



*NATO AwWG, ASIC, DoD
and others
MAWC – CY 2012*



- NATO Ops are supported by:
 - ✓ Aircraft owned, leased, rented or chartered by NATO
 - ✓ Aircraft owned, leased, rented or chartered by Member or Partner Nations and provided for NATO use

- Some issues at the origin of the need :
 - ✓ May 2003 : crash in Turkey of a Yak 42 chartered by NAMSA to transport 62 Spanish troops back from Afghanistan. 75 casualties
 - *Compensations to families had to be paid by NAMSA*
 - ✓ NATO owned E-3A (AWACS) are registered in LX, but LX has no MAA
 - *Who is responsible for continuing and continued airworthiness ?*

- NATO identified the need to establish a robust Airworthiness framework (to include **Policy, Procedures and Standards**) aimed to:
 - ✓ improve Airworthiness process and reduce the number of accidents
 - ✓ establish a common set of Airworthiness criteria for all Aircraft used by/on behalf of NATO
 - ✓ define precisely NATO's liability boundaries
 - ✓ diminish NATO's financial vulnerabilities

- MCASB (Military Committee Air Standardization Board) established
 - ✓ the **AWAHWG** (Airworthiness Ad Hoc WG / 2006-2010)
 - ✓ and then the **AwWG** (Airworthiness WG / since 2010)


- Aug 2010 – May 2011: the AwWG issued the following (AwWG n°1 to n°4) :
 - ✓ **AwWG Terms of Reference**
 - ✓ **NATO Airworthiness Policy proposal**
 - ✓ **Terminology** – 10 Airworthiness definitions forwarded to the ONTC
(Office for NATO Terminology Coordination)

- Sep 2011 : NATO Airworthiness Policy endorsed by the MCASB

- **Scope : all aeronautical products, parts and appliances**
 - ✓ owned, leased, rented or chartered by NATO
 - ✓ owned, leased, rented or chartered by Member or Partner Nations and provided for NATO use
- **Outside of the scope : all aspects of flight operations**
 - ✓ such as operational procedures, flight standards, operator training, aircrew qualification and licensing, and aerospace control operations.
- **All aeronautical products, parts and appliances provided for NATO use shall be :**
 - ✓ certified as airworthy by a NATO recognized airworthiness authority
 - ✓ properly controlled in accordance with approved continued airworthiness provisions
 - ✓ operated and maintained in accordance with approved continuing airworthiness provisions
- **All work associated with the airworthiness process shall be performed by authorized individuals employing approved processes within organizations accredited/approved by a NATO **recognized** airworthiness authority**

- In order to ensure that airworthiness is achieved and maintained, oversight is required. Therefore NATO shall establish and maintain a NATO Airworthiness Executive (NAE) sufficiently independent from the acquisition programs and operator influence. The NAE shall be adequately empowered and resourced in order to execute this policy

- The NAE shall :
 - ✓ undertake any task and formulate opinions on all matters covered by the scope of this policy taking due regard to any other NATO policies
 - ✓ assist the North Atlantic Council (NAC) by preparing measures to be taken for the implementation of this policy. The NAE shall provide the NAC with the airworthiness requirements, operational aspects related to airworthiness and necessary technical, scientific and administrative support to oversee the airworthiness process
 - ✓ identify and designate the NATO **recognized** airworthiness authority for each aeronautical product part and appliance and its controlled environment within the scope of this policy
 - ✓ ensure airworthiness related materiel risk process exists for aeronautical products, parts and appliances provided for NATO use

 The NAE is not an airworthiness authority

- Oct 2011: decision of the MCASB
pending approval of the policy by the NAC (North Atlantic Council) :
 - ✓ to approve Lt-Col Richard Duriez as new chairman
 - ✓ to assign a new mandate for 2012 and 2013 (4 meetings/year):
 - develop the **Implementation Guidelines** of the NATO Airworthiness Policy and specific **Airworthiness Procedures**
 - provide recommendations for the **establishment of the NAE (NATO Airworthiness Executive)**

- 3 AwWG meetings this year so far
 - ☞ *Several national representatives are also members of MAWA Forum or TF*
 - ☞ *Participation of NATO bodies and agencies*
 - ☞ *Liaison/exchange of information with other NATO bodies and cooperation with non-NATO organisations are encouraged*

