

NEWQUAY VMATS PART 2

EGHQ

REVISION 2023/08 - EFFECTIVE 10 AUGUST 2023

PRE | PREFACE

Distribution and Scope

This manual is for controllers of Newquay Aerodrome and Approach Control positions, containing specific and local procedures relevant to these positions. Controllers must be familiar with controlling procedures in the UK; this manual should be read in conjunction with MATS Part 1 (CAP 493) and guidance on standard UK radiotelephony phraseology, detailed in CAP 413.

Exclusion of Liability

This manual is for use on the VATSIM Network only and should never be adopted for real world use.

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Acknowledgements

This document has been written and proofread by a huge wealth of people, without which the development of this document would not have been possible. On behalf of all VATSIM UK's members, this acts as an acknowledgement and thanks for their work.

Definitions

The key words "SHALL", "IS TO", "ARE TO", "MUST", "SHOULD", "MAY" are to be interpreted as described in MATS Part 1 (CAP 493).

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Marked Changes

Changes made since the last release are marked with a black bar, as indicated, in the left-hand margin. They are also described briefly in the table below. **New text is in red.**

Amendment History

| Revision | Effective Date | Notes |
|----------|------------------|--|
| 2023/08 | 10 August 2023 | Added descriptions for Penzance (EGHK) and Tresco (EGHT) Heliports (GEN 2.1); Updated Speed Group Table to new harmonised version (SEP 1.2); Updated Frequencies and removed references to fixed relief logon callsigns for all ATC positions (ADC 1.2 and APC 1.2); Revised Airspace Responsibilities for the ATZ (GEN 3.4); Calm runway selection (ADC 1.4); Enhanced Ground Movement and Apron Procedures (ADC 3.1); Added new procedures for Heavy aircraft backtracking (APC 4.3); Updated ATS Route Joining & Exit points to reflect new AIRAC 2303 West Airspace Deployment (WAD) changes (ADC 7.2); Updated duties of the RADAR 2 controller (APC 1.1); Permitted 3 NM separation when voice coordination is available (APC 1.2); APC instruction to coordinate opposite direction arrivals with AIR (APC 2.5); Reminder of added to APC 2.6 for vectoring below SMAA; Updated Squawk Allocation Plan (APC 5.2); Improved information regarding Surveillance Radar Approaches; Added Appendix on Primary-only and non-Radar Procedures; Various wording and formatting changes |
| 2020/13 | 03 December 2020 | First Publication |

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GEN | GENERAL OPERATING PROCEDURES

Chapter 1 Altimeter Setting Procedures

1.1 Altimeter Setting Procedures

In addition to the procedures in MATS Part 1, Section 1, Chapter 6, the following will apply to aircraft within and in the vicinity of the Newquay ATZ.

1.1.1 Departing Aircraft

All aircraft departing, remaining within the circuit, or operating in the vicinity of the Newquay ATZ, shall be provided with the current aerodrome QNH on first contact. The aerodrome QFE shall be provided on request.

1.1.2 Arriving and Transit Aircraft

Aircraft arriving or transiting through the Newquay ATZ, at or below the Transition Altitude, are to operate on the aerodrome QNH. Aircraft may be given a Regional Pressure Setting (RPS) to operate on either on request or if the controller deems it appropriate.

1.1.3 QFE Aerodrome

The QFE for the aerodrome can be calculated by subtracting 14hPa from the aerodrome QNH. Alternatively, the threshold QFE can be calculated by subtracting 11hPa from the aerodrome QNH when runway 12 is in use, or 14hPa when runway 30 is in use.

Note: from this point onwards, all references of vertical measurements in feet are given as altitude above mean sea level.

1.1.4 Transition Altitude

The Transition Altitude for Newquay Airport is 3000ft.

1.1.5 Transition Level

The Transition Level can be calculated from the aerodrome QNH using the table below. The minimum IFR cruising level available for each Transition Level is also given as a guide:

| Aerodrome QNH (hPa) | Transition Level | Minimum IFR cruising level |
|---------------------|------------------|----------------------------|
| 1050 - 1060 | FL30 | FL30 |
| 1032 - 1049 | FL35 | FL40 |
| 1014 - 1031 | FL40 | FL40 |
| 995 - 1013 | FL45 | FL50 |
| 977 - 994 | FL50 | FL50 |
| 959 - 976 | FL55 | FL60 |
| 940 - 958 | FL60 | FL60 |

1.1.6 Altimeter Setting Regions (ASRs)

Newquay is situated directly underneath a border between two Altimeter Setting Regions (ASRs). The following regions shall be used depending on the direction of flight, as outlined in ENR 6-18:

- South/West: Scillies
- North/East: Wessex

Other ASR pressure settings may be provided on request. Alternatively, aircraft may request QNH of another local aerodrome which shall be provided if known.

Chapter 2 Adjacent Aerodromes

2.1 Aerodromes

2.1.1 Perranporth Airfield - EGTP

Perranporth is a public use aerodrome located **9 NM** Southwest of Newquay. It lies outside of controlled airspace and has an A/G station. It is often used as a base for skydiving aircraft.

2.1.2 Truro Aerodrome - EGHY

Truro is an unlicensed airfield located **11 NM** South of Newquay. It lies outside of controlled airspace and has no associated ATSUs.

2.1.3 Bodmin Airfield - EGLA

Bodmin is a public use aerodrome located **13 NM** East of Newquay. It lies outside of controlled airspace and has an A/G station.

2.1.4 Penzance Heliport – EGHK

Penzance Heliport is a commercial heliport located **27 NM** Southwest of Newquay. It has an A/G station and lies outside of controlled airspace, but within the Land's End RMZ. It mainly sees use by Penzance Helicopters, who operate flights to and from Tresco Heliport in the Scilly Isles.

2.1.5 RNAS Culdrose - EGDR

RNAS Culdrose is a military airfield located **24 NM** South of Newquay. It is a Royal Naval Air Station which serves as the home to the Fleet Air Arm's Merlin helicopter, fast jet and Observer training squadrons. Culdrose Radar provides a Lower Airspace Radar Service (LARS) within **30 NM** of the aerodrome and works in close partnership with Newquay when operational due to the proximity of the two stations. It lies outside controlled airspace and shares a Combined MATZ with Predannack Airfield.

2.1.6 Predannack Airfield - EGDO

Predannack is a military owned airfield located **28 NM** South of Newquay. It shares a Combined MATZ with RNAS Culdrose due to its proximity and is mainly used as a relief landing ground for RNAS Culdrose. It too lies outside controlled airspace.

2.1.7 Land's End - E GHC

Land's End is a public use aerodrome located **33 NM** Southwest of Newquay. It lies outside controlled airspace and serves as one of two bases for local airline 'Isles of Scilly Skybus', the other being Newquay itself. It works in tandem with Scillies Approach to provide a service to aircraft wishing to transit the Land's End Transit Corridor as well as providing a Tower service to all arriving aircraft. The airfield has a nearby VOR (LND 114.20 MHz), however this beacon provides no instrument approaches to the airfield. Instead, there are published RNAV procedures for all runways.

