

## **BRIZE NORTON NOISE MANAGEMENT PROCEDURES**

### **Introduction.**

1. This document is designed to inform the local community about the noise management procedures in place at RAF Brize Norton. It contains extracts from the noise management orders contained in the following documents: Air Engineering Standing Orders (AESO), Brize Air Orders (BZAO), Duty Operations Controller (DOC) Order Book, Terminal Approach Procedure (TAP) Charts and the RAF Brize Norton Defence Aerodrome Manual (DAM) which can be found at: [Defence Aerodrome Manual - RAF Brize Norton](#)

### **Engine Ground Run (EGR) Orders.**

2. **General Policy.** All Engine Ground Runs (EGRs) must be conducted in accordance with the published policy. To minimize noise disturbance to the local community EGRs are primarily to take place during 'normal working hours'. Specific permission is required from either the DOC or OC Airfield Wing for EGRs outside of normal working hours. For requests for EGRs outside normal hours the DOC is to follow the procedure detailed at Annex A, Out of Hours Engine Run Request Form. It should be noted however that only TANSOR, NS, Operational and Theatre specific tasks will be accepted.

### 3. **Responsibilities.**

a. **Squadron Engineering Officer (SEngO).** The SEngO is responsible for ensuring that the requirement to conduct EGRs is actively managed to minimise the out of working hours requirement.

b. **Squadron Personnel.** Squadron personnel are to request permission for an EGR through the Duty Operations Support Controller (DOSC). Request details are to include both the number of engines to be run and to what power setting as well as the duration of the EGR. Out of working hours requests are to include the anticipated operational and engineering impact if permission is not granted.

c. **Duty Operations Controller (DOC).** All EGRs are to be approved via the DOC, acting as OC Operations Wing's representative. The DOC is to record all EGR applications in the DOC EGR Log. The DOC is to make a judgement of the operational requirement against the potential noise disturbance to the local community.

d. **Duty Operations Support Controller (DOSC).** Once an EGR has been approved by the DOC, the DOSC is to determine the most appropriate location in which to conduct the EGR.

4. **Operating Period.** To minimize noise disturbance to the local community, engine ground runs (EGRs) are to be conducted under the following restrictions:

a. **0700 – 1900 (local) – (Normal Working Hours)** To minimize noise disturbance to the local community, engine ground runs (EGRs) are primarily to take place between 0700 and 1900 (local) Monday to Saturday and 0830 – 1900 (local) on Sunday.

b. **1900 – 2300 (local) – (Outside Normal Hours)** EGR requests between 1900-2300 (local) require the approval of the DOC.

c. **2300-0700 (local) (0830L on Sunday and Bank Holidays) - (Quiet Hours)** Permission for any EGRs during Quiet Hours is to be obtained from OC Airfield Wing, via the DOC, and will only be given in exceptional or operational circumstances as confirmed by OC

Operations Wing. The EGR is to adhere to the conditions and locations specified in AESOs and DOSC orders.

5. **EGR Locations and Constraints.** Consideration must be taken regarding prop and jet efflux direction for damage and potential nuisance effects (e.g. use of an additional safety man for EGRs on Bay 20 due to the jet efflux impact on MT route). Platform-specific EGR limitations are as follows:

a. **C17 Globemaster:**

(1) Low Power EGRs are permitted to take place on any C-17 approved bay.

(2) High Power EGRs are to be undertaken at the locations detailed at Paragraph 6.

b. **C130J Hercules.** Low Power (LP) EGRs are restricted to the following locations:

(1) Bays 30 and 29 (all directions). EGR Teams are to be aware that the yellow hatched markings along the shoulder of both bays denote non-load bearing areas, and are also to be aware of the slatted fence to the West of Bay 30. Taxiway G is not affected.

(2) Bays 27 and 26 (no EGRs are to be carried out with the ac facing South). Aircraft are not to be run whilst facing South due to the wind sock to the North of the bays. EGR Teams are to be aware that the yellow hatched markings along the shoulder of both bays are non-load bearing areas.

(3) Taxiway G, East of the MT route. Depending on exact location ATC may close the MT route for the duration of the EGR. DOSC is to consider planned use of the Dangerous Air Cargo (DAC) Pan, Bay 35/37B.

