

International Civil Aviation Organization

MIDANPIRG ATM/AIM/SAR Sub-Group

Thirteenth Meeting (ATM/AIM/SAR SG/13) (Cairo, Egypt, 30 September – 3 October 2013)

Agenda Item 4: ATM/SAR Issues

CIVIL MILITARY COOPERATION

(Presented by the Secretariat)

SUMMARY

This paper presents the developments related to Civil/Military coordination, including the outcome of the Middle East Civil/military Cooperation Seminar (Jeddah, Saudi Arabia, 16-19 September 2012).

Action by the meeting is at paragraph 3.

REFERENCES

- ARN TF/6 Report
- MIDANPIRG/13 Report
- Middle East Civil Military Cooperation Seminar
- MSG/3 Report

1. Introduction

- 1.1 The provisions related to Civil-Military coordination are covered in a number of ICAO documents, in particular: the Convention (Article 3), Annexes 2, 11 and 15, PANS ATM (Doc 4444), Air Traffic Services Planning Manual (Doc 9426), Manual Concerning Safety Measures Relating to Military Activities Potentially Hazardous to Civil Aircraft Operations (Doc 9554) and Manual concerning Interception of Civil Aircraft (Doc 9433).
- 1.2 The Thirteenth Meeting of the Middle East Air Navigation Planning and Implementation Regional Group (MIDANPIRG/13) was hosted by the General Civil Aviation Authority (GCAA) of the United Arab Emirates in Abu Dhabi, from 22 to 26 April 2012.
- 1.3 The Middle East Civil Military Cooperation seminar was held at Jeddah, Saudi Arabia, 16-19 September 2013, and was attended by 98 participants from 10 States and 4 international organizations. The seminar was convened by ICAO, in partnership with the Civil Air Navigation Services Organisation (CANSO), the International Airlines Transport Association (IATA), and the Federal Aviation Administration (FAA) of the United States with the support of Boeing Company.
- 1.4 The sixth meeting of Air Traffic Services Route Network Task force (ARN TF/6) was held at the ICAO MID Regional Office, Cairo, Egypt, from 22 to 24 April 2013.
- 1.5 The Third meeting of the MIDANPIRG Steering Group (MSG/3) was held in Cairo, Egypt, from 17 to 19 June 2013. The meeting was attended by a total of twenty two (22) participants from seven (7) MID Region States (Bahrain, Egypt, Iran, Jordan, Lebanon, Saudi Arabia and United Arab Emirates), two (2) Organisations and one (1) Agency (MIDRMA).

2. DISCUSSION

- 2.1 The meeting may wish to recall that MIDANPIRG/13 emphasized on the need of sharing airspace between civil and military. Accordingly, the meeting urged MID States to manage the airspace flexibly with an equitable balance between civil and military users through strategic coordination and dynamic interaction, which should lead to the implementation of the Flexible Use of Airspace (FUA).
- 2.2 The meeting encouraged States to use the guidance contained in this Circular on Civil/Military Cooperation in Air Traffic Management (Cir 330) to improve the Civil/Military Cooperation in the MID Region.
- 2.3 Based on the above, the meeting re-iterated the MIDANPIRG/12 Conclusion 12/25, which was considered to be still valid:

CONCLUSION 12/25: CIVIL/MILITARY COOPERATION

That, in order to facilitate effective civil/military cooperation and joint use of airspace in accordance with ICAO provisions, and in support of the ICAO's vision for an integrated, harmonized and globally interoperable air traffic management system as laid out in the ATM Operational Concept and in the Global Air Navigation Plan, MID States that have not yet done so, be urged to:

