worth a try and a trial. We had a DC-3 on the line being serviced, so I ordered it into the hangar and directed that the right wing be removed. It was but a very short time later that we were fitting a DC-3 with a DC-2 wing to its center section. We bolted it in place, hooked up all the control cables, electric lines, etc. It seemed too good to believe! I called a meeting of our Chinese engineer, Loy Locke; our highest ranking American Supervisor, Arnold Weir and our Chinese foreman and lead mechanics. I explained to them that here we had a substitute wing, but no time to spare. I told them that I had Hal Sweet coming out to talk to him about flying the wing into Suifu. Eyes were big with disbelief and questions were many and varied. However, I had the whole thing planned in my head, and once I explained my plan, all agreed that it should work. Of course there were quite a few "bugs" to iron out. We removed the

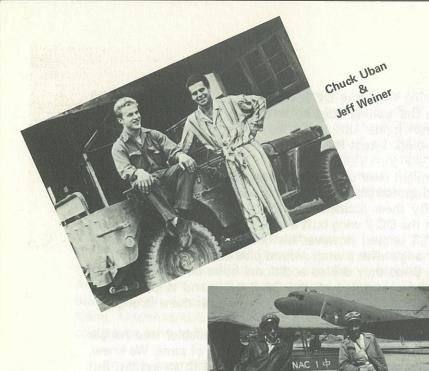
DC-2 wing from the DC-3, removed the tip and we had to remove the trailing edge at butt to the rear spar. As we did that, we made up a Kit so that it could be readily reassembled. I kept P. Y. informed of our plans and progress.

I might clear up a point at this time which has been very much disputed about the attach angle fitting the DC-2 and DC-3. By sheer accident and Donald Douglas' Scotch thrift, he used the DC-2 wing butt and center wing butt jigs, to form the DC-3 angles; however his design engineers called for a heavier angle with a wrap around plus double the attach bolts for the 3—so they drilled additional holes between the DC-2 holes; thus we filled all the DC-2 holes and skipped every other in the DC-3 center wing. Douglas built them strong.

We hauled a DC-2 (only airplane available) into hangar preparatory to attaching wing to the belly of same. We knew, of course, that it would slow the airplane to an extent. But we certainly didn't want a bubble forming under the wing so as to destroy the flight characteristics of the airplane. I figured out the entire method of suspension, and method of fairing in the butt, since we had to suspend the wing butt forward.



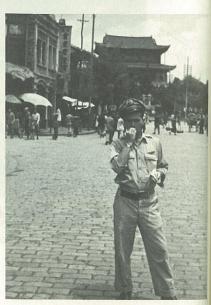
DC-2 wing secured to belly of DC-3 for outside air freight to Suifu.



Rocky & Mac



Rocky & Art and friends



Dick Stratford



Bert Pollock & Robbie Robertson



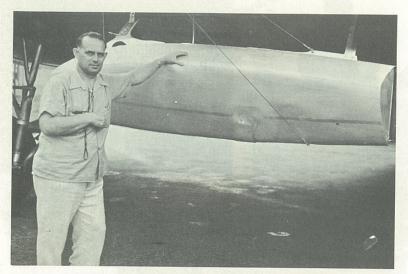
Rocky at Kungming Lake



U. S. Marine Capt. Ned Jones in front of San Hu Pah airstrip at Chungking



Jim Dalby - downtown Kunming



DC-2 wing faired at the butt for flight to Suifu.

Hal Sweet showed up and we went into a huddle in the bar. After I bought a couple rounds of good White Horse, I layed out the plan to Hal; assured him the flight characteristics would not be affected other than climb and speed. Hal was the type of pilot a guy would like to fly with, careful, studious, and very reliable. Then Loy Locke and Arnold Weir joined us, and Hal readily agreed to fly the bundle, saying, "If you are satisfied it will fly"—"then I will fly it"...We all were happy to hear Hal say that.

The following day we were ready to go. Locke made sketches and I photographed the illustration in sequence as we progressed. Hal and P. Y. came out to look see! They were both very pleased with the whole bundle. I said to Hal, that we ought to test fly it—his answer was, "You said it would fly, so that won't be necessary". P. Y. suggested we might try a White Horse, we did, and Hal went home to rest. The airplane was gassed, serviced and ready to go. Miss Lee came in and gave P. Y. a telegram from Bond. He asked that I wire Andy Priester in New York and ask him for approval for

the whole scheme and flight. As much as I realized how very much Bond wanted to brown-nose Priester, I definitely vetoed that suggestion. Andy could have had only one answer, a Big Negative No! P. Y. agreed we carry on with our plans in spite of Bond trying to set up a road block and dig a grave.

I asked Arnold Weir if he would go along and supervise the removal of the demolished wing, assemble the 2 wing, install same and make the temporary repairs as planned; then to co-pilot the 3 with Hal, since Hal agreed to take the wing to Suifu, return a routine flight, then deadhead back for the 3. Arnold was very anxious to make the trip; so I told him to pick his crew of mechanics on a voluntary basis. They all wanted to go. I told those selected to get their hand tools together; we would gather and prepare all the special tools and equipment.

Came evening, darkness and rain. The airplane placed at loading area. Came time for loading, and we reserved space for our maintenance crew. Lo and behold; traffic had sold a complete gross load, over and above the wing, not giving the wing one iota of thought. P. Y. was fit to be tied; I was unhappy, but not Hal, he said "We can fly it all". Needless to say, I started to develop a big—a very big case of butterflies in the stomach. Just as Hal taxied out for takeoff, the sky seemed to open up with a downpour. P. Y. and I stood in that downpour, waiting for Hal to take off. You must understand that Kai Tak was small, unpaved, and very muddy. Hal started his takeoff in that blinding storm, and P. Y. and I stopped breathing. Like forever, Hal lifted off; I had to catch P. Y. and he had to support me.

The DCA, Lt. Moss was all smiles. Well, you just can't believe how good White Horse is at such a time. I might add here that Lt. Moss, the British DCA and the Staff under his direction were very sympathetic and always very helpful to us in the CNAC. He would never hesitate to give us help and advise. Since we were operating out of a British base, at times, sticky questions and problems would arise. Lt. Moss would be called upon for help, be it legal or political and he

would never fail to take our side. The Chinese owe him a debt of gratitude as well as the Americans. He was also a great help to P.A.A. operating in and out of Kai Tak at that time.

After Hal left—there was no thought of going back to sleep or bed that night. P. Y. sent his driver for dry clothes for himself and me. After changing, and a couple of more Horses, we went up to Moss's Office and waited Hal's arrival at Kewlin. Hal kept us informed of his progress, which was slow. Just as he started his approach, the Red Ball went up. Man! Can you imagine that situation? It didn't seem to bother Hal, he pulled over and kept low among the inverted cones until all clear when he went in and landed. He unloaded some passengers and freight—then reloaded a full gross load for Chungking. He flew the wing to Suifu after unloading at Chungking. Arnold quickly unloaded the wing, tools, etc. Hal returned to Chungking, picked up his load and returned to Hong Kong, without rest. But he was a very sick man, as somewhere he had picked up the Dengue bug.

In due time Arnold advised he was ready for flight, but Hal was still sick. P. Y. promised Hal he would hold the airplane for him to fly it out. Hal got better, dead-headed to Chungking and on to Suifu. Arnold had everything in order. The engines were cranked up and Hal took off. After climbout and a few minutes in the air, Hal trimmed the airplane, but in spite of full aileron tab, the craft still flew R. Wing heavy. Arnold had a big spanner for the landing; so they tied it to the spoke of the wheel and flew hands off.

Hal landed at Chungking; the airport was teeming with people all wanting to go to Hong Kong. The traffic agent asked Hal how much he could load. "Hell", Hal told him, "a full load"—that meant 1000 kilo over gross. Hal & Arnold flew that load with that wing nonstop to Hong Kong. Now, I wish to bring out that the DC-2 wing has a thin attach angle and only half the bolts. But Hal could care less, he did a marvelous job. We were very glad and extremely proud to see them land at Kai Tak, and we again went for White Horse. We were so happy, that we promised Hal that we would not call him Ferdinand again, not ever!

So much for that. But now our maintenance task starts. Next morning, the 3 was pulled into the hangar, completely dismantled and overhauled, all damage was repaired and the airplane reassembled except for the wing.

The wing arrived—we assembled the trailing edge to it and I told the mechanics to attach the wing. Disaster was close, too close; the mechanics mated the wing, bolts went in, the two butted nicely, they called me to tell me the bottom would not pull up butt to butt, although all bolts went through. Upon inspection, I found that Douglas inspectors failed to see that the bottom wing bulb angles were not properly trimmed, thus the gap. I complimented our Chinese mechanics. Men of lesser experience might have tried to pull the angles together and a fatal crash would have followed. Douglas was advised via Andy Priester. I cannot praise our Chinese mechanics enough. Once trained and well led, they could be compared to the very best.

The DC-3 was rolled out, Pottschmidt and I took it up for the test flight. "Potty" like the rest of our pilots was good, and this day we felt like a little excitement. So, after we were satisfied everything was O.K. we pulled up headed for the islands off Macao; sure enough the Jap destroyers were anchored in a cove, Potty dived down towards them—Man, you should have seen Japs scatter and run. We went back and landed at Kai Tak. The airplane was serviced and went into immediate service that night.

