



## **Colin Gill** **Deputy Director Civil** **Aviation**

- **Context:**
  - State of Registry v State of Operator
  - Traditional versus innovative methods
  - Risk and performance basis
- **But first and foremost - are AOC standards appropriate or necessary for private/corporate business jets?**
  - We need to understand the safety data ....

# • IBAC Business Aviation Safety Brief - Summary of Global Accident Statistics 2011-2015

- All accidents involving aircraft conducting business operations:
  - **Commercial** – operator with an AOC – generally on demand charter
  - **Corporate** – non commercial operations with professional crews employed
  - **Owner operated** – aircraft flown for business purposes by the owner/operator



# • Global Accident Rates by Operator Type

(Extrapolated) (per 100,000 hours)

Operator Type	Total Accident Rate			Fatal Accident Rate		
	All	Jet	Turb o Prop	All	Jet	Turb o Prop
Commercial	1.64	0.70	2.82	0.53	0.19	0.96
Corporate	0.20	0.20	0.19	0.07	0.06	0.08
Owner Operated	1.44	0.42	2.72	0.62	0.16	1.18

- The Isle of Man Aircraft Registry's planned evolution: "Safety Partnership Reviews"
  - Performance based
  - It is **not** an audit or an inspection
  - Collaborative review
  - Discussion on how safety is being managed
  - Sharing best practices





- Supporting operators to achieve:

- Continuous improvement
- Enhanced operational performance
- Safer skies for all

## • Conclusion

- Collaboration
- Partnership
- Support

**“Safety with Service”**



# Dave Marsh

## Aruba DCA DI

**What is appropriate safety regulation and oversight of private and corporate business jets?**



# FLIGHT DECK DOCUMENTS

- FLIGHT DECK DOCUMENTS – CONTINUING AIRWORTHINESS TASKS:

- Aircraft Flight Manual
- Aircraft Operating Manuals
- Loading Manual
- Minimum Equipment List
- Quick Reference Handbooks

## OPERATIONAL DIRECTIVES – CONTINUING AIRWORTHINESS TASKS:

- Directives with TC related requirements [CMR, LLP, ALI, CDCCL etc.]
- Directives with a continuing airworthiness impact [ETOPS, LROPS, RVSM, MNPS, AWOPS, RNAV etc.]
- Directives affecting flight deck documents and procedures

# RECOMMENDATIONS



## 1. Flight Deck Documents

Airworthiness inspections should include checking the issue and revision status of flight deck documentation against the TC Holders published data.

## 2. Operational Documents

Airworthiness inspections should ensure that all Operational Directives are being properly assessed, carried out and certified, within the operators continuing airworthiness system.



# EBAA Safety Conference

# Content



- Scope of operations in Europe
- TC NAA Responsibilities
- State of Registry (SoR) – State of operating base
- CofA inspections
- Conclusions

# Third Country NAA



- Approximately 40 Bermuda registered aircraft based in Europe.
- Annex 6 Part II (NCC) provisions fully implemented in Bermuda with amendment to Implementing Regulations in 2010.
- Subsequent amendments to Annex 6 Part II have also been implemented in Bermuda.

# Third Country NAA Responsibilities



- Annex 6 Part II - SoR has responsibilities for all approvals, etc.
- Operating base in State other than SoR – the operator is to notify State where the operating base is located.
- ICAO requires safety and security oversight to be coordinated between State of operating base and SoR.

# Third Country NAA Responsibilities



- SoR approvals shall be provided related to PBN, NAT HLA, RVSM, operating minima, flight manual approval, noise certification, HUD approval, EFB provisions, etc.
- Operators must establish an Operations Manual and shall have an approved MEL
- SMS shall be established commensurate with the size and complexity of the operation



# State of Registry – State of Operating Base Coordination



- March 15 – Bermuda DCA letter to operators based in EASA MS advising them of NCC requirements.
- April 15 – Detailed comparison completed between EASA NCC IR and Bermuda/Cayman NCC IR (posted on Bermuda website).
- May 15 - Informal discussion with EASA at EBACE.
- September 15 – Presented at NCC conference in Geneva.
- September 15 – Meeting with UK DfT and UK CAA related to coordination.
- January 16 – UK DfT letter to EASA related to UK territories/dependencies implementation of Annex 6 Part II.
- February 16 – Letter from Bermuda DCA to all EASA MS where aircraft are based.

# Surveillance



- Outside EASA MS ramp inspections will be conducted against Annex 6 Part II
- Operator must have approvals from the SoR, including MEL
- Bermuda recognizes EASA IR for NCC aircraft as an acceptable means of compliance for BCAA requirements
- Bermuda will still issue its approvals

# Certificate of Airworthiness



- OT's issue an expiring CofA (12 month validity).
- Annual CofA renewal inspections of both records and aircraft.
- Bermuda runs an OTAR Part 125 Risk Register
  - Hazard Identification and Risk Assessment on the frequency of inspection
- Risk indicators used to determine an aircraft's safety risk rating – Renewal inspection escalated to 24 months.
- CofA reports, CAMO performance, SAFA findings, IS-BAO audit findings, new operator/CAMO.

# Conclusions



- States should established a robust safety oversight system to ensure that safety outcomes of Annex 6 Part II (NCC) are achieved
- The duplication of regulations and oversight creates legal uncertainty, as two authorities cannot be independently responsible for the implementation of Annex 6 Part II
- ICAO requires the State of Registry and State of operating base to coordinate safety oversight