On January 25, 1990, at approximately 2134 Eastern Standard Time, Avianca Airlines flight 052, a Boeing 707-321B with Colombian registration HK 2016, crashed in a wooded residential area in Cove Neck, Long Island, New York. AVA052 was a scheduled international passenger flight from Bogota, Colombia, to John F. Kennedy International Airport, New York, with an intermediate stop at Jose Maria Cordova Airport, near Medellin, Colombia. Of the 158 persons aboard, 73 were fatally injured.

Because of poor weather conditions in the northeastern part of the United States, the flight crew was placed in holding three times by air traffic control for a total of about 1 hour and 17 minutes. During the third period of holding, the flight crew reported that the airplane could not hold longer than 5 minutes, that it was running out of fuel, and that it could not reach its alternate airport, Boston-Logan International. Subsequently, the flight crew executed a missed approach to John F. Kennedy International Airport. While trying to return to the airport, the airplane experienced a loss of power to all four engines and crashed approximately 16 miles from the airport.

The National Transportation Safety Board determined that the probable cause of this accident was the failure of the flight crew to adequately manage the airplane’s fuel load, and their failure to communicate an emergency fuel situation to air traffic control before fuel exhaustion occurred. Contributing to the accident was the flight crew’s failure to use an airline operation control dispatch system to assist them during the international flight into a high-density airport in poor weather. Also contributing to the accident was inadequate traffic flow management by the Federal Aviation Administration and the lack of standardized understandable terminology for pilots and controllers for minimum and emergency fuel states.

The Safety Board also determined that windshear, crew fatigue, and stress were factors that led to the unsuccessful completion of the first approach and thus contributed to the accident.

The safety issues raised in this report include:

1. Pilot responsibilities and dispatch responsibilities regarding planning, fuel requirements, and flight following during international flights.

2. Pilot-to-controller communications regarding the terminology to be used to convey fuel status and the need for special handling.
3. ATC flow control procedures and responsibilities to accommodate aircraft with low fuel states.

4. Flight crew coordination and English language proficiency of foreign crews.

Recommendations concerning these issues were addressed to the Federal Aviation Administration and the Director, Departmento Administrativo de Aeronautico Civil (DAAC), Colombia.