

June 14, 1935

STATEMENT BY SECRETARY ROPLA

ON THE ACCIDENT TO THE TRANSCONTINENTAL AND WESTERN

AIR, INC., AT ATLANTA, MISSOURI, MAY 6, 1935.

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The Bureau of Air Commerce, under my direction, has just completed an investigation of the crash of the Transcontinental and Western Air Incorporated Company plane SKY CHIEF near Atlanta, Missouri, on May 6, 1935, in which the late Senator Cutting of New Mexico and four other persons were killed and eight persons seriously injured.

The inquiry has been conducted with all possible expedition and thoroughness. Within a short time after the accident happened, five Department of Commerce airline inspectors from different parts of the middlewest were on their way to the scene of the crash. Upon arrival, they promptly inaugurated a preliminary investigation. An inquiry was also started immediately by the Accident Board of the Bureau and two members of the Board, Messrs. Denis Mulligan, Chief of the Enforcement Section, and R. W. Schroeder, Chief of the Air Line Inspection Service, went to the scene of the accident and later held public hearings in Kansas City and Macon, Missouri. A total of 907 pages of testimony was taken at these hearings. Charts, maps, logs, photographs and other exhibits germane to the inquiry also were obtained and later brought to Washington where, immediately upon closing of the public hearings, meetings of the entire Accident Board were held. Following completion of a report by the Board, the report and all of the testimony and exhibits were examined and reviewed thoroughly by Eugene L. Vidal, Director of the Bureau, and J. Carroll Cone, Assistant Director in Charge of Air Regulation, and a summary of the investigation, including testimony, exhibits and comments, made to me. I have carefully studied the facts in the case as reflected by this material and this report is the result of my conclusions based on that study.

Attached is a complete copy of the summary of the Board's findings and comment on the accident by Director Vidal. The full text of the testimony taken by the Accident Board and all of the exhibits obtained by the members in their investigation are on file in public record form at the Air Commerce Bureau in the Department of Commerce.

I am convinced that the accident was due chiefly to bad weather conditions. The two pilots, Bolton and Greenon, made every possible effort to land their passengers safely, but were unable to do so because of the prevailing fog and darkness. Contributory causes undoubtedly were inaccurate weather forecasts from both the United States weather Bureau and the company meteorologist, given the SKY CHIEF crew at Albuquerque about 9 p.m., on May 5; improper clearance by I. A. ground personnel of the plane from Albuquerque; improper control of the plane by the same personnel after the departure from Albuquerque;

error on the part of the pilot in proceeding after he was unable to effectively communicate with the ground, and failure of the T.W.A. ground personnel at Kansas City to expeditiously redispach the plane to a field where safe landing might be effected.

Violations by the Transcontinental & Western Air, Incorporated, of five Bureau regulations are indicated and such violations will be filed against the company. The regulations under which the alleged violations occurred were made effective as of October 1, 1934. They were supplied the T.W.A. company in mimeographed form in November, 1934, and were accepted by the company and subsequently printed in its manual with the added comment on each page of the manual that the regulations were approved by the bureau. The violations which will be filed are as follows:

1. Regulations require that when a first pilot has been absent from an airline division for more than six months, he shall obtain approval from the Bureau of Air Commerce before returning to duty.

While Pilot Bolton had previously flown the Los Angeles-Kansas City Division for an extended period, he had been regularly assigned for nearly a year prior to the accident to the Kansas City-Neward run and had not been approved for duty for scheduled operation on the Western Division.

2. Regulations require that airline first pilots shall be examined every three months by designated medical examiners to determine their fitness.

Pilot Bolton did not take the quarterly medical examination during the month of February 1935, as required by the regulations.

3. The regulations require that where waivers of flight time limitations are allowed for continuous flight exceeding eight hours without an approved rest period, the co-pilot shall hold a scheduled air transport rating.

Co-pilot Greeson did not hold a scheduled air transport rating.

4. The regulations provide that air line craft shall carry sufficient fuel and oil to fly forty-five minutes in addition to the time required for the flight to the next scheduled stop or refueling station. Such additional fuel and oil shall be above and beyond that required by abnormal wind and weather conditions.

The tanks of the SKY CHIEF contained only a 27 minute reserve fuel supply when the crash occurred. When the fact was available at Kansas City that the ceiling was lower than the authorized minimum, which was while the plane was in the vicinity of Wichita, the Kansas city dispatcher should have grounded the ship at Wichita for fuel and further instructions. Instead, he allowed

the plane to proceed into weather conditions which required a flight of a greater distance than permitted landing with the required 45 minute reserve fuel supply.

5. The regulations permit intentional instrument flying over or through fog, clouds or overcast only under certain conditions, one of which is that two-way communication is maintained with ground stations.

Official records show that the SKY CALLER'S radio transmitter was not functioning on night frequency when the plane cleared Albuquerque and that the official weather forecast indicated that instrument flying would be required along the route. The pilot's log also shows a notation made by Co-pilot Greeson, somewhere between Albuquerque and Kansas City, to the effect that the transmitter was out and the receiver was carrying very weak. Therefore, in view of the regulation requiring a two-way radio, the pilot should have landed at the nearest intermediate station, either Amarillo, Texas or Wichita, Kansas.

The plane also was directed by the Transcontinental & Western Air, Inc., dispatcher at Kansas City to attempt a landing there despite the fact that the ceiling had fallen to below 700 feet, the minimum ceiling for landing down through to Kansas City appearing in the company's approved operation manual. If the pilot had followed these instructions, it would have been a violation.

Searching inquiry by the Accident Board, the Director and myself indicate that the Department of Commerce navigation aids and personnel in the area over which the plane was being flown were functioning properly at all times during the fatal flight.

