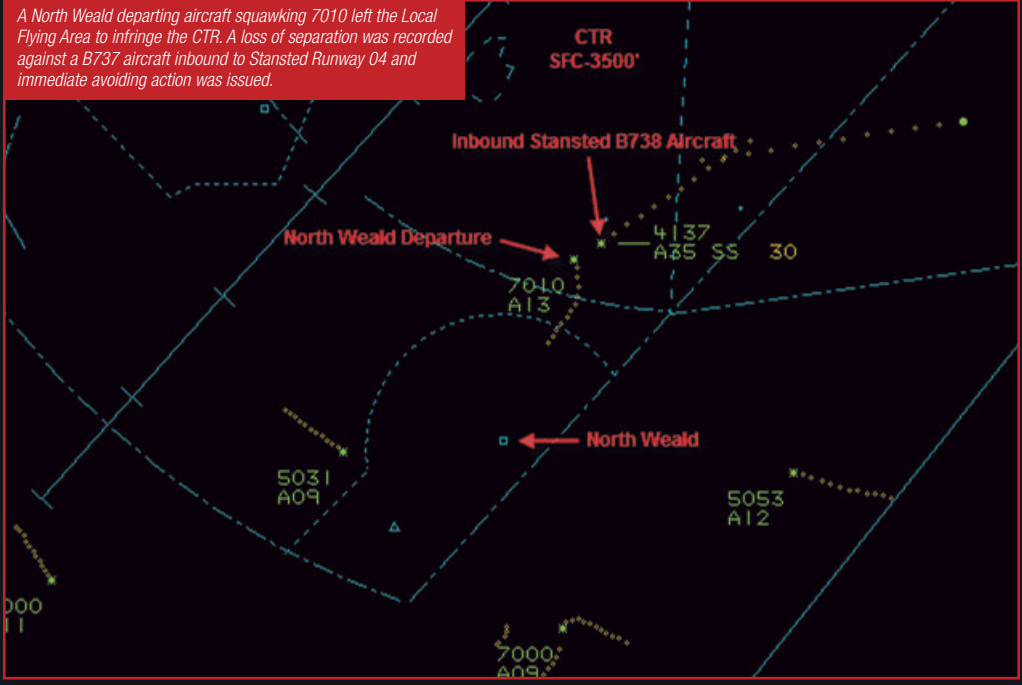


Be TMZ aware! How to avoid infringements

Last year there were a total of 68 unauthorised TMZ penetrations and 224 infringements of the London LTMA and associated CTA/CTRs *(NATS statistics for the whole of the region)*



A North Weald departing aircraft squawking 7010 left the Local Flying Area to infringe the CTR. A loss of separation was recorded against a B737 aircraft inbound to Stansted Runway 04 and immediate avoiding action was issued.



Be TMZ aware! How to avoid infringements

The procedures for transiting the TMZ are straightforward, but we still have to deal with zone busts...

The introduction of the Stansted Transponder Mandatory Zone (TMZ) in September 2009 naturally had implications for flying at the Airfield. As we are situated on the eastern edge of the TMZ, any flights inbound or outbound to the west through the TMZ are required to follow the procedures contained within the Letter of Agreement between NATS and North Weald Airfield. This also defines the Local Flying Area around North Weald where aircraft may fly up to 2 nautical miles without a transponder and enter from outside the TMZ via the Epping VRP.

Mode S equipped aircraft intending to enter the TMZ outside the North Weald Local Flying Area (see map) must use Mode C (ALT) at all times. In all other cases for operations in the TMZ outside the North Weald Local Flying Area, the pilot must contact Farnborough North or Essex Radar well before reaching the TMZ boundary and negotiate a TMZ transit. Once in contact with North Weald Radio, squawk 7010 with Mode C, if available.

Most pilots comply with the simple and straightforward rules, but inevitably there are problems. A transponder may be switched off or not reporting altitude. We can usually solve this over the radio after we have had a call from Essex Radar about an unknown radar plot.

Another problem is pilots setting the North Weald Conspicuity Squawk of 7010 when they are not talking to us. Our official radio range is 10 nautical



Church Langley Water Tower is on the edge of the Stansted CTR



Keep south of the three lakes between Willingale and North Weald



The M11 Junction 7 roundabout at Harlow – 20 base leg turning point



The gap between St Margaret's Hospital and Coopersale



one occasion three aircraft in the circuit all infringed one after the other for this very reason! So take care if extending downwind to maintain separation with aircraft ahead.

