



# APPENDIX I

## GUIDANCE FOR JOINT-USE CIVIL/MILITARY AERODROMES

### Background

One approach to increasing airport capacity, as demonstrated by a number of new low-cost aircraft operators, is to operate from joint-use aerodromes. In addition joint-use aerodromes may be used for the training/flight checking of airline pilots or as bases for technical and test flights.

There are already numerous joint-use aerodromes, hosting different types of military aviation within ECAC. A number of air forces share aerodrome facilities with civil entities accommodating traffic which is both military and civil, domestic and international.

To support overseas operations, the military, very often as a part of multinational operations, use civil aerodrome facilities either as short-term refuelling stop aerodromes or as temporary bases.

The regulatory position varies from State to State. There is no agreed pan-European definition of a joint-use aerodrome; actual use differs among the States.

However, amended the European Union Regulation (EC) 216/2008 in the field of aerodromes, air traffic management and air navigation service refers to the military (in particular, equipment, and organisations that are controlled by the military<sup>1</sup>). Member States shall, as far as practicable, ensure that any military facilities open to public use, (aerodrome or part therefore) or services provided by military personnel to the public (ATM/ANS), offer a level of safety that is at least as effective as that required by the essential requirements of the European Union.

In addition, the EUROCONTROL Guidelines Supporting the Civil Use of Military Aerodromes (CUMA) highlights the key institutional, legal, financial, technical and operational issues. CUMA proposes a set of recommendations to support the national decision making process.

For the purposes of this document, a joint-use aerodrome is either a civil aerodrome used regularly by military traffic or a military aerodrome used regularly by civil traffic. An aerodrome (ICAO term) and an airfield (military term) should be considered as synonyms.

### Military aviation and runway incursions

The military aviation community is not immune from runway incursions. EUROCONTROL collects runway incursion reports on a yearly basis. The operational data collected since 2006 confirms the involvement of military aircraft in runway incursions within the ECAC area. The reports verify the military aircraft's involvement regardless of types of operations and types of flight rules.

Military personnel can therefore contribute to the prevention of runway incursions. Like all staff operating on the manoeuvring area, military personnel, need to be aware of the potential hazards.

ICAO Annex 13 defines responsibility for the investigation of runway incursions involving civilian assets/persons. The reporting of runway incursions in civil aviation is mandated for EU members<sup>5</sup>.

The prevention / investigation / reporting of runway incursions involving only military is a state responsibility.

In accordance with ESARR 2,<sup>6</sup> reporting is mandated for the military in all occurrences where:

- Civil Air Traffic Services is providing service to military aircraft, and
- Military Air Traffic Services and/or Air Defence are providing service to civil aircraft.

1 - See Article 1 of (EC) 216/2008.

2 - **FAA Runway Safety Report, FY 2000 – FY 2003.**

3 - Australian Transport Safety Bureau, Runway Incursions: 1997 to 2003 (June 2004).

4 - Directorate of Flight Safety, Canada, Department of National Defence Trend and Analysis Report: Runway Incursions 2000-2004.

5 - Directive 2003/42/EC of the European Parliament and of the Council of 13 June 2003 on occurrence reporting in civilian aviation [Official Journal L 167/23 of 4.7.03].

6 - EUROCONTROL Safety ATM Regulatory Requirements.

## EAPPRI and military

In respect of the application of EAPPRI recommendations, the military should be involved as:

- Regulator: military aviation authority (MAA) or equivalent national regulatory body;
- Aerodrome operator: military aerodrome and military unit co-located with a civilian aerodrome;
- ANSP: where the military provides aerodrome air traffic services to civil airspace users;
- Aircraft operator: military aircraft operator based/operating at joint use aerodromes, i.e. where the aerodrome operator is civilian and the Air Traffic Services provider is civilian.

Note that for some States there is one regulator responsible for all ATM matters, civil and military, and in others there may be two regulators with discrete civil or military responsibilities.

With the support of civil and military stakeholders, EUROCONTROL has identified some specific factors causing and contributing to runway incursions at joint-use aerodromes, by collecting experiences on a voluntary basis. The current EAPPRI recommendations have been reviewed in the light of the needs of joint-use aerodromes and recommendations for the Prevention of Runway Incursions at Joint-Use Aerodromes developed.

### 1. Aerodrome Operator

There are three main areas at aerodromes where civil and military operations interact: the apron, the manoeuvring area and approach/terminal airspace.

There are joint-use aerodromes where one aerodrome operator (civil or military) is wholly responsible for manoeuvring area operations. There are also joint-use aerodromes where more than one aerodrome operator is responsible for a specific segment of the aerodrome movement area<sup>7</sup>.

To clarify roles and responsibilities, one of the aerodrome operators should take the lead in the coordination of the application of EAPPRI recommendations.