2.1.8 Scilly Isles/St Mary's - EGHE

St Mary's is a public use aerodrome located **59 NM** Southwest of Newquay. It lies outside controlled airspace and works with Land's End to provide a service to aircraft wishing to transit the Land's End **Radio Mandatory Zone (RMZ)**. The airfield has a combined Approach and Tower facility, operating as a non-Radar, **Procedural** Approach unit. The airfield has a single NDB (STM 321.0 kHz) which provides the airfield with instrument approaches for two of the four runways.

2.1.9 Tresco Heliport - EGHT

Tresco is a commercial heliport located **59 NM** East of Newquay. It has an A/G station and lies outside controlled airspace, but within the Land's End RMZ. It is mainly used by Penzance Helicopters, who operate shuttle flights to and from the mainland.

2.1.10 Exeter International Airport - EGTE

Exeter is a public use, international airport located **63 NM** East of Newquay. It lies outside controlled airspace, underneath the **Berry Head CTA** and works in close partnership with Newquay in the Lower Airspace Radar Service (LARS) initiative, providing a Service within **30 NM** of the aerodrome. It has two Radar positions, North and South, which are split down the extended centreline of runway 08-26. Both stations are usually only opened simultaneously during the Summer months or during busy periods.

2.1.11 St Eval

St Eval, formerly RAF St Eval, is a disused airfield located just **2 NM** North of Newquay. Today it is home to a high frequency transmitter station forming part of the Defence High Frequency Communications Service. It is operated by Babcock International Group on behalf of the Ministry of Defence.

2.1.12 St Merryn

St Merryn, formerly RNAS St Merryn, is a former Navy base located **4 NM** to the North of Newquay. It is now used mainly **by** gliding and light aircraft.

2.1.13 Roche Airstrip

Roche Airstrip is a privately owned farm strip located **7 NM** East of Newquay. It lies outside of controlled airspace and has no associated ATSU's.

2.1.14 Polzeath Airstrip

Polzeath Airstrip, also referred to as Roserrow, is a privately owned grass airstrip located **8 NM** Northeast of Newquay. It lies outside of controlled airspace and has no associated ATSU's.

2.1.15 RRH Portreath

Remote Radar Head Portreath is a disused airfield-turned air defence radar station located **15 NM** Southwest of Newquay. It has seen many uses over the years including usage by the USAAF and RCAF as a stopover station during the Second World War.

2.1.16 Liskeard Heliport

Liskeard Heliport is a small heliport located **23 NM** East of Newquay. It serves primarily as a landing site for Castle Air Ltd, a helicopter charter firm, and has no associated ATSU's. It lies outside controlled airspace.

Chapter 3 Light Aircraft and Helicopter Procedures

3.1 Responsibilities

The AIR controller is responsible for aircraft operating with visual reference to the surface within the vicinity of the ATZ at or below 2000ft. This is in addition to the responsibilities of the manoeuvring area of the aerodrome.

APC is responsible for the provision of UK Flight Information Services (FIS) as part of the Lower Airspace Radar Service (LARS) program, and a Middle Airspace Radar Service (MARS), to aircraft operating within a **60 NM** radius of Newquay, up to FL195. Transfer of Responsibility

The transfer of responsibility between APC and AIR will occur when the aircraft concerned is approaching the Newquay ATZ at or below 2000ft AMSL.

Both AIR and APC are responsible for assuring that traffic information is passed to aircraft under their control.

3.2 Fixed Wing Aircraft

All aircraft departing Newquay will be given a direction of turn on departure by the AIR controller. This direction can be a generic left or right hand turn out or a more specific compass direction to fly, if required by APC.

All aircraft departing under Visual Flight Rules (**VFR**) should be given a local Squawk in accordance with the procedures set out in APC Section 5.2.

All aircraft departing the ATZ are subject to departure release by APC, who shall issue a level restriction in addition to after departure instructions. The instruction “no level restriction” may be used if safe.

The transfer of responsibility between AIR and APC will take place once the traffic is clear of the traffic circuit and is observed by AIR to be established on an appropriate track away from the airfield.

3.3 Rotary Wing Aircraft

The following procedures are in addition to the procedures for fixed wing aircraft:

Light helicopters may operate on a direct routing to their indicated landing position. The route to the landing position must avoid overflying the Terminal, terminal car parks, Carnanton House and RAF St Mawgan domestic site. Helicopters are not to cross the runway or enter the runway strip (150m either side of the runway centreline) without ATC clearance.

Heavy helicopters (SK61, Puma/Tiger etc.) will be integrated into the fixed wing circuit and approach to the runway. After landing, heavy helicopters may request ground or air taxi subject to landing gear fitted via the taxiways to their parking position.

Marked helicopter landing spots are for use by military helicopters only, unless specifically directed by the AIR controller.

3.4 Transit Aircraft

Aircraft transiting the ATZ at or below 2000ft AAL (2400ft AMSL) are the responsibility of the AIR controller and shall either be in radio contact or coordinated and agreed otherwise between AIR and APC.

Aircraft overflying the ATZ above 2000ft AAL (2400ft AMSL) are the responsibility of APC and should remain on the APC frequency. **Controllers are reminded that these aircraft are not required to contact AIR or APC, provided they remain outside the confines of the ATZ.**

Aircraft in contact with Newquay ATC requesting to transit the overhead should be issued with a Newquay local Squawk in accordance with the procedures set out in APC Section 5.2 for identification purposes. Aircraft may be given a routing on track if conditions allow. **Otherwise, AIR or APC may agree a suitable routing with the aircraft to ensure a safe and expeditious ATZ transit.**

3.5 Rejoin Procedures

Aircraft should call Newquay Radar for rejoin at least **10 NM** from the aerodrome. Aircraft inbound from Bodmin, Truro and Perranporth aerodromes, or any other aerodrome within **20 NM**, should call before setting course towards Newquay. Upon receiving a rejoin request from an aircraft, APC will provide the aircraft with:

- Runway in use
- Aerodrome QNH
- Expected circuit join e.g. *“plan for right base join runway 30”*

Once the aircraft is observed to be on track towards the aerodrome, they should then be instructed to report the field in sight. Once in sight, the aircraft should be transferred to the AIR controller who will issue circuit joining instructions. It is the responsibility of both controllers to provide appropriate traffic information.

Chapter 4 Noise Abatement

All aircraft inbound to or outbound from Newquay are required to comply with the following procedures.

4.1 Departures

Runway 12

Aircraft less than 5700kg MTOW: Climb straight ahead until above 1000ft AAL before turning on track. Avoid overflying Newquay Town or any built up area as much as possible. Instructions for an earlier turn may be given by AIR or APC if traffic or weather conditions dictate.

Aircraft 5700kg MTOW or more: Climb straight ahead until above 2000ft AAL.

Runway 30

Aircraft less than 5700kg MTOW: Climb straight ahead until above 1000ft AAL before turning on track. Avoid overflying Newquay Town or any built up area as much as possible. Instructions for an earlier turn may be given by AIR or APC if traffic or weather conditions dictate.

Aircraft 5700kg MTOW or more: Climb straight ahead until above 2000ft AGL or across the coast before turning on track.

