SERA PART C - FREQUENTLY ASKED QUESTIONS

SERA Part C represents the final stage of SERA development, and Phase 2 ('SERA C2') the last stage in SERA implementation. SERA Part C Phase 1 took effect on 18 August 2016 and SERA C2 takes effect on 12 October 2017. Amendments to CAA CAPs and the UK Aeronautical Information Publication (AIP) have been prepared and changes to these will be progressively published during the next few months.

Although SERA C2 brings little change to current airspace and ATM arrangements, a number of elements of SERA C2 are exposed to certain sectors of the flying community for the first time. In some cases these elements do represent changes, but in the main they don't. It's important to understand what these are and their impacts, so the CAA has prepared a number of 'Frequently Asked Questions' to foster that understanding.

- Q1: For some time now the CAA has published a consolidation of the SERA rules, EASA 'Acceptable Means of Compliance' and Guidance Material, the UK Rules of the Air and various UK General Permissions and Exemptions. Will this be updated to reflect SERA Part C Phase 2?
- A1: Yes, the consolidation at www.caa.co.uk/sera has been updated ahead of SERA C2 taking effect. This will run alongside the current version until 12 October, when the version dated 16 May 2017 will be removed.
- Q2: Does the SERA definition of 'Air Traffic Services (ATS) Unit' include the 'Air Ground Communication Service' (AGCS, aka 'Air-Ground')?
- A2: No. AGCS as detailed in <u>CAP 452</u> (Aeronautical Radio Station Operator's Guide) is not considered an ATS. An Air Traffic Services Unit in the UK is an Air Traffic Control Unit, a Flight Information Centre, or an Aerodrome Flight Information Service Unit.
- Q3: Why does SERA.5015(c) state that "... no invitation to change from IFR flight to VFR flight shall be made by ATS either directly or by inference" and does the same apply to in the opposite sense i.e. changing from VFR flight to IFR flight?
- A3: The choice of flight rules is the sole responsibility of the Pilot-In-Command; this is not changed by SERA. The requirement reflects long-standing, ICAO-derived UK practice that is reflected within the UK FIS, CAP774) and requirements in The Manual of Air Traffic Services Part 1 (MATS Part 1, CAP 493).
- Q4: SERA.7002 requires the provision of collision hazard information to aircraft when a surveillance based Air Traffic Service (ATS) is provided. Does this change the service provision principles contained within the UK Flight Information Services (UK FIS)?
- A4: SERA.7002 specifically relates to collision hazard information when ATS based on surveillance are provided. A "controlled flight" is defined by SERA as "any flight which is subject to an air traffic control clearance". Therefore, an "identified controlled flight" is a controlled flight identified by surveillance. Furthermore, the provisions of SERA.7002 only apply to flights within Class A airspace, VFR and IFR flights in Classes B to D and IFR flights within Class E airspace.

This provision is derived from ICAO Document 4444, Procedures of Air Navigation Services Air Traffic Management., the requirements of which have been a longstanding feature of The Manual of Air Traffic Services Part 1 . Therefore, SERA.7002 does not introduce a change to UK ATS provision.

If so requested by the pilot or if, in the opinion of the controller, the situation warrants, a course of avoiding action should be suggested. The affected pilot will be notified when the conflict no longer exists. There is no impact upon or change to the service provision principles of the UK FIS in this regard.

- Q5: Does the wake turbulence separation requirements prescribed within SERA.8012 apply to small General Aviation aerodromes?
- **A5:** The wake turbulence separation minima described in SERA.8012 can only be applied by an Air Traffic Control Officer (ATCO).

An Aerodrome Flight Information Service Officer (AFISO) is required to provide a warning of the possibility of wake turbulence where this is known, but doesn't apply the wake turbulence separation minima.

Air Ground Communication Service is not considered to be an ATS and providers will not provide any form of warning. SERA.8012 does not change extant United Kingdom practice in this respect.

- Q6: Some small aerodromes operate hard and grass runways simultaneously. How does SERA.8015, which introduces a requirement for an air traffic control clearance, apply to these types of aerodrome?
- **A6:** SERA.8015 applies to those aerodromes where an Aerodrome Control (ATC) function is provided, and SERA.8015's requirements will already apply there.

