International Military Airworthiness Regulation Conference

The Significance of a Common Regulatory Framework for Military Aviation Safety
Is Europe ready to exploit the benefits?

Col Lou Hermens / Deputy Director MAA-NLD
• What are the elements of Military Aviation Safety that should be regulated?

• Why a common Regulatory Framework for Military Aviation Safety?
  • What are the most significant benefits?

• What are the current Developments in Europe?

• Why can’t we exploit the benefits as much as possible?
  • Given the current developments in Europe

• What should be the Way Ahead?

• Conclusions
What are the elements of Military Aviation Safety that should be regulated?
Convention On International Civil Aviation

- **Annex 1** Personnel Licensing
- **Annex 2** Rules of the Air
- **Annex 3** Meteorological Service for International Air Navigation
- **Annex 4** Aeronautical Charts
- **Annex 5** Units of Measurement to be Used in Air and Ground Operations
- **Annex 6** Operation of Aircraft
- **Annex 7** Aircraft Nationality and Registration Marks
- **Annex 8** Airworthiness of Aircraft
- **Annex 9** Facilitation
- **Annex 10** Aeronautical Telecommunications
- **Annex 11** Air Traffic Services
- **Annex 12** Search and Rescue
- **Annex 13** Aircraft Accident and Incident Investigation
- **Annex 14** Aerodromes
- **Annex 15** Aeronautical Information Services
- **Annex 16** Environmental Protection
- **Annex 17** Security: Safeguarding International Civil Aviation Against Acts of Unlawful Interference
- **Annex 18** The Safe Transport of Dangerous Goods by Air
- **Annex 19** Safety Management
The Military Aviation System is the combination of aviation safety rules, processes and organisational structures with an integrated approach for optimizing mission effectiveness, interoperability, and flight safety. It covers:

- Operations
- Air Traffic Management
- Airworthiness Certification
- Maintenance
- Aerodromes
- Training
- Licenses
- Safety Management & Environment
Why a Common Regulatory Framework for Military Aviation Safety?
What are the most significant benefits?
Why a common regulatory framework?

- Enhancing Military Aviation Safety
- Enhancing Military Interoperability for Joint and Combined Air Operations
  - Improving armaments co-operation
- Enabling recognition between Military Aviation Authorities
  - Using each other’s Artefacts
- Enabling improved Military & Industrial Cooperation
  - Enhancing industrial competitiveness
  - Saving time and money for aircraft development, production and sustainment
- Enabling Centralized Governance for Military Aviation Safety
  - Under European Political Leadership
  - Equal level playing field with civil authorities
  - Concentrating scarce knowledge and skills within the countries in one European organization; efficient use of human resources
Why a common regulatory framework?

It improves Military Safety and Interoperability and it saves a lot of time and money!
What are the current Developments in Europe?
Current Developments in Europe

- **National efforts**
  - The Military execute the Defense & Security tasks as ordered by their Government
  - Safeguarding the Military Aviation Safety is and remains a national responsibility
    - Implementation of the MAWA Common Regulatory Framework is on a voluntary basis
  - Nations in different stages of development
EDA

- **MAWA Forum**: Focus on Harmonization of Requirements for Airworthiness and Recognition: EMAR-21, EMAR-145 EMAR-147, EMAR-66, EMAR-M, EMAD-R, EMAD-1
- Implementation support but implementation remains a national responsibility

- **ESMAB**: EDA Single European Sky Military Aviation Board:
  - **Representatives** from States and EUMC, chaired by EDA
  - **Objective**: review impact of SES on the military and to provide for proactive coordination and cooperation with States and international organizations in order to avoid any adverse impact on national and collective defence capabilities but also to take the opportunity of any possible benefits for the military.
    - Development and deployment of a Common Military Position (CMP)
  - **EDA’s role**:
    - **Military interface** between EU institutions and the Military Community
    - **Military Facilitator**: coordination of military views from States and relevant stakeholders in the different areas of expertise, applying the 3-step consultation process with EUROCONTROL and NATO
NATO

- Director of Armament and Aerospace Capabilities Directorate is designated as the NATO Airworthiness Executive (NAE)
- Transition of the Air Traffic Management Committee (ATMC) into an Aviation Committee (AVC) has been completed
  - Two Advisory Groups for ATM and Airworthiness
  - Implementation of NATO Airworthiness Policy:
    - Insurance of AW of national and NATO assets by recognition of national AW systems.