An A.A.F. Captain was sent to Hong Kong from our Chungking embassay to get details. Locke and I gave him detailed sketches and photographs, which he sent to Wright Field. The Air Force, then did believe that it could be done, and the system was then applied to the U.S.A.A.F. transports. Of course, not a word of thanks from A.A.F.

This airplane probably received more publicity than any airplane in the world other than the Wright Bros. stick and wire and "The Spirit of St. Louis".

This is the story as best I can recollect after these many years. But we have many more episodes as thrilling and





Snow on the Hump



Let down into Supfu



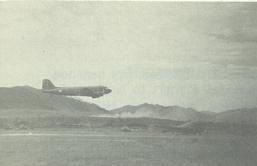
Art Prendergast - Dinjan



Codrea's airplane — Near Dinjan



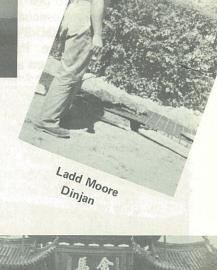
Jeff Weiner Dinjan



Tenchung



Salween River



5.4

Downtown Kunming



Roy Farrel & Bob Blair



Snow on the Hump

important as this, but not so well publicized. For instance, when Woody was forced by 5 Jap fighters to land on the river; and when we evacuated Hong Kong, again Hal was in the picture, taking a DC-3 off Kai Tak with a full load and a knowing engine failure. Pawley came to our help with an engine, etc. I could go on and on, but those are other stories.



Before



After

ORGANIZING THE ASSAM AIRLIFT INTO CHINA Part II By H. L. Woods

By the end of 1943, we had acquired some exceptionally competent mechanics, headed by Vernon L. Gudeman of Pan American Airways, one of the best maintenance men I ever knew. He did a brilliant job for us.

Then we hit the jackpot by getting Jake Fassett, a graduate of Cornell University's Hotel Management School, to head our Commissary Department. He was the perfect man for the job and, if any kudos are ever handed out for accomplishments there, Jake should be standing right up near the head of the receiving line.



Dinjan Operations Office

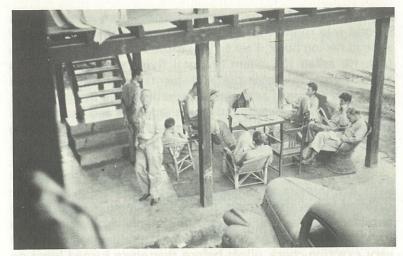
We also got sharp men to run the Operations Office. While there are several who deserve recognition, two that I remember as outstanding were Warren Lovejoy and Jim Phillips. Warren was a cautious, methodical plugger who always thought things out carefully and capably shouldered a

heavy load of responsibility. Jim was a ball of fire. No one with an inclination to goldbrick had any peace around him. I don't know when he ever got any sleep. By the time he got there, we were operating around the clock and yet he seemed to be always on the job. He contributed a lot to our success.

Several other members of the staff are entitled to be singled out for honorable mention. If they are overlooked in this story, let's hope they get their reward in Heaven. Needless to say, it was a team effort, but, as usual, the head men get the spotlight. My belated thanks to all of them. I mention Gudeman, Fassett, Lovejoy and Phillips particularly because they relieved me of so much responsibility and made the entire operation look good.

The pilots were something else again! Without exact figures available to me, I estimate that we had around 200 at the end of 1945 and probably another 200 had been on the payro II at some previous time during the period. Naturally there were some misfits who failed to adjust or qualify. Some moved on to greener pastures and crashes cost us some of the finest specimens of American manhood who ever lived. The flying was exceptionally hazardous, more from weather, inadequate equipment and lack of radio facilities than from enemy action. To my knowledge, only one loss of life was caused by being intercepted and shot down—that was the death of Sam Anglin over North Burma in 1943.

In order to get an impression of the group we assembled, it must be remembered that the draft had been in effect before we started recruiting. We were fortunate in getting so many of the Flying Tigers. The rest of our pilots were sorted out from the applications of adventurers, draft dodgers, and soldiers of fortune. Some of our boys qualified in all three categories. On the whole, though, they were happy-go-lucky youngsters who liked to work hard and play hard. They could do their month's flying time in from twelve to fifteen days and had the rest of the month off in Calcutta. Their monthly pay averaged about US \$2,000 tax free. Many of them went broke between pay days and IOU's circulated freely. As a matter of fact, a black market existed in these



Dinjan Tea House Hostel

IOU's with the price dependent upon how many IOU's each individual was known to have outstanding. Sometimes, the IOU's were used as stakes in gambling games and discounted as high as 50 to 75 per cent.

FLYING TIME NEEDED FOR THE HUMP

I was about twelve to fifteen years older than the average pilot and had already spent eight and a half years in the Orient by the outbreak of World War II. That, together with my more than 10,000 flying hours, qualified me as the "Old Man", which I certainly was by their standards. I used to implore them to save some of their salary and to try to impress upon their minds that money would not always flow so freely. Perhaps some of them took heed, but most paid about as much attention to my admonitions as I would have to the same advice at twenty.

When I joined Pan American Airways in 1932, I had 1,800 flying hours. I flew co-pilot for two years and nine months before checking out as Captain. I'll never forget one incident that occurred shortly after the Flying Tiger group joined us. Most had been checked out as Captains. Robert

("Catfish") Raines had just returned from probably his second solo round trip over the Hump. As he was entering his time in his log book, I asked him casually how many hours he had. He asked if I meant his total flying time, including his cadet flying in Pensacola and his time in the American Volunteer Group. I answered affirmatively. He thumped back through a few pages, did some adding, and nonchantly announced that, including that day's trip, his total flying time came to 277 hours. I don't think I ever quite recovered.

Even though some of the boys began flying Captain with a minimum of logged hours, I don't believe we ever suffered losses attributable to lack of training in handling the aircraft. All the pilots were thoroughly indoctrinated in instrument flying and all had to meet the demands of some very exacting check pilots before they were turned loose on their own.

Most of our losses were directly attributable to adverse weather. We had absolutely no forecasting and very spotty reporting of actual weather conditions en route. Polar air masses could sweep down across the Gobi Desert and over the Himalayas without warning. One day, two or three flights came in to Dinjan from Kunming and reported clear and unlimited weather with winds of 15 to 20 miles per hour. A few minutes later, a couple of our planes left Dinjan for Kunming on the same route and, within two or three hours, encountered a violent blizzard with crosswinds estimated at up to 125 MPH. It was no wonder that the Hump took its toll!

The poor kids were sent out by Air Transport Command didn't have the advantage, during the first year or so of operations, of starting their flights with experienced Captains. They had to strike out on their own and it was pretty rough. The fact that enough survived to train and indoctrinate those who came later was a near miracle and certainly no tribute to foresight on the part of the Air Transport high command. I personally had a conference with General "Hap" Arnold in 1939, at which time I explained the type of flying we were doing and the radio procedures and

equipment we were using. While he listened intently and questioned me at length, I evidently didn't manage to get my message across.

In 1939, I had Colonel (later Major General) Ralph Royce as a passenger from Hong Kong to Chungking. Naturally, I let him ride in the co-pilot's seat. Shortly after leaving Hong Kong, in the middle of the night and over Japanese-occupied territory at an altitude of about 15,000 feet, we encountered a middling severe thunderstorm. Turbulence, lightning and St. Elmo's Fire were prevalent. As a gesture to put the Colonel at ease, I engaged the automatic pilot, slid down into my seat, rubbed my hands together, and gleefully announced: "This is what I like."

He figured I had completely lost my mind and asked me what the hell I liked about it.

"No Japs up here now," I told him.

Years later, after I had moved to Florida and after his retirement, our families became good friends. Invariably, when introducing me to his friends, he would say:

"This is the fellow who flew me into China through that storm I told you about."

In all his military flying, which began in World War I, he had never been up at night except under ideal conditions. He wouldn't have been qualified to fly the Hump without considerable additional training.

When I said that the pilots "were something else again," I didn't mean to imply that they couldn't stack up against the ground staff members I mentioned. In any group that size, there are bound to be occasional misfits, but 99 per cent of them were "Ding How." I am proud to have quite a few of them as personal friends now that a quarter of a century has elapsed since we worked together. While there was the normal amount of bitching, every last one of them knew that he was a lot better off than the boys in England flying

bombing missions over Germany. One of our Flying Tigers, Robert ("Moose") Moss from Doerun, Georgia, expressed the situation succinctly when he said, "Every day with CNAC is just like Sunday on the farm." He knew a good thing when he saw it.

COBRAS AND ELEPHANTS

For the first couple of years, our Chinese ground staff and crew members were quartered in a bungalow on the Limbiguri Tea Estate located about six miles east of Dinjan. I had reports that cobras had been seen in the immediate vicinity. I asked the manager of the Estate, Bob Grayburn, what could be done about it. He said that on previous occasions he had called in a local Indian snake charmer to do the job. I told him to go ahead. The snake charmer appeared and went to work. I don't know whether anyone watched him, but a few hours later he showed up with one large and nine baby cobras in his basket. He must have done his work well for we had no more complaints. I don't recall just how I showed his compensation on our books, but I do recall that I had to resort to subterfuge, as I didn't want to have to explain the presence of a snake charmer on the payroll.

Later on, we had to move the Chinese to a different location as each fall a herd of about 200 wild elephants would move into the area along the road leading to the airport. While they were not particularly vicious, some of the young females would stand in the middle of the road and refuse to budge. Any car which tried to get around or past them would inevitably be shoved and batted around for a while. This never happened to us, but it did to some of the local tea planters. Hence we avoided getting too close to them.

