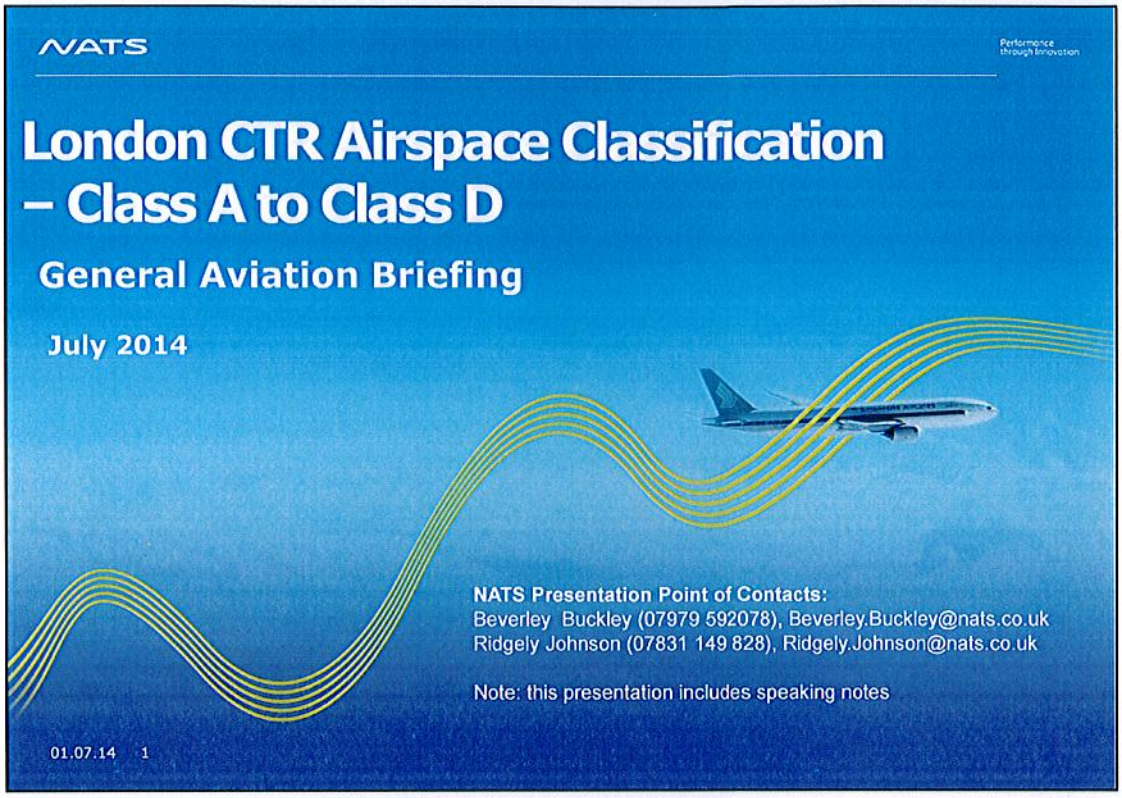


Notes to the Speaker:

This presentation is intended to be given by Airfield representatives at Club nights, Safety Briefings or similar forum.

If you need NATS support either before or at the meetings, please contact:

Beverley Buckley (07979 592078), Beverley.Buckley@nats.co.uk

or Ridgely Johnson (07831 149 828), Ridgely.Johnson@nats.co.uk.

