Roads, Vehicles & Equipment

Operational Safety Instruction

ATC Radio Frequencies

Control of Vehicles on the Manoeuvring Area

08th May 2019

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v4.0

It is the responsibility of all employers to ensure that relevant OSIs are brought to the attention of their staff. However, individuals remain responsible for their own actions and those who are in any doubt should consult their Supervisor or Manager.

1. Introduction

1.1 This instruction describes the radio frequencies used by Air Traffic Control to inform and communicate with vehicle drivers operating on the manoeuvring area at Heathrow.

1.2 The use of red bars next to paragraphs indicates addition or significant change to the document

1.3 On 13th September 2018, some of the VHF frequencies used at Heathrow changed to 8.33kHz channels. This means that any vehicles operating on the manoeuvring area and using VHF radios must be 8.33kHz capable and, where required, must have any pre-set frequencies amended to match those included within this OSI.

1.3.1 Airfield drivers using UHF channels **are not affected** by this change.

1.3.2 The UK Air Pilot (AIP) is amended accordingly to advise flight crews of the frequency change.

1.4 As of 0430hrs (L) on 8th May 2019 both runway frequencies; **118.705** Mhz / **Channel 7** for the Northern Runway and **118.505** Mhz / **Channel 11** for the Southern Runway will remain in operation H24. Aircraft and vehicles operating outside of usual scheduled movements must ensure they operate on the correct runway frequency.

2. Definitions

Abbreviation	Description
ATC	Air Traffic Control
CTCSS	Continuous Tone Coded Squelch System
GMC	Ground Movement Control
Manoeuvring Area	Taxiways and Runways
UHF	Ultra-High Frequency
VHF	Very High Frequency

3. Safety Procedure

3.1 Technical

3.1.1 NATS provides the ATC service at Heathrow. Control of vehicles on the manoeuvring area is exercised through the VHF radio frequencies listed below:-

3.1.1.1 **118.505** Mhz - Southern Runway (09R/27L)
3.1.1.2 **118.705** Mhz - Northern Runway (09L/27R)
3.1.1.3 **121.905** Mhz - GMC1
3.1.1.4 **121.705** Mhz - GMC2
3.1.1.5 **121.855** Mhz - GMC3
3.1.1.6 **124.475** Mhz - Standby frequency

3.1.2 The above VHF frequencies are cross-coupled (linked) to the UHF used by the majority of radios in the vehicles on the airfield. These UHF frequencies are referred to by ATC using their Channel number:-

3.1.2.1 Channel 1 (GMC1) - linked to **121.905** Mhz
3.1.2.2 Channel 7 (Northern Runway 09L/27R) – linked to **118.705** MHz
3.1.2.3 Channel 9 (GMC2) - linked to **121.705** Mhz
3.1.2.4 Channel 10 (GMC3) - linked to **121.855** Mhz
3.1.2.5 Channel 11 (Southern Runway 09R/27L) - linked to **118.505** Mhz

3.1.3 The UHF frequencies (Channels) use CTCSS switching to reduce the level of interference on these channels. These tones are silent to the user but are essential for the operation of the radio.

3.1.4 Airport companies should refer this OSI to their radio coordinator or service provider, who will advise them on the technical aspects of this instruction.

3.2 Operational

3.2.1 Runways

3.2.1.1 At all times, ATC control of the promulgated runways is exercised by the Southern Runway Controller on **118.505** Mhz and the Northern Runway Controller on **118.705** Mhz.

3.2.1.2 Aircraft and vehicles wishing to make a crossing of the Southern runway (09R/27L) should hold short of the runway and contact the Tower using **118.505** Mhz. Drivers who are unable to select the VHF air frequencies should hold short and call for crossing clearance on **Channel 11**.

3.2.1.3 Vehicles wishing to make a crossing of the Northern runway (09L/27R) should

hold short of the runway and contact the Tower using **118.705 Mhz.** Drivers who are unable to select the VHF air frequencies should hold short and call for crossing clearance on **Channel 7**.

3.2.1.4 After the last scheduled movement, ATC control of the promulgated runway(s) will continue as per daytime operations using **118.705** Mhz / **Channel 7** for the Northern Runway and **118.505** Mhz / **Channel 11** for the Southern Runway. These frequencies may be operated by the same controller (band-boxed).

3.2.2 Taxiways

3.2.2.1 ATC GMC is responsible for all aircraft and vehicular movements on the taxiway system. During the day, GMC is split into three areas, each with their own frequency:-

GMC 1 VHF - **121.905** Mhz; UHF - Channel 1
GMC 2 VHF - **121.705** Mhz; UHF - Channel 9
GMC 3 VHF - **121.855** Mhz; UHF - Channel 10

3.2.2.2 GMC may be operated using a reduced number of frequencies. If this occurs during Westerly Operations – GMC 1 and GMC 3 will be band-boxed (linked) using **121.855** Mhz (Ch 10). During Easterly Operations – GMC 1 and GMC 2 will be band-boxed (linked) using **121.905** Mhz (Ch 1). Vehicles operating using UHF channels should ensure they continue to select the correct channel for their area of the airfield. VHF users may obtain the frequencies in use by contacting Airfield Operations on 0208 745 6459.

3.2.2.3 After the last scheduled movement, ATC GMC control of the airfield is exercised using **118.505** Mhz and **Channel 11**. ~~This is the only promulgated H24 frequency/channel.~~

3.3 Training

3.3.1 To drive on the manoeuvring area, a driver must hold a valid Airside Driving Permit. This will either be 'M' class or 'R' class, with only the latter providing access to runways. Issuance of a permit will require the holder to be fully conversant and competent in the use of the radio equipment, and selection of the frequency or channel to be used on the appropriate part of the airfield.

3.4 Enquiries

3.4.1 Any questions concerning this Instruction should be addressed to Heathrow Aerodrome Safety and Assurance, Airside Operations Facility, Snowbase, Heathrow Airport – Email airside_safety@heathrow.com