4.2 Arrivals

Jet aircraft must not join the final approach track to either runway at a height of less than 1500ft AGL, except that jet aircraft carrying out visual circuit training may descend from 1500ft AGL on base leg and join the final approach track not less than 1000ft AAL.

Propeller driven aircraft of more than 5700kg MTOW must not join the final approach track to any runway at a height of less than 1000ft AAL.

Unless otherwise instructed, aircraft using the ILS in IMC or VMC shall not descend below the height specified above before intercepting the glide path nor thereafter fly below it. Aircraft approaching without assistance from ILS or Radar shall follow a descent path which will not result in it being at any time lower than the approach path which would be followed by an aircraft using the ILS glidepath.

Chapter 5 All Weather Operations

5.1 Aerodrome Equipment

Runway 30 is suitable for Category II/IIIb operations by operators whose minima have been accepted by the Civil Aviation Authority. This permits operators to take advantage of the 'autoland' feature of many modern aircraft and operate down to a minimum of 75m RVR. Runway 12 is fitted with a Category I installation only and therefore aircraft cannot perform an 'autoland' when making an approach.

5.2 Low Visibility Procedures

The AIR controller is to implement LVPs when the met visibility falls below 1200 metres and/or the cloud base reduces to 200ft AAL and is forecast to deteriorate. Pilots will be informed via ATIS broadcast when LVPs are in force. On VATSIM, this can be done by adding '&lvp' to the ATIS generator URL when connecting the ATIS in EuroScope, or by manually typing it into the "NOTAMS" section in vATIS.

If pilots wish to conduct a Category III autoland when aerodrome LVPs are not in force, the pilots must be offered the same Category III ILS protection to enable the autoland procedure to be conducted safely. Generic information and guidance regarding Low Visibility Procedures (LVPs) is published in CAP168 Chapter 2 Appendix 2B.

Aircraft inbound for an ILS approach must be established at no less than a 10-mile final when LVPs are in force.

SEP | LOCAL SEPARATION STANDARDS

Chapter 1 Separation Standards IFR

1.1 General Procedures

Standard departure separation detailed in MATS Part 1 shall be used to facilitate safe departure separation.

Separation between departing aircraft shall be achieved through the application of time intervals between successive departures. These intervals are dependent on the departure track and aircraft type as listed in the departure separation tables and aircraft speed groups contained in Annex A.

The accurate application of time separation minima is required to ensure that successive departures following a similar or the same departure track are separated by a minimum of five nautical miles when those aircraft reach their initial cleared altitude or flight level.

All aircraft are subject to a departure release from APC. Successive departures should be given a time interval within the release which must be adhered to by the AIR controller.

Any departure from the runway not in use shall be agreed between AIR and APC.

APC will endeavour to deconflict aircraft in receipt of a Deconfliction Service from all observed conflicting traffic, in accordance with the deconfliction minima set out in CAP 774, Chapter 4, Sections 4.10 and 4.11.

1.2 Departure Intervals

1.2.1 Time-Based Separation

As there are no standard instrument departures at Newquay, there are no strict time-based separation rules between successive departures. Instead, departure intervals shall be coordinated through the individual departure release of all aircraft.

The standard wake turbulence departure intervals are based on sixty full seconds. They are to be applied accordingly between successive departures. Extra time separation should be applied as normal, in accordance with the table illustrated in Annex A, if the speed group differs between the aircraft(s) concerned.

Take off clearance may be given with an allowance for the anticipated take off run on the runway, however the airborne time interval shall reflect a difference of at least the minimum required time separation. When the following aircraft is from a higher speed group, one minute is added to the departure interval. APC shall coordinate the time interval in the departure release. In the absence of APC, AIR may use the table in Annex A as a reference when applying departure separation.

Controllers should be aware that in some weather or operational conditions, the required separation between departing aircraft may be significantly eroded unless the intervals required by the speed group table are increased to compensate. The problems are particularly noticeable in the lower speed groups.

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Annex A – Departing Aircraft Speed Group Table

| Group 1 | | Group 2 | |
|--------------------------|----------|----------------------------------|-------------------|
| BN2P/T | DHC6 | ATR variants | King Air variants |
| C208 | E110 | DH8A/B/C | PC12 |
| DA62 | | F50 | SF34 |
| | | JS31/32/41 | SW3/4 |
| | | TBM7/8/9 | |
| Group 3 | | Group 4 | |
| Bae 146/Avro RJ variants | DH8D | All jet aircraft except : | |
| Citations except | E135/145 | • <i>Those in Group 3</i> | |
| C56X/680/700/750 | E50P/55P | • <i>Concorde</i> | |
| CL35/CL60 | P180 | • <i>Military fast jets</i> | |
| CRJ1/2/7/9/X | SB20 | | |
| D328/J328 | | | |

1.2.2 Expeditious Departure Release

The AIR controller may coordinate an expeditious release with APC, if they believe a departure would suffer undue delay whilst waiting for the departure interval to elapse. This may occur even after the initial release from APC.

Chapter 2 Separation of Other Traffic

2.1 Separation Standards in Periods of Low Visibility

When an aircraft is carrying out an instrument approach in low visibility, there is an increased risk of a go-around. This is to be considered by APC when applying separation standards. Detailed missed approach procedures, if required, may be passed to the pilot prior to them commencing the final approach.

For aircraft making an ILS approach, the spacing between subsequent arrivals shall be increased to a minimum of **10 NM**.

Departing aircraft are not to be instructed to use the runway, with an arriving aircraft within **5 NM** of touchdown.

2.2 Separation of Circuit Traffic from IFR approaches

There is no requirement to separate airborne VFR traffic from airborne IFR traffic. However, in order to ensure correct sequencing of circuit traffic with IFR flights, aircraft may be instructed to orbit, land or leave the circuit and hold away from the final approach track. Traffic information is to be passed as appropriate. Conditional instructions such as “*follow the...*” may also be used.

ADC | AERODROME CONTROL

Chapter 1 General Procedures

1.1 General Responsibilities

Aerodrome Control (ADC) is responsible for issuing information and instructions to aircraft under its control to achieve a safe, orderly and expeditious flow of air traffic and to assist pilots in preventing collisions between:

- Aircraft flying in and in the vicinity of the Aerodrome Traffic Zone (ATZ)
- Aircraft taking off and landing
- Aircraft moving on the apron
- Aircraft, obstructions and other aircraft on the manoeuvring area

1.2 Positions

The responsibilities of Aerodrome Control can be split between the 'Tower controller' (AIR) and the 'Ground controller' (GMC). The responsibilities of the two positions are outlined below:

Newquay Tower - EGHQ_TWR 134.375 MHz

- **Coordination Callsign: "Newquay Tower"**
- Responsible for aircraft flying within and in the vicinity of the Aerodrome Traffic Zone (ATZ) at or below 2000ft AAL (2400ft AMSL)
- Aircraft taking off and landing
- All other movements on the active runway
- Coordinating departures with APC and requesting the subsequent release of departures
- Issuing after departure instructions to aircraft operating VFR and IFR choosing not to join the **ATS Route Structure**, as coordinated with APC
- Maintaining the Aerodrome Terminal Information Service (ATIS)

Newquay Ground - EGHQ_GND 121.950 MHz

- **Coordination Callsign: "Newquay Ground"**
- Responsible for aircraft movement on the aprons and taxiways
- Issuing standard departure instructions to all aircraft intending to join the **ATS Route Structure** in accordance with the Standard **ATS Route Structure** Joining Points as detailed in ADC Section 7.2
- Flight plan interrogation and amendment as necessary to conform with the UK SRD, or as otherwise required

Note: due to limitations of VATSIM, 8.33kHz frequencies cannot be used, therefore these frequencies have been used as a substitute.