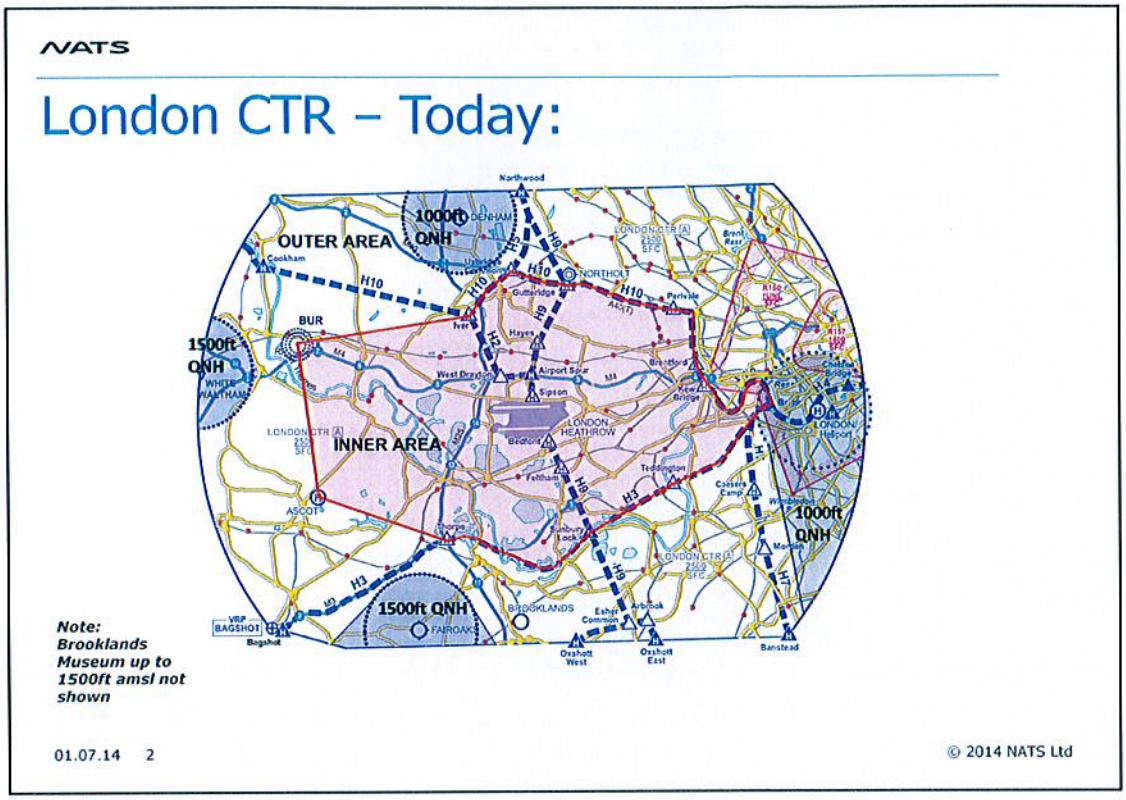
We have provided speaking notes to be spoken out loud to the audience.

There are 10 slides and 11 pages of speaking notes (Slide 10 has two pages of speaking notes)

Speaking Notes/Script:

Thank you for attending this briefing for the reclassification of the London CTR.

Note: VMC minima criteria will not change on the 18th of Sept and this presentation is based on existing VMC Minima. However, it is expected that VMC minima will change later in the year (Nov/Dec 2014) with the CAA's introduction of SERA (Standardised European Rules of the Air.)



