

Supplementary Instruction (SI)

CAP 493 MATS Part 1

Safety and Airspace Regulation Group
Airspace, ATM and Aerodromes



Number 2014/02

Issued 23 January 2014

Effective Date: 24 July 2014

FORMATION FLIGHT PARAMETERS

1. Introduction

- 1.1 Commission Implementing Regulation (EU) No. 923/2012 – Standardised European Rules of the Air (SERA) transposes ICAO Annex 2 and elements of ICAO Annex 11 into directly binding EU law. One aspect of SERA specifies the maximum lateral, longitudinal and vertical distance between each aircraft and the formation leader. However, the SERA parameters also do not apply directly to State aircraft.
- 1.2 Legacy UK common military and civilian procedures enable formations to operate displaced up to 1 NM laterally and longitudinally from the flight leader and at the same level, further extended in Class F/G airspace or subject to special arrangements. However, SERA require formations to operate within 0.5 NM laterally and longitudinally but within 100 ft vertically.

2. Analysis and Revised UK Procedures

- 2.1 The CAA, in collaboration with the Ministry of Defence (MoD), NATS and civilian formation flight operators, have reviewed the SERA provisions, considered the safety risks both to the provision of ATS and within the formation, and agreed revised UK requirements. It has been established that:
 - a) Adoption of the SERA 0.5 NM lateral and longitudinal parameter by civilian formation flights is considered to be acceptable. However, for military formations, the reduced distance generates intolerable in-flight safety risk.
 - b) The allowance for a 100 ft vertical displacement within a formation reflects the reality of today's formation flights, particularly when conducting turns. Allied with formation elements squawking standby, it is not considered that such vertical allowance will generate adverse effect on ATS provision. In accordance with SERA, the additional vertical displacement **does not** necessitate any additional vertical separation to be applied, and the formation can, for ATS purposes, be considered to be operating at the level allocated by the formation leader.
- 2.2 The CAA and the MoD aspired to the maintenance of continued common civilian and military formation flight parameters; however, this could not be achieved given the safety risks identified. Consequently, the UK lateral and longitudinal provisions for military formation flights will remain as today, but civilian formations will adopt the reduced SERA criteria. However, civilian and military formation flights will all be allowed to operate, within 100 ft vertically, in accordance with SERA.

- 2.3 In addition to above, the formation procedures have also taken account of future wider use of Class E airspace in replacing current UK Class F airspace. As VFR aircraft can operate without an ATC clearance in Class E airspace, the procedures for such VFR formation flights reflect those for Class F/G airspace. However, IFR formation flights in Class E airspace are treated as per those in Class A-D airspace.
- 2.4 Revised CAP 493 formation procedures, effective 24 July 2014 are at Annex A. The updated UK AIP will be published on the same date. Consistent Military procedures are also being promulgated.

3. Queries

- 3.1 Any queries or further guidance required on the content of this SI, or queries relating to the availability of this SI, should be addressed to:

ATS Enquiries
CAA Safety and Airspace Regulation Group
Airspace, ATM and Aerodromes
2W Aviation House
Gatwick Airport South
West Sussex
RH6 0YR
E-mail: ats.enquiries@caa.co.uk

4. Cancellation

- 4.1 This SI shall remain in force until 24 July 2014.

<i>Number</i>	<i>Title</i>
2010/04	<i>Procedures and Phraseology concerning Level Restrictions associated with Standard Instrument Departures</i>
2013/06	<i>Objectives and Responsibilities of Air Traffic Control</i>
2014/01	<i>Wake Turbulence</i>

.....