- a) manage the airspace in a flexible manner with an equitable balance between civil and military users through strategic coordination and dynamic interaction, in order to open up segregated airspace when it is not being used for its originally-intended purpose and allow for better airspace management and access for all users according to their needs;
- b) develop necessary institutional arrangements to foster civil/military cooperation; and
- c) take steps and arrange as necessary for the Military authorities to be:
 - *fully involved in the airspace planning and management process;*
 - ii) aware of the new developments in civil aviation; and
 - iii) involved in national, regional and international aviation meetings, workshops, seminars and training sessions, as appropriate.
- 2.4 The meeting may wish to note that the Middle East Civil/Military Cooperation Seminar (Jeddah, 16-19 September 2012) objectives were to build on the Global Forum outcome to:
 - improve civil/military cooperation and coordination;
 - optimise airspace by applying the concept of flexible use of airspace in the regions;
 - share information between civil/military authorities; and
 - analyse the impact of modernization efforts by States.
- 2.5 The following are the Recommendations developed from the Seminar addressed to States, ICAO and other international organizations, as appropriate:
 - a) Civil/Military cooperation/coordination principles and practices as outlined in the Circular 330 AN/189 *Civil/Military Cooperation in Air Traffic Management* should be elevated to the highest political level in the States in the Middle East region.

- b) Permanent civil/military working structures at regional and national level are necessary. States should create civil/military cooperation/coordination committees and working groups of subject matters experts with appropriate legislation and mechanisms to address, among other things: identification of shared goals, quality communications, transparent sharing of information, and human networking, as well as continuous improvement of access to airspace, infrastructure issues, interoperability and integration of future systems.
- c) States should make broader application of Flexible Use of Airspace (FUA) and ATM Security concepts; however, guidance material and additional training should be provided in order to gain the greatest benefits from these concepts.
- d) States should review special use airspace to accommodate the requirements of the users (civil/military) sharing the airspace and to alleviate congestion in major traffic flows and accommodate expected future growth of the region.
- e) States, ICAO, international organizations are encouraged to hold regular civil/military meetings/seminars/workshops to raise awareness of civil/military cooperation/coordination, PBN, and flexible use of airspace (FUA) and continue promoting the building of a trust based relationship between civil and militaries authorities.
- f) States should consider and aim for the enhancement of the interoperability between civil and military ATM systems, including radar data sharing, flight plan information, etc.
- 2.6 The meeting stressed that States should continue bringing military representatives as part of their national delegations to the ICAO meetings as recommended by Assembly Resolution A37-15 Appendix O, "Coordination and cooperation of civil and military air traffic", as at **Appendix** A to this working paper.
- 2.7 It was recognized by the seminar that ICAO should continue working closely with partners organizations having mandate/interest in promoting civil military cooperation in ATM in order to conduct coordinated, complementary and mutually beneficial activities in support of the States' use of Circular 330 AN/189 *Civil/Military Cooperation in Air Traffic Management*.
- 2.8 The meeting may wish to note that ICAO MID Regional Office circulated a survey on the FUA through State Letter Ref.: AN 6/13.3-13/002 dated 8 January 2013, as a follow up action to the seminar outcome. Only Jordan, Lebanon, Oman and Qatar replied, as at **Appendix B** to this working paper.
- 2.9 The meeting may wish to recall that the Sixth meeting of the ATS Route Network Task Force (ARN TF/6), Cairo, 22-24 April 2013, emphasized that the key element to enhance the ATS route network in the MID Region is through the application of the FUA.
- 2.10 In this regard, the ARN TF/6 meeting reviewed the status of the non-implemented ATS routes or segments of routes, which are included in the Table ATS 1 of the MID Basic Air Navigation Plan (ANP) and the proposed routes that are contained in the route catalogue. All these routes are pending awaiting the approval of the relevant military authorities.
- 2.11 The ANR TF/6 meeting was apprised of Bahrain proposal related to the relief of traffic congestion north of Bahrain FIR, which require accessibility to military restricted airspace in that area.

