

CAST/ICAO Common Taxonomy Team (CICTT)

Overview/ Outreach Briefing
Bob Sutton/Reinhard Menzel, Co-chairs

Topics

- Objective
- Background
- Team Composition
- Operating Methodology
- Recent Activities
- Next Steps
- Meeting Schedule
- Group Contact Information

Objective

Common terms, definitions, and taxonomies for aviation accident/incident reporting systems to enable world-wide coordination and focus on common safety agendas

Background

(Basis for the need)

- NO UNIVERSAL INTERNATIONAL STANDARD
- FOCUS ON COMMON SAFETY AGENDA IS EXTREMELY DIFFICULT
- NEW TECHNOLOGIES OFTEN NOT ACCOMODATED BY PRESENT TAXONOMIES (e.g., GLASS COCKPITS, ACTIVE CONTROLS, FOQA, etc.)
- RECENT FOCUS ON SAFETY WORLDWIDE RESULTED IN STARTUP OF MANY DISPARATE EFFORTS
- LAYS FOUNDATION FOR:
 - WORLDWIDE SHARING OF COMMON ACCIDENT/INCIDENT DATA
 - FOCUSED, DATA DRIVEN, COORDINATED SAFETY AGENDA
 - COMMON INVESTIGATION/REPORTING AND POST ACCIDENT ANALYSIS
 - SHIFTING FROM REACTIVE TO PROACTIVE SAFETY ASSESSMENT

Background

- August 98- Informal Discussions with CAST/ICAO regarding the need for the activity
- October 98- CAST Briefed- strong support, go ahead received
- November 98- Planning begins- CAST/ICAO joint team building, preliminary plan prepared
- Feb 2-3 1999- Kickoff meeting at ICAO HQ

Team Composition

- Organizations currently represented

Commercial Aviation Safety Team

International Civil Aviation Organization

National Transportation Safety Board

Federal Aviation Administration

National Aeronautics and Space Administration

USAF Safety Center

Transport Canada

Transportation Safety Board -Canada

Civil Aviation Authority- United Kingdom

National Aerospace Laboratory- Netherlands

BEA- France

Team Composition(cont.)

Eurocontrol

Aircraft Accident Investigation Center(Japan)

Airline Pilots Association

International Society of Air Safety Investigators

Airbus Industries

Boeing

Pratt and Whitney

General Aviation Manufacturers Association

Volpe Transportation Systems Center

Air Claims, Ltd.

Bureau Veritas

....and growing

additional international outreach underway

Operating Methodology

- Minimize face-to-face meetings
- Maximize use of email coordination
- Sub-team(s) prepare draft products pass on for internal review by entire team
- Final draft prepared by Sub-team, reviewed by entire team
- Changes incorporated and completed-product released

Recent Activities

- Released Products:
 - Aviation Accident Categories- Definitions and Usage Notes
 - Aviation Occurrence Categories- Definitions and Usage Notes
 - Phase of Flight Definitions
- Sub- Teams created and working the following:
 - Aircraft Make/Model Series Code Common Taxonomy
 - Engine Make/Model/Series Code Common Taxonomy
 - Rotorcraft Occurrence Category and Phase of Flight Definitions
 - ‘Target Taxonomy’ Development

Aviation Occurrence Categories (Accidents & Incidents)

ABRUPT MANEUVRE (AMAN)

Excerpt

The intentional abrupt maneuvering of the aircraft by the flight crew.

- This category includes the intentional maneuvering of the aircraft to avoid a collision with terrain, objects/obstacles, weather or aircraft (note: the effect of intentional maneuvering is the key consideration).
- Abrupt maneuvering may also result in a loss of control or system/component failure or malfunction. In this case the event is coded under both categories (e.g., AMAN and LOC-I, AMAN and SCF-NP, or AMAN and SCF-PP).

CONTROLLED FLIGHT INTO TERRAIN (CFIT)

Inflight collision with terrain, water, or obstacle without indication of loss of control

- CFIT is used only for accidents occurring during airborne phases of flight.
- CFIT includes collisions with those objects extending above the surface (for example: towers.).

