

SAFETY AND AIRSPACE REGULATION

ACTIVITY NO 2014-00-0110

04 Sep 14

See Distribution



AIRSPACE CO-ORDINATION NOTICE

USAF C-17 STATION KEEPING EQUIPMENT (SKE) FLIGHTS IN UK AIRSPACE

References:

- A. E-mail: RE: Review of Annual Airspace Coordination Notice for C17 SKE Flights in UK dated 03 Sep 14.
- B. Manual of Military ATM Ch 11.

ALL TIMES UTC

INTRODUCTION

1. In accordance with Reference A, and in accordance with Reference B, the following measures have been agreed by SARG with the organiser and airspace controlling authorities to accommodate the subject Unusual Aerial Activity.

OVERVIEW

2. USAF C-17 Globemaster aircraft are required to carry out formation flights in stream formation, using SKE. SKE is a multipurpose, time-ordered, avionics system that provides the capability for C-17 aircraft to maintain a fixed formation position in either VMC or IMC. Aircraft will operate in Lower, Middle and Upper airspace, with typical longitudinal spacing of approximately 4000ft between aircraft. The formation will fly at co-altitude and with lateral separation of 500ft. Routinely, SKE flights will comprise of up to 6 aircraft. Exceptionally SKE formations in excess of 6 aircraft may be flown. However, these flights require special approval and will be co-ordinated and notified by separate ACN. SKE formations may be flown anywhere in the UK and will also utilise the UKLFS. The lack of manoeuvrability of the formation will make special handling by ATS units essential.

3. Most C-17 Globemaster aircraft have been upgraded with an improved SKE system called FFS (Formation Flying System), and eventually all USAF C-17 Globemaster aircraft will be retrofitted with the new and improved system. SKE FFS formation geometry and procedures are exactly the same as the legacy SKE; the differences between the two systems are internal to the aircraft only.

4. This ACN does not cover SKE departures and arrivals from individual Airfields. The Sponsor/Formation Leader is responsible for ensuring that the ATC agencies at these Airfields are fully conversant with the SKE procedures to be employed.

DATES AND TIMES

5. Flights occur regularly and will be notified by the Sponsor.

Civil Aviation Authority

CAA House 45-59 Kingsway London WC2B 6TE www.caa.co.uk
Telephone 020 7453 6599 DFTS (9) 6453 ext 6599 Fax 020 7453 6593
Email ausops@caa.co.uk

VERTICAL LIMITS

6. As notified by the Sponsor.

POINT OF CONTACT/SPONSOR

7. The Sponsors of this ACN are:

C-17 Operations	Tanker/Airlift Control Centre (TACC)
HQ AMC/A3DT	Diplomatic Clearances
402 SCOTT DRIVE, UNIT 3A1	Comm: 1-618-229-3008
SCOTT AFB IL 62225-5302	Fax Comm: 1-618-229-0154
Comm: 1-618-229-0459	EMAIL: tadip@scott.af.mil

AIRCRAFT

8. SKE flights will involve between 2 and 6 C-17 Globemaster aircraft.

NORMAL TCAS-OVERLAY/SKE FORMATION PROCEDURES

9. The TCAS-Overlay system provides backup to the legacy SKE system and is mandatory for formations to operate in IMC. SKE is used as the primary formation reference and any deviation between SKE and TCAS-Overlay beyond a predetermined value will be treated as a SKE malfunction and appropriate corrective procedures will be followed. These corrective procedures may involve the break-up of the formation.

10. All aircraft in the formation will operate TCAS in TA-Only mode. All aircraft will leave the IFF system in 'ATC-ON' unless directed otherwise by ATC. In formations larger than 3 aircraft, the formation lead and trail aircraft will keep TCAS Broadcast Active while all other formation aircraft will switch to Broadcast Inhibited. In formations of three or less all aircraft will remain in Broadcast Active.

AREA AND ROUTES

11. Operations in the UK could include both formation flights being staged from an airfield in the UK or a transit of UK airspace only. Flights will normally be mounted from RAF Brize Norton or RAF Mildenhall but may originate from other airfields following prior and timely consultation with the appropriate ATC agencies. Some routes will involve crossing controlled airspace (CAS), normally under the control of the appropriate ATS Unit. Occasionally, it may be necessary for the formation to obtain a procedural clearance to cross CAS. The following routes are recommended for crossing CAS although other routes may also be requested:

- a. Lichfield, Gamston and Daventry RCs. Flights to East and North East England and to Scotland should utilise the Lichfield RC at FL140, the Gamston RC at FL190 or the Daventry RC at FL100.

AIRSPACE RESERVATIONS

12. ATCCs and Terminal ATC Units. The Sponsors are responsible for seeking approval for the intended route with the appropriate Duty Supervisor(s), and for advising those ATC agencies on the proposed route from which an ATS may be required. Such action will activate this ACN.

13. Low Flying. The appropriate USAF command and control agency, in conjunction with the C-17 aircrew, will co-ordinate all low level flights with the controlling authority.