Uncontrolled aerodromes (those where Aerodrome Flight Information Service (AFIS) or Air Ground Communication Service (ACGS) is provided) are out of scope. SERA.8015 therefore does not introduce a change to longstanding extant United Kingdom practices.

- Q7: SERA.10001 introduces the use of "operations normal" RTF phraseology when two-way radio-communications have not occurred with the same Air Traffic Service Unit (ATSU) during the preceding 20 to 40 minutes. How does this requirement affect General Aviation?
- A7: Although within Europe it is more commonly associated with flights over mountainous or sparsely populated areas, including sea areas, this procedure is already available to pilots within the United Kingdom FIRs and elsewhere throughout Europe regardless of the type of air traffic service being provided.
- Q8: SERA.13001 requires the pilot of an aircraft equipped with a serviceable SSR transponder to operate the transponder at all times during flight, regardless of whether the aircraft is within or outside airspace where SSR is used for ATS purposes. Does that mean all UK airspace becomes a Transponder Mandatory Zone?
- A8: No, all it requires is for the transponder if fitted and serviceable to be operated. It does not mandate transponder carriage (transponder carriage requirements are detailed in the <u>United Kingdom Aeronautical Information Publication</u> at GEN 1.5 paragraph 5 'Carriage of SSR Transponder Equipment'; transponder operation requirements are at ENR 1.6 paragraph 2 'SSR Operating Procedures').

Transponder information is not just for ATS use; it is the essential means of conveying aircraft position information to Traffic alert and Collision Avoidance System safety net (TCAS - see www.eurocontrol.int/acas) and other collision warning systems. Operating a transponder enables other aircraft to see you. It also enables

more efficient and safer air traffic service provision and the CAA has traditionally encouraged transponder use as a means of helping air traffic units prevent and/or resolve airspace infringements.

- Q9: SERA.13001(b) states that "Pilots shall not operate the IDENT feature [on the aircraft's transponder] unless requested by ATS". What is the significance of this?
- **A9:** The 'Ident' feature is primarily used by air traffic service units to assist in the identification of aircraft. When selected, the 'Ident' feature causes the aircraft's label as shown on a radar display to flash for approximately 20 seconds.

Therefore, if selected when it is has not been specifically requested by ATS it presents a significant distraction and can delay a controller from completing the task of identification.

The controller will have to wait until the unrequested flashing ident feature stops before issuing the pilot with a specific squawk ident instruction, again delaying identification.

- Q10: SERA.13001 requires the pilot of an aircraft equipped with a serviceable SSR transponder to operate the transponder at all times during flight, but what about aircraft without sufficient electrical power supply, such as gliders?
- **A10:** SERA.13001(c) exempts aircraft without sufficient electrical power supply from the requirement to operate the transponder at all times, **except** for flight in airspace designated by the competent authority for mandatory operation of transponder.
- Q11: SERA.13005(b)(2) states that "in the absence of ATS instructions related to code setting, select code 2000 or another code as prescribed by the competent authority" (i.e. the CAA). SERA.13005(b)(3) then adds that "when not receiving air traffic services, select code 7000 in order to improve the detection of suitably equipped aircraft unless otherwise prescribed by the competent authority. Does this mean a change to current UK practice?
- A11: There is no change to current UK practice. <u>United Kingdom Aeronautical</u> Information Publication (UK AIP) ENR 1.6 lists 2000 and 7000 as follows:

2000 - Aircraft from a non SSR environment, or on the aerodrome surface. Unless otherwise instructed by ATC, Mode S transponder equipped aircraft on the aerodrome surface should select Mode A code 2000 when under tow; or parked and prior to selecting OFF or STDBY.

- 7000 General conspicuity code (see ENR 1.6 paragraph 2.2.2.2)
- Q12: SERA.13010 requires verification of the pressure-altitude-derived level information displayed to the controller to be effected at least once by each suitably equipped ATC unit. How does this affect pilots?
- A12: It doesn't. SERA.13010 refers to an ATS function, not an aircrew function. 'Verification is effected' means that the level information (e.g. Mode C information) is checked by each suitably equipped ATC unit. This is a long-standing ATS practice, derived from ICAO requirements.
- Q13: SERA.14015 refers to the language to be used in air-ground communication. Isn't English is the language of aviation that is available at all aerodromes with an ATSU including Air/Ground units?