Aircraft that are required to cross the runway are to be transferred to the AIR frequency. They are not permitted to cross the runway on the GMC frequency.

These responsibilities are in addition to those listed in MATS Part 1, Section 2, Chapter 1, Paragraph 2.

1.3 **Airspace Responsibilities**

AIR assumes responsibility for the Newquay Class G ATZ and immediate vicinity (up to an equivalent 5 NM radius) for aircraft operating under VFR at or below 2000ft AAL. The AIR controller may approve aircraft to join, leave and transit the ATZ at a certain altitude if the traffic situation dictates. All departing VFR traffic are still subject to departure release, except those departing to enter the visual circuit. Aircraft transiting outside the confines of the ATZ may contact APC if they wish, but controllers are reminded that this is not a requirement, but a courtesy.

1.4 **Preferential Runway**

There is no preferential runway system at Newquay, however the calm wind runway shall be Runway 30.

Pilots may request either runway for departure to reduce track mileage to their initial waypoint if the tailwind component is less than 10 knots and traffic conditions permit. Controllers should also be aware of the winds aloft, especially considering Newquay's proximity to the coastline, and its elevation. It is advised that controllers take note of the current wind in comparison with the predicted winds in the aerodrome TAF before considering a change in the active runway.

Considering the Category II/IIIb capabilities of Runway 30, serious consideration should be given to switching operations to Runway 30 when Low Visibility Procedures are in force, to allow aircraft to make a CAT III ILS approach or 'autoland'.

Chapter 2 Aerodrome Characteristics

2.1 Geographical Data

| | |
|------------------------------------|---|
| ICAO Code | EGHQ |
| Location of Reference Point | Lat: 50°26'27" N Long: 4°59'43" W Midpoint of Runway 12/30 |
| Aerodrome Elevation (ft) | 390 |
| Magnetic Variation | 1.05°W (2022) / 0.20° decreasing |

2.2 Declared Distances

All values are in metres unless otherwise indicated.

| Runway | TORA | TODA | ASDA | LDA | Threshold Elevation (ft) |
|-----------|------|------|------|------|--------------------------|
| 12 | 2637 | 2937 | 2637 | 2637 | 306 |
| 30 | 2744 | 3044 | 2744 | 2444 | 385 |

| Runway | TORA | TODA | ASDA | Remarks |
|-----------|------|------|------|--|
| 12 | 1920 | 2220 | 1920 | Take-off from Intersection with Taxiway Bravo 1. |
| 12 | 1271 | 1571 | 1271 | Take-off from Intersection with Taxiway Charlie 1. |
| 12 | 1222 | 1522 | 1222 | Take-off from Intersection with Taxiway Echo 1. |
| 30 | 1441 | 1741 | 1441 | Take-off from Intersection with Taxiway Echo 1. |
| 30 | 1391 | 1691 | 1391 | Take-off from Intersection with Taxiway Charlie 1. |
| 30 | 743 | 1043 | 743 | Take-off from Intersection with Taxiway Bravo 1. |

Chapter 3 Manoeuvring Areas and Apron Parking Procedures

3.1 Ground Movement Procedures

- Aircraft wishing to operate on taxiways and on the Alpha, Foxtrot, SAR and GA Aprons require the permission of ATC before manoeuvring.
- Echo, Golf and Hotel Aprons are designated as ATC non-movement areas and arriving aircraft shall operate at their own discretion once they have crossed the relevant stop bar. Departing aircraft shall be instructed to report at holding points E3, G1 or H1 when ready for taxi.
- Scheduled aircraft will be instructed to taxi onto a parking stand on the Alpha Apron, which will be allocated by ATC using the UK Controller Plugin.
- Visiting light aircraft are to be given directions to the GA Parking area East of the Alpha Apron.
- Visiting business jets will be instructed to taxi to the Echo Apron to park their discretion.
- Heavy aircraft shall be assigned Golf or Echo Apron, which shall be coordinated between AIR and GMC.
- Heavy aircraft shall be backtracked along the runway and instructed to vacate via Taxiways Echo or Golf to their assigned Apron. They are not permitted to use Taxiways Alpha, Bravo, Delta or Echo. If pilots have outdated scenery, then Taxiway Hotel may be used in place of Taxiway Golf.
- Any other aircraft arriving for maintenance or storage will taxi to the Golf and Hotel Aprons depending on their requirements.
- Some locally based light aircraft may also use the Foxtrot, Golf and Hotel Aprons for parking and storage.
- The Foxtrot Apron is generally used by RAF Air Experience Flight aircraft but has the capacity to hold military helicopters as well.

All aircraft stands at Newquay offer nose-in parking and larger aircraft such as E195, A320 or B738 may require pushback onto Taxiway Alpha. Taxiway Alpha runs West/East across the apron boundaries, with all stands pushing directly back onto the taxiway. Aircraft parked on the Apron areas are to request engine start from ATC.

It is not generally necessary to instruct aircraft to pushback in a given compass direction. Instead, the active runway shall be given with the pushback approval, e.g. *“push and start approved for Runway 30.”* Controllers may elect to use a compass direction to aid in clarity of the pushback instructions.

To expedite surface operations, GMC may authorise the simultaneous pushback of more than one aircraft onto the taxiway, provided that there is at least one stand between them.

Most operations occur on the Alpha Apron in front of the terminal building where there are four main parking stands and four extra parking stands for smaller aircraft such as Twin Otters or similar types.

Pilots operating propeller driven aircraft parked on the Alpha Apron may request engine start on stand provided that the aircraft is parked in such a way that it can be taxied off safely. This is particularly useful for DH8D or ATR aircraft and in some circumstances can aid in expedition of traffic flow.

Pushback from all stands on the Alpha Apron is directly onto Taxiway Alpha, thus blocking entry to and exit from the section of Taxiway Alpha between holding point A2 and Taxiway

Bravo. This is particularly important to note when Runway 30 is in use, as aircraft vacating via Taxiway Bravo may come into conflict with aircraft pushing back from the Alpha Apron.

The Runway 12 ILS critical area exists beyond Holding Point A2. If ILS traffic is inbound, GMC shall use A2 as a taxi clearance limit for departing aircraft and transfer them to AIR before they reach A2.