The Monsoon season started in the latter part of June. We could see it building up in the south and moving further north each day. When the rains broke loose, we seldom had more than an hour or two without at least a light shower. We had about 120 inches of rainfall annually, all of it falling during the Monsoon season which ended around late

September. About three-fourths of the rain fell at night. Unless one has experienced a Monsoon rain, it is hard for him to conceive of it. How in the name of Heaven so much rain can be held in the atmosphere is beyond me. Lying in bed at night and listening to the downpour, one would think that it couldn't possibly rain any harder and a moment later, with a great roar, the rate of rainfall would about double. Roads became impassible except for six-by-six trucks with high axles and enough driving wheels to make it.

About October, with the Monsoon season over, Upper Assam enjoys the most beautiful weather one could imagine. Not a cloud in the sky until the next Monsoon. Temperatures at mid-winter would get down into the low 60's at night and stay in the upper 70's during the day. On the China side, the weather was almost exactly opposite. Winters were cold and overcast and the summers, at the 6,200 foot altitude of Kunming, were delightful. If all the trouble-makers and politicians were taken out and shot and the world settled down to a peaceful existence, I can't think of a better life weatherwise than to winter in Upper Assam and summer on the beautiful clear lake about 25 miles south of Kunming. (Not the first lake south of Kunming; that one is yellow and muddy.)



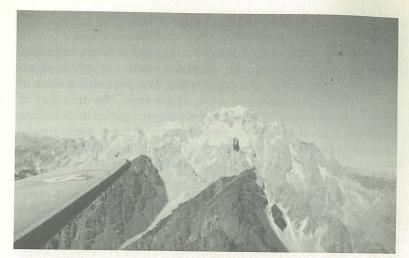
Lake Tali

Recreation facilities for our ground staff were limited. As they were on a seven-day-a-week schedule, we tried to give them several days off once every two or three months in Calcutta or wherever they could go for a good time. Bird shooting was excellent and consisted of doves and green-feathered pigeons. At first, ammunition was scarce, but later a carload of shotgun shells arrived for the U.S. Military to be used by the fighter pilots for skeet shooting, which was supposed to sharpen their aim and reactions for dogfights. Someone in charge of the boxcar decided that, since a small amount of water had seeped in around the door, it would be simpler to condemn the cargo than to unload it. I took a truck down and loaded enough shotgun shells in it to have lasted me all my life even if I hunted pigeons and doves continuously. I recall that, when I left Dinjan in December 1945, I gave several of my planter friends about 3,000 rounds each.

These amusements helped dispel the gloom and sorrow that prevailed when one of our planes was missing. We lost sixty planes on the Hump in the four-year period with about half of them resulting in one or more fatalities.

The tea plantations throughout the valley had been literally carved out of the jungle. They averaged from 2,500 to 3,000 acres overall with about a third of the land actually in tea. The balance was used to raise bamboo and thatch grass for the native houses and as pasture for the livestock of the estate workers. The natives fell into three distinct groups, separated by religion: Hindus, Moslems and Christians. Separate living areas had to be built for each as they literally despised each other.

Outside the perimeter of the tea gardens was the dense jungle. All sorts of wild animals, reptiles and birds lived there and made occasional forays into the cultivated land. One of our captains, "Fuzzy" Ball, shot and killed a tiger about half a mile from the foreign staff's quarters. (He used a 12-gauge shotgun with lead slugs.) Shortly after the war was over and our people had left the area, a tea planter friend wrote me that a tiger had just killed two natives on the small dispersal



Likiang Peak

air strip I had built. Our radio station and tower were on this tract and our Chief Radio Engineer, "Red" Knight and his wife, Alice, who was also his assistant, lived in a small building on the premises. They once found a deadly banded Krait, equivalent to our coral snake, in their clothes closet. Warren Lovejoy, who lived in the staff house, found a Krait coiled up on his dresser one morning.

Once one of the pilots woke in the middle of the night and saw what he thought were two gleaming tiger eyes a few feet from his cot. A few screams and one or two pistol shots later, he discovered that what he had seen was two wrist watches, each belonging to a different person. The room was crowded and had double-decked bunks. It was easy to see how the two watches came within such close proximity to each other, but harder to understand how the pilot had missed shooting somebody.

Oddly enough, we also had trouble with mockingbirds. During the mating season, they seemed unanimous in their choice of the carburetor airscoop as the ideal nesting place. The number of nests we would find was uncanny. Even during a short refueling operation, the energetic birds would manage to put down a few leaves and straws.

CARGO OUT OF CHINA

On our way into China, we carried military supplies. Coming back, we brought wolfram, the ore from which tungsten is extracted, and pig bristles. The pig bristles were of the double-hair variety and were, at the time, the only sort of bristle which could be used for a special type of anti-fouling paint used on the hulls of naval vessels. At one time, several United States destroyers were delayed in launching pending the arrival of Chinese pig bristles for brushes.



Kunming Lake — Old Scar Face Mountain

Other cargo from China included mercury, which was carried in 50-kilo earthen demijohns—about 110 pounds. These had to be secured to stringers under the bucket seats of the aircraft. They took up so little space that with a full load the plane often looked empty. This resulted, on several occasions, on the planes being double-loaded and the mistake not being discovered until the pilot, as he neared the end of the runway, wondered why he was so slow in getting airborne. Once up in the air, the pilot would continue on his course, taking a low-level route and burning up a considerable amount of fuel before risking a landing. Occasionally, a

dull-witted pilot would come storming in to tell us what a "junk pile of an airplane" we were asking him to fly, that he couldn't get it off the ground, that it ought to be overhauled, and so forth, when all that was wrong was that it was carrying a double load of cargo.

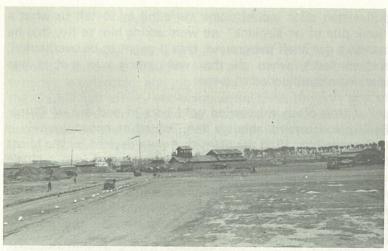
Quite often we carried gold bars in and out of China. Each plane carried about a ton, valued at approximately a million dollars. If all the plans that were devised by the pilots to make off with a planeload were compiled into a single volume, it would rival Webster's Unabridged Dictionary in size. None of these plans was ever put into effect and all gold shipments arrived at their destinations. Rumor has it, however, that some gold was jettisoned by the military during an emergency.

We had our share of anxieties, heartaches and tragedies. Due principally to unpredictable weather, we sustained over thirty fatal accidents in a four-year period. Each plane carried a radio operator and all communication was in code, but foul weather would often put planes out of communication for extended periods of time. Our ground facilities for radio navigation were meagre and inadequate.

Finally, we put in three or four intermediate homing stations. These were in locations where the personnel would have to walk in overland, a trip that would take them three to four months. They would have to carry the supplies they needed for the long trek on their backs. The supplies for the stations, however—radio equipment, power plants, fuel, tools, foodstuffs and medicines—were parachuted in to them. Generally, there were two men to each station. They were Chinese and, as a rule, would stay six months at a stretch at their posts. It was wild, primitive country, hardly fit for man or beast.

MILITARY AND PAN AMERICAN AIRWAYS

We remained a wholly civilian operation throughout the war. At one time, we were approached with the proposition that we take over the entire Air Transport Command



Kunming Operations

operation for that section of the world. We declined, believing it was more than we could handle.

Until sometime in 1943, CNAC actually laid down more tonnage in Kunming than the military. From then on, though, our operations were increasingly dwarfed by the Air Transport Command shipments. This was largely due to the greater size of their planes. We were encouraged to continue our work, partly for sentimental reasons and partly because the majority interest in CNAC was owned by the Chinese Government and our flights were a matter of prestige to China.

The minority interest was owned by Pan American and the venture, I am told, proved quite profitable to that company. Though the pilots, crew and staff had no thoughts of this at the time, their efforts would be quickly forgotten in the postwar scramble. There was considerable resentment over the fact that none of the personnel who risked life and limb was offered a berth in the parent company, nor was any gratitude expressed. Earlier, the Pan American people had indicated that, when the war was over, the boys who had joined the CNAC operation in Assam and China would become "members of the family." If so, they were treated as illegitimate members.

A REVERSE THREE-POINT LANDING By W.C. McDonald



A good landing is when you can walk away from it.

Pilots often have premonitions. On the night of January 15, 1941, I had one. My cargo was 5 million dollars in Chinese banknotes and a bank messenger. I was scheduled to fly a DC-3 with Co-pilot Chen and Radio Operator Wong from Hongkong to Kunming direct. We departed Hongkong at midnight with seven hours fuel aboard. Our route was over Kweilin and west to Kunming.

About 4 A.M., we were flying at 10,000 feet when I noticed a rather severe lightning display with huge build-ups dead ahead. I called to Wong, who was busy sending a message, to roll in his trailing antenna to keep the lightning

from hitting us. As I saw him start to wind in the antenna, I began to plan a route through the storm ahead. When Wong had finished his job and was attempting to complete transmission to the ground station at Kunming, we suddenly entered the storm to find the lightning vicious and everywhere around us.

I heard a great crash and knew we had been hit. Lightning struck the antenna and came up through the aircraft, burning out all electrical equipment, radio receivers, transmitters and direction finder. Before I could turn back, the lightning hit us twice more.