(4) Bays 60-69, subject to no passenger movement on adjacent bays.

c. **C130J Hercules** High Power (HP) EGRs are restricted to the following locations:

(1) Bays 29 and 30 (all directions). When the aircraft is pointed towards the South the efflux will affect the Main Runway. EGR teams are to power down to LP at the command of ATC to allow traffic to transit along the runway. Aircraft facing the North will cause the closure of Taxiway G; the MT Route can remain open. EGR Teams are to be aware that the yellow hatched markings along the shoulder of both bays are non-load bearing areas.

(2) Bays 26 and 27 (no EGRs with aircraft facing South or North West). Aircraft are not to be run whilst facing South due to the proximity of the wind sock to the North of the bays. Aircraft are not to be run at HP whilst facing North West due to the potential damage that could be caused to the door of Hangar 94, and the solar panels adjacent to the hangar. Any EGRs that affect Taxiway G will cause the taxiway to close at the point where the efflux crosses it. The MT route can remain open. When the ac is pointed towards the South the efflux will affect the Main Runway. EGR teams are to power down to LP at the command of ATC to allow traffic to transit along the runway. EGR Teams are to be aware that the yellow hatched markings along the shoulder of both bays are non-load bearing areas.

(3) Taxiway G, East of the MT route. Depending on exact location ATC may close the MT route for the duration of the EGR. DOSC is to consider planned use of the DAC Pan, Bays 35/37B.

(4) Bays 60-69 subject to no Passenger movement on adjacent bays or in the vicinity.

d. **A330 Voyager:**

(1) Low Power. Low power EGRs are permitted to take place at any Voyager approved bay.

(2) High Power. As detailed at paragraph 6.

(3) Compressor Washes. Voyager engine compressor washes are to be carried out on Bay 51.

e. **Visiting Aircraft** (Low and High Power). EGR can be sanctioned IAW time constraints para 4. The location will be determined by the DOC (in conjunction with ATC) with respect to noise, and prop or jet efflux, according to the aircraft size and engine position. The visiting aircraft crew/engineering team must satisfy themselves that the location is suitable for their aircraft type and that no drain covers, signs, or buildings etc will sustain damage during the EGR. High Power EGRs should be carried out at a location detailed at para 6 below.

6. **High Power EGR Locations** (C17, Voyager and Visiting Aircraft). For high power EGRs, several different taxiway locations are used to enable the aircraft to be parked nose into wind. These locations can impinge on traffic using the MT Route. In order to protect other airfield users for the duration of the high power EGRs, the following additional measures are required:

a. **Taxiway Delta.** Used when the wind is from the North. Contact with the ATC remains paramount to ensure that prop or jet efflux does not affect aircraft on the airfield. The positioning of aircraft to be ground run must be done in coordination with ATC to ensure that the aircraft is positioned as close to the hold as possible. Other aircraft parked nearby, especially light aircraft, must be considered.

b. **Taxiway Charlie.** Used when the wind is from the North or South. When the wind is from the North the aircraft is to be parked nose into wind. The MT Route on taxiway Bravo is to be blocked to the South, near to ATC, by an additional member of the engineering team for the duration of the EGR. The JADTEU traffic lights will be selected to RED by ATC. When the wind is from the south the aircraft shall be position such that the junction of taxiways Charlie, Bravo and Golf is not blocked.

c. **Taxiway Golf 2 Hold.** Used when the wind is from the East. Aircraft parked at the Golf 2 Hold in line with the taxiway. The MT Route on Taxiway Golf is to be blocked at the confluence of Taxiways Bravo, Charlie and Golf by an additional member of the engineering team for the duration of the EGR. The JADTEU traffic lights will be selected to RED by ATC. The DOSC is to consider implications of the DAC Pan usage.

d. **Taxiway G (adjacent to Hangar 94, East of MT route).** Used when the wind is from the East or West. Aircraft parked in line with the taxiway to the East of bay 28 entrance. Provided the aircraft is parked to the East of bay 28, maintenance is not impacted by the DAC Pan. DOC and ATC will determine any implication to the MT route depending on exact aircraft location and direction.