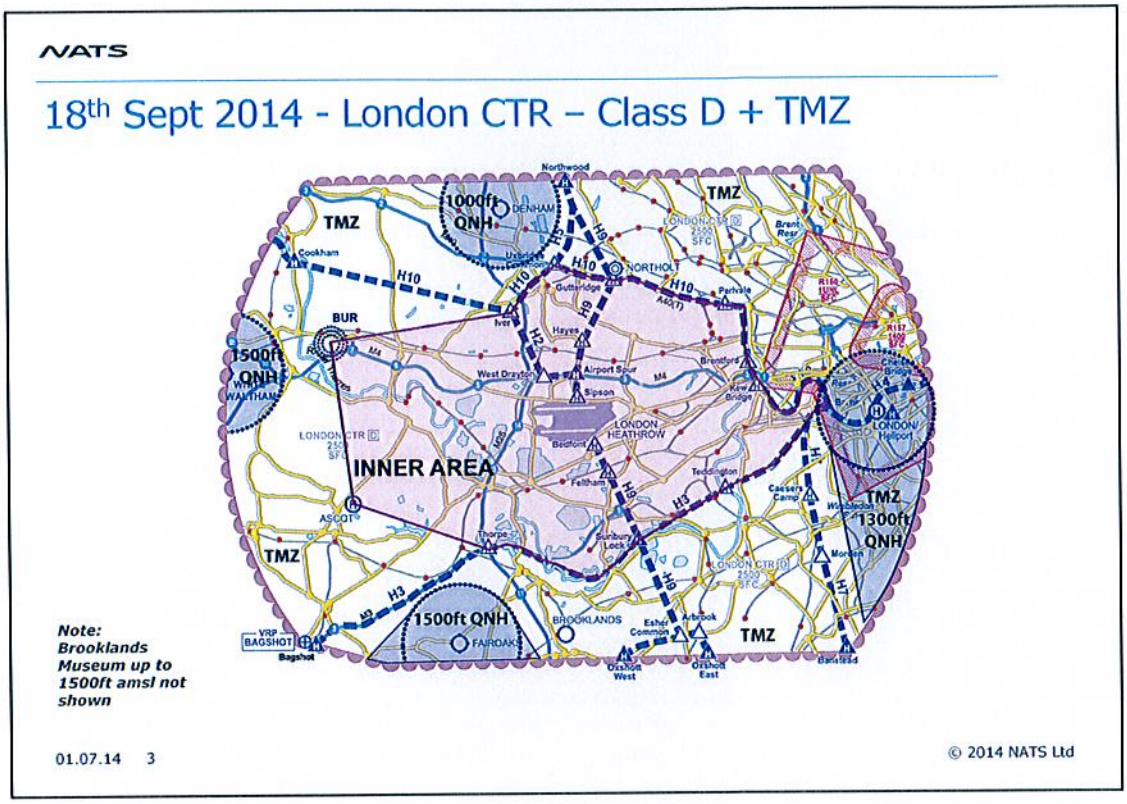
Speaking Notes/Script:

You may have had flying experience in other Class D CTA/CTR's in the UK. The London CTR, although changing to Class D, is very different to other Class D airspace in the UK due to the sheer volume of IFR traffic at Heathrow. This presentation aims to explain the change from Class A to Class D and the differences between the LON CTR today and the LON CTR on the 18th of September 2014 and into the future. Because of the intense IFR operation at Heathrow, the LON CTR does have some unique features compared to other Class D airspace. Firstly, we have the airspace as today. On the map shown are the five Local Flying Areas – Denham, White Waltham, Fairoaks, Brooklands and Battersea. Brooklands LFA is rarely used but should be noted that it is available up to 1500ft amsl.

Also shown is the 'Inner Area' shaded in pink on the map. The Inner Area covers the core of the London CTR encompassing Heathrow Airport.

You may not have seen the Inner Area depicted on a map before. The Inner Area exists today in the ATC environment and is there to protect the Heathrow operation as it's the busiest airspace in the UK.

Most SVFR transit traffic today either flies on the helicopter routes or transits around the Inner Area via Burnham – Ascot. This is ATC's way of minimising disruption to the Heathrow operation. For higher priority traffic such as air ambulance and police helicopters, ATC coordinate gaps in the traffic flow at Heathrow in order to accommodate the high priority traffic. Coordinating gaps normally involves holding traffic on the ground at Heathrow and/or holding traffic in the holding stacks surrounding Heathrow. In Class A airspace today, this priority traffic operates under SVFR rules and is therefore subject to standard separation from IFR traffic.