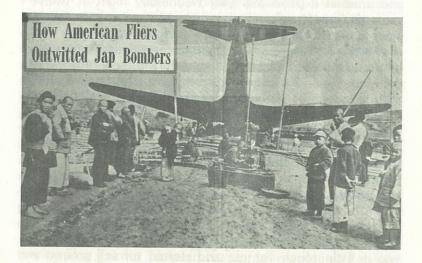
After heading back east, we broke out into the clear, but we were flying above an overcast. I decided to head toward daylight and keep to an easterly course. Fuel was running low, so we throttled back, leaned the mixture to the utmost, and reduced our RPM until we seemed to be just floating through dark skies.

My Co-pilot was so frightened that he could neither fly nor give me assistance. Radio operator Wong took over as Co-pilot. He was alive at least and was of some help.

Daylight came, but we couldn't see the ground. At 8 A.M., exactly eight hours after take-off, I did some tall praying. Suddenly I saw the ground through a hole in the clouds and down we went through the hole. I knew we were near Kweilin because of the cone-shaped hills everywhere, but I could find no place to come down. With our fuel dangerously low, we had to land quickly, so I selected a newly constructed, but unfinished, road and landed. The road was only a few feet wider than the landing gear. Large clods of clay on the surface caused the DC-2 to nose up at the very end of the landing roll, but there was no damage.

Fortunately, we were in Chinese-held territory so our bank messenger was able to get the money into a local bank. Our Co-pilot simply disappeared. Coolies used clay and water to camouflage our plane. During the days we were forced to stay there, Japanese bombers passed overhead, but they failed to make an identification and didn't attack us.

Meanwhile, a thousand coolies worked to tamp down the surface of the road so we could take off. A week later, we had righted the DC-2 and a radio mechanic from Hongkong had partially repaired the electrical system. We loaded with 100 gallons of fuel and took off with no Co-pilot. We arrived in Hongkong safely, mission incomplete and Co-pilot missing. As far as I know, he has never been heard from by anyone in CNAC. Perhaps he too had a premonition.



Not much has been told of the American airmen who are flying commercial transport planes for the Chinese Government, but their work has a heroic quality that is not surpassed by aviators in war areas anywhere. Here is an example of skillful piloting by Capt. W. C. McDonald, who set his plane down on a narrow road in China's interior with his radio gone and a heavy storm raging. The pilots, volunteers in the service of the China National Aviation Corps, fly unaided and unarmed. Exposed to hurricanes, high water and Japanese bombers, they wait for nights when heavy storms prevail and conditions are unusually difficult. — 1941 Los Angeles Examiner.

My Letter To Family Written At Scene of Forced Landing

Sunday, Jan. 18, 1941. Linhsien, China

Dear Folks,

Again your wandering boy has had one of those exciting and unusual experiences. Last Wednesday night at twelve I took off from Hongkong on my way to Kunming via Kweilin. Two hours and a half later I passed over Kweilin with everything running quite normal then 20 minutes later we ran into a small electrical storm. I told the radio operator to shut off his radio and we flew thru the storm without any trouble and came out in the clear above clouds in 15 minutes. The operator turned his radio on and we tried to talk to Kunming but we were still too far away so we flew on above the clouds, sometimes flying thru the tops of some higher ones when suddenly after passing Kweilin two hours out I ran smack into another electrical storm. This time the storm was a humdinger. The radio was off and I was busy at the controls when all of a sudden a terrific flash of lightning smacked our trailing antenna, which acts more or less like a lightning rod. I then made up my mind that this condition was a little tough for me and started turning around and before I could get out of the storm, which took only four minutes. I had been hit two more times. The blue flash was so bright on one hit that I was blinded for a few seconds. Our position was some 200 (two hundred) miles east of Kunming. Knowing the mountains there so well I started back to Kweilin and then found out that the lightning had disabled our sending set. We could hear on our receiver but not very well and could not use our Radio Direction finder so we took a reading on our situation and realized that we were indeed in for trouble. We had less than four hours gasoline left at the very conservative speed and two hours and a half until daylight. Knowing that the weather conditions were not so bad some 150 miles east of Kweilin I made for this area. At 7:30, three hours after we were hit, and shortly after daylight, I saw the ground thru a rather large break in the

clouds, so I began to circle down and as I was going down the hole began closing up but I managed to get under the clouds safely and spotted several fairly large sized towns with a nice river and a highway which was under construction. The town named Sing Tse, located 20 miles northeast of Linhsien and 155 miles ESE of Kweilin, is surrounded by rather high mountains and we flew over the entire valley for an hour looking for suitable places to land then when we had only ten minutes of gas left I selected the newly constructed road for the spot to land. Picking a straight stretch, I landed nicely but the road was soft because of the rain and we ran along for about 200 yards and then slowed down too fast and slowly nosed up but down safely. The airplane was not even scratched and we were all pleased at getting down so nicely under such rotten conditions. We were 8 hours and 42 minutes in the air-I think that is a record of some sort.

It was quite a feat, even though I am forced to say so, in landing on the road as it is only two to three feet wider than the tread of the tires. So narrow that it is impossible to take off and we will make the road wider and surface harder before attempting to take off. But all is well and another experience has rolled under my bridge.

After landing I was lucky in finding a bus that was leaving Sing Tse for Linhsien that same morning so I arrived here about 2 P.M. and found Dr. Chester Fuson, Presbyterian Missionary, waiting at the District Magistrates office, as he had heard we were down at Sing Tse. He invited me to stay with him so I graciously accepted, as the Hotel was not quite as good as the Redmont. So we walked across the pontoon bridge to the Mission Compound, which is located on a little hill overlooking the Lin River and the City of Linhsien. The Mission is one of nicer Missions in China. There are twelve rather large brick buildings which include a Hospital, Church, School Buildings, and Residences.

The valley here is almost self sustaining. However, the wheat and cotton comes from the little town where I landed. The Magistrate took great pride in showing me around the city which was decidedly cleaner than other Chinese cities

and towns that I have visited and he was pleased when I told him so.

Dr. Fuson and his wife have been in China for over 35 years. He has three boys and they are all grown and teaching in the States. One at Berea College, Ky.

The Fusons are unusual Missionaries. They are more like good old Southern folks than anything else. They are very cordial and friendly and not in the least boring. The Doctor has been of valuable assistance in helping me get communications thru to Hongkong and Kweilin and we have had many laughs out of the whole business.

There are three foreign couples here. Dr. Bradshaw and wife have been here eleven years with the hospital and the Fusons who have been here only two years having moved from Canton because of the Japanese and a Canadian couple that do their work on the River. Traveling here and there spreading the Gospel among the river folk.

Being slightly Christian myself they seem to think I am not such a terrible person and have not tried to get me to join the church or something. Anyway I am certainly lucky to have landed so close to people that can be of comfort when needed because I did feel bad about having to land the plane away from an airdrome and cause it to be out of use for weeks to come but it is much better than having lost the plane, the crew and one passenger—oh yes, I forgot to mention that my cargo was some \$5,000,000.00, Chinese, which the passenger was guarding. He was certainly upset but pleased as a puppy when he got his money safely in the bank here.

Just had a telegram last night that a car and a radio mechanic with gasoline is on his way and should be here today. I will in the meantime go back to Hongkong and go on other schedules until the highway is fixed and I can fly this plane back to Hongkong.

Just wanted to write this letter under the environment of this place as I find it difficult to retrace the thoughts and feel the environment after getting back to Hongkong.

This place is very scenic. Mother would certainly like to visit here. A very fertile valley and the Kwangsi-Kwangtung Mountains make a rare setting for the valley. Sharp peaks and strange awe inspiring effects at sunset make it a very beautiful spot. Even though the Japs fly nearby causing an alarm almost every day, however, they have only bombed here three times.

I hope that newspapers didn't get out a story that I was lost or hurt or something so as to cause you unnecessary worry.

Love to all,

William

SHOT DOWN By Louis Reid 1941 – Los Angeles Examiner

There was the incident on Aug. 24, 1938, when Captain Woods—he is a native of Salina, Kan., was shot down by a squadron of Japanese pursuits while en route with a DC2 from Hongkong to Chungking. Fortunately, he was able to make a landing in the shallow waters of the Pearl River. But as he, his crew and passengers were swimming ashore, the raiders dived and machine-gunned them, killing 19 of the 23 passengers and crew aboard.

Captain Woods wasn't to be daunted. With some special aid the plane was recovered, rebuilt and sent back into service.

Not long ago the Japanese made a concerted effort to disrupt the commercial air transportation in China. Again Captain Woods was involved. Flying a DC3 from Chungking to Chengtu, he was picked up by a detail of five Japanese

bombers, with no clouds to hide in, he dived and made a landing in the tiny intermediate field of Siufu.

Scarcely a minute later the Japanese dived on the field. Before they left they had dropped more than 200 bombs on the airport. One of them blew the port wing off Woods' plane. The starboard wing was completely mangled.

Woods radioed Hongkong that with a new wing he would be able to get out; that he was putting crews at work "mounting" a runway, but "help must hurry."

Hongkong had no spare wing, had no materials even to build one. The only wing available was a DC2 wing. Through the night engineers and maintenance men struggled with the problem. They figured. Could a DC3 be flown with half a DC2 wing? They decided that, with certain adjustments, it could.

But—how were they to get the spare wing from Hongkong to Suifu—a distance of 860 miles? The only way, of course, was to fly it. To the underside of the standby DC2, the spare wing, with its "adjusted" sections, was lashed.

Would the contraption fly? Captain H. A. Sweet, of Salt Lake City, volunteered to try—and to deliver the wing if he got into the air. While his colleagues held their breaths he pushed the plane to the last yard of runway before he got the wheels off the ground.