EUROCONTROL

- Military ATM Board (MAB):
  - Advisory Board for Eurocontrol Executive Management and the Provisional Council
  - Representing Military ATM interests
    - But no formal link with European political institutions
    - Shifted to the ESMAB; Eurocontrol focuses on technical aspects
EUMAAC (European Military Aviation Authorities Conference)
  • Informal Conference for Aviation Authorities
  • Exchanging information

EURAMID (European ATM Military Directors Conference)
  • Informal conference for national ATM Directors
  • Exchanging information
Why can’t we exploit the important benefits of the use of a Common Regulatory Framework in Europe as much as possible?
There are some shortcomings that prevent us from reaching this ultimate goal!

- The regulatory framework has only partially been harmonized and standardized and is subject to national endorsement and implementation
  - Total Military Aviation System is not yet in scope
  - Mainly focus on development and sustainment of common requirements, less on implementation of those requirements

- Governance is fragmented addressing Military Aviation Safety in various organizations with diverse national representation at different levels arising from different responsibilities.
  - Causes that military interests for proper execution of Defense & Security tasks are inadequately represented and accounted for
## Current Military Governance in Europe

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# Current Political - Military Governance

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**EUROCONTROL**
- Provisional Council
- Executive Management
- MAB
**Associated Effects**
- Less improvement of Military Aviation Safety and Interoperability.
- Less cost reductions in Military Aviation and associated Industries
- No equal Level Playing Field with Civil Aviation Organisations and/or Authorities.

**Associated Risks**
- Safety and interoperability risks
- costs remain high for:
  - Military Investment Programs
  - Production and Maintenance
  - Training.
- High cost to comply with new civil regulations or even inability to comply with those regulations leading to possible operational restrictions for the use of our aviation (weapon)systems
What should be the Way Ahead in Europe?
Way Ahead

• Endorse a single European Military Joint Airworthiness Authorities Organization (EMJAAO) owning the Common Military Framework for Airworthiness
  • Within the current Basic Framework Document of the MAWA Forum
  • Part of EDA and governed by the EUMC
  • To be sponsored by the participating Member States
  • Requires approval at Ministerial Steering Board level.

• Extend the suite of EMARs to include areas such as Flight Operations, Flight Crew Licensing, Air Traffic Management and Aerodromes, in order to cover all necessary requirements applicable to a Total Military Aviation System.
  • Conversion of the EMJAAO to a European Military Aviation Organization (EMAO)

• After achieving this goal a European Military Aviation Agency (EMAA) can be established, owning regulations rather than requirements, issuing artefacts and enforcing the national implementation of the Common Regulatory Framework for Military Aviation Safety.

• The ultimate step is a single European Military Aviation Authority.
  • Also responsible for oversight activities within the participating Member States.
Way Ahead

Organizational/institutional improvement

**Military Aviation Safety**
- EDA/MAWA
- EDA/ESMAB
- NATO/AC
- ECTL/MAB
- European Military Joint Airworthiness Authorities Organization
- European Military Aviation Organization
- European Military Aviation Agency
- European Military Aviation Authority

**Civilian Aviation Safety**
- European Aviation Safety Agency (EASA)
Way Ahead

Some doubts about This Way Ahead……

- European Countries concerned retaining sovereignty
- National legislation has to be changed in many European nations and it needs political approval on the highest level
- Concerns about keeping the necessary military flexibility

But weigh those doubts against the benefits of the suggested Way Ahead?
Do the European nations accept the risks of the current Status Quo?
Do the European nations dare to commit themselves to a strategic goal and to dedicate their activities to a roadmap that serves the achievement of this goal?
Conclusions
Conclusions

• Current activities in Europe are essential for the ultimate aim to introduce the use of a Common Regulatory Framework for Military Aviation Safety.

• Current activities in Europe are not enough to exploit the benefits of the use of a Common Regulatory Framework as much as possible
  • Only airworthiness and ATM in scope
  • No guarantee that a common Regulatory Framework will be implemented by the European nations
  • No strong governance for Military Aviation Safety in Europe that enforces the implementation

• Way ahead: extend the work of the MAWA forum;
  take the following steps:
  1. Endorse a single European Military Joint Airworthiness Authorities Organization (EMJAAO)
  2. Extend the scope of the regulatory framework to include all areas for Military Aviation System
     ➢ European Military Aviation Organization
  3. European Military Aviation Agency
  4. European Military Aviation Authority
Food for thought for the audience:
How can we exploit the benefits of a common regulatory framework for Military Aviation Safety in the F-35 program?