Speaking Notes/Script:

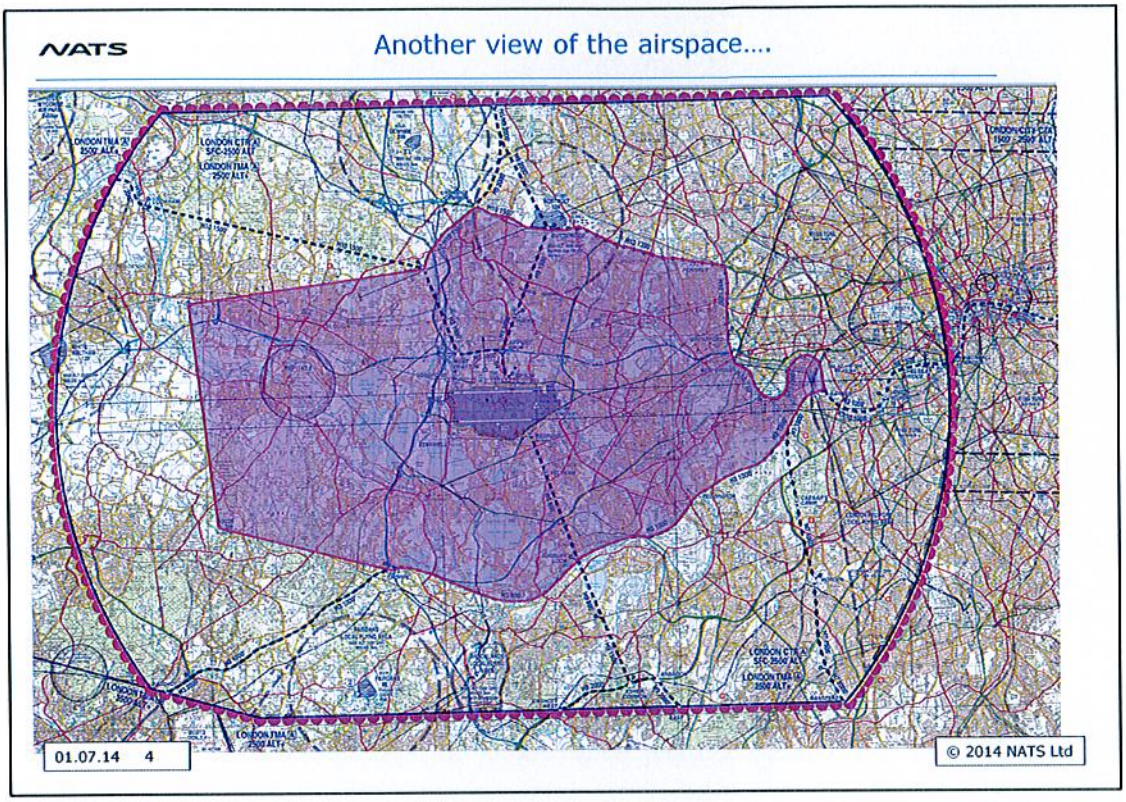
This is the airspace once Class D comes in on the 18th of Sept 2014. The lateral boundaries of the airspace remain the same. Some of the vertical extents of the helicopter routes have been raised slightly.

Some new procedures have been developed with Heathrow Tower and Swanwick Terminal Control experts to provide a solution that has minimal impact on the Heathrow operation and controller workload. The CTR is a TMZ with elementary mode S which maintains the current Class A transponder requirement. Please note, this requires ACS not just mode A or A and C. The change to Class D allows VFR flight under certain weather criteria in addition to SVFR and IFR. This allows ATC the option to safety integrate VFR and IFR traffic without having to provide standard separation and therefore causing less disruption to the Heathrow traffic flow.

The four LFAs, EGTF/EGLM/EGLD/Brooklands are exempt from Mode S within the LFA's. However, it's European law that if an aircraft has a transponder at any of the airfields mentioned, they have to use it. At Battersea, the fifth LFA, transponders (Mode S) are mandatory.