Before he reached Suifu Japanese bombers had returned to finish off the damaged plane. Woods and his crew and his coolie helpers, however, had dragged the DC3 off the field and three miles down the road and had hidden it in a clump of trees. For two days bombers scoured the countryside looking for the plane, finally giving up the hunt. The two skippers feverishly set to work fitting the substitute wing to the plane while coolies filled in bomb craters to provide a runway. As dawn streaked through the trees Woods took the DC3 off with its unbalanced monoplane.

All of the pilots are not as lucky as Woods. En route to Chungking from Hongkong Capt. W. C. Kent was attacked just as he landed on the field at Chanyi by a squadron of Japanese fighters. The pilot, two of his crew and all of his passengers were killed.

Another and more fortunate incident involved Capt. W. C. McDonald, who on a DC2 from Hongkong to Kunming was caught midway in a heavy snow and ice storm, with his radio out of commission by lightning. He crept down to the ground and landed on a strip of newly-cleared road.

By daylight he learned he had come within eighteen inches from a pole on one side and twenty-four inches from trees on the other. Gasoline and a new radio were flown to him. Local coolies were enlisted to widen the road and eight days later Capt. McDonald took up his schedule out of Hongkong.

To these men it is just routine stuff, just incidents of the war in China.

ERIC JUST AND THE RED BARON By Mrs. Ralph Royce

Throughout the entire period of CNAC's life, the foreign staff consisted preponderantly of Americans. One of the aliens on the staff was Eric Just, a German who had been a member of the famed Richthofen Squadron during World War I. During the latter part of the 1920's, Just had been in Japan, demonstrating Dornier flying boats. At the termination of his contract with Dornier, he came to Shanghai and joined CNAC, where his seaplane experience was a valuable asset. He was well liked and his competence and dependability were appreciated. Eric used to take members of the American staff to the German Club as his guests and he often visited the Columbia Country Club as a guest of some of the American members.

Like many people who have led an adventurous and exciting life, he was usually reluctant to discuss his past

exploits. However, on one memorable occasion, an interesting coincidence came to light over a few drinks. One of the American pilots was Cecil Sellers, who had served with the Royal Flying Corps prior to United States entry in World War I. Sellers had been assigned to a bomber squadron. On one occasion, his flight, comprising seven bombers, was intercepted over Belgium by the "Red Baron" and his group. The bombers had no defense screen on fighter planes. Richthofen's men shot them down, one by one, until only Seller's bomber was left. He was pursued for a considerable distance by a solitary German Fokker which had him in a sitting-duck position. Sellers believed that his last moment had come. However, the German didn't open up on him with his machineguns. He followed for a while, then pulled alongside, waved farewell, and turned back.

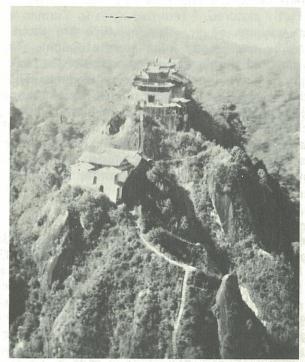
Dates and places were pinpointed and it was proved conclusively that the two antagonists had been Sellers and Just. The only reason Sellers had lived to tell the story was that Eric's machineguns had jammed. The two pilots became good friends after that with great respect for each other.

George Sellers, who later transferred to Pan American Airways, lost his life together with Captain Ed Musick, the Chief Pilot for Pan American, near Canton Island in the Pacific. They had been making a survey flight from the Hawaiian Islands to Australia and had just taken off when trouble of some sort developed. They decided to return to their point of departure, but their gross weight exceeded that allowable for landing. Accordingly, they began to dump fuel, which ignited, exploding their plane in mid air.

Shortly before the outbreak of the Sino-Japanese War in 1937, Eric Just left CNAC to fly for Generalissimo Chiang Kai-Shek as his personal pilot. By 1938, the breach between Germany and China had widened sufficiently for him to find China uncomfortable and he returned to his homeland. During World War II, he was reportedly in charge of the night-flying activities of a German cadet school in Munich. The school, like the entire Luftwaffe, was under Hermann Goering, who had, of course, been one of Just's former associates and who had taken command of Richthofen's squadron when the Baron was shot down.

The territory of which the Jade Dragon is the centre, is the home of a sturdy tribe known to the Chinese as Moso, which they call themselves Nakhi, or black people. They are different from the Chinese and closely related to the Tibetans who call them Jung. Since the close of the Han Dynasty about 24 A.D., they have dwelt in these regions where they later created a kingdom...

In 1930, I returned from America to Yunnan to further study the Nakhi tribe, their pictographic script and literature, ceremonies and legends, breaking these studies by excursions



Buddist Temple near Lake Tali - Photo credit Jim Dalby

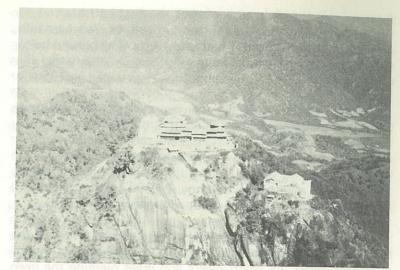
to the peaks and gorges. In 1931, I was determined to traverse the Yangtze gorge in the Likiang snow range, which is possible only on foot. I had never dreamed how difficult it would be. It necessitated climbing from the river bank at 5,000 feet to 10,000 feet almost twice a day on the entire journey. It took me five days to negotiate the gorge although it can be done in three. The entire gorge is only about 48 miles long, and the Yangtze drops 1,000 feet in that short distance. To describe the gorge is next to an impossibility, it must be seen.

The narrowest part is known as the Hutiaotan or the tiger-leap rapid, so narrow that a tiger can jump across. In March, when I traversed that gorge, the temperature on the river bank was 102 degrees Fahrenheit, yet looking up to the mighty crags above, there lay eternal snow and ice.

Illness befell me and I had to return to the civilized world. Partly restored, I returned again to Yunnan to write the first volumes of my studies which are about to be published by the French Book store of Peiping. They are entirely devoted to this region and comprise the history and geography of the ancient Nakhi kingdom. This task completed, I wanted once more to visit my old haunts, and especially the snow range and the mighty Yangtze gorge. Physical conditions did not permit me to journey forth as in my younger days, when to reach Likiang it took twenty days on horseback, and thence to and through the gorge another nine days, not reckoning the return journey to Likiang.

CHARTER FORD AEROPLANE

Great strides have been made in China since the days of my explorations, and since my return to Yunnan in 1934 the China National Aviation Company had established an air service between Yunnanfu and Chungking via Kweiyang, the capital of Kweichow. Thus, it occured to me why not charter their Ford trimotor plane called the Kunming and fly to the Likiang snow range and through the mighty Yangtze gorge? I communicated with Captain Allison of the company in Shanghai through Mr. O'Hara, the pilot of the Kunming



Buddist Temple near Lake Tali - Photo credit Jim Dalby

plane, asking if it were possible to charter the plane for such a journey. While flying from Shanghai to Peiping in November 1935, I learned from the pilot, Mr. (Hewitt F.) Mitchell, that the trip had been approved and on my return to Yunnan I lost no time to arrange the trip. February third was set as the date for this historic and memorable flight.

As fine a day as only Yunnan can boast of at this time of year dawned. The sky was cloudless and of a deep turquoise blue as only a Yunnan and Tibetan sky can be. My party consisted of two of my Nakhi assistants, and as guests Mrs. O'Hara, wife of the pilot, and the Rev. Lankester of the Church Missionary Society of Yunan. Two paying guests I had also invited to help defray the expenses of the trip, namely Mr. Harding, H.M. Consul-General at Yunnanfu and Mr. Ezeghelian of the Banque de l'Indochine.

When we arrived at the flying field, the engines of the plane were humming and all was ready. At 7:45 A.M. Yunnan time, we took off. Sailing over the old city of Yunnanfu with its interesting pagodas, built during the Tang Dynasty over 1,200 years ago, we rose gradually to 9,000

feet and shortly afterwards, during the first half hour of our flight, we climbed to 13,000 feet. Beneath us were bare hills, or here and there covered with pine trees. The ground below was like a sea disturbed by a terrific gale, undulating like huge waves. . .

Deep erosion met the eye everywhere, red soil, bare hills, and small plains. From here, 150 miles away as the crow flies, we first sighted the Likiang snow range. The atmosphere was clear and the peaks stood out sharply... From here looking north northwest, we could see 170 miles away the three mighty peaks of Konkaling, 22,000 feet in height and first explored by me in the spring and summer of 1928...

Truly, it (the Likiang snow range) seemed to float in the atmosphere like a sleeping dragon, enshrouded in its mantle of purest snow, its sharp peaks and crags piercing the deep blue sky. An aura of majesty encompassed it, overawing all; its neighbouring hills lay crowded about it like loving children gather round their mother. Nearly 20,000 feet its peaks tower into the heaven and yet the ever-hastening, restless waters of the Yangtze and time have conquered it. A gorge 12,000 feet in depth this mighty river has carved for itself, separating the northern from the southern peaks.

BUMPY FLYING

We continued in a northerly direction till we came abreast the exit of the Yangtze gorge, flanked by mighty peaks and crags covered with eternal snow. Up to here the flying was more or less smooth, only now and then flying over the deep Yangtze valley were we somewhat tossed about. We flew to north of Mbayiwua, or Minvin, as the Chinese call the place, and nearing Tokosher, or the place at the foot of the long pine, we turned west over the alluvial plain with its scattered hamlets collectively called Ndaku, or Taku (beat the drum). The Ndaku plain is at an altitude of 5,900 feet while we flew over it at a height of 16,000 feet.