- ✓ Further to a request of the Private Office, define the role and responsibilities of the NAE and his supporting staff and their position in an existing NATO body with the current NATO manpower
- ✓ Brainstorming session to begin drafting guidelines for the NAE to identify the situation :
 - *8 cases of aeronautical products distributed into 4 categories :*
 1. Owned by NATO or jointly owned by part of NATO member nations
 2. Rented or leased by NATO
 3. Chartered by NATO
 4. Owned, rented, leased or chartered by NATO nations and provided for NATO use
 - *Identification of the stakeholders : MAA/CAA, owner, operator, contract responsible, State of registration*

■ Outcome of last meeting :

- ✓ Identify the topics to be included in the guidelines and procedures distributed into 2 batches to be drafted ex-committee by 2 syndicates of volunteers :
 - *Airworthiness management (lead by IT) :*
 - identify the airworthiness landscape (NATO bodies involved in airworthiness),
 - identify the needs (iaw aircraft category : owned/rented/leased/chartered by NATO or by NATO nations for NATO use),
 - documentation management,
 - airworthiness requirements in NATO contracts,
 - categories of airworthiness recommendations to be issued by the NAE,
 - risk assessment and risk reduction,
 - resources,
 - communication plan,
 - reporting procedures to the NAC and from recognized authorities and NATO bodies
 - *Recognition and designation of an airworthiness authority (lead by US) :*
 - general organisation of an authority,
 - initial certification,
 - registration and release to service,
 - phasing out an aircraft,
 - continued and continuing airworthiness
- ✓ The **Question Set** issue will not be addressed before 2013 to benefit from MAWA TF1 output and on-going bilateral recognition activities

■ Work for next meeting :

- ↪ Split in 2 enlarged syndicates to consolidate the drafts





■ Who are ASIC?

- ✓ ASIC is an organisation with members representing the air forces of :
 - *Australia,*
 - *Canada,*
 - *New Zealand,*
 - *United Kingdom*
 - *United States (including the US Navy)*
- ✓ ASIC strives to ensure nations are interoperable during the conduct of expeditionary operations.

■ What do they do?

- ✓ Create mutually agreed standards in the conduct of expeditionary air operations.
- ✓ Share information on training, tactics and procedures.
- ✓ Share equipment between nations under the Test Programme Arrangement/Agreement.



ASIC Products

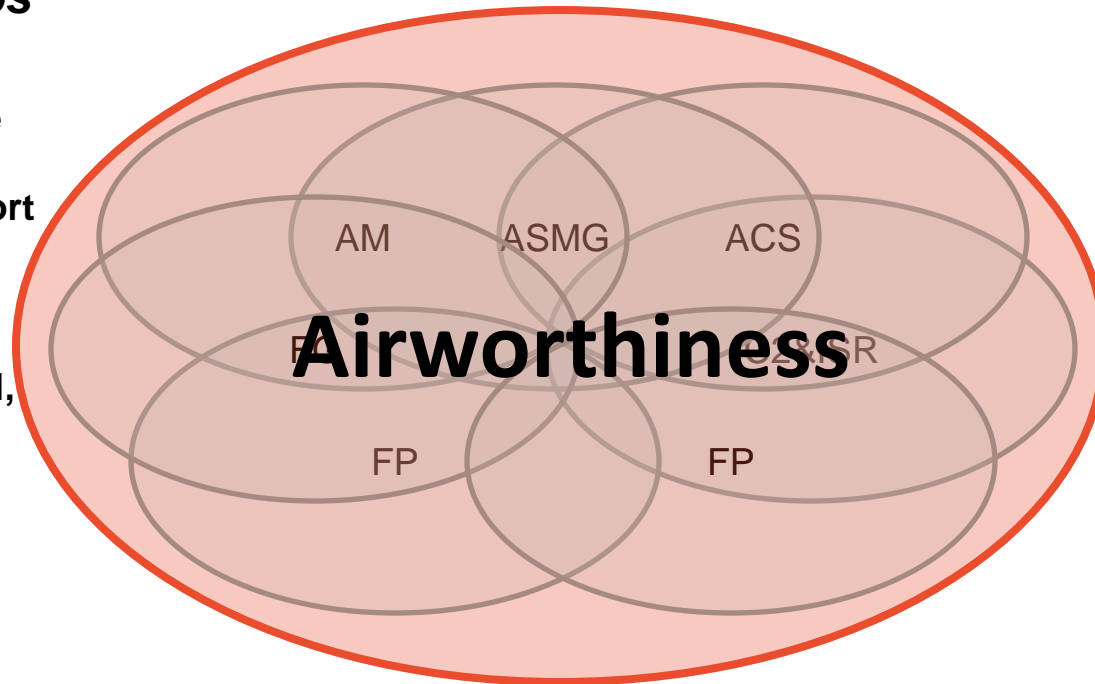
- Air Standard
 - ✓ Standardization document signed by all nations.
- Advisory Publication
 - ✓ Provide a vehicle for formally advising member nations of procedural or material developments in situations where standardisation is either impossible or inappropriate.
- Information Publication
 - ✓ Used to exchange information between SMEs and as such are designed to provide protection of proprietary rights for the originator of the information.
- Information Exchange
 - ✓ To determine where countries are divergent, compare capabilities etc.
 - ✓ Gathering of information is usually the first step to creating the other products.
 - ✓ Usually conducted as a virtual project.