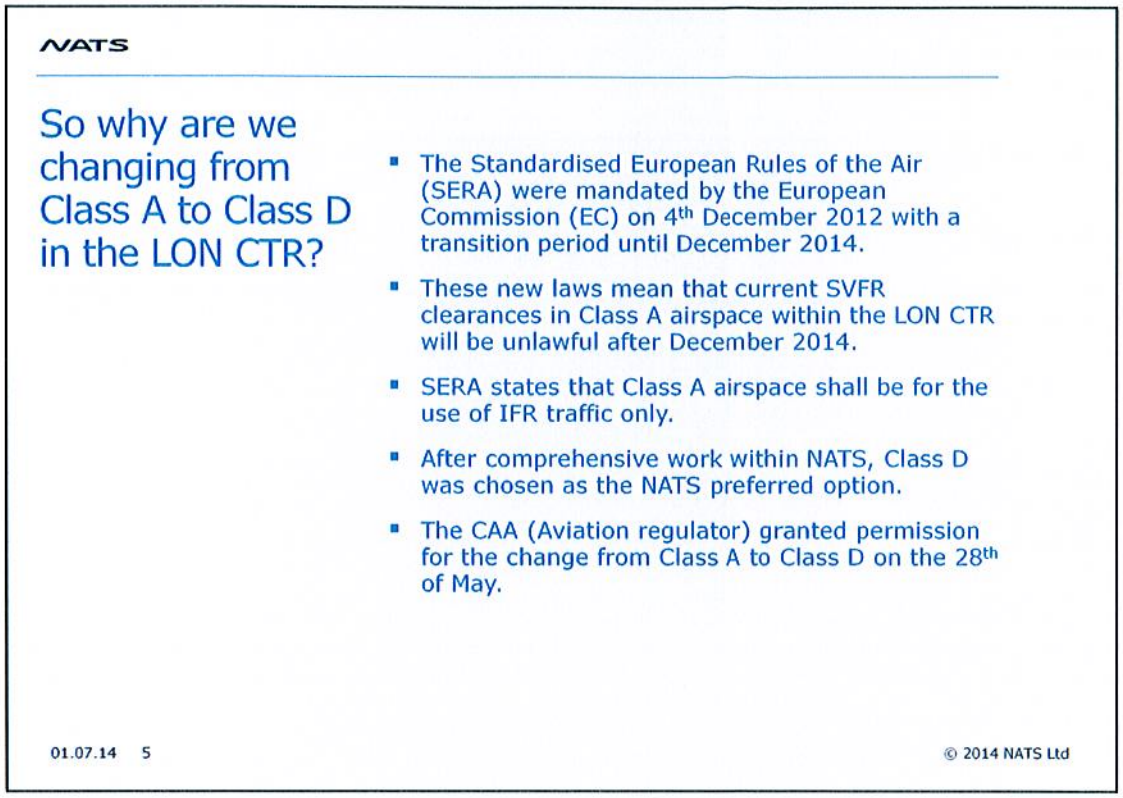
The Battersea LFA is raised from 1000ft to 1300ft.

The Inner Area and the new procedures for aircraft wanting to transit are explained later in the presentation.



Speaking Notes/Script:

How the airspace looks overlaid on the Helicopter Routes in the London Control Zone CAA chart.



Speaking Notes/Script:

The Standardised European Rules of the Air (SERA) were mandated by the European Commission (EC) on 4th December 2012 with a transition period until December 2014.

The CAA held a consultation period on SERA regulations last year (June through to August) so you may have seen the legislation during the consultation period. For any queries regarding SERA, please visit the CAA website – https://www.caa.co.uk/ There is a proposed change to VMC minima under SERA which is due to implemented in December, again see the CAA website for more information. From 18th September until the implementation of SERA, the VMC minima remains as today.

