Flight 1141 Aircraft Rescue and Emergency Response

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Abstract

The basis of this research is to provide an overview of the Aircraft Rescue and Firefighting (ARFF) efforts, in response to Flight 1141’s aircraft accident. Some of the topics discussed in this research paper include cause of accident; accident investigation report; aircraft rescue and firefighting; airport emergency plan; and emergency evacuation. On August 31, 1988, Flight 1141 crashed shortly after takeoff from Dallas-Fort Worth Airport, (Tailstrikecom, 2018). After a normal takeoff roll, the captain heard two explosions as the main gear wheels left the ground. The airplane began to roll violently, struck the instrument landing system localizer antenna array and came to rest about 3,200 feet beyond the runway. The safety board’s investigation concluded that the aircrew did not ensure the aircraft was properly configured for takeoff, (Ntsbgov, 2018). The airplane was destroyed by impact forces and post-crash fire. 14 passengers were killed while 94 survived. The swift response of the ARFF team was credited in saving many lives while administering treatment to the surviving victims. Three trucks arrived within 5 minutes of notification; three more trucks within 6 minutes; and five more within 11 minutes, (Faagov, 2018).

**Introduction**

“Delta Air Lines Flight 1141, a Boeing 727 Advanced, registration number N473DA, was a commercial airline flight that flew from Jackson, Mississippi, to Dallas-Fort Worth International Airport to Salt Lake City International Airport in Salt Lake City, Utah,” (Tailstrikecom, 2018). The safety board's investigation concluded that the accident may have been prevented if the captain had taken a more active role in running the cockpit. Additionally, the investigation found that the cockpit discipline problems noted on flight 1141were not isolated to this cockpit. These problems were observed and reported to Delta in previous FAA inspection reports. However, neither FAA nor company management initiated sufficient corrective action. The cause of death of the 11 passengers and the two flight attendants was determined to be smoke inhalation. Levels of carboxyhemoglobin (COH6) ranged from 15 to 81 percent, (Faagov, 2018).

**Cause of Accident**

- Airport’s FAA inspection records.

- Cockpit discipline and responsibilities.

- Wing flaps and slats

- Takeoff warning system

- Documented discrepancy of the aural horn degraded, being weak and intermittent

**Airport emergency plan**

The DFW airport is located approximately midway between the cities of Dallas and Fort Worth, Texas. It is owned by these cities and governed by an eleven-member board of directors, (Faagov, 2018).

* Training and preparedness of emergency response personnel.
* Equipment and manpower available to control the situation.

**ARFF Response at the airport**

* ARFF Distance from the scene of the accident.
* Route and response time to accident.
* Coordination between Emergency personnel and additional support agencies.
* Emergency evacuation

**Shortfalls/Success**

* How did the ARFF team succeed in responding to the accident?
* Areas in which the response and recovery efforts fell short.
* Comparison with similar aircraft accident that occurred before and after.
* Other areas for improvement moving forward.

**Summary**

The ARFF response to Flight 1141, was executed in a timely manner. Relevant training was instrumental in providing the responders with the adequate tools needed to carry out the mission. Upon further scrutiny, areas were pointed out to which special attention would be given to ensure an improved future response effort.

Reference

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