



Recognition: Experiences, lessons learned and proposals

Military Airworthiness Conference 2017

Presented by Javier MANFREDI
Head of Airworthiness Unit - DGAM



Overview

- EMAR – PERAM
- Decision of implementation
- Spanish specifics
- Key issues
- Proposals

PERAM

DIGAM Resolution summary (Sept. 2012):

1. PERAM are the official instrument of the Ministry of Defense to define airworthiness requirements. They are adaptation of EMAR to comply with national aviation laws.
 2. DGAM/SDGINREID will provide the human and technical resources for the implementation
 3. DGAM/SDGINREID will verify that the entities applying to be approved according to PERAM regulations, meet the requirements. Approval is granted by MNAA
 4. Approval, publication and distribution will be made by the DIGAM after consulting the Airworthiness Board.
- ✓ All PERAM have been published



Decision of implementation

1. Decision taken by the Ministers of Defence in 2009
2. Specially important for Spain, with a long experience in military certification, and with a strong industry exporting aeronautical military products, some civil derivatives (CAN, AUS, NLD, EEUU, ...)
3. Taken into account legal aspects, organizations, communication, human resources and others.
4. National sovereignty is a real difference with civil.
5. MOA, MTOA, DOA and POA for organic units is a challenge, but independency is needed to maintain aircrafts, approve modernizations and modifications is required
6. Easy for industry, most of them compliant with civil regulations. Not easy for organic units due to different approach in organization, procedures and qualification of personel. Need to take decisions, define criteria and ask for investment
7. Section B requirements have to be fulfilled by Authorities to facilitate mutual recognition. Lot of new procedures, guidance material, formats, trainings, audit teams, etc has to be put in place
8. Of interest for other countries, NATO, etc. (possible globalization)
9. In programs in which Spain participates: A400M, EF2000, TIGRE, NH90, EF2000 ...
10. Application of PERAM for legacy products?. Grand father law and other means



Spanish Specifics

- DGAM/INTA roles and responsibilities in certification processes. Recommendation to have a single MARQ
- Adapt the Organization to PERAM. Define a Plan
- Difficulty to have staff able to carry out the work required for the implementation
- Cost of specific training for the staff, and other means to comply with regulations
- Requirements for military and civilian personnel working in the Ministry of Defense
- Balance between military life destinations and regulatory changes. Need for continuity in posts vs. military career



Key Issues (1 of 2)

- Two missions:
 - Ensure the airworthiness of aeronautical products owned by the Ministry of Defense as well as those of interest to the national defense industry
 - To promote and encourage the activity of the national defense industry both nationally and internationally.
- Two types of products:
 - to be used by the Ministry of Defence, and
 - to be exported.
 - The second type requires specific regulations and agreements with customer authority. Room for those agreements in the regulation
- Flexibility to use other regulations than EMARs, for special cases and legacy products
- For future projects of international collaboration, encourage the use of EMAR based on mutual recognition using EMAD-R and MARQs
- Close collaboration with civil authorities (local and international) through agreements



Key Issues (2 of 2)

- Many audits for different proposes.
- Approval of changes in products certified outside the scope of MAWA
- Complex certification processes: civil derivatives, military derivatives, military used by commercial operators ...
- Role change products (FSTA/Voyager experience)
- Airworthiness requirements need to be identified from the very beginning in contract negotiations
- Use of evidences and MoC for both certification and qualification by the same experts team
- We learn from each other

Proposals

- Every Authority will have a Quality System and an Exposition Document to show compliance with requirements to other Authorities (i.e. Section B of EMARs)
- Audit process standardized, including agenda and report format
- Highlight similarities (DOA iaw EMAR 21), differences (number of personnel) and reservations/recommendations (translation of national references and practices)
- MARQ to be reviewed
 - 162 questions, some of them are repetitions of safety goals. Reduce the number without reducing the scope
 - Will identify the aim of the recognition (organization, product or artefacts)
- Follow the spirit of the “Le Bourget Momentum”
 - Use of artefacts (airworthiness related document that can be used as evidence in making an airworthiness judgment)
 - Every nation will identify their needs and the level of recognition with others (Tier 1, 2, or 3)
 - Common programs will continue as of today



Thank you for your attention