International Military Airworthiness Regulation Conference

NATO Airworthiness Policy: Towards the NATO Total Aviation System approach

Richard Duriez
• NATO missions and operations
  – supported by aircraft owned, leased, rented or chartered by NATO, NATO Members, Partners or other contributing Nations

• Complex operations such as ISAF
  – require intra-theatre movement of troops from one Nation travelling in another Nation’s aircraft but under NATO responsibility
Background

- Dramatic past experiences
  - 1999: NATO E-3A in GR
  - 2006: UKR Yak42, 62 SP casualties
- NATO affiliated assets:
  - NATO E-3A (AWACS)
  - C-17
  - Alliance Ground Surveillance (AGS) system
NATO Airworthiness Policy

- Developed from 2010 to 2012
- Approved by the NAC on 20 Jul 2013
- Aim
  - To establish a robust airworthiness framework within the Alliance, based on the principles of economy of efforts, cooperation and interoperability
• All aeronautical assets provided on behalf of NATO shall be:
  – Certified as airworthy by a NATO recognised Airworthiness Authority
  – Properly controlled i.a.w. approved continued airworthiness provisions
  – Operated & maintained i.a.w. approved continuing airworthiness provisions
NATO Airworthiness Policy

• Applies to all aeronautical assets:
  – Owned, leased, rented or chartered by NATO
    – Owned, leased, rented or chartered by member, non-member, or Partner nations and operated on behalf of NATO
• Airworthiness is a sovereign responsibility
• The NAWP is not intended to replace nor interfere with national airworthiness system
  – regulation,
  – authority,
  – organizational structure
Together with the approval of the NAWP on 20 Jul 2013, the NAC appointed the NATO Airworthiness Executive (NAE)

- not a supranational Airworthiness Authority
- independent from acquisition and operations

Director Armament & Aerospace Capabilities /International Staff (IS/DI/A&ACAP)

- Tasked to provide an implementation plan to be approved by the NAC before the policy takes effect
NAE Staff Manning

Director A&ACAP

Head of Aerospace Capabilities Section

Hiring process under finalization

- IS staff officer position created in 2014 with a part-time AW role
- NAE Staff AW Officer position created in Sep 2016
- Another Staff AW Officer ≥ 2018, Voluntary National Contribution (VNC) in the meantime
NATO Aviation Committee

• NATO Total System Approach to Aviation
  – Allies recognized the need to consider all relevant aspects contributing to aviation safety
  – Allies determined this important effort requires the authority of one of its 13 key level 1 Committees reporting to the NAC
  • ATMC became AVC on 01 Jan 2016
NATO Aviation Committee

- **AVC:**
  - NATO policies, programmes and capabilities in the ATM and AW domains

- **ATM-CNS AG:**
  - guidance and standards on ATM-CNS-Airfields matters

- **AWAG:**
  - guidance and standards to support NAE and AVC in implementing the NAWP

- **NAE/NAE Staff:**
  - develop, conduct and maintain records of NATO AW recognition activities
  - maintain AW liaison within NATO and with national and international AW organizations and entities
NATO Aviation Committee

Military Mission Effectiveness

with due consideration of
Equivalent levels of Safety Assurance
Good Airmanship
Civil – Military Cooperation

- NATO Air Traffic Management Policy
- Guidance, procedures and standards for:
  - Operations of manned aircraft
  - RPAS and UAS airspace integration
  - Aeronautical Systems and Technologies
  - Airfields
- Aviation security, incl. cyber

- Guidance and Standards for the qualification and training of air operators:
  - ACS Aircrew qualification
  - UAS pilots and operators
  - Air Traffic Controllers licenses

Total system approach to aviation safety

Holistic consideration of all technical, organisational, procedural and human factors with contribute to the mitigation of hazards and risks of air activities

- NATO Airworthiness Policy
- NATO Airworthiness Executive
- NATO Recognition Process
- Standards for UAS Airworthiness requirements
- R&D for UAS airspace integration

Aviation Committee is NATO’s interface with international civil aviation

NATO UNCLASSIFIED
NAWP Implementation Plan

• NAWP IP approved by the NAC on 01 Jul 2016

• NATO Recognition Process (NRP) to be approved by AVC in Dec 2016
  – NATO Recognition Survey (NRS) using the MARQ annexed to EMAD R
    • Rely on extent recognitions between MAAs
    • EASA/FAA/TCCA de facto recognized
      – Other CAAs on the basis of Safety Agreements with EASA/FAA
NAWP Implementation Plan

• Action Plan to be approved by AVC in Dec 2016
  – Form NATO Assessment Teams (NAT) with NAE Staff AW specialists and SMEs from Nations
  – Launch NRP as early as 2017 in the following order
    • NATO Affiliated Assets (AWACS, C17, AGS)
    • 28 NATO Allies
    • Partner and non-Partner Nations
    • Other States
NATO expectations

• To ensure the success of the NAWP implementation, NATO expects NMAAs from NATO Allies and Partner Nations:
  – to participate actively, if not proactively, to the NRP
  – to nominate experts for NAT membership
  – to provide VNC to man the NAE Staff
Q & A

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