

David Abad

- ECA HeliWG Chairman.
- Technical and Flight Safety department – SEPLA.
- S76 C+ SAR Pilot at Babcock MCS Spain.
- FI, Fi of FI, TRI, IRI, MCCI, CRMI.
- FE, TRE and IRE.
- Accident investigator (UPM and IFALPA Accredited investigator).
- Former HT and Flight Safety Manager.





ECA

European Cockpit Association

EBT – Data Analysis

David Abad

ECA HeliWG

Objective

Show and explain the analysis work that we're carrying on.



Framework Bulding

- IATA EBT Report and ICAO Doc. 9995 does not include Helicopters.
- Use the same methodology.
- What to analyze?:
 - Off shore, SAR, HEMS, CAT IFR, FF...
- Helicopter generations.



Helicopter Generations

DRAFT

Generation of Helicopter	Qualifying Description	Types included in category
Generation 4	Twin engine, FADEC, digital cockpit display, FMS, full authority AFCS, envelope protection, fly-by-wire	AW609, B525,
Generation 3b	All of Generation 3a characteristics, plus envelope protection	H175, EC225
Generation 3a	Twin turbine, FADEC, digital instrument display, navigation display, full authority AFCS (4 axis), FMS.	AS332L2, AW139, AW169, AW189, S76 C/D models, S92A, A109SP, Bell 429 ⁺ , EC155 ⁺ , H135 ⁺ , H145 ⁺ , MD902 ⁺
Generation 2	Twin turbine, non-FADEC controlled, analogue instrument display (Basic AFCS) (up to 3 axis)	AS332L/L1, AS 365N, BK117, S61 all models, S76A/B models, EC 135, EC145, A109E, A109S, AS355, A109K2, BELL 212, BELL 412, BO105, KA32 A, PZL SWIDNIK W3
Generation 1b	Single piston or turbine engine, digital instrument display	A119, AS350 B3
Generation 1	Single piston or turbine engine, analogue instrument display Early helicopter generation (full analog and mechanical)	B206 all models, B407, R22, R44, R66, S300, AS350 (except B3), SA316, SA319, SA315



Define common methodology - Factors

- Maintain Factors like in IATA report.
- Adapted to Helicopters.
- New factors added:
 - Mission specific.
 - Monitoring.
- Factors:
 - 40 Contributing factors – Select as many found.
 - 5 No Technical competencies – 2 more relevant.
 - 5 Technical competencies – As many found.
 - Improved Training.



Analyst requirements

- Instructors.
- HF Experience / Accident investigator.
- Type Rated:
 - Current or expired.
 - Variant preferably.
 - Access to RFM.
- Core Team + SME.

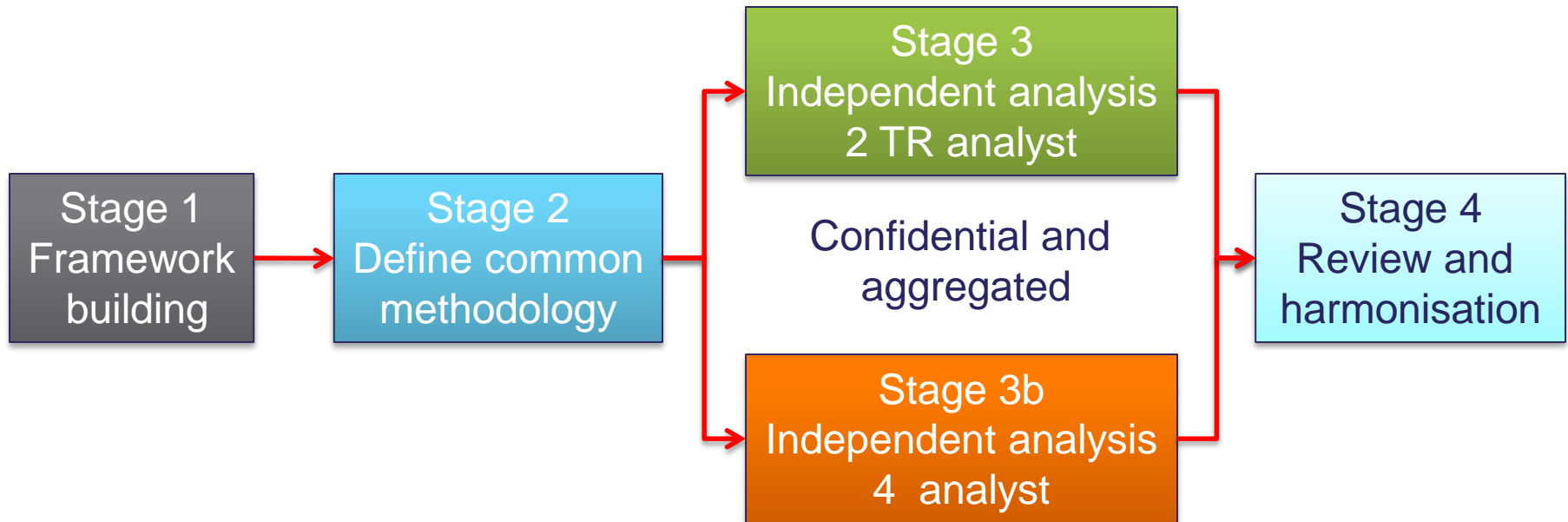


Trial Issues

- Reports:
 - Quality.
 - Active pilot inputs?
 - Language.
- Variety of missions and types.
- Cultural and organizational issues.
- Excel.



Work development





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Thank you !

Questions ?