- A13: There is no change in the UK, where English is used. Pilots travelling to smaller overseas airfields (i.e. those with fewer than 50 000 international IFR movements per year) should be aware that air-ground communications at those aerodromes may be conducted in English or in the language normally used by the station on the ground.
- Q14: The EASA Air Ops regulations recently introduced the compulsory carriage of an ELT/PLB on EASA aircraft of less than 5700kg. Does SERA.14080 affect this requirement in some way?
- A14: There's no change. With regard to the introduction of the compulsory carriage of an ELT/PLB as per NCO.IDE.A/H.170 in EASA aircraft of less than 5700kg this regulation does not affect those aircraft. Meanwhile, SERA.14080(a)(2) reinforces a long-standing requirement to monitor 121.5 Mhz (VHF International Air Distress) again, nothing has changed.
- Q15: Specific provisions concerning wind shear and volcanic ash state that if wind shear is reported but not encountered then the Pilot in charge (PiC) SHALL advise ATS. Is this is a new requirement?
- A15: No, this is not a new requirement. It stems from ICAO Annex 3 (Meteorology) and is already applied in the UK (see <u>United Kingdom Aeronautical Information</u> <u>Publication</u> GEN 3.5) and in practical terms it more commonly applies to CAT and high end business aviation. Also neither is a common occurrence in the UK.
- Q16: SERA contains numerous references to 'the vicinity of an aerodrome' what exactly does this mean?
- A16: SERA defines 'aerodrome traffic' as being all traffic on the manoeuvring area of an aerodrome and all aircraft flying in the vicinity of an aerodrome', adding that an aircraft operating in the vicinity of an aerodrome includes but is not limited to aircraft entering or leaving an aerodrome traffic circuit'. ICAO Annex 2 additionally states that 'an aircraft is in the vicinity of an aerodrome when it is in, entering or leaving an aerodrome traffic circuit'.

'The vicinity of an aerodrome' cannot be defined in terms of distance from the aerodrome, as operations vary from aerodrome to aerodrome and each aerodrome traffic circuit ('the specified path to be flown by aircraft operating in the vicinity of an aerodrome') will vary in size and shape accordingly.

- Q17: Following the recent queries regarding operating out of airfields/sites within control zones, which aerodrome is being referred to when it says 'the reported conditions at 'that aerodrome'. Is it the controlling aerodrome or the one within the control zone?
- A17: SERA.5005(b) states that, "Except when a special VFR clearance is obtained from an air traffic control unit, VFR flights shall not take off or land at an aerodrome within a control zone, or enter the aerodrome traffic zone or aerodrome traffic circuit when the reported meteorological conditions at that aerodrome are below the following minima..."

Where multiple aerodromes exist within a CTR, it is the reported meteorological conditions at each individual aerodrome which affect the take-off and landing of VFR flights, not just the meteorological conditions at the 'controlling aerodrome'.

When these aerodromes do not have a meteorological office to observe, measure and report meteorological conditions, it is a pilot's responsibility to determine visibility and their ability to comply with the VMC applicable to the classification of the airspace

- in which they are flying, whilst at the same time complying with obstacle clearance and minimum heights requirements.
- Q18: Now the CAA consolidation of the SERA rules, EASA 'Acceptable Means of Compliance' and Guidance Material, the UK Rules of the Air and various UK General Permissions and Exemptions has been updated to reflect SERA C 2, will this be maintained to reflect any future changes to its contents?
- A18: Yes, and industry will be alerted to any subsequent changes. Skywise will be the preferred means of notifying changes.
- Q19: How will industry be kept aware of the various changes to CAPs, etc, that have been brought about by SERA C2?
- A19: The CAA is publishing a Skywise alert to accompany each change as and when they are published. The 'Relevant news' section of the CAA's SERA web page will also be updated to reflect the changes.
- Q20: Will the 'Skyway Code' (CAP1535) be updated to reflect SERA C2 changes?
- A20: Yes, the Skyway Code is a living publication that will be reviewed regularly to ensure it reflects the latest regulatory requirements and best aviation practice. Any updates will appear first on the CAA website at www.caa.co.uk/skywaycode.