**Restrictions in Running of C130 Auxiliary Power Unit (APU)**

7. The running of C130 APUs are to have the following restrictions;

a. In good visibility C130 APUs ground runs are to be run on bays cleared for EGR.

b. In poor visibility (including night) C130 APU's ground runs may take place on the

Southern bays if the time to tow the aircraft to the bays stated in para 5 exceeds the length of the required APU ground run. This is due to the requirement to run the APU in poor visibility whilst the aircraft is being towed.

### High Power EGR Locations



### 8. C-130 ENGINES RUNNING ON AND OFF LOADS.

C-130 Engines Running On/Off loads (EROs) are regularly used for Airborne Delivery Wing (ADW) sorties to maximise flight time and maintain the throughput for basic, continuation, and refresher parachutist training. The request for EROs is to be made in advance and must come from ADW Ops. Once the need has been identified, ADW Ops are to request the authorisation from OC Airfield Wing or Squadron Leader Operations, via the DOC.

### 9. NOISE RESTRICTIONS

a. Crew changes with engines running are to be carried out on the Northside of the aerodrome as expeditiously as possible.

b. Local training sorties, including conversion courses, by Brize Norton based Service aircraft are to be conducted between the following times:

- (1) C-17 aircraft, between 0700 and 1900 (local) Monday to Friday.
- (2) C-130 aircraft, between 0700 and 2300 (local) Monday to Friday.

c. Squadrons wishing to conduct any training after their embargo times must have confirmation of operational necessity by OC Operations Wing if they wish to make more than one approach, before obtaining approval from OC Airfield Wing via the DOC; similarly, the same prior approval process is required if they wish to conduct local training sorties which include visual circuits at the weekend.

d. Local training sorties by non-Brize Norton based aircraft and civil airline aircraft are to be conducted only between 0700 and 1700 (local) Monday to Friday and require the approval of OC Airfield Wing or his nominated deputy. Between 1700 and 2200 (local), visiting aircraft may be accepted for a practice approach and will be permitted to carry out one approach only before departing. These restrictions do not apply to Northolt based

Service aircraft who are to apply the same regulations as Brize Norton-based Service jet aircraft, except that approval is to be sought from OC Airfield Wing prior to Northolt based Service aircraft being accepted for practice approaches between 2200 and 2300 (local) from Monday to Friday or at weekends. If OC Airfield Wing is unavailable, the ATC Supervisor may authorise practise approaches from Northolt based Service aircraft, subject to controller workload.

e. Crews are to plan to fly no more than 2 approaches for training currency purposes (ideally one per pilot maximum) at the end of AAR, and other non circuit training sorties (eg formation flying). Such approaches are not to include practice asymmetric overshoots from Locator approaches, the training for which should be conducted in the flight simulator.

f. Between 1900 and 0700 (local) crews on non continuation training sorties are to plan to fly a straight-in instrument recovery. If a visual join is considered more expeditious, it may be flown with the intention of landing from the first approach, with care taken to avoid noise sensitive areas during the visual recovery.

g. For all full stop landings, and particularly when landing between 2000 and 0700 (local), crews are to plan to land using idle reverse, whenever conditions or sortie profile permit.

h. With the exception of Brize Norton Flying Club, RAF Waddington Flying Club, 637 VGS (Little Rissington), RAF Benson and RAF Colerne Tutors, no local training flying which includes visual circuits is to be carried out on a Saturday, Sunday or Bank Holidays without the operational requirement being confirmed by OC Operations Wing and approval granted by OC Airfield Wing via the DOC.

i. RAF Brize Norton Flying Club is authorised to operate within the following periods:

(1) The Club may operate 7 days per week including Public Holidays.

(2) Club operated aircraft may operate from 0800 to 2300 (local) except for conditions stipulated in para (3) below.

(3) Club operated aircraft may not conduct circuit flying between 1900 and 2300 (local) unless approval has been granted by Squadron Leader Operations. Such requests are to be made at least 24 hrs in advance. There is to be no visual circuit flying between 1900 and 2300 (local) on Sundays.

