March 10, 1955

MEMORANDUM

TO: The Civil Aeronautics Board

CC: Director, Bureau of Safety Investigation

FROM: Acting Director, Bureau of Safety Regulation

SUBJECT: Aircraft Accident - LAI--Linee Aeree Italiane (Italian

Airlines) DC-6B, New York International Airport,

December 18, 1954

REFERENCE: Operations Memorandum No. 57 (2nd Rev.) Section 8,

Paragraph 13, Report by Official BSR Observer

In accordance with Operations hemorandum No. 57 (2nd Rev.),
I attended the public hearing at New York, New York, on February 16
through 19, 1955, concerning the subject accident. I attended the
hearing as the official BSR observer for the purpose of reporting
on (1) possible violations of the Civil Air Regulations and who was
responsible for such violations, and (2) any deficiencies which
appeared to exist in the pertinent Civil Air Regulations. My
conclusions with respect to (1) and (2) above are as follows:

(1) No violations of Part 44 appear to have been involved. I believe the preponderance of evidence appears to indicate that complete attention had not been given to all of the provisions of Section 60.11, Preflight Action, particularly insofar as that section shall include taking into account "an alternate course of action."

The language of Section 60.11 is very general in nature and it does not expressly require specific documentary indication in company

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literally demands nothing more than a mental preparedness on the part of the pilot in command to cope with unforeseen contingencies. Since all of the flight crew were fatally injured, a determination as to the pilot's preparedness is, of course, so speculative as to leave considerable doubt as to whether the record would sustain a formal action by the Administrator. Nevertheless, it is my personal view that had a formal commitment been made prior to the origination of the flight with respect to an alternate airport, the pilot might have been less disposed to risk the fourth (and fatal) approach.

Section 60.41 (k) requires that, for IFR operations a flight plan shall be filed with air traffic control containing a designation of the alternate airport or airports "unless otherwise authorized by air traffic control." ICAO Annex 6 specifies that "at least one alternate acrodromeshall be listed in the flight plan when a significant portion of the flight is to be conducted in weather conditions which necessitate compliance with instrument flight rules.... Although this was clearly an IFR flight in which a "significant" portion was conducted in IFR conditions, no alternate airport was designated in the flight plan, nor was any evidence disclosed in other company records concerning this flight which indicated that an alternate airport had been designated prior to its origination. It should be made clear, however, that with respect to the alternate airport requirements of Part 60, although no formal authorization by air traffic control to the contrary had been made, the practice followed by air traffic control for many years in which no scheduled air carrier

is required to file an alternate airport constituted tacit authorization for LAI to submit a flight plan without designating such an alternate airport. Furthermore, although compliance with the provisions of Annex 6 with respect to the designation of an alternate airport could not be substantiated, in view of the fact that Annex 6 does not require the carriage of sufficient fuel to proceed to the alternate from the destination, this provision of Annex 6 must be regarded as a technicality and not a useful operational standard. The significance of LAI's failure to comply with this provision is so much a matter of conjecture as to dictate against further review from the point of view of determining officially whether or not the intent of Annex 6 had been met. In any event, a large number of alternate airports were available to the flight within the normal operating range of the aircraft until the moment of the accident.

(2) The record of the accident investigation focuses attention upon two deficiencies of a regulatory nature which require the attention of the Board, one of which involves Part 60 and the other ICAO Annex 6. Neither of these deficiencies bear any clear causative relationship with the accident. In the first instance, suitable provisions should be introduced into Part 60 to clarify the requirements concerning the designation of alternate airports by air carriers and to relate them more directly to the pertinent operating rules. Secondly, the Board should initiate appropriate action through the Air Coordinating Committee seeking the amendment of Annex 6 so

as to relate the fuel requirements more realistically to the requirements for alternate airports.

The Bureau has initiated appropriate action with respect to the matters covered in (2) above.

Oscar Bakko

MECHANIA

70: Director, Bareau of Safety Investigation

TROM: Director, Bureau of Safety Regulation

SUBJECT: Hearing in the Matter of Investigation of Accident

Involving Aircraft of Italian Registry DO-68, I-Line, which Cooursed at New York International Airport, Jamaica, N. Y., December 18, 1954

In accordance with Operations Memorandum No. 57 (2R), this is to advise that Mr. Oscar Sakks will represent the Sureau of Sakety Regulation at the subject hearing.

Original Signed By

Noscar Bakke/

John K. Chamberlain

on: Chairman Providing Officer Official Congress F. Albery

Obekkeing B-Sla 2/14/55

CIVIL AERONAUTICS BOARD

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WASHINGTON 25, D. C.