When implementing CUMA, the civil aerodrome operator should verify and assess differences between the existing services and infrastructure and the related ICAO provisions; such differences should be notified by means of Aeronautical Information.<sup>8</sup>

The civil and/or military aerodrome regulator may perform the task of re-certifying an aerodrome, and may clarify roles and responsibilities.

### 2. One aerodrome two authorities

One characteristic of joint-use aerodromes is the responsibility of two regulatory and supervisory authorities, one civil and one military. Although different States have different relationships between their military and civil regulators, military authorities are in most cases independent of their respective civil aviation authorities (CAAs).

In certain cases, as a consequence, two auditing / oversight authorities perform audits at the same aerodrome independently. There is an opportunity to perform a coordinated inspection/audit and propose common conclusions and recommendations.

### 3. Mixed Type of flight

Joint-use aerodromes facilitate both types of flights, civil and military. The majority of applicable ICAO provisions are identical, although differences may be found regarding procedures for formation flying or other military functions. The application of different types of procedure could create confusion during aerodrome operations.

7 - That part of an aerodrome intended for the surface movement of aircraft, including the manoeuvring area and aprons.

8 - EUROCONTROL Guidelines Supporting the Civil Use of Military Aerodromes.

For instance, during surface movement, a formation of aircraft is considered as a single aircraft in terms of right-of-way. When an individual aircraft and a formation are on a converging course, a formation of aircraft should be treated as one entity.

At present, the application of mixed aerodrome operations requires a safety assessment by each State at each joint-use aerodrome.

Timely and effective coordination between the various airport entities responsible for ground operations is important. One of the practices at joint-use aerodromes is regular coordination between civil and military entities facilitating mixed types of operations. The means of coordination can range from a joint civil-military coordination body to a liaison officer assisting with daily coordination. In certain cases, the representative of a flying unit is present in the tower during military operations.

### 4. Mixed type of aircraft

Civilian pilots may not be able positively to identify military aircraft types. ATC instructions involving specific military aircraft types, e.g. "Follow F 1", should be avoided.

### 5. Radio equipment and procedures

Even though the majority of military aircraft are VHF/UHF radio equipped, military aircraft very often operate using UHF. Civilian aircraft use VHF only.

Simultaneous aerodrome operations using different frequencies are a known practice at joint-use aerodromes, and may lead to communication breakdowns and reduced situation awareness.

Special procedures are applied, e.g. TWR/GND transmission on both VHF and UHF frequencies, or cross-coupled VHF and UHF frequencies.

Military pilots and controllers may use non-standard ICAO phraseology. Very often, a domestic language is in use at joint-use aerodromes. There are also instances in which approved R/T phraseology means different things to civil and military pilots.

Both practices could cause a breakdown in communication and reduce situation awareness.

### 6. Aerodrome markings

A number of markings around military aerodromes may be different from the ICAO standards. Some of them are outside the movement area for civil aircraft; however, those which are visible to civil pilots/drivers could lead to pilot or vehicle driver navigation error.

### 7. Use of the Runway lights

The technical characteristics and operational procedures for air-ground lighting at joint-use aerodromes may deviate from ICAO Annex 14.

The application of different light-operating procedures may reduce situation awareness on or around the runway.

### 8. Ad hoc allocation of military unit at civil aerodrome

Military pilots and ground personnel, coming from all around the world, may not be familiar with ICAO flight rules, phraseology, aerodrome signs, lights and markings. They will also be unfamiliar with local aerodrome procedures.

Moreover, because of the regular rotation of military personnel, local familiarisation training is required.

## Conclusion

- Military aviation is not immune from runway incursions. Military personnel can therefore contribute to the prevention of runway incursions. One way of achieving appropriate awareness is through participation in a local runway safety team.
- Even though the majority of ICAO recommendations are directly applicable, there are some particular points with regard to joint-use aerodromes covered by EAPPRI only.
- The civil and military authorities responsible for flight safety at the aerodrome should identify the potential risk regarding the unauthorised use of the runway and other portions of the manoeuvring area and implement measures to prevent events resulting in potential or actual runway incursions.
- States may consider implementing recommendations and guidance material identified in EAPRRI for their application at joint-use aerodromes.

## Reference

- Australian Transport Safety Bureau, Runway Incursions: 1997 to 2003 (June 2004)
- Directive 2003/42/EC of the European Parliament and of the Council of 13 June 2003 on occurrence reporting in civilian aviation [Official Journal L 167/23 of 4.7.03]
- Directorate of Flight Safety, Canada, Department of National Defence Trend and Analysis Report: Runway Incursions 2000-2004
- European Action Plan for the Prevention of Runway Incursions; Edition 1.1
- EUROCONTROL Guidelines Supporting the Civil Use of Military Aerodromes; Edition 1.0
- EUROCONTROL Safety ATM Regulatory Requirements
- FAA Runway Safety Report, FY 2000 – FY 2003
- ICAO ANNEX 13
- ICAO Doc. 4444, Part IV
- Regulation (EC) 216/2008