(4) Club operated aircraft may conduct a take-off to leave the Control Zone and a single landing, on flights of at least 2 hrs duration, at any time between 2300 and 0800 (local). The DOC is to be informed of the flight details 24 hrs in advance and pass such details to the ATC Supervisor.

Note: Paras e, f and g do not apply to main conversion course sorties and sorties on which flight checks are required.

## 10. **Visual Circuit and Runway Selection.**

### a. **Circuit Altitudes.**

(1) Normal 1800 ft QNH. (1500 feet agl)

(2) Light aircraft 1300 ft QNH. (1000 feet agl)

(3) Circuits below 1800 ft QNH are permitted for C-130 essential training and currency but are to be kept to the absolute minimum necessary.

(4) C-130 crews conducting Tactical Air-Land Training (TALT) may request a circuit altitude up to the limit of the Control Zone and are to pre-brief ATC with their requirements to ensure safe integration with other CTR traffic.

b. **Runway and Visual Circuit Direction.** For noise abatement, the ATC Supervisor is to vary the circuit direction, whenever possible to avoid annoyance to one specific sector of the community. Pilots will be informed of the visual circuit direction when recovering to Brize Norton. The following general guidelines apply:

(1) When both Brize Norton and Fairford are active similar runway directions are to be used, with the circuit direction at Brize Norton to the north.

(2) Runway 26 is the preferred runway at Brize Norton unless either the tailwind component exceeds 5 knots, or the pilot requests otherwise.

11. **Arrival and Departure Procedures.** All normal arrival and departure procedures are detailed in the aeronautical Terminal Approach Procedures.

a. **Noise Abatement.** All home-based aircraft are to follow the appropriate Standard Instrument Departure procedure unless otherwise instructed by ATC.

b. **C-130 Aircraft TacAT Departures.** C-130 TacAT departures are normally to be flown not above 1800 ft QNH (1500 feet agl) via the following visual sectors:

(1) **Tac N Departure.** Sector bounded by Little Rissington and Enstone glider sites.

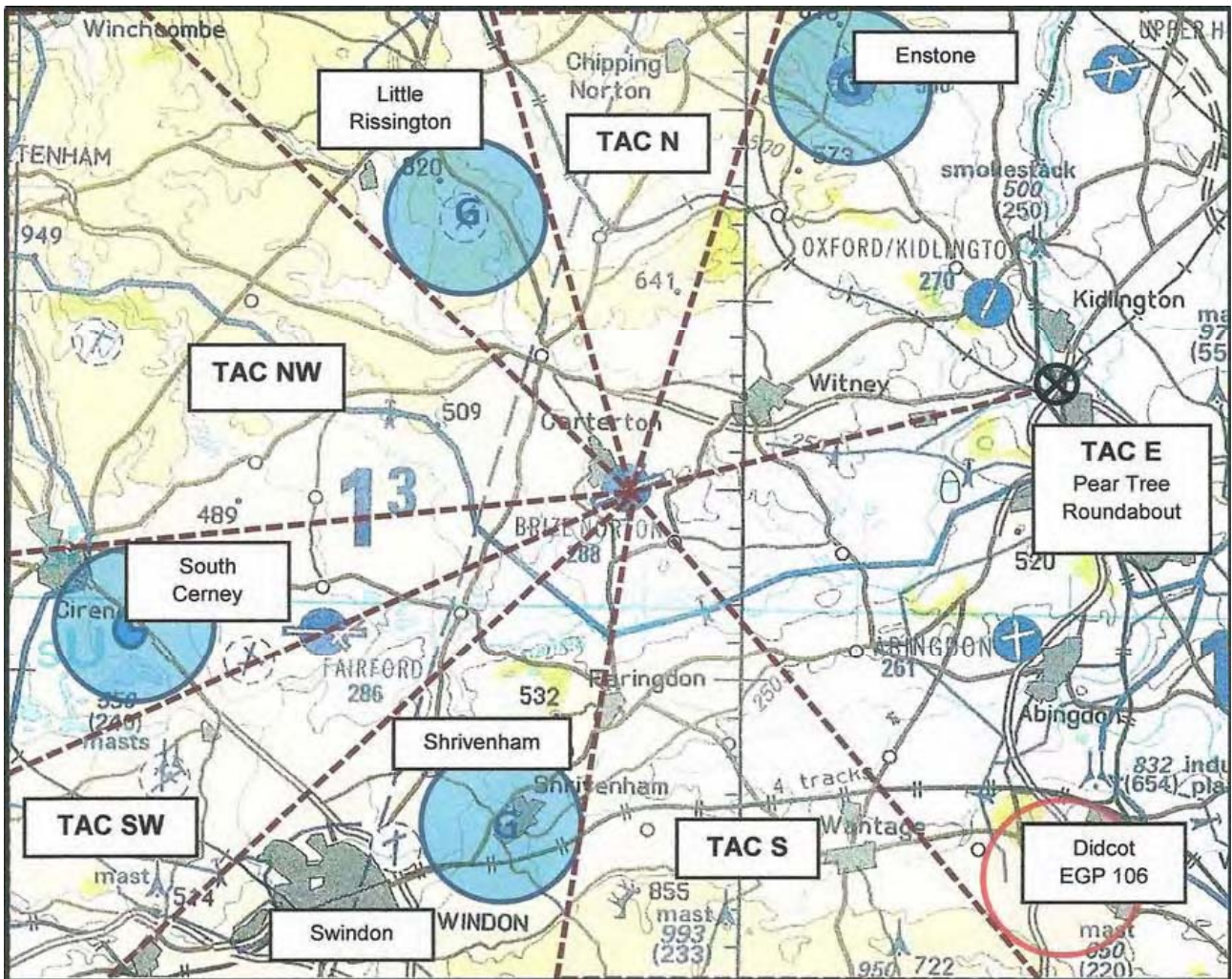
(2) **Tac E Departure.** Route via the Peartree Roundabout (N51 47.70 W00116.1) as per the PTS departure profile