- 2.12 The ANR TF/6 meeting underlined the efforts of Qatar and Saudi Arabia with their relevant authorities to extend the opening hours of airways UM430 all the way to Doha and UL681 from 1900-0300 to 1500-0300 UTC. Furthermore, the meeting noted with appreciation the cooperation of the military authorities in releasing the area before the published opening time, and requested States to officially publish the new extended time, which will allow users to consider these routes during their flight planning process.
- 2.13 The ARN TF/6 meeting also encouraged the concerned States to implement the new RNAV-1 route SALWA-DHA on H24 basis, as well as the following routes' segments:
 - DBA-AMIBO
 - ARH-NWB
 - ARH-RASDA
 - GEPAP-DRZ
- 2.14 The meeting may wish to note that the Third meeting of the MIDANPIRG Steering Group (MSG/3) was apprised of the latest global development related to Civil/Military Cooperation and the AN-Conf/12 Recommendation 4/5 below:

Recommendation 4/5 – Civil/military coordination/cooperation and sharing of airspace

That States:

- a) planning and implementation regional groups, and ICAO to analyse the benefits that could be achieved through improved civil/military cooperation and sharing of the airspace serving international traffic flows and express the results of this analysis in terms of:
 - 1) capacity increases and reduction in routine delays as measured by traffic volumes on major traffic flows;
 - 2) document fuel savings and emission reductions through the use of the fuel savings estimation tools; and
 - 3) other additional benefits;
- b) based on the analysis made by States, planning and implementation regional groups, and ICAO, urge States to develop plans to implement improvements for the cooperative use of airspace related to the top areas of opportunity and establish concrete targets using tools already available for this purpose;
- c) in relation to international traffic flows, for each ICAO region urge the planning and implementation regional groups and their associated States to identify the top areas of opportunity that could benefit the most from improvements in civil/military cooperation and sharing of the airspace and develop concrete targets for improvement;

That ICAO:

- d) develop a set of criteria or metrics to enable objective measurement of progress in civil/military cooperation; and
- e) continue to develop guidance material for States on the flexible use of their airspace, airspace design, interoperability and integration of humanitarian assistance flights in crisis response scenarios in their airspaces to facilitate integrated use of the airspace.

2.15 Based on all the above, the Aviation System Block Upgrades (ASBU) Block 0 Module – FRTO: *Improved Operations through Enhanced En-Route Trajectories*, is considered as a priority for the MID Region. Accordingly, the MSG/3 meeting agreed to include the B0-FRTO in the Draft MID AIR Navigation Strategy, which will be discussed in details in WP/19.

3. ACTION BY THE MEETING

- 3.1 The meeting, taking into consideration the major traffic flow in the MID Region and the Users' requirements is invited to:
 - a) identify the top areas of opportunity in the MID Region, that could benefit the most from improvements in civil/military cooperation and sharing of the airspace and develop concrete targets for improvement; and
 - b) urge States to implement the provisions of the An-Conf/12 Recommendation 4/5.

II. Air Navigation II-17

APPENDIX O

Coordination and cooperation of civil and military air traffic

Whereas the airspace is a resource common to both civil and military aviation, and given that many air navigation facilities and services are provided and used by both civil and military aviation;

Whereas the Preamble of the Convention on International Civil Aviation stipulates that signatories thereto had "agreed on certain principles and arrangements in order that international civil aviation may be developed in a safe and orderly manner and that international air transport services may be established on the basis of equality of opportunity and operated soundly and economically";

Whereas Article 3 a) of the Convention states that "This Convention shall be applicable only to civil aircraft, and shall not be applicable to state aircraft" and Article 3 d) requires that "contracting States undertake, when issuing regulations for their state aircraft, that they will have due regard for the safety of navigation of civil aircraft";

Recognizing that growing civil air traffic and mission-oriented military air traffic would benefit greatly from a more flexible use of airspace used for military purposes and that satisfactory solutions to the problem of cooperative access to airspace have not evolved in all areas;

Whereas the flexible use of airspace by both civil and military air traffic may be regarded as the ultimate goal, improvement in civil/military coordination and cooperation offers an immediate approach towards more effective airspace management; and

