

## Design & Access Statement

**Planning Application for Amateur Radio Antenna Installations**  
**74 Eastern Avenue, Chippenham, Wiltshire, SN15 3LW**  
**Applicant: Andrew Hughes**

To: **Wiltshire Council – Planning Department**

Subject: **Planning Application for the Installation and Variation of Amateur Radio Antennas**

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### 1. Introduction

This application is submitted following the grant of permission under reference **25/00431**, which authorised the installation of radio amateur masts at the property. The present application seeks approval for the installation and variation of four antennas necessary for lawful amateur radio operation, the applicant's ongoing technical experimentation, and the applicant's voluntary role in providing emergency communications support.

The applicant is a licensed Amateur Radio Operator, regulated by Ofcom, and a member of both the **Radio Society of Great Britain (RSGB)** and **RAYNET**, the UK's voluntary emergency communications service. The proposed installations are essential for participation in the hobby, for emergency readiness, and for compliance with amateur-radio technical standards.

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### 2. Description of Proposed Antenna Installations

#### Overview

Permission is requested for **four antennas**, comprising both house-mounted and pole-mounted installations, as set out below.

#### Antenna Inventory

##### 1. Antenna 1:

- House-mounted vertical antenna
- Extends approximately **4.5 m above the roofline**

##### 2. Antenna 2:

- House-mounted vertical antenna
- Extends approximately **10 cm above the roofline**

##### 3. Antenna 3:

- **Triple Delta Loop Antenna** mounted on a telescopic monopole mast
- Antenna dimensions: approx. **2.6 m × 2.6 m**, constructed from 10 mm aluminium poles and wire
- Mast extends to **8–8.5 m** only during operation
- Mast retracts to approx. **4.5–5 m**, ~~significantly~~ **below the roofline** and significantly reducing visibility
- Operated silently via hand winch and raised only intermittently, primarily during summer months

##### 4. Antenna 4:

- A **2 mm thick wire antenna**, running from the upper floor

of the property to two ground-mounted poles at the rear of the garden

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### 3. Elevation and Site Drawings

See Site Plans

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### 4. Technical and Regulatory Compliance

The applicant is licensed by **Ofcom** to install and operate amateur radio equipment within allocated frequency bands, including the 10 m band.

All antennas are configured, matched, and tuned to ensure safe operation and to prevent interference to other spectrum users.

Elevated antennas are essential in urban environments due to high RF noise floors and surrounding obstructions, which adversely affect signal clarity.

The installation is periodically checked for electromagnetic compatibility (EMC) in accordance with Ofcom licence requirements.

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### 5. Local Context and Planning Precedent

Comparable telecommunications installations—many far more visually prominent—have been approved throughout Chippenham, often exceeding **15 m** in height and without retractable features.

Unlike permanent mobile-network infrastructure, the applicant's pole-mounted antenna is **intermittent in use** and retractable, resulting in limited and temporary visual presence.

At least **five similar amateur-radio installations** exist in Chippenham; evidence can be provided upon request.

The council has previously undertaken a **site visit** and has seen the installations in situ.

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### 6. Visual and Environmental Considerations

House-mounted antennas are **slim-profile**, neutral in colour, and positioned to minimise skyline prominence.

When retracted, the telescopic mast places the triple delta loop's tip **below the roofline**, rendering it visible only from narrow sightlines between properties.

All masts are **free of cameras, lights, or audio equipment**.

Antenna poles are narrow (approx. **50 mm diameter**; antenna elements approx. **12 mm**, radials approx. **3 mm**).

No overshadowing, loss of light, overlooking, or privacy impacts are created for neighbouring properties.

A single silver vertical antenna remains permanently visible but is extremely low-impact and not readily noticeable from more than two properties away.

The applicant is aware that a concern may have been raised with the council; no neighbour has approached him directly. He remains fully open to constructive dialogue and reasonable mitigation.



(The tall vertical property mounted antenna photographed from 2 houses away (Dead centre in photograph above), you will see blends into the skyline and is barely visible compared with surrounding TV Masts)

## 7. Operational Use

The mast supports a range of antennas according to operational need, atmospheric propagation, and radio-frequency noise conditions.

Amateur radio is a technical hobby in which antenna experimentation and self-construction form a central component.

The property is surrounded by residential homes, many of which feature rooftop TV aerials; the

proposal is consistent with the established character of the area.



*typical Amateur mast and antenna*

## 8. Request for Variation of Permission – Antenna Interchangeability

Due to the inherent variability of radio propagation, changing atmospheric conditions, and the experimental nature of the hobby, the applicant requests permission allowing:

**The installation or substitution of different antennas on the permitted mast**, up to a maximum envelope of **4 m × 4 m × 4 m**, noting that all proposed antennas will contain far more air than physical material within this volume.

**Only one antenna to be installed on the mast at any one time.**

**Flexibility without repeated planning applications**, as innovation and

experimentation often involve antennas that have not yet been conceived or constructed.

This flexibility reflects both common amateur-radio practice and RSGB guidance, which emphasises the importance of optimally sited antennas for reducing transmitted and received interference.

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## 9. Amateur Radio: Technical and Public-Benefit Context

Amateur Radio has contributed extensively to technological development, including innovations such as the **superheterodyne receiver**, which underpins modern mobile phones.

Signal propagation varies significantly with the **13-year solar cycle**, often necessitating replacement or modification of antennas.

The RSGB's EMC guidance states that optimal antenna siting—typically high and away from immediate obstructions—is the most important factor in preventing interference issues.

The applicant is the **sole active RAYNET member in Chippenham**, providing backup emergency communications to statutory authorities, event organisers, and local government.

The installations are therefore essential for maintaining readiness to support community resilience.

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## 10. Planning Policy and Material Considerations

The proposal does **not** affect daylight, sunlight, privacy, noise levels, or

create a sense of enclosure for neighbours.

Visual impact is minimal and mitigated by slender design, retractability, and siting.

RSGB siting guidance for urban environments is followed as closely as practical.

The council has previously accepted the principle of mast installations at the property.

The applicant accepts that a **personal permission** (restricted to the named applicant) would be appropriate and proportionate.

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## 11. Willingness to Cooperate and Mitigation Measures

The applicant is committed to full cooperation and is willing to:

Explore reduced-height or alternative mounting options

Provide photographs, diagrams, and technical specifications

Accept site visits or supplemental documentation requests

Consider neutral colours, screening vegetation, or other visual-mitigation measures

Accept reasonable planning conditions, including:

- keeping the mast retracted when not in use
  - height restrictions
  - colour/finish requirements
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*Typical types of amateur radio antenna for mast fixing*

## 12. Conclusion

This application represents a balanced, proportionate, and technically necessary set of installations that support lawful amateur-radio operation, emergency-communication capability, and continued technical experimentation.

The proposals have **limited and manageable visual impact**, align with local precedent, comply with Ofcom regulations, and incorporate retractable, low-profile, and considerate design measures.

The applicant remains fully committed to responsible operation and ongoing cooperation with Wiltshire Council and neighbouring residents.

**I respectfully request that the Council approve this application.**

**Yours sincerely,  
Andrew Hughes**

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