The best landmark is the distinctive Church Langley Water Tower next to the M11. **If you go beyond it you will be in Stansted CTR airspace.** Similarly, aircraft joining on left base for runway 20 should keep south of the small lakes just to the east of the Airfield.

On runway 20, the turn onto base leg is over the Junction 7 roundabout of the M11 at Harlow. For Runway 02, there is a substantial gap between St Margaret's Hospital and Coopersale, which can be used for a tighter circuit.

Infringements cause the Essex Radar controllers all sorts of problems. An aircraft without a transponder switched on will result in traffic being vectored away from the perceived threat, causing delays for arrivals and departures with an ongoing knock-on effect for aircraft in the hold. Aircraft penetrating the Stansted zone itself require immediate avoiding action, which also causes similar delays.

Even aircraft approaching the edge of controlled airspace cannot be ignored as their intentions are unknown. So it is always best to fly as tight a circuit as possible, and avoid

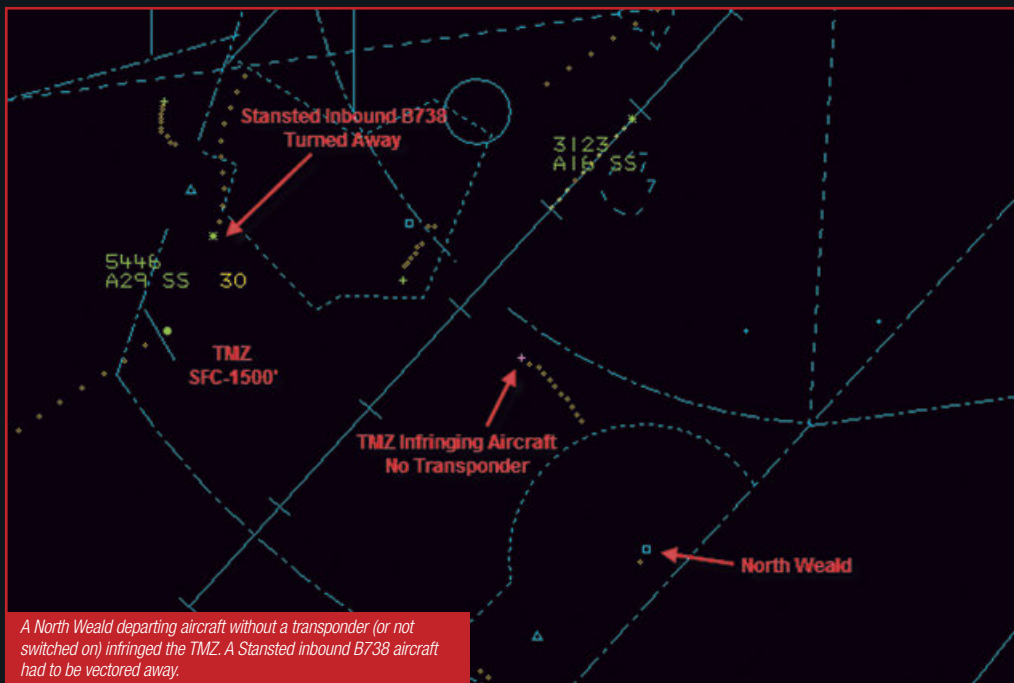
miles and sometimes the squawk is being used much further out than this. Nevertheless, using the squawk helps us deal with problems faster.

There have been infringements of the Stansted CTR straight from the North Weald circuit. It is important to note the local landmarks to avoid this. Many pilots tend to fly wide and extended circuits, which can lead to inadvertent airspace penetrations.

If there is a strong southerly wind, an aircraft can easily be blown off course and make an infringement on base leg. On

**Famborough North 132.800. Operational hours 0800-2000 during winter (summer 1 hour earlier)
North Weald Squawk 7010 (with altitude)**

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A North Weald departing aircraft without a transponder (or not switched on) infringed the TMZ. A Stansted inbound B738 aircraft had to be vectored away.

coming too close to the boundary. GPS units are not 100% reliable at plotting your position.

If Stansted is using Runway 04 the problem is potentially worse because inbound aircraft could be routing overhead North Weald on base leg or are descending rather than climbing away and so there is a greater chance of confliction.

