



NTSB National Transportation Safety Board

Office of Aviation Safety



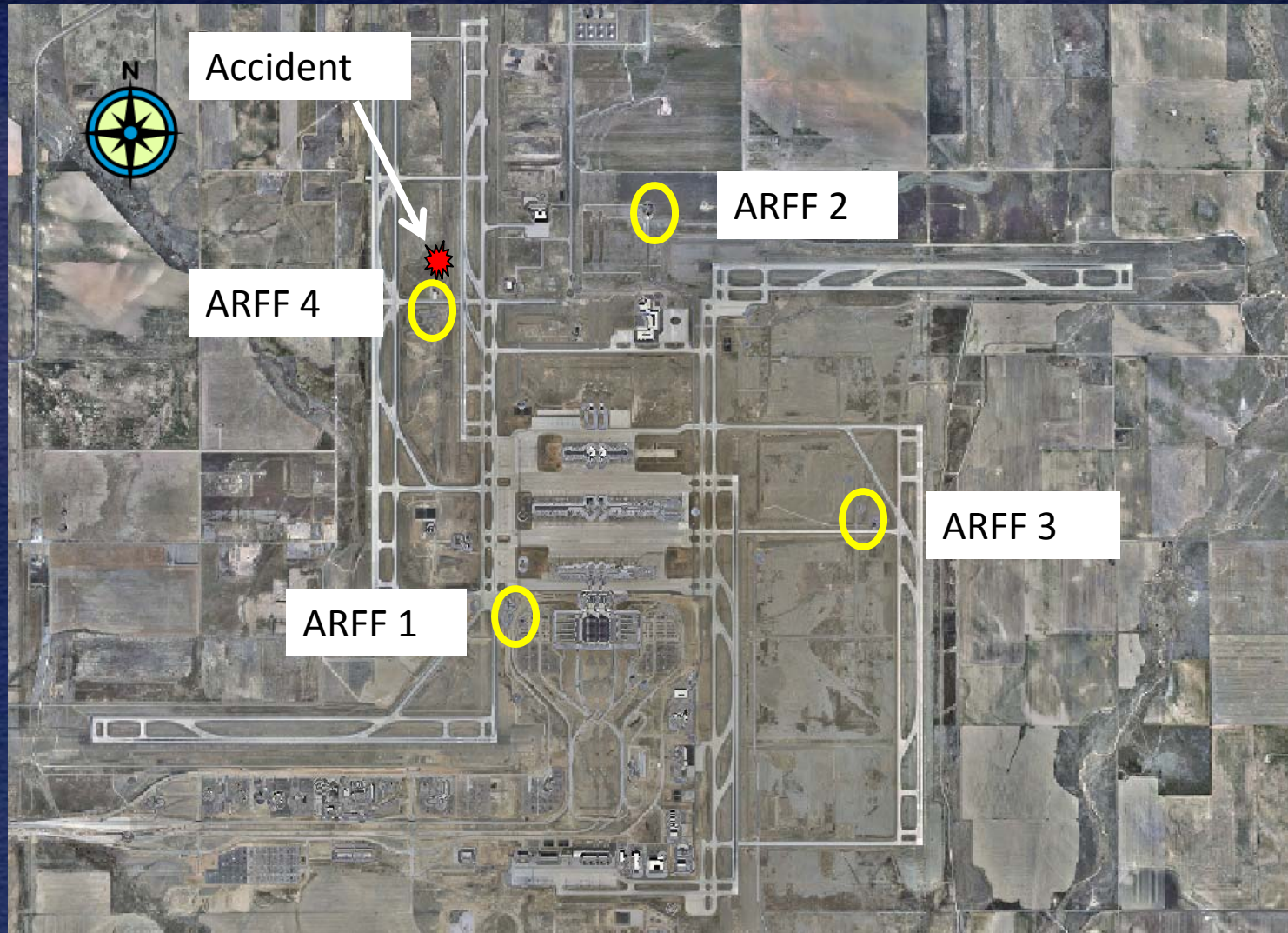
Continental Airlines Flight 1404

Survival Factors
Mark George

Presentation Overview

- Aircraft rescue and firefighting (ARFF) response
- Flight crew seats
- Cabin crew seats
- Galley restraints

Denver International Airport



Emergency Response

- Air traffic control notified ARFF stations of crash
- Initial accident location misidentified
- Location clarified while trucks en route
- Three ARFF crews not delayed
- One ARFF crew (station 4) delayed
- Response timely, effective

Aircraft Seat Standards

- 1988 – FAA upgraded seat crashworthiness standards
 - Newly type-certificated airplanes
 - Rulemaking to retrofit existing fleet
- Retrofit postponed until 2005; final rule
 - Applied to newly manufactured airplanes
 - Not applicable for flight deck seats
- Both flight deck crew had back injuries
 - Captain: severe spinal fractures