CFIT can occur during either

Phases of Flight: Excerpt from Aug '01

STANDING

- Engine(s) Not Operating
- Engine(s) Start-up
- Engine(s) Operating
- Engine(s) Shutdown

PUSHBACK-TOWING

- Assisted, Engine(s) Not Operating
- Assisted, Engine(s) Start-up
- Assisted, Engine(s) Operating
- Assisted, Engine(s) Shutting Down
- Under Power

TAXI

- Taxi to Runway
- Taxi to Takeoff Position
- Taxi from Runway

TAKEOFF/INITIAL CLIMB

- Takeoff.
- Rejected Takeoff.
- Initial Climb.

Airbus A300 - Make/Model/Series

Same System = Different Formats

Different Systems = Different Formats

Airclaims (UK, private)

Make	Model	Series
AIRBUS INDUSTRIE	A300	A300
AIRBUS INDUSTRIE	A300	600R F
AIRBUS INDUSTRIE	A300	60?
AIRBUS INDUSTRIE	A300	6??R
AIRBUS INDUSTRIE	A300	622R
AIRBUS INDUSTRIE	A300	622R F
AIRBUS INDUSTRIE	A300	B4-220
AIRBUS INDUSTRIE	A300	B4-?01
AIRBUS INDUSTRIE	A300	B4-?20
AIRBUS INDUSTRIE	A300	B4-???

FAA Accident Incident Data System

Make	Model
AIRBUS	A300*
AIRBUS	A300/
AIRBUS	A300B2
AIRBUS	A300B2/
AIRBUS	A300B21A
AIRBUS	A300B2K3C
AIRBUS	A300B4103
AIRBUS	A300B4203
AIRBUS	A300F4605R

Near Mid-Air Collision System

Make	Model
A300	
AIRBUS INDUSTRIE	EA30
EA30	

Service Difficulty Reporting System

Make	Model
AIRBUS	A300*
AIRBUS	A300B2K3C
AIRBUS	A300B4*
AIRBUS	A300B4/
AIRBUS	A300B4103
AIRBUS	A300B4203

FAA Aircraft Registry

Make	Model
AIRBUS INDUSTRIE	A-300-B4-2C
AIRBUS INDUSTRIE	A300B2-1C
AIRBUS INDUSTRIE	300B4-605R
AIRBUS INDUSTRIE	A300 B4-203
AIRBUS INDUSTRIE	A300B4-622R
AIRBUS INDUSTRIES	A-300-B4-2C
AIRBUS INDUSTRIES	A300B4-203
GROUPMENT D'INTERET ECONOMIQUE AIRBUS IND.	A300B4
GROUPMENT DINTERET ECONOMIQUE AIRBUS IND	A300B4-2C

National Transportation Safety Board

Make	Model
AEROSPATIALE	A300B4
AIRBUS	300-200
AIRBUS	300-B4-103
AIRBUS	A300 B4-203
AIRBUS INDUSTRIE	A-300B4-203
AIRBUS INDUSTRIES	A300-600
GROUPMENT DINTERET	A300B4-2C

As of 6/99
With assistance from
McFadden & Assoc. Inc.

Next steps

- Complete Aircraft MMS Common Taxonomy
- Complete Engine MMS Common Taxonomy
- Complete Rotorcraft Occurrence Category and Phase of Flight additions
- Develop ‘Target Taxonomy’ common events and factors lists
- Develop plan to distribute/maintain products
- Complete development of CICTT Web site

Meeting History/Schedule

- Feb 1999, Kickoff-ICAO HQ, Montreal
- June 1999, FAA Facilities, Brussels
- Oct 1999, TSC Facilities, Boston
- June 2000, Eurocontrol- Ispra Italy
- Oct 2000, ICAO HQ, Montreal
- Mar 2001, NTSB HQ, Washington
- Oct 2001, ICAO HQ, Montreal
- Apr 2002, CAA HQ, London
- Oct 2002, ICAO HQ, Montreal

Group Contact Information

- Co-chairs
 - Reinhard Menzel, ICAO, rmenzel@icao.org
 - Bob Sutton, CAST, FlightSafety@cox.net
- NASA Postdoc server (used for collaboration)
 - <https://postdoc.arc.nasa.gov/postdoc/> (new user log in)
 - https://postdoc.arc.nasa.gov/postdoc/t/folder/main.ehtml?url_id=18989 (CICTT folder)