NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: April 24, 1978

Forwarded to:

Honorable Langhorne M. Bond Administrator Federal Aviation Administration Washington, D.C. 20591

SAFETY RECOMMENDATION(S)

A-78-30 through 32

On September 22, 1976, a Grumman Gulfstream II, N500J, crashed while making an instrument landing system approach to Ingalls Field Airport, Hot Springs, Virginia. The aircraft was operated by Johnson & Johnson, Inc., under 14 CFR 91 Subpart D.

During its investigation, the National Transportation Safety Board discovered that the Johnson & Johnson flight department did not have, nor was it required to have, a flight operations manual which detailed the operational, administrative, and cockpit procedures which Johnson & Johnson required its flightcrew members to follow. Johnson & Johnson pilots conformed to well known, unwritten company procedures during the conduct of their flights.

The corporate/executive fleet consists of more than 3,200 aircraft which fly about the same number of hours as air taxis under 14 CFR 135. Large turbojet and turbopropeller aircraft make up 1,211 of the total corporate/executive fleet. This figure includes 2 Boeing B707's, 20 BAC-111's, 137 Grumman Gulfstream II's, 232 Lear Jets, 94 Jet Stars, 177 Falcon Jets, and 134 Cessna Citations. The sophistication and complexity of the systems and equipment on corporate/executive aircraft often equal those of air carrier aircraft. ATC procedures, cockpit procedures, pilot workloads, and planning functions are also virtually identical. In addition, the often unpredictable schedules of corporate flying dictate that basic procedures and policies be documented and well known to all pilots. A flight operations manual is the most practical means to establish and promulgate common administrative and flight operations policies and procedures, and to insure that standard policies and procedures are conveyed to company pilots.

2271D

AAR. 78-4

The Safety Board believes that a comprehensive flight operations manual should be required for certain corporate/executive operations. with the requirements based on the number and type of aircraft operated and on the number of pilots employed by the company. The Safety Board believes that those flight departments which operate four or more aircraft, or two or more large aircraft, should have a flight operations manual. In addition, flight departments which have a manager of flying or a chief pilot who supervises four or more pilots should be included in this category. Although a flight operations manual must accommodate the requirements of the company, it must also contain standard pilot and cockpit procedures for the takeoff, en route, and the approach and landing phases of flight. The manual could also include such topics as flight planning, administration, duty and flight time, emergency procedures, dispatch procedures, passenger handling, and other items similar to those specified in 14 CFR 121.135. Company and flight procedures must be well known to all crewmembers and individual flight departments should be standardized to the highest degree possible.

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

Develop the criteria to determine which corporate/executive flight departments are required to operate under formal flight operations manuals. (Class III, Longer Term Action) (A-78-30)

Amend 14 CFR 91 to require that corporate/executive flight departments which fall in certain categories be required to maintain and operate under a flight operations manual. (Class III, Longer Term Action) (A-78-31)

Amend 14 CFR 91 to establish the criteria for flight operations manuals for those corporate/executive flight departments which are required to have manuals. (Class III, Longer Term Action) (A-78-32)

KING, Chairman, McADAMS, HOGUE, DRIVER, Members, concurred in the above recommendation.

y James B. K