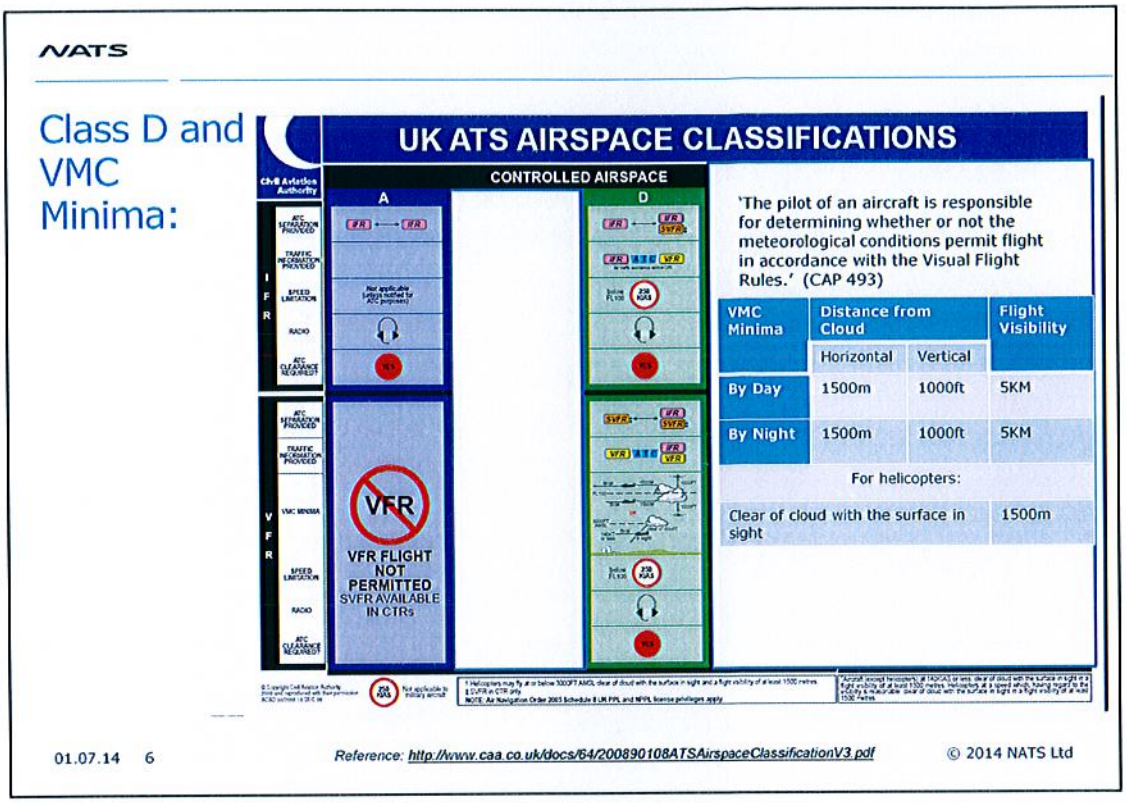
These new laws mean that current SVFR clearances in Class A airspace within the LON CTR will be unlawful after December 2014.

SERA states that Class A airspace shall be for the use of IFR traffic only so in order to provide access to the airspace for other airspace users, NATS started this project to reclassify the class of airspace.

After comprehensive work within NATS, Class D with TMZ was chosen as the NATS preferred option. All classes of airspace were considered but Class D gives commonality across most UK airport CTR's and of course commonality with the adjacent LC CTR. It also gives ATC flexibility to integrate VFR and IFR traffic.

NATS went through the ACP process with a consultation period and the CAA (Aviation regulator) granted permission for the change from Class A to Class D on the 28th of May.

Notes: Class C was dismissed because of the requirement to separate VFR from IFR which would have been as restrictive as Class A today.