The plain with its scattered hamlets, completely enclosed by high mountains and bisected by the Yangtze

which flows through it, looked insignificant. Rapidly we approached the third peak, Haba, and the mouth of the deep gorge yawned and swallowed us. The wind was terrific. To both sides the ice-covered crags and peaks hemmed us in, and 12,000 feet below us flowed the Yangtze, a narrow ribbon of blue, in its rocky prison, and in deepest shadow. The sun illuminated brilliantly the snow peaks and pinnacles, outlining them sharply against the deep blue sky.

The fierce wind which howled through the gorge caused our ship to flutter like a piece of paper in a gale. It drove us toward the peak of Haba, so that I feared the wing of our plane would scrape the cliff, which looked forbidding. My friend Lankester who sat opposite me shivered and looked queerly at me. He grabbed the spittoon with one hand and the camera with the other.

We were tossed about, rising and dropping at the rate of 1,500 feet a minute; the ship swayed and every bump registered in our stomachs. The roar of the engines seemed intensified, and we bumped and swayed and shook as we passed close to the ice-crowned, vertical limestone cliffs at an altitude of nearly 17,000 feet. Such a spectacle will forever remain unforgettable. Serene and as if with contempt, the mighty peaks looked down on us as we in our insignificant craft literally bumped through the virgin gorge. The heaving of my seat for moments made me forget the scenery, and made me hold on and close my eyes. Soon we were nearing the other end of the gorge.

Instead of flying up the Yangtze valley over the river, we flew over Tahoshan, or the great fire mountain, an extinct volcano in whose crater now live a few families belonging to the Chunghela tribe, who once settled here, coming from Kweichow, their ancestral home. Here we made a turn south and flying at an altitude of 15,700 feet we hugged the western flanks of the snow peaks of the Yulangshan. Here the wind was less strong and the ship sailed smoothly through the air at the rate of 130 miles an hour. As we reached the southern end of the range, just a little south of the last crag, Hualapax, of the range, we crossed over it to the plain.

FINE LANDING FIELD

Soon our motors roared over the upper end of the Likiang plain, and near the last village at the foot of the snow range Nvlvko, or at the foot of the silver rocks, where I had spent many years, we made a beautiful landing on one of the finest landing fields of Yunnan. The place is called Wuaduwuadu and is 8,700 feet above sea level. Here in days gone by we used to race our horses and I often thought then that some day it would be used as a landing field for planes. The distance from it to the town of Likiang is negligible, being only about twelve miles. As no plane had ever landed here, or for that matter in the Likiang district, our pilots O'Hara and Black, flew slowly, and several times round it, examining carefully till they decided it was all right to land, and gently we came down, landing at a speed of 95 miles per hour at 10:50 A.M.

The first trip by air to the Likiang snow peaks had thus been safely accomplished. The gods were good to us. Not a cloud was there in the sky and the range, dressed in new snow, looked at its best. On our landing, there was not a soul on the plain, but soon the houses of the surrounding villages emptied their occupants who raced to the place to marvel, for such a bird had never been seen by these friendly, simple people.

LOOKING FOR IRON EGGS

Some had heard our motors long before we had come in sight and they believed that avalanches descending from the snow range had caused the noise. Others seeing our plane coming from the west thought a British plane had invaded Yunnan, coming from Upper Burma. The friendly crowd surged around the plane, some crawled underneath as if looking for eggs which the iron birds might have laid. Faces were pressed against the windows and Mrs. O'Hara, wife of the pilot, was the center of attraction on the part of the Nakhi women.

During the brief stay, I lived over the many years of my sojourn here, happy memories indeed, yet I would not have liked to remain behind this time. The two Nakhi boys who had made the flight with me were surrounded like heroes by the relatives and friends. They had been separated from their families for over two years, and one had had a son born during his absence, and when I asked him, "well, what did you say to your wife?" he replied, "I did not speak to her for there were too many people about." They hold queer views about marriage, for they once informed me that "for the first two years of our marriage, we don't speak to our wives."...

How times have changed. The journey to and from Likiang would take by caravan forty days, and adding the trip through the Yangtze gorge another ten days, and these fifty days of travel we cut down to four hours and thirty-five minutes actual flying time.

THE BURMA BANSHEE By Zygmund Soldinski

Much, yes, very much has been written about CNAC's DC3 No. 41, which was dubbed "the Burma Banshee", especially by John H. Murdoch III. There are still various and many stories being told and retold, some doubted and disbelieved about this airplane, as they should be because of the many conflicting versions and all receiving world wide publicity, only to be outdone by the stories of and about the DC 2½. Therefore, the following is my own factual and personal account and version of what actually happened, and in which I wish to give the proper personnel the proper credit

^{*} Fellow of the Royal Geographical Society. What follows is excerpted from Dr. Rock's "By Aeroplane over Yunnan," which appeared in the North-China News for March 2 and 3, 1936.

for their part and performances. For instance, Bill Pawley, although not an active member of CNAC at that time, played a very important part, and vital it was, in enabling us to get this airplane back to safety. Few, even many of the very oldest CNAC personnel know of Pawley's part, so they understandably can't give him due and just credit for his help and assistance.

The start of this episode begins in Hong Kong. As I have stated in my article entitled "The Last Days of CNAC in Hong Kong 1941" Hal Sweet was on his way into Hong Kong with a sick engine. Also, Sweet was told that the engine could be doctored enough for a takeoff only, and he would have to punch it! That is the way it was. Hal had a full load headed for Nanshiung. After take-off he punched the left engine and landed with a feathered prop. The engine was a wrap-up.

Since I had sent Troy Haynie to Nanshiung or (Nanyang) beforehand, I ordered him to take charge and try to hide the airplane. However, the Japs were there early the next morning. They had spotted the DC3, formed a "Ring around the Rosey" and played games diving or just dragging and shooting up the airplane at their leisure. They must have just about enpended all their ammo, as evident by the great number of bullet holes we found later. The Japs were operating out of Canton, and I doubt that it has ever been told that the Nips also paid a price, as there was a detachment of Chinese soldiers camped just outside the Airport, and, as the heroic Japs made the runs the Captain of the detachment opened up with his small calibre machine gun and finally got one.

The Chinese Government paid the Captain a handsome bonus. Lee Taylor was there when the Captain received his reward. First, says Lee, the Captain bought every one of his soldiers a pair of shoes (piece of old tire held together by string) and then all the food they could eat. Lee says he helped them with the food and it was good.

Chuck and I, of course, were still in Hong Kong; Bond and Gimpie Price arrived in Chungking the day before Chuck

and I left Hong Kong and arrived in Chungking on Thursday morning so tired we had trouble climbing the 365 steps to the Pink House. The "Pink House" was a big house on the cliff above the Yangtze, built on a solid rock hill, the cellar was honey-combed for Air-raid shelters and also served as headquarters for Operations and Maintenance as well as work shop and stores.

I took my family to the Chaling House where I got a room in the cellar. I then returned to the Office; Bond was there and Chuck had just got back. Since we had no Managing Director we had the lower echelon to work with. All the material we had spirited out of Hong Kong was in Customs bond, stored there. His Excellency Minister Ping walked in with a couple of lesser officials and announced that he was now acting Manager Director. We were then called into a meeting: the Minister, his aides, Bond, Chuck, myself. It looked like a Morticians convention lacking a corpse. It was first decided to consolidate what we had in Chungking, then decide our future actions. I must say the Minister was a very nice and considerate person.

"What about No. 41?" they asked. "If ever we needed airplanes we do now." I told them I was leaving the next morning for Nanshuing, since Chuck had already set that up, and I'd give them a report upon my return which might be in two or three days. "How about an engine?". We didn't have one, but I'd come up with something, I said.

As we walked out of the meeting, Bill Pawley was waiting in the hall. He, of course, had considerable equipment at Bhamo. Bill offered us anything he had, whether it was equipment or material. Here was my engine, I thought. I explained to Bill our problem in regards to the DC3, and so I sent Jim Latta to get an engine from Bill Pawley at Bhamo.

Hugh Chen and Lee Taylor arrived. Lee was a damn mess as he was allergic to picric acid, and he had been constantly walking through it at Kai Tak which really fixed him. His head was as big as a Brahma bull's, his hands were the size of a catcher's mitt; but Lee was a good soldier and said he was ready to trot.

I told Lee to get his tool box, that we were leaving in the morning for Nanshing. Next morning before daybreak, with Pop Kessler the Captain, we took off. I also took along Floy Wah, as he was an excellent radio and electrical technician. Even Gimpie agreed with that.

We arrived at Nanshiung, quickly unloaded and re-loaded the plane and Pop took off. We sure didn't want the Nips to catch him there. We then made a detailed inspection of the DC3 No. 41, and Wah made a remark that we could maybe use it to strain noodles. Large areas were peppered so densely with bullet holes you could cover a dozen with your hand. All tanks were shot up including the oil tanks. The left main had mysteriously caught fire and burned itself out. Why the tanks didn't blow was unexplainable. The tanks would have to go to Chungking for steaming and repair. The tires would have to be replaced. The Pilots side of cockpit windshield would have to be replaced. I decided and marked the holes that would have to be reinforced and repaired before flight. While Taylor and I were inspecting, Haynie and Sien were digging out rivets and metal from the pile lifted from Hong Kong. There were ten and twelve inch pieces of wing attach angle shot away. I decided not to touch that as it would be safe to fly; but stay out of turbulent air.