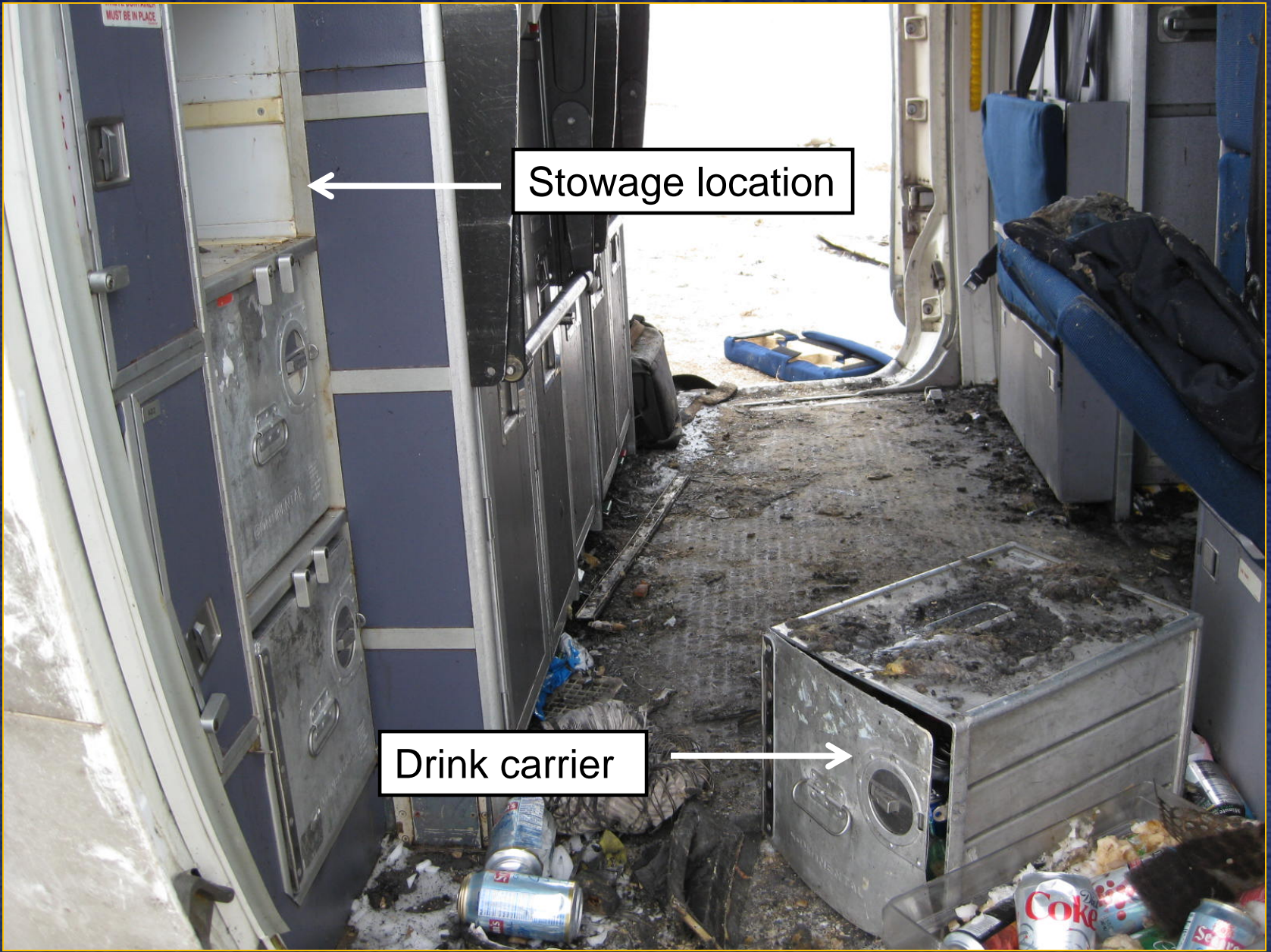
Broken seat pan

Cabin Crew Jumpseat

- Materials laboratory examination
 - Pre-existing metal fatigue
- Routine visual inspections
 - Structure
 - Function
 - Cannot detect fatigue cracks
- Crewmember safety
 - Conduct emergency evacuations

Stowage location

Drink carrier





Original mounting location

Aft Galley Restraints

- Aft galley latch affixed with adhesive
 - No mechanical fastener
- Carrier directly behind flight attendant jumpseat
- Manufacturer issued service bulletin
 - Addition of mechanical fasteners
 - Applies to Continental only
- Boeing and galley manufacturer queried
 - Unknown number of similar installations



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