In this connection it should be kept in mind that the Department is charged with aiding aviation by both establishing aids to air navigation and developing safer and improved methods of operation and drafting regulations helpful to the public and the industry, but that it is not a policing body. It does not have an inspection force of sufficient size to apprehend violations the moment they occur or to be able to prevent all violations. It exercises constant vigilance to set up regulations which will improve air line operations and, with the cooperation of operating companies and private flyers, enforces them stringently. Bureau regulations, particularly covering safety in flying, are stricter today than they ever have been before in history.

Discussion of two regulations which were changed by the Department, effective October 1, 1934, in regard to reserve fuel supplies to be carried by planes and maximum hours to be flown by pilots which has arisen in connection with this accident, indicates a misunderstanding of the facts.

The new regulation requiring pilots to carry in addition to the normal reserve, a sufficient fuel and oil supply to enable them to fly for 45 minutes after landing at their terminals or refueling points marked a distinct advance in behalf of safer flying. The former regulation provided that a pilot should carry a 35% fuel reserve. Under this old

rule a pilot, when flying against a head wind, or when circling in storms could exhaust his reserve fuel supply and still be complying with Bureau regulations. Under the new rule, such a situation is impossible. This new regulation undoubtedly has made flying safer.

The regulations also were changed on October 1, 1934, so as to greatly reduce both the maximum annual flying time of first pilots and the monthly flying time of co-pilots. Formerly, first pilots were permitted to fly 1320 hours annually. Under the regulations of October 1, 1934, the annual maximum flying time of first pilots was reduced more than 25%, or from 1320 to 1,000 hours. The monthly flying time of co-pilots, which formerly was without limit, was reduced to 100 hours.

The custom of waiving, in certain cases, the regulation providing a maximum daily flying time of eight hours for first pilots also has caused discussion. Waiver of this regulation has been granted by the Bureau since 1930, to meet exceptional conditions. Usually waivers were granted to assist companies to complete runs of slightly more than eight hours duration where the changing of pilots near the end of a run would work an unnecessary hardship and expense without adding to the safety of the operation.

The SKY CHIEF accident occurred on a run on which the operating company had been granted a waiver. This waiver was granted at the request of both T...A. pilots and officials because the Los Angeles-Kansas City eastbound run has a scheduled flying time of eight hours and fifteen minutes. Thus the waiver permitted the company to work its first pilots a short time in excess of the regular eight hour day and thus enabled them to complete the run with one first pilot. The custom of this company, it should be noted, was not to work its pilots coming under the waiver rule more than 100 hours in any single month.

Despite the fact that this run was being operated under a waiver, nothing has been developed in any of the testimony taken in connection with the accident to indicate that either First Pilot Bolton or Co-pilot Greeson was suffering from fatigue which in any way contributed to the accident.

In fairness to the company, it also should be stated that Pilot Bolton had the reputation of being a high class pilot and that he had an extended rest period before taking out the SKY CHIEF on its ill-fated flight. He had gone to the coast as pilot of a chartered plane, and his selection for this important assignment is indicative of the confidence placed in him by his company. During the three months prior to the accident he had flown an average of only 83 hours monthly. He had not been on any sort of flight duty during the five days immediately preceding his shipping as pilot of SKY CHIEF.

The unusual aid given pilots on all T...A. planes in the form of automatic pilots should be mentioned. All T...A. planes are equipped with automatic pilots, and the SKY CHIEF, in common with the rest, had one of them.

Thus it was possible for the SKY CHIEF pilots, not only to relieve each other at the controls for rest periods, but also to control the plane safely by the automatic pilot.

The point has been made that the SKY CHIEF did not carry a hostess and that at times the co-pilot may have been called upon to perform duties ordinarily assigned to a hostess. This is an accurate statement regarding the

size of the crew personnel. T.K.A. planes do not carry hostesses.

Until this accident happened, no suggestion ever had been made, either by companies or pilots, that the provision for waiving the eight hours rule of exercising every safeguard in flying and as a precautionary step, the rule permitting the waiver of the eight hour regulation has been temporarily rescinded and a thorough inquiry of its effect on pilots is being made.

Careful study of conditions surrounding the accident indicates the advisability of the Bureau continuing to strengthen its regulations regarding the employment of thoroughly qualified dispatchers by companies. This arm of the air service received special attention in the revision of regulations on October 1, 1934, when, for the first time in the history of the Bureau, approval of dispatchers by the Bureau was made obligatory. The Bureau now is convinced that dispatchers should be licensed, that their responsibilities should be made exact and that only men of the highest type should be approved.

The accident suggests the advisability of further study of the reserve fuel problem and this is being made by the Department. The existing rule which requires a pilot to carry sufficient fuel for forty-five minutes flying after landing at his terminal or refueling point will be retained as a minimum. Consideration also will be given to the adoption of a proportionate fuel reserve regulation to apply to long distance flights.

It is deplorable that this accident should have happened when both the plane and the fields over which it was flying were not fitted with equipment now being developed under the supervision of the Bureau that it is believed will lend material aid to flying safety. Rapid progress is being made in the perfection of equipment for the transmission of radio communication and radio direction signals designed to greatly improve air line operations. Blind approach facilities also are making marked advances and it is believed by aviation authorities that if the SKY CHIEF and landing fields in and near Kansas City had been fitted with recently perfected equipment for such operations, the plane might have been brought down in safety.

The Department of Commerce is doing its utmost to make flying safer. It is the desire of the Department not only to meet every legal requirement imposed upon it, but also to exercise every technical and practicable approach to safeguard human life.