Recalling that the ICAO Global ATM Operational Concept states that all airspace should be a usable resource, any restriction on the use of any particular volume of airspace should be considered transitory, and all airspace should be managed flexibly;

The Assembly resolves that:

- 1. the common use by civil and military aviation of airspace and of certain facilities and services shall be arranged so as to ensure the safety, regularity and efficiency of civil aviation as well as to ensure the requirements of military air traffic are met;
- 2. the regulations and procedures established by Contracting States to govern the operation of their state aircraft over the high seas shall ensure that these operations do not compromise the safety, regularity and efficiency of international civil air traffic and that, to the extent practicable, these operations comply with the rules of the air in Annex 2:
- 3. the Secretary General shall provide guidance on best practices for civil/military coordination and cooperation;
- 4. Contracting States may include, when appropriate, representatives of military authorities in their delegations to ICAO meetings; and
- 5. ICAO serves as an international forum that plays a role in facilitating improved civil/military cooperation, collaboration and the sharing of best practices, and to provide the necessary follow-up activities that build on the success of the Global Air Traffic Management Forum on Civil/Military Cooperation (2009) with the support of civil/military partners.

Associated practices

1. Contracting States should as necessary initiate or improve the coordination and cooperation between their civil and military air traffic services to implement the policy in Resolving Clause 1 above.

- 2. When establishing the regulations and procedures mentioned in Resolving Clause 2, the State concerned should coordinate the matter with all States responsible for the provision of air traffic services over the high seas in the area in question.
- 3. The Council should ensure that the matter of civil and military coordination and cooperation in the use of airspace is included, when appropriate, in the agenda of divisional and regional meetings, in accordance with Resolving Clauses 3, 4 and 5 above.

APPENDIX P

The provision of adequate aerodromes

Whereas major improvements to the physical characteristics of aerodromes are required at many locations;

Whereas in certain cases these improvements will involve considerable outlay and it would be inadvisable to plan such work without taking into account future developments;

Whereas States and aerodrome authorities will continue to need to know the general trends in aerodrome requirements which succeeding generations of aircraft will most likely produce;

Whereas many serious problems can be avoided if the operating requirements of new aircraft are such as to permit them to operate economically without further demands on the physical characteristics of aerodromes;

Whereas the operation of aerodromes has many advantages, environmental considerations have imposed limitations upon the operation of aircraft at some locations. In view of the capacity problems currently experienced globally, account should be taken of the introduction into service of newer quieter aircraft; and

Whereas there is a growing trend for aerodromes to be operated by autonomous entities, the obligation of States to ensure safe aerodrome facilities and services remains unaffected;

The Assembly resolves that:

- 1. the technical requirements for aerodromes shall be kept under review by the Organization;
- 2. there is a need for future generations of aircraft to be designed so that they are capable of being operated efficiently, and with the least possible environmental disturbance, from aerodromes used for the operation of present-day aircraft:
- 3. States shall undertake certification of aerodromes;
- 4. States should ensure that safety management systems are introduced at their aerodromes; and
- 5. States should place greater emphasis on the management of aerodrome operations, with runway safety given a high priority.

Associated practices

- 1. In the light of the results of the continuing review mentioned in Resolving Clause 1 above, the Council, taking into account the requirement to improve still further existing safety levels, should:
 - a) develop additional guidance material on future developments;

