NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

FOR RELEASE: 6:30 P.M., E.D.T., MARCH 8, 1976

(202) 426-8787 ISSUED: March 8, 1976

Forwarded to:

Honorable John L. McLucas Administrator Federal Aviation Administration Washington, D. C. 20591

SAFETY RECOMMENDATION(S)

A-76-8 thru 14

On November 12, 1975, Overseas National Airways Flight 032, a McDonnell Douglas DC-10-30, caught fire during the takeoff roll on runway 13R at John F. Kennedy International Airport (JFK), Jamaica, New York. The fire erupted in the area of the right engine after the aircraft encountered a flock of sea gulls which had been on the runway.

The National Transportation Safety Board's investigation of the accident revealed that the Federal Aviation Administration (FAA) and the Port Authority of New York and New Jersey had been concerned with the increasing number of bird strikes at JFK during 1975. Measures to reduce the bird hazard had been implemented on a piecemeal basis and did not equal the measures considered adequate by the FAA and the Port Authority after the accident.

In addition, the Safety Board's investigation revealed that the Chapel Pond, located on the center of the airport, and the pier associated with the abandoned runway 7-25 serve as attractants for birds and should be removed. Three ecological studies have been conducted at the airports operated by the Port Authority. As a result of these studies, actions were recommended to reduce the bird hazards to aircraft operations. The Safety Board notes that the recommendations for a bird patrol unit and for an ecologist/ornithologist to administer the Port Authority environmental program had not been implemented before the accident. The Safety Board believes that these recommendations are still valid and that they should be applied at the Port Authority airports.

The Safety Board also believes that JFK's procedure of physically inspecting a runway and dispersing the birds before designating it the active runway is a sound measure. Although the practice was not mandatory in October 1975, none of the five reported bird strikes at JFK during the month occurred during the periods the bird patrol was operated. This practice has been effective at JFK and should be required at all controlled airports which have a recognized bird problem.

During the initial certification inspection of JFK, FAA certification specialists determined that the bird problem was a hazard. However, the evaluation criteria contained in Airport Certification Safety Inspection (FAA Form 5280-3) is a statement of fact and provides no detailed checklist to be used by the inspector and airport manager. Expanded evaluation criteria would enable the certification specialist to perform a more complete inspection, while at the same time provide definitive safety guidelines for the airport management.

14 CFR 139.67 requires an airport operator to demonstrate that it has procedures to prevent or reduce a bird hazard. The Board considers the ramifications of an effective bird-hazard control program to be complex enough to warrant an ecological study as the basis for the program. Such a study would enable the operator to consider all the elements necessary for a viable program, and would provide the FAA an accurate measure of program effectiveness. This study should be required only at airports the Administrator has determined to have a bird hazard.

Accordingly, the National Transportation Safety Board recommends that the Federal Aviation Administration:

- 1. In coordination and cooperation with the Port Authority of New York and New Jersey, expedite the following actions:
 - (a) Determine the weather conditions, ocean tide conditions, seasonal factors, migratory patterns, and daily movement patterns which could be used to forecast periods of greatest bird hazards at the Port Authority of New York and New Jersey airports and take effective actions to disperse the birds before use of the affected runways is permitted.
 - (b) Remove the abandoned runway 7-25 pier at JFK.
 - (c) Remove the bird attraction to the beach adjacent to the south and east boundaries of the airport by eliminating the beach through gravel fill, dredging, a seawall or other appropriate means.
 - (d) Drain the Chapel Pond at JFK. (Class II-Priority followup.)
- 2. Require a physical inspection of a runway and adjacent areas at each controlled airport certificated under 14 CFR 139, which has a recognized bird-hazard problem on each occasion before:

- (a) Designating that runway as the active runway, or
- (b) allowing takeoffs from other than the active runway (Class II-Priority followup.)
- 3. Frequently review the operations manual for each airport certificated under 14 CFR 139 which has a recognized bird hazard problem to assure that the provisions of their bird-hazard reduction program are adequate. (Class II-Priority followup.)
- 4. Require that a specially trained, staffed, and equipped bird-dispersal organization be established at each controlled certificated airport with a recognized bird-hazard problem. (Class III-Longer-Term followup.)
- 5. Amend 14 CFR 139.67 to require that, where the Administrator finds that a bird hazard exists, an ecological study be conducted to determine the measures necessary for an effective bird-hazard reduction program. (Class III-Longer-Term followup.)
- 6. Revise FAA Form 5280-3, Airport Certification Safety Inspection, to include more detailed criteria for use by airport certification specialists to evaluate the bird hazard potential at an airport. These criteria should include, but not be limited to, migratory patterns, local attractants, and airport features likely to attract birds. (Class III-Longer-Term followup.)
- 7. Assist and encourage the Port Authority to implement the recommendations contained in the previous ecological studies of Port Authority airports. Specifically, these studies offered the following remedial measures:
 - (a) For John F. Kennedy International Airport:
 - (1) Eliminate the two dumps and several sewer outlets which attract gulls.
 - (2) Drain or fill the several small marshes and ponds on the airport.
 - (3) Dredge mudflats or cover them with gravel to eliminate shore bird concentrations.
 - (4) Remove the wire fence at the southeast end of the airport.

- (5) Dispose of food-bearing plants such as bayberry, tall stands of phragmites, and other dense growths of vegetation used for roosting purposes. This may be done by burning, cutting, bulldozing, or with herbicides.
- (6) Shoot or trap rodents and rabbits which attract birds of prey.
- (7) Employ a well supervised shotgun patrol to repel birds from critical airport areas. The patrols should use shell crackers, and to a limited extent, live ammunition.

(b) For LaGuardia Airport:

- (1) Consider the appointment to the New York Airports of an environmental specialist to coordinate the programs of bird control.
- (2) Fill temporary water areas, and alter habitat in the headland area by bulldozing or the use of herbicides.
- (3) Continue a shotgun patrol and the use of scare devices,
- (4) Communicate with the New York City Department of Public Works to explore possibilities for minimizing gull access to domestic waste. Elimination of food sources will substantially reduce the local gull population.

(c) For Newark International Airport:

- (1) Bird and other wildlife habitat at the airport be altered by drainage, cutting, bulldozing, or use of herbicides.
- (2) Grasshoppers be controlled by applying either insecticides, or through cultural practices.
- (3) Newly constructed areas not be landscaped with ornamental trees, shrubs, or brush.
- (4) A shotgun and scare device patrol be continued.
- (5) A collection of bird/plane and near-miss data be continued.
- (6) A man be appointed full-time to eliminate bird hazards
- (7) The Port of New York Authority influence the termination of the Oak Island and Elizabeth Dumps, and

prohibit the development of proposed dump sites near the airport. (Class II-Priority followup)

TODD, Chairman, McADAMS, THAYER, BURGESS, and HALEY, Members, concurred in the above recommendations.

By: Webster B. Todd, Jr.

THIS RECOMMENDATION WILL BE RELEASED TO THE PUBLIC ON THE ISSUE DATE SHOWN ABOVE. NO PUBLIC DISSEMINATION OF THIS DOCUMENT SHOULD BE MADE PRIOR TO THAT DATE.