3.2 Parking Stand Limitations

The following aircraft size limitations apply on the Alpha Apron:

| Stand Number | Maximum Aircraft Size |
|------------------------|-----------------------|
| 17 | DHC6 Twin Otter |
| 18 | DHC6 Twin Otter |
| 19 | DHC6 Twin Otter |
| 20 | Airbus A321 |
| 21 | Airbus A321 |
| 21A | Boeing 737-800 |
| 22 | Airbus A321 |
| 23 | Airbus A321 |
| 23A | Boeing 737-800 |
| 24 (Not normally used) | DHC6 Twin Otter |

3.3 General Aviation Parking Procedures

Larger aircraft may be permitted to park at their own discretion on the Alpha Apron to facilitate easier access to the Terminal building. This is, however, entirely dependent on the space available on the Alpha Apron. These aircraft shall otherwise be routed to the Echo, Golf or Hotel Aprons on arrival, as there are no limitations for these Aprons.

Unless otherwise requested by the pilot, all propeller driven General Aviation aircraft shall park on the GA Apron. The locally based Coastguard unit has its own hangar on Taxiway Charlie North (North of Holding Point C3) and shall be directed towards it accordingly.

The locally based Cornwall Air Ambulance may be routed direct to their landing pads in the Southern corner of the airfield. This may be done at the discretion of the AIR controller and, if online, GMC should be notified of this.

All operations on the GA Parking area must be conducted with ATC approval. Access to the General Aviation parking area is via the GA Taxiway to the North of Taxiway Alpha.

3.4 Runway Vacating Procedures

Arriving aircraft may be instructed to vacate via a particular taxiway, or “roll to the end” if it is evident that they will not make a particular exit. Aircraft of similar size as Boeing 737-800/Airbus A320 or smaller can be instructed to backtrack and vacate via a taxiway they have passed, if the distance to the taxiway is less than rolling to the end, and there is no arriving traffic within 10 NM from touchdown. This is particularly useful for business jets and aircraft that will park on the Echo Apron as Taxiway Echo is located roughly in line with the midpoint of Runway 12/30.

Heavy aircraft parking at Echo or Golf Aprons will require backtrack to the relevant runway exit point and shall roll to the end of the runway before turning around to commence the

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backtrack. Turn-around markings are available at both ends of the runway. Heavy aircraft are not permitted to vacate onto, or use Taxiways Alpha, Bravo or Charlie.

Chapter 4 Aerodrome Low Visibility Procedures

4.1 Aerodrome Protections

LVPs are to be initiated when meteorological visibility drops below 1200m, the cloud base decreases below 200ft AAL.

Illuminated stop bars are provided at A2, A3, B2, C2 and E2, as well as vehicle crossings V(North) and V(South).

If Runway 30 is in use, the AIR controller shall ensure that CAT II/III protections are in place before LVPs come into force. Aircraft are to be instructed to hold at the defined CAT II/III holding points in order to protect the ILS Critical Area.

Aircraft vacating Runway 30 are to be instructed to hold initially at the stop bar at holding point A2. Runway 30 is deemed vacated once the aircraft is established on Taxiway Alpha and has passed holding point A1. Runway 12 is deemed vacated once the aircraft is established on Taxiway Alpha and has passed holding point A4.

Aircraft departing Runway 30 are to be held at CAT II/III holding point A3 and aircraft departing Runway 12 are to be held at CAT III holding point A2.

4.2 CAT II/III Holding Points

When LVPs are in force, pilots and controllers should adopt CAT II/III protections. Newquay has defined the following CAT II/III holding points:

- Runway 30: A3
- Runway 12: A2, B2, G1, H1
- Both Runways: C2, E2

Aircraft taxiing via D4, G1 and H1 are required to report holding at, and subsequently when crossing, each of these holding points when LVPs are in force.

Chapter 5 Coordination between ADC/APC

5.1 ADC with APC

AIR may coordinate with APC a specific minimum distance between successive arrivals to create spacing for the arrival of VFR aircraft.

AIR shall coordinate with APC the individual departure release of all departing aircraft, except for traffic that will remain in the visual circuit.

AIR must inform APC when the circuit becomes active and additionally when it ceases to be active, as well as the type of aircraft in the circuit (i.e. fixed or rotary wing).

5.2 APC with ADC

APC will coordinate with AIR all IFR arrivals making any approach other than an ILS.

VFR traffic wishing to transit at or below 2400ft QNH, and all arriving VFR traffic, is to be pre-noted to AIR in good time so they may prepare for the transit/arrival.

APC shall inform ADC when Radar is split, and subsequently **boxed**. Each departure release will include the departure frequency for each aircraft.

In addition to the above, controllers are to coordinate any unusual air activity, delay, unserviceability of equipment or any other abnormal circumstances or situations that would benefit the controllers' situational awareness. This includes missed approaches.

Chapter 6 Circuit Procedures

6.1 General Procedures

The visual circuit at Newquay is generally operated to the South of the airfield but can be conducted on either side if traffic and weather conditions dictate.

The standard fixed wing circuit operates at an altitude of 1400ft QNH (1000ft QFE). The standard rotary wing circuit operates at an altitude of 1100ft QNH (700ft QFE). Circuit altitude may be raised to 2000ft QNH (1600ft QFE) if the traffic situation permits, though APC shall be notified prior to raising the circuit height. Heavy helicopters (SK61 or Puma/Tiger etc) shall be integrated into the fixed wing circuit.

All aircraft operating within the visual circuit should be instructed to Squawk 7010.

Overhead joins of any description are not permitted at Newquay.

Chapter 7 Departure Procedures

7.1 Departure Instructions

Departure instructions are a key part of operations at Newquay due to the distance the airport lies away from any Controlled Airspace. Departure instructions listed in the Standard **ATS Route Structure** Joining Points table in ADC Section 7.2 require no coordination between ADC and APC. Standard Departure instructions are to be given by GMC on initial request for clearance while the aircraft is parked on stand if operating IFR. VFR aircraft shall be given departure instructions by AIR at the holding point.

All IFR Departure Instructions are to be given in the following format:

“[Callsign], after departure runway [number], left/right turn on track [initial waypoint], climb [initial FL], Squawk [assigned Squawk].”

Note: Due to Newquay’s location outside controlled airspace, the phrase “Cleared to [destination]” shall be omitted from the departure instructions.

The maximum initial climb to be given to an aircraft departing to the **ATS Route Structure** is FL190. This is to keep the aircraft below the base of Class C airspace in the Southwest area of the London FIR, which is FL195. If the aircraft’s requested cruise level is lower than FL190, then that level shall be given as the initial climb clearance instead.

Once the aircraft has been cleared for start and/or pushback, GMC shall pre-note APC with the Callsign, assigned Squawk code and Estimated Time of Departure (ETD).

Note: ETD may be calculated by adding 10 minutes to the aircraft’s Actual Off Block Time (AOBT).

7.2 Standard **ATS Route Structure** Joining Waypoints

The following waypoints are to be used as standard **ATS Route Structure** Joining waypoints for IFR departures from Newquay. These shall be the first waypoint in the aircraft’s flight plan.

| Direction | Initial Waypoint |
|---|---------------------------|
| North (traffic to Dublin Group only) | NICXI |
| Northeast | EPACE EXMOR (RFL 170-) |
| East | DAWLY |
| Southeast | ABBEW |
| West/South | LND (Land’s End VOR) |

Further direct routings along the aircraft’s flight plan may be coordinated by APC with AC West before the aircraft in question departs. These routings can be coordinated in advance of the aircraft calling for clearance, or at any point up to the point of release by APC. **Aircraft**

filing via the **ATS Route Structure** and not using one of the points listed above shall have their route amended in accordance with the UK SRD.

