

# PARTICIPATION OF MILITARY AVIATION IN THE RVSM PROGRAMME



By Derek Hodge, Reduced Vertical Separation Minima (RVSM) Programme

*The successful launch of RVSM operations earlier this year was a milestone for the EUROCONTROL Organisation. Some forty-one States, their air navigation service providers (ANSPs), the airspace users and numerous stakeholders from Europe and abroad have been involved. Amongst the major stakeholders were the various national military authorities, who were identified in the very beginning as a critical partner. They were involved in the planning stage with their inclusion endorsed in the RVSM Master Plan. As military authorities, their involvement crossed the whole spectrum of activity from regulator and aircraft operator to air traffic service provider.*

It was a fundamental requirement for the implementation of RVSM that there was access to airspace for military users. It was necessary for Operational Air Traffic (OAT) to operate, as before, with tactical freedom. There was also recognition that some military flights operating as General Air Traffic would not be able to meet the appropriate height-keeping performance to obtain RVSM approval. This meant that an exemption policy had to be developed and agreed by all the participating States to allow non-RVSM approved military flights to operate in RVSM airspace. The exemption policy also meant that adequate definitions of what really constituted a State flight for ATM purposes had to be determined in conjunction with a Legal Task Force. The legal considerations on what constitutes a State flight were based on the general provisions of the ICAO Chicago Convention and led to the development of four key principles to identify State aircraft for ATM purposes. These principles were later endorsed by the EUROCONTROL Provisional Council for application in other ATM Programmes. The participat-

ing States, however, also requested that wherever practicable, military forces should seek to modify regular users of the GAT structure (e.g. transport aircraft, tankers) so that they meet the RVSM approval requirements.

*Since the implementation of RVSM on 24 January 2002, the operation of State flights through RVSM of the European Region airspace has been relatively trouble-free.*

The need to identify non-RVSM approved flights, both civil and military, led to specific changes for air traffic service systems support and flight planning requirements. It was essential that ATC be systematically aware as to the RVSM-approval status of all aircraft

and that of a State aircraft requesting operation within the RVSM airspace of the European Region. This was essential as ATC is selectively applying two vertical separation standards, since the separation of 1000ft (300m) may only be applied between RVSM-approved aircraft and 2000ft (600m) is the applicable vertical separation between non-RVSM approved State flights and any other aircraft operating within RVSM airspace.

It was evident with all the preparation for RVSM that an awareness campaign would be required that was targeted at a military audience. It was sometimes difficult to reach the working level in the military structure as most of our direct contacts were at Ministry of Defence level. Therefore, the RVSM Programme provided briefings that ranged from NATO Air Traffic Management Committee (NATMC) to the NATO Airborne Early Warning Force at Geilenkirchen. Wherever possible, the joint attendance of civil and military pilots and controllers was encouraged at national briefings and training. Some States also conducted joint RVSM training for both civil and military which was innovative and encouraging. Additional specific publicity material for military personnel, a guidance document and a military workshop were provided in order to propagate an understanding of RVSM approval requirements and flight planning needs and to get feedback from the military community. For future similar airspace or equipment initiatives, the awareness campaigns should also be aimed at the whole aviation community, both civil and military. Internally, of course, there was constant dialogue with the EUROCONTROL Military Experts Unit (EMEU) and the EUROCONTROL Civil/Military Interface



Standing Committee (CMIC). This effort by the EUROCONTROL Agency was well received by the military community.

RVSM National Programme Managers were the principal working links between the RVSM Programme and the States but, additionally, military points of contact were also identified so that the progress of the military authorities for RVSM could also be tracked. Their responsibilities included flight crew training, the completion of Letters of Agreement (LoAs) between Area Control Centres (ACCs) and Air Defence Units as well as overall assessments as to the effect of RVSM on their military operations. The participation of military controllers in some of the simulations was valuable in assessing the impact of the implementation of RVSM on OAT operations, as well as the specific simulation requirements to assess the handling of non-RVSM approved State flights operating as GAT and the potential adverse affects on ATC.

Since the implementation of RVSM on 24 January 2002, the operation of State flights through RVSM of the European Region airspace has been relatively trouble-free. The handling of non-RVSM approved State flights and the application of 2000ft and 1000ft vertical separation during busy periods was a concern to air traffic controllers, particularly with regard to sector capacity. This apprehension has largely diminished given the low traffic numbers of non-RVSM approved State flights (about 150 daily flights in RVSM of the European Region airspace). The efforts of some States, and particularly the United States of America, to modify their transport/tanker fleets to RVSM requirements is commendable. The numbers of non-RVSM approved military flights represent some 50% of military traffic within RVSM airspace and about 1% of IFR flights operating at FL 290 and above. The numbers of modified airframes are ahead of our forecast expectations at present.

For the future, when considering the applicability of specific aircraft equipage requirements or airspace changes for aircraft operating within the airspace of the ECAC Member States, particular consideration needs to be given to the accommodation of State flights so that the safe and efficient co-existence of civil and military operations can be maintained. The experience of the RVSM Programme is that the key to the flexible use of airspace is the full commitment and early involvement of both parties, civil and military, in changes of practices and procedures. ■