## Federal Express Addendum to Submission B727, N497FE Accident Tallahassee, Florida July 26, 2002 DCA02MA054

Thank you for the opportunity to submit an addendum to our submission given in reference to the above-mentioned flight. This addendum is submitted based on new information as reported the "Report of Medical Investigation" and "Sound Study" on the First Officer. After reviewing these reports with our company Aeromedical Advisor, Federal Express would like to offer the following observations:

As to the Pulmonary Embolus,

- Pulmonary Embolus symptoms usually involve chest pain. In his interview the First Officer made no mention of any chest pain prior to the accident.
- As per the CVR, the First Officer's actions, conversation and performance do not indicate he was having any physical difficulties.
- For the first twelve hours after the accident, the First Officer's oxygen saturation levels were well above 90%, which would contradict the presence of a Pulmonary Embolus.
- The medical tests administered after the accident but prior to August 16, 2002, show no evidence of or possible source for a Pulmonary Embolus.
- The medical tests on August 16, 2002, showed Pulmonary Embolus symptoms were present. However, these symptoms would be consistent with the type of injuries sustained by the First Officer and the subsequent treatment of those injuries.
- While the breathing rate of the First Officer may appear more rapid than a person in a non-stressful environment, we are unable to determine whether this rate would be considered abnormal while performing a night visual approach into an unfamiliar airport.

## As to the Color Deficiency,

• In his interview, the First Officer stated that on the turn to final the PAPI initially indicated "white next to red, on glide slope." This observation was consistent with the aircraft's position at the time of the observations. Further, it would indicate the First Officer's ability to interpret the PAPI.

- Federal Express trains all its pilots in the simulator on night visual approaches without the use of glideslope information. Crewmembers are expected to demonstrate they can utilize the proper "sight picture" to discern and fly a safe visual approach at night. The First Officer had successfully completed this training.
- The First Officer's experience in the Navy and Federal Express combined with the training he received at Federal Express would indicate that he had developed strategies for using visual glidepath indicators or a sight picture for flying successful night visual approaches and landings.
- Remarks on the CVR indicate the First Officer was able to determine that he was low and needed to take some action.
- From our previous analysis and this new information, it appears neither the Captain nor the First Officer was utilizing the PAPI below 1,000 feet. However, both the Captain and First Officer had adequate visual cues from the sight picture and the PAPI to fly a safe approach to landing.
- Federal Express does not believe the First Officer's color deficiency to be a contributing factor to the cause of the accident.

## Recommendations

- FAA discontinue usage of the Farnsworth Lantern (FALANT) Color Perception test as a means to determine color deficiencies in pilot examinations.
- FAA re-evaluate methods and procedures for testing pilots for first class medicals so as to better identify physical deficiencies.

In closing, at Federal Express we are very pro-active in our safety environment where crew fitness for duty is concerned. We feel our original submission, especially section 1.18, is representative of the aforementioned statement.