RA 3231 – ►Air Traffic Control Unit◄ Terrain Safe Level and Terrain Clearance

Rationale

►Controlled Flight into Terrain (CFIT) is a recognized Risk to low flying activity. Without a known Air Traffic Control (ATC) Unit Terrain Safe Level[1] there is an increased Risk of CFIT. ATC Unit◄ Terrain Safe Levels need to be established to mitigate the Risk of CFIT ►and to ensure that Controllers are◄ aware of their responsibilities regarding terrain clearance when an Air Traffic Service (ATS) ►is provided.◄

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3231(1): ►Air Traffic Control Unit◄ Terrain Safe Level
3231(2): Controllers' Responsibility for Terrain Clearance

Regulation 3231(1)

►Air Traffic Control Unit◄ Terrain Safe Level

3231(1) ►ATC Unit◄ Terrain Safe Levels **shall** be detailed in Unit Orders►[2]◄.

Acceptable Means of Compliance 3231(1)

►Air Traffic Control Unit◄ Terrain Safe Level

1. When providing an ATS, Controllers **should** take account of ►the ATC Unit◄ Terrain Safe Levels.

2. Controllers **should** only descend an ►Aircraft◄ below the ►ATC Unit◄ Terrain Safe Level when;

   a. ►Authorized to do so under a specific procedure or a Front Line Command Order.◄

   b. In support of an ►Aircraft◄ emergency.

   c. When the pilot is in visual contact with the surface.

   d. When the pilot is using terrain-following radar equipment.

   e. When ►Aircraft◄ are operating from / to a ship in accordance with (iaw) BRd 766►[3]◄.

Guidance Material 3231(1)

►Air Traffic Control Unit◄ Terrain Safe Level

3. ►Responsibilities for ATS units where Aircraft conduct Radar to Visual Recoveries and Short Pattern Circuits will be iaw RA 3232[4]◄

Regulation 3231(2)

Controllers Responsibility for Terrain Clearance

3231(2) Controllers **shall** be responsible for terrain clearance under specified conditions associated with the ATS being provided and / or the airspace classification in which an ►Aircraft◄ is operating.

Acceptable Means of Compliance 3231(2)

Controllers Responsibility for Terrain Clearance

4. Controllers **should** be responsible for terrain clearance ►as follows.◄

   a. ►When◄ Radar Control is being provided to Aircraft operating under Instrument Flight Rules (IFR).

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[1] ►Refer to MAA 02: MAA Master Glossary.
[2] Includes Air Traffic Control Centres (ATCCs) and UK Airspace Surveillance and Command System (ACACS) Unit.
[3] Refer to BRd 766 – Embarked Aviation Orders.
[4] Refer to RA 3232 – Provision of Vectors to Air Systems conducting Radar to Visual Recoveries or Short Pattern Circuits below the Air Traffic Control Unit Terrain Safe Level.◄

Acceptable Means of Compliance 3231(2)

b. **Class A** ►**Airspace.**◄ Controllers **should** ensure that levels assigned to IFR flights in receipt of a Radar Control Service provide adequate terrain clearance for the phase of flight as follows:

(1) Final Approach. Controllers **should** allocate levels iaw the approved procedure.

(2) Within the Surveillance Minimum Altitude Chart (SMAC) or Radar Vector Chart (RVC) Area, levels allocated **should** be iaw the information published on the SMAC / RVC.

(3) Within 30 nautical miles (nm) of the Surveillance Antenna. The antenna **should** be that which is being used to provide the ATS. Levels allocated **should** be 1000 ft above any fixed obstacle within:

(a) 5 nm of the ►Aircraft◄, and;

(b) 15 nm ahead and 20° either side of the ►Aircraft's◄ track.

(c) When the ►Aircraft◄ is within 15 nm of the antenna and, provided a SMAC or RVC or approved procedure has been notified, the 5 nm in (a) and 15 nm in (b) may be reduced to 3 nm and 10 nm respectively.

(4) Outside the Above Phases. Levels allocated **should** be 1000 ft above any fixed obstacle:

(a) Which lies within 15 nm of the centreline of any Airway (for flights on Airways); or

(b) Within 30 nm of the ►Aircraft◄ (for all other flights).

Note: In sections of Airways where the base is defined as a Flight Level, the lowest useable level normally provides not less than 1500 ft terrain clearance.

c. **Class E** ►**Airspace.**◄ Responsibility for terrain clearance for IFR flights is as follows:

(1) Controllers utilizing surveillance-derived data to provide a service to IFR flights are responsible for terrain clearance through the use of the relevant RVC, ►SMAC◄ or equivalent system.

(2) When surveillance-derived data is not available, the pilot remains responsible for terrain clearance, but Controllers **should not** assign a level to the pilot below the relevant sector safe altitude. The pilot **should** be advised that surveillance-derived data is not available and that ►they are◄ responsible for terrain clearance.

d. **Visual Flight Rules (VFR) and Special Visual Flight Rules (SVFR) inside Controlled Airspace**. Controllers have no responsibility for terrain clearance of these flights, even if they accept vectors; however, Controllers **should not** assign levels to ►Aircraft◄ operating under VFR or SVFR which accept vectors.

5. **Class G** ►**Airspace.**◄ In Class G ►Airspace◄, terrain clearance responsibilities **should** be iaw the Flight Information Service being provided[►5◄].

Guidance Material 3231(2)

Controllers Responsibility for Terrain Clearance

6. Nil.

[5] ►Refer to CAP 774 – UK Flight Information Services.◄