Any aircraft departing IFR and not intending to join the **ATS Route Structure** will require individual coordination with APC with respect to their departure instructions. GMC shall inform APC of a “non-standard” routing. APC will then prepare and pass specific departure instructions to AIR. These aircraft shall be given a Squawk code in accordance with the procedures set out in APC Section 5.2 when receiving their departure instructions, which shall be passed to the pilot by the AIR controller.

7.3 Departure Releases

Departure releases are separate from departure instructions as they are determined by the local traffic situation. Every departing aircraft at Newquay is subject to a departure release from APC, except for traffic remaining in the visual circuit.

If an aircraft is lined up on the runway or holding short, and revised post departure instructions need to be passed, the revised post departure instructions shall be prefixed with an instruction to “*hold position*”. If the aircraft is taxiing to a holding point, then the prefix “*hold [holding point]*” may be used in order to allow the aircraft to continue taxiing whilst receiving the revised departure instructions.

A departure release may be requested by AIR as soon as the aircraft in question has been cleared to taxi to the runway holding point. If APC releases the aircraft as cleared, then no departure instructions need to be passed or reiterated to the aircraft before it is cleared for take-off.

An IFR departure release shall be requested in the following format:

“Request release, [Callsign], routing [initial waypoint], climbing [initial level].”

A VFR departure release shall be requested in this format:

“Request release, [Callsign], departing [direction] VFR.”

A departure release is valid for 5 minutes after being issued or 5 minutes after the release time.

Chapter 8 Arrival Procedures

8.1 Late Landing Clearances

Aircraft on an instrument approach will be transferred to the AIR controller at no less than four miles from touchdown. If unable to issue a landing clearance to the aircraft by 4 NM, the phrase *“Expect late landing clearance”* is to be used plus any brief information to improve situational awareness (departing traffic ahead, runway inspection etc). Controllers must not rely on the pilot to initiate a missed approach if a landing clearance cannot be issued before minimum descent height. If it becomes likely that a missed approach will be required, the aircraft should be instructed to do so at the earliest opportunity.

8.2 Land After Procedures

The AIR controller has the option of issuing a land after instruction to arriving aircraft. This may only be done in good visibility and during daytime, and only when the preceding aircraft is also landing. The phrase *“Land after”* shall be used instead of the usual *“Cleared to land”* to inform the pilot that the runway is not clear, as well as details of the preceding traffic and its status e.g. *“Land after the vacating Dash 8.”*

APC | APPROACH CONTROL

Chapter 1 General Procedures

1.1 Positions

Newquay Radar (RADAR 1) - EGHQ_APP 133.400 MHz

- **Coordination Callsign: “Newquay Radar”**
 - Callsign “**Newquay Radar 1**” shall be used when both Radar positions are open
- Responsible for all IFR departures joining, or remaining outside, the **ATS Route Structure**
- Responsible for the sequencing and vectoring of arriving IFR aircraft
- Responsible for presenting departing traffic to AC West as coordinated in **Controlled Airspace** Joining Instructions
- Responsible for entry and exit of the NQY holding facility
- Provides a Middle Airspace Radar Service (MARS) to aircraft arriving and departing Newquay IFR with a final level of FL100 or above, until the point of entering controlled airspace, transfer to AC West or up to a range of **60 NM** from Newquay and up to FL195.
- To release all aircraft for departure in a way that allows for a safe and expeditious departure from Newquay

Newquay Radar (RADAR 2) - EGHQ_L_APP 127.920 MHz

- **Coordination Callsign: “Newquay Radar 2”**
- Performs duties on an ad-hoc basis, as delegated by Radar 1, when the workload of the Radar 1 controller is too high to fulfil all their duties. This will generally be provision of LARS, or Surveillance Radar Approaches. Radar 2 may also be used as a Final Director in exceptional circumstances.

Note: due to limitations of VATSIM, 8.33kHz frequencies cannot be used, therefore the aforementioned frequencies have been used as a substitute.

Radar 2 is only to be opened in exceptional circumstances and when Radar 1 is already online, usually during events or high workload periods. Its primary purpose is to provide a LARS service, when Radar 1 is busy, to reduce the workload of the main Radar controller.

1.2 Radar Separation Minima

APC is approved to reduce deconfliction minima to **3 NM** between aircraft identified with **Primary** and **Secondary Radar**, providing both aircraft are in receipt of a service by the same controller. Separation against aircraft receiving a service from separate controllers may be reduced to 3 NM with coordination, provided both controllers have a means of voice communication available.

Chapter 2 Arriving Traffic

2.1 Arriving IFR Traffic from the **ATS Route Structure**

Traffic inbound to Newquay from the **ATS Route Structure** should route towards the NQY NDB after their final waypoint. The standard arrival routes are detailed in the table below.

| Approach from | Via ATS Route(s) | Route |
|------------------|-------------------------|----------------------|
| Northeast | N92 | EXMOR DCT NQY |
| East | L620 | DAWLY DCT NQY |
| Southeast | N864 | BHD DCT NQY |
| West | N/A | LND DCT NQY |
| Southwest | N/A | DCT NQY |

Traffic inbound from the North may route **ADHAV DCT** NQY. AC West may also elect to route an aircraft direct to the NQY NDB before or without routing via these standard waypoints in order to expedite traffic flow or resolve conflicts with other traffic (subject Danger Area activity). This may be done with no prior coordination provided a pre-note to Newquay APC has not already taken place.

Prior to transfer to Newquay APC, aircraft will be cleared to leave controlled airspace by AC West and routed direct to the NQY NDB. This traffic will be pre-noted to Newquay APC, and the Radar Service will be downgraded accordingly. The pre-note from AC West will include the following information:

- Callsign
- Final waypoint (before NQY)
- Current Squawk code
- Current cleared level

Newquay APC will agree an acceptance level (typically FL100) and provide a new local Squawk in accordance with the procedures set out in APC Section 5.2, to facilitate identification of the inbound traffic. Prior to transfer, AC West should notify Newquay APC of the type of Radar Service being provided to the aircraft. This may be done verbally or electronically (see APC Section 3.2). AC West shall not transfer traffic above FL195 to Newquay.

In the rare circumstance aircraft are transferred still inside controlled airspace, traffic is released for descent, but APC may not stop descent above the acceptance level. Traffic is **not** released for turn at or below the acceptance level unless otherwise coordinated, while still within the confines of controlled airspace.

2.2 Holding and Stack Procedures

The NQY hold is a racetrack procedure approaching the NDB on differing tracks depending on the runway in use. This allows for direct entry into the procedural approaches laid out in the AIP.

The lowest holding altitude for the NQY hold is 2500 ft, however the lowest holding level is typically the Transition Level, leaving **at least** 1000ft vertical separation from traffic at 3000 ft QNH.

