



*International Civil Aviation Organization*

**Thirteenth Meeting of the APANPIRG  
ATS/AIS/SAR Sub-Group (ATS/AIS/SAR/SG/13)**

Bangkok, Thailand, 23-27 June 2003

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**Agenda Item 4: Consider problems and make specific recommendations concerning the provision of ATS/AIS/SAR in the Asia Pacific Region**

**ALTITUDE RESERVATIONS**

(Presented by the United States of America)

**SUMMARY**

This paper encourages States to consider the need for developing an Altitude Reservation Memorandum of Understanding with the Pacific Military Altitude Reservation Function (PACMARF).

**1. BACKGROUND**

1.1 It is recognized that some military aeronautical operations necessitate non-compliance with certain air traffic procedures. Paragraph 16.1 of the ICAO Air Traffic Management (Doc 4444 PANS-ATM) discusses responsibilities in regard to military aircraft. Temporary airspace reservations, either stationary or mobile, may be established for the use of large formation flights or other military air operations. Arrangements for the reservation of such airspace shall be accomplished by coordination between the user and the appropriate ATS authority. The coordination shall be effected in accordance with the provisions of Annex 11 and completed early enough to permit timely promulgation of information in accordance with the provisions of Annex 15.

1.2 The U.S. military agency in the Pacific responsible for developing altitude reservations (ALTRV) is the Pacific Military Altitude Reservation Function (PACMARF). PACMARF is located in Hawaii and staffed by the U.S. Air Force. They have responsibility for coordinating all ALTRV requests in the Pacific region where a memorandum of understanding (MOU) exists with the appropriate civil aviation authorities. The PACMARF also has a counterpart in Europe (EUCARF) for European and Atlantic ALTRV coordination. Within the U.S., this function (CARF) is staffed by the Federal Aviation Administration. Each performs the same function within its assigned area of responsibility.

**2. DISCUSSION**

2.1 The long-term outlook in the Asia/Pacific Region indicates a steady increase for civil traffic. Therefore, it is imperative to improve upon the status quo by implementing measures that increase the level of safety for all airspace users. The DOD would like to partner with individual air traffic service units in providing an ALTRV co-ordination capability in their airspace/flight information regions (FIRs). The objective of this co-ordination is to achieve the best arrangement in order to avoid hazards to civil aircraft and minimize interference with the normal operation of military aircraft.

2.2 An ALTRV is authorization between PACMARF and the appropriate air traffic service provider, “for airspace utilization under prescribed conditions.”

2.3 The purpose of implementing ALTRV procedures is to provide a higher level of safety when a number of aircraft must be moved with less IFR separation between participating aircraft than is allowed by standard air traffic control criteria. It is also used when multiple aircraft must operate within prescribed altitudes, times, and/or areas.

2.4 The MOU is only intended to establish formal procedures for requesting ALTRV approvals from the air traffic control provider for the Flight Information Region controlled. The decision to approve any request will rest solely with the appropriate air traffic control authority. The establishment of this MOU does not eliminate diplomatic clearance requirements, but will provide a higher level of safety than is presently available using due regard procedures.

2.5 The DOD currently has agreements that establish ALTRV procedures with air traffic control centers in Japan, Korea and the Philippines. We propose using the Appendix as a model to implement an MOU establishing procedures for granting an ALTRV to U.S. military aircraft transiting the various FIRs in the Asia/Pacific region.

**3. RECOMMENDATION**

3.1 States are encouraged to take into consideration the development of an MOU as a formal process to receive, approve and operate ALTRVs within their appropriate FIRs.

3.2 Appropriate ATS providers within the Asia/Pacific Region are encouraged to identify a point of contact for future discussions on this topic.

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