Wah, in the meantime was busy on the radios and electrical and we made a list of instruments to be replaced.

After a long day we went to town and got a room in a Chinese Hotel with a plain board bed, and happy to get even that. Then we went to dinner; the finest food we had had since the Nips hit Hong Kong. The roast chicken was so delicious we asked the waiter to get us two whole, so we could take with us and have an early breakfast. We placed the chickens on the window sill and to bed. Sometime after midnight I heard a noise. Low and behold a cat was feasting on our chickens. Lee had a gun which I grabbed and shot that

cat!!! This woke Lee up, so we decided to eat the rest of the chickens and wash them down with Samshui.

Next day I sent Haynie to Chungking; left Lee Taylor in charge and told him to stay with it until finished, with B. L. Chang, Wah and a couple of other mechanics.

We took a good look at what material we had spirited out of Hong Kong which sure wasn't much. I gave orders to ship all but what Taylor would or could use to Chungking. We placed an armed guard on the cache of gasoline and oil. Gas was selling at \$4.00 U.S. a gallon. Our station mechanic made a small fortune before we found out and fired him.

Upon returning to Chungking, things looked much worse than before. I had all our own material consolidated and took a close look.

Bond called a meeting and told us that Ministry had advised that the British agreed to let CNAC set up a base at Calcutta or any other city or site in India.

Minister Ping said that the Government would like to have Chungking or even Kunming for the base. Chuck told him he could operate out of either, but what about maintenance. So I asked about that and I pointed out the hopeless condition existing and that under such circumstances and conditions the airplanes could only bring maintenance material, and no passengers or vital express. So, it was decided to move operation and maintenance to Calcutta. Chuck took an airplane and flew schedule to Lashio via Kunming and on to Calcutta. To my knowledge, this was the first such flight ever.

Pawley's engine arrived. O' what a let down! It was the biggest engine they had for a fighter, a 950 H.P. Well, we had been crazy before—we could be crazy again, so I decided to take the engine even though we needed one of 1150 H.P., to Nanshiung. When we got there, I told Lee Taylor the story; he smiled and said "People will sure think you are on Opium, Sol, but we'll put it in". All the tanks and equipment was

repaired and back to Lee; in the meantime, I selected a small group of maintenance personnel and was off for Calcutta.

Lee and his men got everything set and the last thing was the prop. Lee sent me a message the prop shaft on the new engine was too short to take the hydromatic prop of a DC3, so I borrowed a controllable prop from the C.A.F. and sent it to Lee. We made a mickey mouse control for the prop that worked.

Now that Lee was ready for takeoff, I asked Chuck for a pilot since Hal Sweet was in the States and unavailable. Chuck answered this and stated that his own brain had been so attled lately that he himself would be the best choice. Thereupon, I briefed him on the short-comings of the airplane and reminded him that he had a small engine and prop on the left side, and the possible difficulties he might expect. He was ready for that, but I assured him it was structurally safe.

Chuck arrived, Lee warmed up the engines and Chuck was satisfied. The plane loaded, the camouflage removed. Crew and mechanics climbed aboard and Lee Taylor flew co-pilot. A test flight was ruled out by Chuck, as they were too close to Canton and Hong Kong. The roaming heroic Imperial Nips might just see them, another unarmed airplane.

Chuck headed direct for Kunming, giving Canton a wide berth. Trouble started about half-way to Kunming. Part of the instruments would go off and then come back on intermittently. Chuck kept on and arrived Kunming, where, upon landing, the left brake failed. Chuck's vast experience and cool took care of that. Chuck pulled the plane to the CNAC installation and Taylor found the brake trouble was that a Jap Bullet had hit a brake hydro tube, and the vibration in flight finished the break in the line. Wah found the cause of instrument shorting was that a bullet had lodged in the main conduit over the Pilot's head, which had not cut the wires, but had cut through the insulation thus causing an intermittent shorting during vibration periods in flight.

They loaded more cargo and headed for Lashio, where upon arriving they found Hansen was trying to hold back a line of would-be passengers a half mile long and all screaming and begging to be evacuated. Chuck was touched by the misery and ordered Hansen to load a gross load plus the usual 1000 kilos overload, and this with a crippled airplane with a small engine and prop.

The airplane arrived at Dum Dum and really it did make one Hell of a most unfamiliar whistling noise, due to the many holes; and this is how the name of the BURMA BANSHEE came to be!

Upon pulling up to the block, all were surprised to see so many Indians boil out of the airplane. Chuck remarked that this was just another flight. Taylor took off for a week's rest at the resort on Karria Road.

I had the airplane pulled into the hangar, dismantled completely and rebuilt and returned to service in due time, Taylor having brought the dead engine along in the airplane.

I have said it many many times before, and I will say it once again: That this all points up to the wonderful team we had, together, Chinese and foreign, and all, who knew what the word teamwork really meant, in facing disaster, personal hardship and even death. And believe me, I, Sol, was and am proud to have been a part of such a team.

After having been placed back into service and flying throughout the war, I eventually saw this same airplane, many years later in Burbank; and now I am told, this old No. 41, the Burma Banshee, is still flying, somewhere in South America.

220 East 63rd Street, Apt. 2-P, New York, New York 10021

J. S. FASSETT BOX 362 WEST FALMOUTH, MASS. 02574

April 28, 1971

Dear Mac,

Congratulations on "Wings over Asia". It is marvelous and you deserve a great deal of credit for not only collecting the material but also for a superb editing job. Both Mary and I hope you can continue with more issues.

I sent some photographs and an amusing item written by Bert Coulson who was later killed on a flight from Calcutta to Dinjan to Reg Farrar along with some other material that might be of interest. At the time I could not recall Coulson's name so if you have the material that is who wrote it.

Did I ever tell you about the time in the fall of 1945, when we started operating in China again, that Petach resigned right in the midst of a flight from Hankow to Chungking? We had a full load of passengers and Pete invited me to ride in the righthand seat knowing that I was an enthusiastic Piper Cub pilot who liked to gain a little flying experience under instrument conditions.

We were on instruments soon after the take off and all went well until we started picking up a king size load of ice. Petach got madder and madder at the company for putting him in the position of flying a load of passengers in an aircraft with no de-icing equipment. Finally, he blew up completely, jumped out of his seat and said: "I am quitting right now. Turn this plane around, Jake, and fly back to Hankow". He then proceeded to take his resignation to the radio operator for transmittal to Calcutta. Since he was paying no attention to the airplane, I followed orders and very gingerly and gently turned the heavily laden plane 1800 for the return to Hankow. Throughout the entire time I fervently hoped that Pete would renege on his resignation long enough to land the plane in Hankow. Fortunately for all concerned he cooled off enough to finish the flight and if memory serves He actually did leave the company very shortly thereafter. Whether or not his departure had anything to do with this incident, you or Chuck Sharp would be in a better position to know.

I am still hoping to make the reunion this year but it will depend largely on landing a business assignment that will take me west. Mary and I are retired from our jobs in New York as of last June and live full time in this delightful spot except when an occasional consulting job puts me on the road. We have a lovely little house right on the water. Come see us.

Mary joins in sending very best to you and Peggy.

September 21, 1971

Captain Wm. C. McDonald, Jr., Permanent Chairman China National Aviation Corporation Association 2201 Crest Road South Birmingham, Alabama 35209

Dear Mac,

I was certainly surprised and very flattered upon receiving the beautiful plaque honoring my years of service with CNAC.

The years have erased any unpleasantness that might have occurred and I look back upon that period now with nostalgia and pleasant memories. My only regrets are the losses of lives of so many of our fine boys.

Again I want to express my heartfelt appreciation to those members of the CNAC Association who have selected me for the honor of the Service Award for 1971.

Sincerely,

Montre

Hugh L. Woods

HLW: m

PAUL J. LAUBE, M. D. 1340 DODGE STREET DUBUQUE, IOWA 52001

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Captain William C. McDonald P.O. Box 1807 Birmingham, Alabama 35201

Dear Mac:

Thank you so much for sending me the copy of "Wings Over Asia". I have just finished leafing through it and it looks fascinating. I plan to read it carefully very shortly.

To me it looks like a highly worthwhile document and I am indeed proud to have it and to have played a very, very small part in the total history of CNAC.

At this point I wish I could say "See you in San Diego in July", but I think that is a little bit doubtful. However I will give it serious consideration and investigate the possibility. It would be great to see all you people again, having fond recollections of our reunion in Mallorca.

Sincerely

Paul J. Laube, M. D.

PJL:01

FOR CEDRIC MAH—ADVENTURE IS JUST ROUTINE By Harold Hilliard

Kemano, B.C.



Ced Mah - Dinjan

Log rustlers were on the rampage on the jaggedly indented British Columbia coast, and Cedric Mah, who is reputed to be the country's only Chinese-Canadian bush pilot, was winging into action, in reply to an urgent radio appeal for help. An entire log boom had disappeared, so Ced dropped down to a landing at Kitimat and a Mountie constable climbed aboard.

Off into the blue Ced's plane streaked again, zigzagging up and down inlets seeking the missing boom. It didn't take long in the speedy aircraft. Below, a small fish boat plunged forward, towing the smuggled logs. Men could be seen madly sawing, trying to remove the brands which, as with cattle, are used to identify and prove ownership of logs. But Ced and his Mountie passenger were too fast. Before the evidence was destroyed, the plane was alongside, the saws were seized and a suspect loaded into the plane for a quick trip to jail at Kitimat.