2.3 Expected Approach Times

Expected Approach Times (EATs) should be issued where delay is twenty minutes or more. EATs are given at ten-minute intervals for any of the published approach procedures. For Radar vectored approaches, an interval of five minutes should be used.

2.4 Continuous Descent Approaches

Newquay APC controllers are encouraged to provide a **Continuous Descent Approach (CDA)** where possible. From a controller's perspective the CDA is based on a **3-degree** glidepath. For every **10 NM** the aircraft covers, it will descend 3000ft. This method allows controllers to judge the required track mileage needed for an aircraft to achieve a CDA and wherever possible this should be passed to the pilot.

2.5 Approach Radar Control

Most inbound aircraft can expect an ILS approach for whichever runway is in use at Newquay. Approach controllers should note the characteristics of the ILS system on each runway:

Runway 12 - ILS CAT I 3.0° Glidepath

Runway 30 - ILS CAT III 3.0° Glidepath

The extended centrelines correspond to the localiser centreline beams and the distance markers have been ranged from the same source as the ILS.

APC shall provide Radar vectors that will establish an aircraft at no less than 6 DME during runway 12 operations and 7 DME during runway 30 operations so that the aircraft intercepts the localiser before the glidepath. Note that a period of level flight is not required because of the use of CDAs at Newquay.

Controllers may, at their discretion, vector aircraft to intercept the ILS approach beneath the platform altitudes for the ILS procedure (2000ft for runway 12; 2500ft for runway 30). This will be subject to terrain safe levels depicted on the ATC Surveillance Minimum Altitude chart (EGHQ-5-1), and Area Minimum Altitudes chart (ENR 6-81).

Pilots may request to land on the opposite runway to the notified active, if weather conditions allow. In this instance, coordination shall be affected with AIR to determine if this is an appropriate course of action.

2.6 Vectoring for Approach

Most arrivals are already conveniently positioned for a base leg join for either runway, so not much vectoring is required to establish aircraft on the ILS. All aircraft outside of controlled airspace may be vectored upon Transfer of Communications, unless specifically requested otherwise by the transferring controller.

Alternatively, aircraft may be given own navigation to a **10 NM final or centre fix** for an ILS approach. This reduces controller workload, allowing the controller to focus on providing **services** to other aircraft. This also has the added benefit of giving the aircraft the shortest and most direct routing to the ILS and reducing fuel burn in the air.

Aircraft inbound for an ILS, LOC DME or NDB DME approach to Runway 30 from the East (via EXMOR and DAWLY) may also request to route via the Direct Arrival 12-DME I-NWQ Arc. These aircraft should proceed under their own navigation and must have the required navigation equipment onboard in order to conduct the procedure.

When vectoring aircraft for an instrument approach, levels should be assigned with reference to the ATC Surveillance Minimum Altitude Area (SMAA). Descent below these altitudes can be approved, but the pilot shall be warned they are responsible for their own terrain clearance and service shall be downgraded to Traffic Service. **Controllers are reminded that aircraft operating below the SMAA or MSA cannot be vectored until they return to an altitude equal to or greater than the SMAA or MSA.**

2.7 Missed Approach Procedures

Standard Missed Approach Procedures are published on the Instrument Approach Charts which can be found in the UK AIP. APC may vary the missed approach instructions when AIR notifies them of an aircraft conducting a missed approach. Alternatively, AIR may issue tactical headings at their discretion to ensure separation from other traffic within, or in the vicinity of, the ATZ.

Chapter 3 Coordination with London Area Control

3.1 General Coordination

Individual coordination of arrivals and departures shall be made with AC West (LON_W_CTR) or AC Bandbox (LON_CTR) if available.

As Newquay has no standing agreements with ACC, individual coordination of all arrivals and departures is required. This includes, but is not limited to:

- Obtaining **ATS Route Structure** Joining clearances for departing aircraft
- Accepting pre-notes and coordinating acceptance levels and local Squawk codes for arriving traffic
- Passing relevant information such as whether holding is in progress or serviceability of Radar

3.2 **ATS Route Structure** Joining Clearances

Due to differences in configuration of VATSIM to real world control facilities, the role of Middle Airspace Radar Service (MARS) between FL95 and 195 lies by default with AC West. However, APC is highly encouraged to provide MARS to its own arriving and departing flights, including relay of **Controlled Airspace** Joining Clearances. Controllers shall be flexible and respond to the traffic situation when deciding which station is best placed to provide service to a flight. A **Controlled Airspace** Joining clearance should be requested once the aircraft is airborne, identified and observed to be proceeding on track. The aircraft shall also be less than 10 minutes from the point at which it will join Controlled Airspace. A **Controlled Airspace** Joining clearance shall be coordinated as per the example depicted in the table below.

| Newquay Radar | AC West | Notes |
|---|--|---|
| [Telephones AC West] | "AC West." | |
| "Newquay Radar, request Joining clearance, BEE9JN." | "Pass your message." | |
| "BEE9JN routing DAWLY, estimating time 53, requested level FL270, my Squawk 1740." | "Roger, BEE9JN cleared to join Controlled Airspace on track DAWLY climbing FL210. Squawk 0351 on transfer, frequency 126.075." | <i>Newquay gives the Callsign, Joining waypoint and an estimated time at the waypoint, current Squawk and RFL (cruise level). AC West replies with the Joining waypoint, acceptance level, new Squawk* and next frequency.</i> |
| "BEE9JN cleared to join Controlled Airspace on track DAWLY climbing FL210. Squawk 0351, frequency 126.075." | "Correct." | <i>Newquay Radar reads back the clearance in full, before passing the instructions on to the pilot. The Squawk code given by AC West should only be passed to the pilot immediately prior to transfer. Change of code should be</i> |

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observed by Newquay prior to handover.

*** Note:** a new Squawk may be assigned by APC using the UK Controller Plugin, if the Area Controller does not provide one in the Joining clearance. *This can be done without coordination.*

When passing the Joining clearance to the pilot, the phrase “London clears [callsign] to join Controlled Airspace...” must be prefixed to the clearance. The aircraft may be climbed to the acceptance level given by AC West once the clearance has been received and read back correctly by the pilot.

Newquay APC should notify the receiving controller of the type of UK FIS being provided when coordinating the Joining clearance. This may be done either verbally within the Joining clearance, or electronically. To do this electronically, standard abbreviations of the type of UK FIS, found in GEN Section 2.6.1 of the London (EGTT) vMATS Part 2, shall be inserted into the ‘FREE TEXT’ column of the datablock. For convenience, the standard abbreviations are also listed below.

- Basic Service - **/BS**
- Traffic Service - **/TS**
- Deconfliction Service - **/DS**
- Procedural Service - **/PS**

Once the new Squawk code has been set and validated, APC shall hand the aircraft over to the receiving controller on the frequency given in the Joining clearance. Traffic should be transferred in time for contact with AC West before the edge of Newquay’s MARS boundary (60 NM from the airfield).

Chapter 4 Coordination with Adjacent Airfields

4.1 General Coordination Requirements

Adjacent aerodromes are described in GEN Section 2.1. There are no standing agreements between Newquay and adjacent stations, so coordination of all traffic to be transferred to other units is essential.