When we get a phone call about an infringement, we try to settle things amicably, as we need to resolve the problem quickly. But occasionally, if the incident is serious, the aircraft registration may be disclosed and the CAA informed.

If you inadvertently enter controlled airspace inform the relevant radio frequency as soon as possible. They will help you get clear and maintain separation. Don't be tempted to switch your transponder off – that could be expensive!

Our *Pilot's Self Briefing Notes* can be readily downloaded as a Pdf file from the *Information for Pilots* section of our website www.northwealdairfield.info. These list all the procedures for entering and transiting the TMZ.

Most pilots already talk to Farnborough North inbound and outbound, even if they have a Mode S transponder. We strongly advise that you make this your best practice too. We want everyone to fly safely. If you have Mode C, switch it on!

North Weald Squawk 7010 (with altitude)

Fly on Track

Promoting airspace awareness

The aim of this very useful website is to reduce infringements of controlled airspace. As North Weald Airfield is situated within the Stansted Transponder Mandatory Zone, pilots will find a great deal of helpful information, not only about our immediate area, but also other similar zones as well.

There is general navigation advice with downloadable CAA Safety Sense leaflets and VFR Guide, an A5 radio call reminder for a pilot's kneeboard, radar replays of controlled airspace infringements and a video of flying different routes under the London TMA.

There is also news on airspace changes. Links are provided for a range of official reporting forms, the CAA's *CAP 804* publication as well as information, including the latest amendments for VFR charts.

With such a wealth of useful data available in one place, the website is well worth bookmarking. It is constantly being updated with news and content. Check it out at: www.flyontrack.co.uk/content

TMZ procedures at a glance

Inbound from the east

Mode S, A or C equipped aircraft squawk 7010 (with altitude) when in contact with North Weald Radio. (Not more than 10 miles inbound to the Airfield)

Non transponder aircraft may enter the North Weald Local Flying Area directly from the east in accordance with an exemption as part of our Letter of Agreement with NATS.

Outbound to the east

Mode S, A or C equipped aircraft squawk 7010 (with altitude) when in contact with North Weald Radio. (Not more than 10 miles outbound from the Airfield)

Non transponder aircraft may depart directly to the east without requiring a clearance.

Inbound from the west through the TMZ

Mode S equipped aircraft squawk 7000 with Mode C (ALT) set until in radio contact with North Weald Radio then squawk 7010 with Mode C (ALT) set. We recommend you contact Farnborough North inbound, who will allocate a squawk.

Mode A or C or non transponder aircraft must call Farnborough North for a clearance to enter the zone.

Squawk 7010 (with Mode C set, if equipped) once you are released and change frequency to North Weald Radio.

Inbound from the west outside TMZ

Route outside the TMZ and join from the south via the Epping VRP. Squawk 7010 with Mode C (ALT), when in contact with North Weald Radio, if suitably equipped.

Outbound to the west through the TMZ

Mode S equipped aircraft squawk 7010 with Mode C (ALT) set while in contact with North Weald Radio, then 7000 with Mode C (ALT) set if not contacting Farnborough North or Essex Radar for ongoing flight, or 0013 for listening watch.

Mode A or C equipped aircraft squawk 7010 while in contact with North Weald Radio. **You must free call Farnborough North for clearance before departing from the Local Flying Area to transit the TMZ.** Farnborough North will allocate a squawk.

Non transponder aircraft are recommended to call North Weald Radio for a clearance, which we can obtain by telephone from Farnborough North prior to departure. Remain within the Local Flying Area until radio contact is made with Farnborough North.

Outbound to the west remaining outside the TMZ

Depart to the south via the Epping VRP.

Circuits and flights in the Local Flying Area (within 2 nautical miles of Airfield)

Transponder equipped aircraft squawk 7010 (with altitude).

Non transponder aircraft may operate in the North Weald Local Flying Area in accordance with an exemption as part of our Letter of Agreement with NATS.