It was another routine trip to Ced, as was the flight to the Far East, when, as captain of a white crew of a C-46 Commando transport, he had the difficult decision of ordering \$800,000,000 worth of Chinese paper currency to be jettisoned. It was on one of countless trips when, as a civilian pilot, he stretched his luck to the limit against, first, hostile Japanese fighters and, later, equally unfriendly Chinese Communists. Also, as an extra bonus for thrills, he was flying the world's toughest airlane.

Cedric Mah is a Prince Rupert-born Chinese, after whom Mount Ced Mah in the B.C. coastal range was named last year for outstanding service transporting and supplying a government survey party under difficult flying conditions. While moving the men around from peak to peak, he landed them on an unnamed lake atop an unnamed mountain in a virgin part of B.C., where nameless features of the topography are more common than properly christened ones.

Ced got the flying bug at the tender age of 18, flew bush planes for the now defunct Starratt Airways and Canadian Airways out of Winnipeg and Edmonton, and instructed in the British Commonwealth air training plan during World War II. Then, attracted by the prospects of aerial adventures by the dozen, and fancy pay, he crossed the Pacific for what proved to be a six-year stint shuttling in and out of the homeland of his forefathers.

Three years ago, after China was overrun by the Communists, his Far East assignment ended, but only after he had been one step ahead of capture several times, piloting the last plane out of cities before they fell to the Reds. So the dashing young flier—with a lifetime of experience behind him at 31—returned to the relatively sheltered flying of B.C. The peak-studded coast is not without its thrills, either. I can attest to this from first-hand experience.

Ced's Far East flying was done with China National Aviation Corp., Chinese subsidiary of Pan American Airways. Most of his fellow-pilots were demobilized "Flying Tigers," the legendary volunteer group of U.S. citizens led by Gen. Claire Chennault, who helped stem the Japanese in Southeast Asia before the U.S. got into the war.

"JET STREAMS" INCREDIBLE

When Ced first joined the China National company, it had a contract packing freight for the U.S. air force over the "aerial Burma road," across "the hump" of the Himalayas between India and China. China then was Nationalist-governed by Chiang Kai-shek.

This run over "the roof of the world," where mountains tower up to Mount Everest's 29,000 feet and create a land of eternal snow, may well rate as the world's worst "graveyard of the air." Rainfalls totalling 600 inches a year are not uncommon, mostly during the monsoon season between May and October. But an ever worse hazard are the "jet streams", probably the world's most violent winds, which are experienced above the 18,000-foot elevation. At times they whip up to an incredible 300 miles an hour—faster than most aircraft. A plane with an air speed of less that that, heading into such a wind, would move backwards—if it could survive.

Such winds flip planes over on their backs and rip wings off. Ced told of one trip he flew when a load of lead ingots bounced up and down like corks on an ocean, tearing holes in the roof of the aircraft and embedding some ingots in the floor. Downdrafts were so violent his plane would drop 3,000 feet in a single plunge.

Ced recalled one night—fortunately for him, on one of his nights off—when 35 planes, out of 300 which started over "the hump" that night, were lost in a storm. "The weatherman really got a going over the next day," Ced recalled. "There shouldn't have been a plane in the air that night." Mickey's peak and Fox's pass, in the Himalayas, are named after some of the pilots who perished on that sorrowful night.

The time Ced had to jettison his load of Chinese paper currency is the most vivid of his recollections of his Far East escapades. Earlier he had participated in a 22-flight operation, delivering \$100,000,000 in gold bullion from Calcutta to Chungking. It was a U.S. loan to China. Ced made three of the 22 trips, personally packing, in his "aerial express", about \$15,000,000 worth of bullion.

When flying the paper money from Calcutta to Chungking, he encountered severe icing conditions over the Burma "hump." A support in the undercarriage snapped, and one of the retracted wheels slid down into landing position. This created a drag, and when one engine conked out, the

aircraft couldn't hold its altitude. It started dropping in peak-studded territory.

Ced's first reaction was to order his crew to bail out. "But then suddenly I remember we were over Lolo country," he recalled. The Lolos, he explained, are a hill people numbering about 7,000,000, who dwell in the Chinese and Indo-Chinese borderlands. The Lolos are notoriously hostile and treat white captives as slaves. Even if the crew escaped capture, the chances of walking safely out of the jungle, and disease-infested territory were almost nil.

"There was no choice but to drop our load, hoping by lightening the plane we could hold our altitude and limp to a safe landing," Ced said. So out went \$800,000,000 worth of Chinese currency.

But the plane still kept drifting lower. It broke through the clouds, and a valley appeared below. Ced flew along it until he arrived over a lake. By this time the overtaxed remaining engine was starting to act up. So Ced started circling the lake, in case he had to ditch. It was a better choice than a mountain peak, although not much. A belly landing in water, with a wheel dragging, wasn't a pleasant prospect.

PROVIDENTIAL AIRSTRIP

Ced had circled for about 40 minutes when he noticed ice starting to melt off the aircraft, thanks to the lower altitude. So decided to try the dead engine. It coughed and sputtered and finally roared into life. The plane continued under full power. But by now fuel was too low to complete the trip to Chungking. Ced turned south and landed at Kunming.

Dodging hostile aircraft was, of course, an almost daily routine. Once Ced landed at an airstrip just as enemy shells moved to within range. Ced left one engine going and, while ground crews unloaded, dived for a dugout to escape the shrapnel. When his plane was ready, he raced from the

dugout, jumped in, and started the plane down the runway for a take-off while in the act of cutting in the second engine. It was one of those situations you expect to see only in the movies.

Enemy shelling was highly concentrated one day he was to land at Lanchow, which hadn't been under fire when Ced left Chungking a few hours earlier. It was too hazardous to sit down with his load of silver dollars. "Which was most embarrassing, because I didn't have enough fuel to get to an alternate field," he recalled.

Ced remembered flat country in Tibet within range. So he streaked for it with the idea of a belly-landing. But darkness overtook him. He about-turned and headed for a town 10 minutes away, planning to bail out there.

"As we arrived over the town I saw a small plane, with its landing lights on, dropping," Ced recounted. "I didn't know whether to believe my eyes or not. But I followed the plane down, anyway and, sure enough, there was an airstrip. It wasn't marked on any maps, because it still was under construction. As I touched down and raced along the runway, it was lined with pushcarts, oxcarts and camels—the equipment being used for construction.

"I asked someone, "Where am I?" I was told it was Sining, capital of a Chinese province. I had alighted on land which, until recently, had been used as a parade ground for Moslem generals to train Mongolian calvarymen, who were loyal to the Chinese nationalist government."

Civilian pilots, flying under war hazards, made extraordinarily high earnings, including fat bonuses for particularly dangerous trips. Ced said in one three-month period he received \$10,000. But the Communists advanced too quickly for him. He salvaged only a small part of his earnings, and among assets he had to leave behind in Shanghai were two cars and a house. He piloted the last plane to leave Shanghai before the Reds captured the airport. He had stood by there a couple of days, on instructions to wait

to fly Chiang Kai-shek to safety. But the generalissimo fled to Formosa instead, by boat. Ced also flew the last plane out of Nanking before it fell.

Ced's older brother, Albert, was a fellow-pilot with the China National Corp. He is now an instructor of NATO cadets at a school near Montreal. Ced told of an amazing trip Albert made through enemy lines to Canton to deliver money to his mother, after she was trapped there on a visit from Canada. (She has since escaped and now lives in Vancouver. His father, a Prince Rupert butcher and grocer died when Ced was 12.)

Albert made his trip to Canton by foot, by sedan chair and sampan. On his way out, again through enemy lines, he brought his 12-year-old sister, who had gone to China with her mother. The highlight of a harrowing three-week trip was when Albert handsomely paid a group of native Chinese to transport the two of them in a coffin through a mountain pass in hostile country.

BACK TO FIRST LOVE

Ced had decided to give up flying on his return to Canada, so bought a bowling alley in Vancouver. However, the bug kept biting, and he returned to his first love, bush flying. He plans to continue it in the summer months, while running his business in the winter.

Bush flying in coastal B.C. isn't exactly routine, with weather probably more unpredictable than anywhere else in Canada. Violent winds, tricky tides and mountain peaks have to be coped with. One day at Kemano, where Ced has been based with Pacific Western Airlines for the past several summers, a wind was strong enough to pick up a large Canso flying boat and crash it down on top of the dock to which it was moored. Another gust dumped it back in the sea and completed wrecking it.

In bush flying, too, a pilot meets all types. Ced recalls on occasion when weather closed in and he had to land in the sea. He spent over three hours parked in the lee of an island until the ceiling lifted. His plane was loaded with men fresh from the bush, and none was too savory-looking a type. From the conversation as the plane sat, Ced wondered at times about what might happen to him.

Once his plane was chartered by a Mountie to remove a man in a straitjacket to Prince Rupert. The patient was very troublesome and, if anything, got worse when the aircraft had to make an unscheduled landing because of rough weather. He kept talking about picking up the rivets anchored in the plane floor, so Ced suggested to the Mountie that the man be released from the jacket to see if it would calm him down—provided he promised to "pick up" every rivet off the floor. It was a dangerous chance, but the Mountie agreed. The patient spent the rest of the trip quietly "picking up" the rivets.

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