APC is to have a means of communication with adjacent Area Controllers, Approach Units and Aerodrome controllers in order to ensure the safe and expeditious flow of traffic and improve the situational awareness of controllers as required.

4.2 Lower Airspace Radar Service (LARS)

Newquay APC provides a Lower Airspace Radar Service (LARS) to aircraft outside controlled airspace up to FL95 and within a 60 NM radius of Newquay. This is an optional service to aircraft outside controlled airspace, however if requested APC shall attempt to provide a service unless the workload of handling IFR traffic makes this impossible.

Aircraft receiving a LARS from Newquay can expect to be fully coordinated with onward units as listed below:

| LARS Unit | Frequency | LARS Range |
|-----------|------------------------------------|------------|
| Culdrose | 134.050 | 30 NM |
| Exeter | 128.975 (North) 123.575 (South) | 30 NM |
| Cardiff | 119.150 | 40 NM |

When coordinating with adjacent units with regards to LARS traffic, a **prenote** shall be given to the receiving controller in the following format:

- Callsign
- Aircraft Type
- Departure & Destination
- Current Indicated Altitude/Flight Level
- Flight Rules
- Type of UK FIS
- Current Squawk

The receiving controller should then reply with a new Squawk from their range, and next frequency.

The aircraft may be transferred to the next controller on the frequency given in the **prenote** once the new squawk has been set and validated. A **prenote** may be coordinated up to 5 minutes prior to transfer.

Chapter 5 Squawk Code Allocation Plan

5.1 Squawk Range

Newquay has been allocated a Squawk range of 1730-1757 for local use by APC in accordance with the UK SSR Code Allocation Plan contained within Section ENR 1.6 of the UK eAIP.

5.2 Code Assignment Plan

| Use/Position | Code Range | Notes |
|---------------------------------------|------------|--|
| Inbound Traffic (Radar 1) | 1730-1737 | Can be used as overflow departure squawks – start at 1737 and work backwards |
| Outbound Traffic (Radar 1) | 1740-1746 | |
| LARS Conspicuity Code | 1747 | Not to be issued to aircraft departing or inbound to Newquay |
| Coordination/LARS (Radar 2) | 1750-1756 | Can be used as overflow arrival squawks |
| LARS when no discrete codes available | 1757 | To be used once 1750-1756 range has been fully utilised |

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Appendix A - Surveillance Radar Approaches

Newquay has the capability to offer a Surveillance Radar Approach (SRA) to aircraft which either request it or have an equipment failure and it is the only method of conducting a safe landing.

Both SRA procedures at Newquay terminates at 2 NM from touchdown and advisory level checks should be conducted at one-mile intervals. If a pilot reports visual during the approach, the SRA can be terminated, and the pilot will continue visually. The landing clearance for the SRA is to be obtained from AIR no later than 4 NM from touchdown, as the aircraft will be retained on APC's frequency, until the approach is complete. The landing clearance must be relayed to the aircraft by APC.

The SRA for Runway 30 includes a step-down fix at 4 NM.

The advisory altitudes and heights are listed below for both runways for reference. Data is accurate as of AIRAC 2023/03.

Runway 12 RTR 2 NM (Threshold Elevation: 306) 2.86° Glidepath

| Range from Touchdown (NM) | Altitude (ft QNH) | Height (ft QFE) |
|---------------------------|-------------------|-----------------|
| 5.5 (Descent Point) | 2000 | 1694 |
| 5 | 1880 | 1574 |
| 4 | 1580 | 1274 |
| 3 | 1270 | 964 |
| 2 | 970 | 664 |

Runway 30 RTR 2 NM (Threshold Elevation: 385) 3.0° Glidepath

| Range from Touchdown (NM) | Altitude (ft QNH) | Height (ft QFE) |
|---------------------------|-------------------|-----------------|
| 6.5 (Descent Point) | 2500 | 2115 |
| 6 | 2350 | 1965 |
| 5 | 2030 | 1645 |
| 4 (Step-Down Fix) | 1710 | 1325 |
| 3 | 1390 | 1005 |
| 2 | 1070 | 685 |

Appendix B – Land’s End RNP Approaches

Due to its proximity and Radar coverage, Newquay APC has an additional responsibility of Radar monitoring all aircraft making RNP approaches into Land’s End Airport (EGHC). These approaches are approved for Category A aircraft only.

On transfer to Land’s End, aircraft flying under Traffic Service or Deconfliction Service shall be advised to Squawk Conspicuity and **freecall Land’s End Tower** on 120.250 MHz. Alternatively, Newquay APC may elect to pass the details of the inbound aircraft to Land’s End ATC prior to transfer and instruct the aircraft to **contact Land’s End Tower** on transfer. **If Land’s End ATC is closed, Newquay APC may assign this squawk to the aircraft. Alternatively, the pilot may elect to set the code once they have left the Newquay Radar frequency.**

Once Land’s End has received the aircraft’s intentions to perform an RNP approach, they shall instruct the aircraft to Squawk 4501. Newquay APC shall Radar monitor the aircraft’s approach within the limits of their Radar coverage.

Charts for each RNP approach can be found in the UK eAIP. For convenience, the IAFs for each runway are listed below. **Data is accurate as of AIRAC 2023/03.**

| Runway | Inbound Course | Initial Approach Fixes |
|--------|----------------|------------------------|
| 07 | 067° | BAVKI |
| | | SIVBO (IF) |
| | | KOGOK |
| 16 | 160° | TUBNO |
| | | UMBOB (IF) |
| | | APVOG |
| 25 | 247° | DIBTO |
| | | NIDGA (IF) |
| 34 | 340° | GESVI |
| | | NUTMU (IF) |

Appendix C – Primary-Only and Non-Radar Procedures

Some controllers may wish to simulate Primary Radar-only, or non-Radar operations.

All IFR departures and arrivals, as well as local VFR aircraft and aircraft in receipt of a Lower Airspace Radar Service (LARS), are to be assigned the Newquay Conspicuity Squawk **1747**. This notifies adjacent controllers that the aircraft is in receipt of a reduced service from Newquay, up until the point where a new squawk is assigned.

Aircraft remaining in the visual circuit shall squawk 7010 as normal.

The receiving controller shall be responsible for identification and validation, and shall inform Newquay once they observe the code change. The receiving controller will then need to verify the aircraft's Mode C readout once they have transferred to their frequency. Alternatively, if no adjacent control is available, Newquay APC may instruct the aircraft to report when they have set the assigned squawk.

Newquay is not permitted to provide MARS services when both Primary and Secondary radar is not being simulated. In this situation, Newquay should aim to transfer the traffic once it passes FL100. Joining clearance can be requested and relayed if suitable.

Inbound aircraft will be coordinated as normal, except all aircraft shall be instructed to Squawk **1747**.

During PSR-only operations, APC may continue to log on as **EGHQ_APP (coordination and RTF callsigns remain "Newquay Radar")**. The EGHQ_L_APP split may still be opened in this case.

During non-Radar operations, APC shall log on as **EGHQ_A_APP (coordination and RTF callsigns change to "Newquay Approach")**, using frequency 133.400 MHz. In this case, the EGHQ_L_APP split may **not** be opened.