ATTACHMENT A
STATE LETTER REF: AN 6/13.3-13/002

Follow-up to the Middle East Civil/Military Cooperation Seminar (Jeddah, Saudi Arabia, 16-19 September 2012)

| State: | Jordan | | | |
|--|------------------------------|---------------|--|--|
| Does Your State establish a Civil/ Military Committee? | | | | |
| ☐ Yes ☐ No | | | | |
| If yes, Does the commi | ittee started its activities | | | |
| ☐ Yes ☐ No | | | | |
| If No specify the date: | | | | |
| | | | | |
| Does Your State implement a plan for the Flexible Use of Airspace (FUA)? | | | | |
| ☐ Yes ☐ No | | | | |
| If yes, FUA will be app | plied to which? | | | |
| Dangerous Areas | | | | |
| Name | | Time | | |
| OJD7 | | 1600-0600 LMT | | |
| D5 | | 1600-0600 LMT | | |
| D6 | | 24\7 | | |
| And / or; | | | | |
| Restricted Areas | | | | |
| Name | | Time | | |
| OJP9 | | 1600-06LMT | | |
| | | | | |
| | | | | |

.____

ATTACHMENT A

STATE LETTER REF: AN 6/13.3-13/002

Follow-up to the Middle East Civil/Military Cooperation Seminar (Jeddah, Saudi Arabia, 16-19 September 2012)

| State: | LEBANON | | | |
|--|-----------------|------|--|--|
| Does Your State establish a Civil/ Military Committee? | | | | |
| ĭ Yes □ No | | | | |
| If yes, Does the committee started its activities | | | | |
| ĭ Yes □ No | | | | |
| If No specify the date: | | | | |
| | | | | |
| Does Your State implement a plan for the Flexible Use of Airspace (FUA)? | | | | |
| ☐ Yes ⊠ No | | | | |
| If yes, FUA will be app | plied to which? | | | |
| Dangerous Areas | | | | |
| Name | | Time | | |
| | | | | |
| | | | | |
| | | | | |
| And / or; | | | | |
| Restricted Areas | | | | |
| Name | | Time | | |
| | | | | |
| | | | | |
| | | | | |

.____

ATM/AIM/SAR SG/13-WP/6 Appendix B

ATTACHMENT A

STATE LETTER REF: AN 6/13.3-13/002

Follow-up to the Middle East Civil/Military Cooperation Seminar (Jeddah, Saudi Arabia, 16-19 September 2012)

| State: | Oman | u - | | | |
|--|------|-------------|--|--|--|
| Does Your State establish a Civil/ Military Committee? | | | | | |
| X□ Yes | Yes | | | | |
| If yes, Does the committee started its activities | | | | | |
| X□ Yes □-Ne- | | | | | |
| If No specify the date | : | | | | |
| | | | | | |
| Does Your State implement a plan for the Flexible Use of Airspace (FUA)? | | | | | |
| X□ Yes □ No | | | | | |
| If yes, FUA will be applied to which? | | | | | |
| Dangerous Areas | | | | | |
| Name | | Time | | | |
| ALL | | AS REQUIRED | | | |
| | | | | | |
| | | | | | |
| And / or; | | | | | |
| Restricted Areas | | | | | |
| Name | | Time | | | |
| ALL · | | AS REQUIRED | | | |
| | | | | | |
| | | | | | |

ATTACHMENT A
STATE LETTER REF: AN 6/13.3-13/002

Follow-up to the Middle East Civil/Military Cooperation Seminar (Jeddah, Saudi Arabia, 16-19 September 2012)

| QATAR | | | | |
|--|---------------------------|--|--|--|
| lish a Civil/ Military Co | mmittee? | | | |
| ☑ Yes ☐ No | | | | |
| If yes, Does the committee started its activities | | | | |
| ☑Yes □ No | | | | |
| : | | | | |
| | | | | |
| Does Your State implement a plan for the Flexible Use of Airspace (FUA)? | | | | |
| ☑ Yes 및 No | | | | |
| If yes, FUA will be applied to which? | | | | |
| Dangerous Areas | | | | |
| | Time | | | |
| | H24 | | | |
| | ACTIVATED BY NOTAM | | | |
| And / or; | | | | |
| Restricted Areas | | | | |
| | Time | | | |
| | НЈ | | | |
| | H24 | | | |
| | H24 | | | |
| | H24 | | | |
| | lish a Civil/ Military Co | | | |