FOR RELEASE:

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IMMEDIATE
January 25, 1955

CAB SETS HEARING ON ITALIAN AIRLINES ACCIDENT AT NEW YORK

The Civil Aeronautics Board announced today that it would convene a public hearing to determine the cause of a fatal accident which occurred on December 18, 1954, involving a DC-6B airplane owned and operated by Italian Airlines, which crashed into the approach light pier that extends into Jamaica Bay from Runway 41 of the New York International Airport at Idlewild, Long Island, New York. The crew of 10 and 16 of the 22 passengers were killed.

The Board's public hearing will convene on Thursday, February 17, 1955, at 9:00 A.M. (local time) in the New Yorker Hotel, New York City, CAB Member Joseph P. Adams will serve as a member of the hearing panel, Other members of the panel will include William K. Andrews, James N. Peyton, Robert W. Chrisp, and George M. French, and Thomas K. McDill will serve as Presiding Officer, all from the Board's Bureau of Safety Investigation in Washington, D.C. Joseph O. Fluet, Investigator-in-Charge of CAB's New York Office will serve on the panel also.

The Italian Government which is participating in the Investigation, will be represented at the CAB public hearing by Lieut. Colonel Carl Franco Fiorio, Assistant Air Attache, and Dr. R. Roveri, of the Italian Aeronautics Registry, Rome, Italy.

The DC-6B was flying as Italian Airlines Flight 451 on an international flight from Rome, Italy, to New York International Airport via Boston, Mass., where a landing was made. Italian flight 451 subsequently arrived over New York where the weather at 12:06 Eastern was ceiling 300 scattered, measured 400 broken, visibility two miles, light rain, fog, wind SSE 18, gusts to 23. Italian Flight 451 made three unsuccessful attempts to land and on the fourth approach, which was being made to Runway 4, the pilot was cautioned by Idlewild radar that he was below the proper glide path and was advised to pull up and execute a missed-approach procedure unless he had the runway in sight. At approximately 1400 Eastern, the aircraft struck the approach light pier and crashed into Jamaica Bay.

CIVIL AERONAUTICS BOARD Washington

December 20. 1954

TO: Messrs. Gurney, Denny, Ryan, Lee, Adams,

The Executive Director

FROM: Director, Bureau of Safety Investigation

SUBJECT: Aircraft Accident - Italian Airlines

(Linee Aeree Italiane) DC-6B, I-LINE. at New York International Airport, Jamaica, L. I., New York, December 18.

1954

Italian Airlines Flight 451, en route from Boston, Massachusetts, to New York International Airport after an overseas flight from Rome, Italy, struck an approach light pier and crashed into Jamaica Bay at approximately 1400 e. s. t., December 18, 1954, while making an instrument approach to runway 4. Of the 10 crew members and 22 passengers on board, including 2 children, only 6 passengers survived.

The following detailed account of the crash and events immediately preceding it is quoted from a release made by the CAA Control Tower at New York International Airport:

"At 1206E Italian Airlines I-LINE was cleared for an approach to Runway 22. The ceiling at this time was 300 scattered, measured 400 broken, visibility 2 miles, light rain, fog, wind south-southeast 18, gusts to 23. At 1218E I-LINE executed a missed approach procedure for Runway 22. The ceiling lowered below limits for an approach to Runway 4 at 1300%. Idlewild Control Tower Radar advised the pilot that he was low on this approach. At 1313E I-LINE abandoned his approach to Runway 4 and again at the pilot's request was immediately cleared for another approach to Runway 4. IDLEWILD TOWER Radar's observations of this approach indicated that it was satisfactory in respect to conformance to the course and glide path. I-LINE abandoned the third approach at 1325E and was cleared to the Long Beach radio range Intersection in accordance with missed approach procedures while four other aircrafts completed approaches to Runway 4. At 1355E 1-LINE was cleared for another approach to Runway 4. The pilot was cautioned by Idlewild Radar that he was below the proper glide path. The aircraft was observed to increase altitude to the proper glide path

efevation then descend. Radar again advised the pilot of his position below the glide path and advised him to pull up and execute a missed approach procedure unless he had the runway in sight. The aircraft was observed to increase altitude then dive into the approach light pier in jamaica Bay."

Immediate search was instituted and the wreckage was located in the waters of jamaica Bay through the cooperation of U. S. Navy vessels and divers.

Mr. Joseph O. Fluet, investigator-in-Charge of the Board's New York office, and Messrs. John F. Pahl, A. B. Hallman, and D. W. Markey, of the Washington office, are at the scene. The Italian Government is being represented in the investigation by Lieutenant Colonel Carl Franco Fiorio, Assistant Air Attache, and Mr. Giovanni Tagliaferri, of the Italian Aeronautics Registry.

WKandrns

W. K. Andrews