Enhancing Coalition Warfighting through Air and Space Interoperability



Working Groups

- Aerospace Medicine
- Agile Combat Support
- Air Mobility
- Command & Control, Intelligence, Surveillance & Reconnaissance
- Force Application
- Force Protection
- Fuels



All Working Groups have **COMPONENTS** that are cross functions of other groups

Airworthiness reaches across ALL working Groups



Airworthiness Initiative

- **Instigated by Australia**
 - ✓ Due to Aw issues common to ASIC Working Groups
 - ✓ Formed as a Project Group
 - ✓ 1st Meeting Dec 2011
 - ✓ 2nd Meeting Aug 2012
- **3rd Meeting planned June 2013**
- **Includes Technical, Operational and Safety/Investigation**
- **Managed by ASIC, run by the Group**



Airworthiness Project Group - Goals

- **Develop a Standard Question Set**
 - ✓ Based on MAWA
 - ✓ Includes Aviation Safety and Investigation
 - ✓ Developing Operational Airworthiness Facet
 - ✓ Will be maintained as an ASIC Air Standard
- **Establish Major Constituent Parts to Aw**
- **Develop a high level 'Process of Recognition'**
 - ✓ Employment of Question Set
 - ✓ Establishing Business Rules
- **Develop a 'Data Sharing' Arrangement**
 - ✓ Establishing an MoU
 - ✓ Based on Generic Aw Products
 - ✓ Linked to FMS case for specific products by type



Airworthiness Project Group - Plan

➤ **Question Set Completion**

- ✓ Initial Review and Validation 2012
- ✓ Determine National Constituent Components (in conjunction)
- ✓ Answers 1st Quarter 2013
- ✓ Review and Face-to-Face June 2013 (1st day of meeting)
- ✓ Development of Operational Aw Question Set early 2013
- ✓ 1st stage of Recognition late 2013

➤ **Complete 2 Pilot Programmes as test cases**





- Department of Defense (DoD) directive on airworthiness
 - ✓ A DoD-level directive to provide airworthiness and establishing a common framework among DoD to do so
 - ✓ Currently in signature review for endorsement by the Office of Under Secretary of Defense
 - ✓ Expected approval within 6 – 12 months

- Tri-services national airworthiness council working meeting
 - ✓ Meeting to be held 13 – 15 June 2012 to discuss further mutual (USAF, US Army, USN/USMC) **recognition** efforts (or multi-lateral as the case may be) among the three services



- Agenda includes agreement on a suitable **Question Set** for determining recognition
- Discussion on each service's self assessment against a common **Question Set**
- These activities are an on-going effort among the three services

- NL

- ✓ MAA NL with US Army
 - *CH-47 Chinook*



- *AH-64 Apache*



- IT, NL and UK

- ✓ DAA, MAA NL and MAA UK, each with USAF and/or USN
 - *JSF*



- **Recognition** process based on respective **Question Sets**

- **Recognition** of airworthiness authorities is a widely shared concept
 - ✓ The goal is for an authority to reuse another authority's artefacts (type certificates, organisation approvals, airworthiness directives...) to issue its own artefacts without further verifications
- The recognition process starts by answering a **Question Set**
- Coordination of the various fora (MAWA, ASIC, AwWG...) to harmonize the **recognition** processes and the **Question Sets**
 - ☺ AwWG chairman is member of MAWA Forum and TF1
 - ☺ ASIC UK representative is member of MAWA Forum and TF1 chairman
 - ☺ IT, NL and UK members of MAWA Forum and TFs are involved in recognition processes with the US