(3) **Tac S Departure.** Sector bounded by Shrivenham glider site and Didcot Power Station, Crews are to be aware of and comply with the restrictions regarding the Lambourn Gallops.

(4) **Tac SW Departure.** Sector bounded by South Cerney glider site and Swindon.

(5) **Tac NW Departure.** Sector bounded by Little Rissington and South Cerney glider sites.

When meteorological conditions and instrument traffic allows, crews should give consideration to transiting at 2000 feet agl to reduce the noise footprint in the local area.



12. For noise abatement purposes, during quiet hours (2300-0700L) aircraft are not to reverse into parking bays 76-80 under their own power, unless authorised by the DOC.

### 13. JADTEU OPERATIONS

Flying operations are to be conducted between 0800 and 1700 (Local) Monday to Friday. Prior approval by the DOC, on behalf of OC Airfield Wing, is required for flights certified as operationally essential by OC Operations Wing for flying outside these times.

### 14. NOISE ABATEMENT AS PUBLISHED IN THE RAF BRIZE NORTON AERONAUTICAL PUBLICATIONS

a. **Preferred Runway.** Runway 26 is the preferred runway, unless the tailwind component exceeds 5 knots, or unless the pilot requests otherwise.

b. **Departures.** All aircraft using the NAXAT SID are to use the Noise Abatement techniques for aircraft type until:

- (1) Above 3300 QNH, or
- (2) Past NAXAT (BZN 283R/10d)

c. **Visual Circuits.** Pilots are to plan visual circuits to avoid Witney (BZN 064R/3.5d) and, when possible, other local villages. The visual circuit altitude is 1800 QNH.

d. **Runway 26RH (Right Hand Circuit).** Aircraft joining the visual circuit are to climb ahead to 1300 QNH before turning downwind. ATC permission is required if downwind leg is extended to the North and East to 'Go round Whitney'.

e. **Night Restrictions.** Aircraft landing 2200-0700 local should use minimum reverse thrust whenever possible.

f. **Noise Concerns.** Pilots joining or flying in the visual circuit should avoid overflying below 1800 QNH the following communities:

(1) **Northside:**

Shilton Village (BZN 347R/1.7d)

Minster Lovell Village (BZN 037R/3.6d)

Witney Town (BZN 064R/3.5d)

(2) **Southside:**

Clanfield Village (BZN 166R/2.0d)

Bampton Village (BZN 122R/2.6d)

Aston Village (BZN 115R/3.8d)

Military helicopters are not to fly below 800 AMSL within the CTR unless making an approach or departure from Brize Norton.

g. **Avoidance Areas.**

(1) Cotswold Wildlife Park (BZN 312R/2.3d) 1 nautical mile or not below 1300 AMSL

(2) Mill Farm (BZN 127R/1.4d) 0.5 nautical mile or not below 1800 AMSL

Notes:

QNH and AMSL refers to above sea level – subtract 300 feet to convert these altitudes to heights above ground level.

