Analysis of ABX Air Douglas Dc-8-63, N827ax Accident

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**Summary**

NTSB investigates the instigates of accidents and produces reports about these accidents, including detailed information that is used to inaugurate safety recommendations that promote safety in all areas of the transport sector. NTSB's report on "Uncontrolled Flight into Terrain ABX Air Douglas DC-8-63, N827AX" is detailed, and it contains all the information required by different safety reporting programs. This flight was a test of post-modification flight functional evaluation, and the accident occurred in Virginia. The report includes aircraft accident details, including all records about the damage, casualties, and other details related to the accident required by NTSB PART 830. It also contains recommendations necessary to prevent similar incidents as required by ASAP and ASIAS.

**Problem**

According to the report, this was an aircraft because the pilots were not able to control the airplane. The report has all details about the aircraft, the pilots and members of the crew, and other information containing safety data related to the whole incident. According to the report, the pilot put inappropriate control inputs in a stall recovery attempt. The non-flying pilot also failed because he did not recognize, report, and correct these inappropriate inputs. According to the investigations, ABX was also blamed due to the failure of putting in place a program that conducted the functional evaluation and contained adequate guidelines, and other requirements necessary for pilot training (NTSB, 1996). The inoperative stick shaker warning system also contributed to the accident alongside the inadequate flight training simulator.

**Significance of the Problem**

This accident was caused by human errors, and there are multiple accidents that have been caused by human errors. Therefore, the stated problem has significance to general aviation because it is unfortunate to lose lives due to human errors, which could be prevented if safety data was available and crew members had top-notch training and experience to deal with different occurrences. In this case, if the flying pilot had put the correct control input, the accident could not have occurred (NTSB, 1996). The inability of the pilot to put the right control inputs was attributed to the lack of proper training, and this is a major problem in the entire aviation industry. Also, if the non-flying pilot was keen and cooperated with the other pilot, he could have prevented the accident from happening because he could have noticed and addressed the errors that the other pilot made. Also, Airlines' negligence is a major concern because, according to the report, the aircraft's training simulator and stick shaker stall warning system were inadequate and inoperative, respectively, and they contributed to the accident (Schroeder, 2016). In this case, if the airline had functional and updated systems, the accidents could have been prevented. This states that there is a general concern for airlines and other regulatory bodies in neglecting the full functionality of aircrafts.

**Alternative Actions**

**Alternative Action 1:**

It is critical to establish an advisory circular that guides all air carriers on different aspects related to limitations, conditions, and tolerances in the functional evaluation of flights (Myers, 2018). This will enable pilots to know specific maneuvers that are performed during flights, especially those related to different approaches to stall.

**Advantages**

All air carriers will have access to accurate guidance during different activities related to functional flight evaluation. Also, uniform standards of carrying functional evaluation flights will be established, leading to consistency and uniformity in the entire industry.

**Disadvantages**

This action will require the formation of a uniform advisory circular, which will lead to major changes in the way different airlines operate, leading to huge financial and human resource implications. Also, it may have setbacks to airlines that have established excellent and advanced functional evaluation systems.

**Alternative Action 2:**

Providing regular training programs to pilots would be the best solution to prevent inappropriate control inputs because the programs will sharpen their skills and refresh their expertise (Crider, 2010).

**Advantages**

This will enable airlines to prevent similar accidents caused by human errors. It will also provide updated information about flight control and critical insights related to changing technologies in the aviation industry.

**Disadvantages**

This will require additional funds, which may have negative financial implications for airlines. Also, this action may limit improvements in other areas because more resources and attention will be directed to training pilots and other technicians.

**Recommendations**

The integration of different aspects that require special consideration, such as functional evaluation flights, should be done by all airlines. In this case, similar needs will be addressed in the same manner to all parties, and operational guidance and training will be done in a way that all airlines will be able to manage these issues uniformly (Crider, 2017). All programs related to functional evaluation flights should be put under surveillance to establish their weakness and provide actionable corrections and additions, which will ensure that related accidents do not occur (Crider, 2008). Lastly, manufacturers and operators of different flight simulators should ensure that they are functional, and pilots have adequate training in all aspects related to recovery from stalls.

References

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