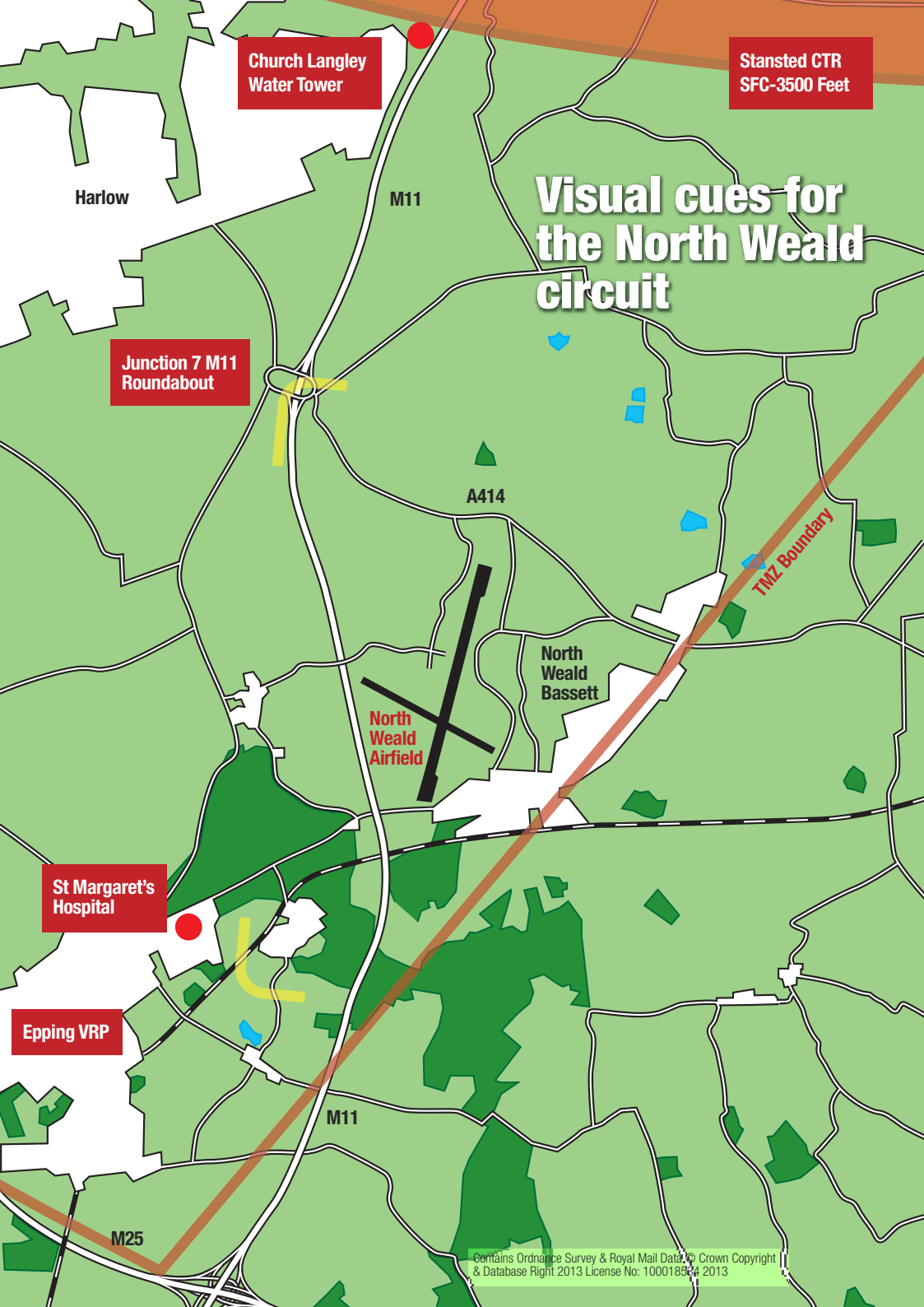
Local Radar Unit frequencies and assistance

Farnborough North 132.800 has primary responsibility for TMZ clearances. Operational hours 0800-2000 during winter (summer 1 hour earlier)

Essex Radar 120.625 (at other times)

Luton Approach and Essex Radar Listening Watch Squawk 0013 (Mode S and using Mode C (ALT) in TMZ)

For a TMZ briefing or assistance phone North Weald Tower on 01992 524 740 during operational hours.



Church Langley
Water Tower

Stansted CTR
SFC-3500 Feet

Visual cues for the North Weald circuit

Junction 7 M11
Roundabout

St Margaret's
Hospital

Epping VRP

TMZ Boundary

North
Weald
Airfield

North
Weald
Bassett