BZN 283R/10d means 10 nautical miles on a bearing of 283 magnetic from the navigation beacon situated at the western end of the runway.



## ANNEX A TO RAF BRIZE NORTON NOISE MANAGEMENT PROCEDURES

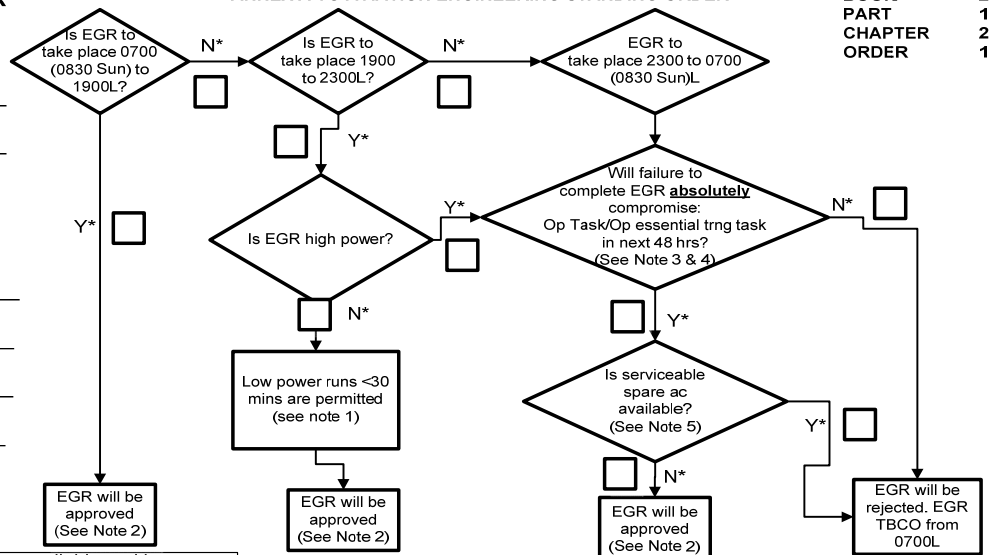
### OUT OF HOURS EGR REQUEST FORM

**TO BE SUBMITTED FOR EGR REQUIREMENTS**

Date: \_\_\_\_\_  
 Name/Rank: \_\_\_\_\_  
 Contact No.: \_\_\_\_\_  
 Ac Type: \_\_\_\_\_  
 Tail Number: \_\_\_\_\_  
 Location (See Note 1): \_\_\_\_\_  
 Next Task: \_\_\_\_\_  
 Run Period: \_\_\_\_\_  
 Number of Engines: \_\_\_\_\_  
 Power: Idle / Low / High  
 Fax Number: \_\_\_\_\_

ANNEX A TO AVIATION ENGINEERING STANDING ORDER

BOOK 2  
 PART 1  
 CHAPTER 2  
 ORDER 1



- Note 1:** DEOC advice to be sought on available parking locations for high/low power runs and EGR durations as per AESOs.
  - Note 2:** With the exception of OP PABBAY or other high profile noise embargo.
  - Note 3:** For engineering tasks >12 hours in duration Sqn Duty Eng Exec to provide evidence to justify EGR request.
  - Note 4:** Sqn Dex to be contacted by DOC if clarification required on training mission priority.
  - Note 5:** Spare ac availability must include adequate time for role changes.
  - Note 6:** To be returned within 30 mins.
- \* Tick as appropriate

DOC Approval / Approval with Limitations / Rejection (See Note 4 # 6)

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Signature: \_\_\_\_\_  
 Rank & Name: \_\_\_\_\_