

## RA 3232 – Provision of Vectors to Aircraft conducting Radar to Visual Recoveries or Short Pattern Circuits below the Air Traffic Control Unit Terrain Safe Level

### Rationale

*Radar to Visual recoveries (R-Vis) and Short Pattern Circuit (SPC) procedures may require Aircraft to be descended and vectored below the Air Traffic Control (ATC) Unit Terrain Safe Level. When Aircraft are deliberately descended below the ATC Unit Terrain Safe Level there exists a greater Risk of Controlled Flight into Terrain (CFIT). This RA details the Controller responsibilities regarding Air Traffic Service (ATS) provision below the ATC Unit Terrain Safe Level* ▶ ◀.

### Contents

#### 3232(1): Provision of Vectors to Aircraft conducting Radar to Visual Recoveries or Short Pattern Circuits below the Air Traffic Control Unit Terrain Safe Level

### Regulation 3232(1)

#### Provision of Vectors to Aircraft conducting Radar to Visual Recoveries or Short Pattern Circuits below the Air Traffic Control Unit Terrain Safe Level

3232(1) Controllers **shall** only provide vectors below the ATC Unit Terrain Safe Level when controlling Aircraft performing R-Vis or SPC ▶ **under receipt of a Traffic Service.** ◀

### Acceptable Means of Compliance 3232(1)

#### Provision of Vectors to Aircraft conducting Radar to Visual Recoveries or Short Pattern Circuits below the Air Traffic Control Unit Terrain Safe Level

1. Controllers **should** only provide vectors to a maximum of 500 ft below the ATC Unit Terrain Safe Level, as depicted by the Radar Vector Chart (RVC) or Surveillance Minimum Altitude Area (SMAA), ▶ **excluding the Final Approach Vectoring Area (FAVA),** ◀ when:

- a. An Aircraft in receipt of a Traffic Service is performing a R-Vis recovery and is within 10 nautical miles (nm) of the Aerodrome.
- b. An Aircraft in receipt of a Traffic Service is performing a SPC or practice SPC and is within 10 nm of the Aerodrome.

▶ **Note:**

**In these scenarios, the Controller is not required to make reference to responsibility for terrain clearance.** ◀

2. ▶ ◀

3. Controllers **should not** provide vectors below the FAVA unless the Aircraft is established on a recognized instrument approach.

### Guidance Material 3232(1)

#### Provision of Vectors to Aircraft conducting Radar to Visual Recoveries or Short Pattern Circuits below the Air Traffic Control Unit Terrain Safe Level

4. **RVC.** RVCs depict the lowest vectoring altitude ▶ ◀ / height in various sectors covering the normal operating range of the surveillance system. The altitudes / heights specified provide a minimum of 1000 ft obstacle clearance or 2000 ft in a mountainous ▶ **area**<sup>1</sup>. ◀

<sup>1</sup> ▶ An area of changing terrain profile where the changes of terrain elevation exceed 3000 ft (900 m) within a distance of 10 nm (18.5 km). ◀

**Guidance  
Material  
3232(1)**

5. **Military Surveillance Minimum Altitude Chart (Mil SMAC).** Mil SMACs depict the lowest vectoring altitude<sup>1</sup> / height in various sectors covering the normal operating range of a military surveillance system. The minimum altitudes / heights available within the SMAA sectors are normally adequate to permit vectoring of an Aircraft to the final approach of a published Instrument Approach Procedure, including Surveillance Radar Approach. However, there may be circumstances where further descent below the SMAA, either on the final approach track, or while establishing on the final approach track, provides operational flexibility. The area that provides this facility is known as the FAVA. The altitudes / heights specified in the SMAA sectors provide a minimum of 984 ft (300 m), rounded up to the nearest 100 ft, to provide 1000 ft obstacle clearance including in a mountainous area<sup>1</sup>. The altitudes / heights specified in the FAVA provide a minimum of 492 ft (150 m), rounded up to the nearest 100 ft, to provide 500 ft obstacle clearance<sup>2</sup>.

---

<sup>2</sup> Refer to CAP 777 – ATC Surveillance Minimum Altitude Charts in UK Airspace Policy and Design Criteria.