Speaking Notes/Script:

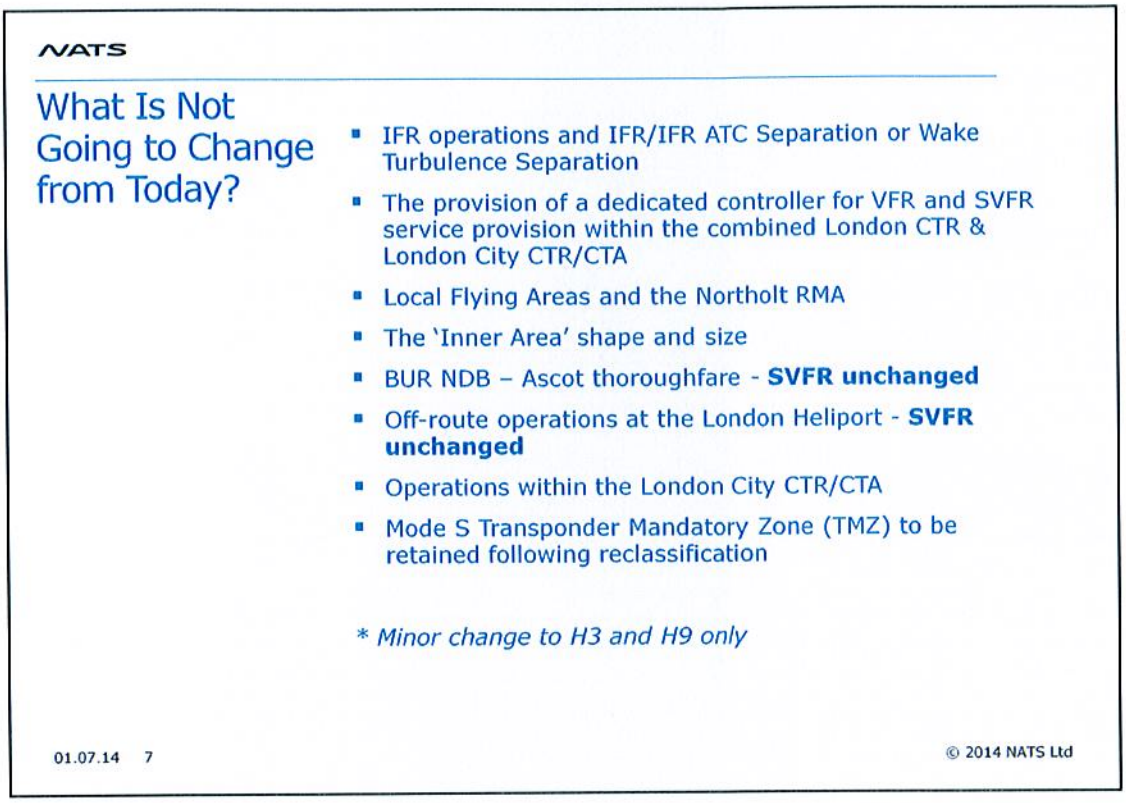
Permitted VFR traffic avoids IFR, as per other Class D airspace. So as the pilot under a VFR clearance, you are responsible for separating your aircraft from other traffic.

By changing the LON CTR to Class D, it brings commonality and simplification of ATC procedures and weather minima in line with all other UK control zones, including the adjacent London City CTR and London Gatwick CTR.

SVFR = Special VFR flight is still an available option within Class D airspace. However, SVFR cannot hinder IFR flight so there may be delays incurred by requesting a SVFR clearance.

Clearance for SVFR flight in the UK is authorisation by ATC for a pilot to fly within a Control Zone when unable to comply with IFR. Met criteria is based on Heathrow weather within the LON CTR.

When operating on a SVFR clearance, the pilot must comply with ATC instructions and remain at all times in flight conditions which enable them to determine their flight path and to keep clear of obstacles. It is implicit in all SVFR clearances that the aircraft remains clear of cloud and in sight of surface. It may be necessary for ATC purposes to impose a height limitation on a SVFR clearance which will require the pilot to fly either at or not above a specific level. ATC will provide standard separation between all SVFR flights and between such flights and other aircraft under IFR flight. Pilots with a SVFR clearance should note that they cannot be given separation from traffic flying in the LFA's.

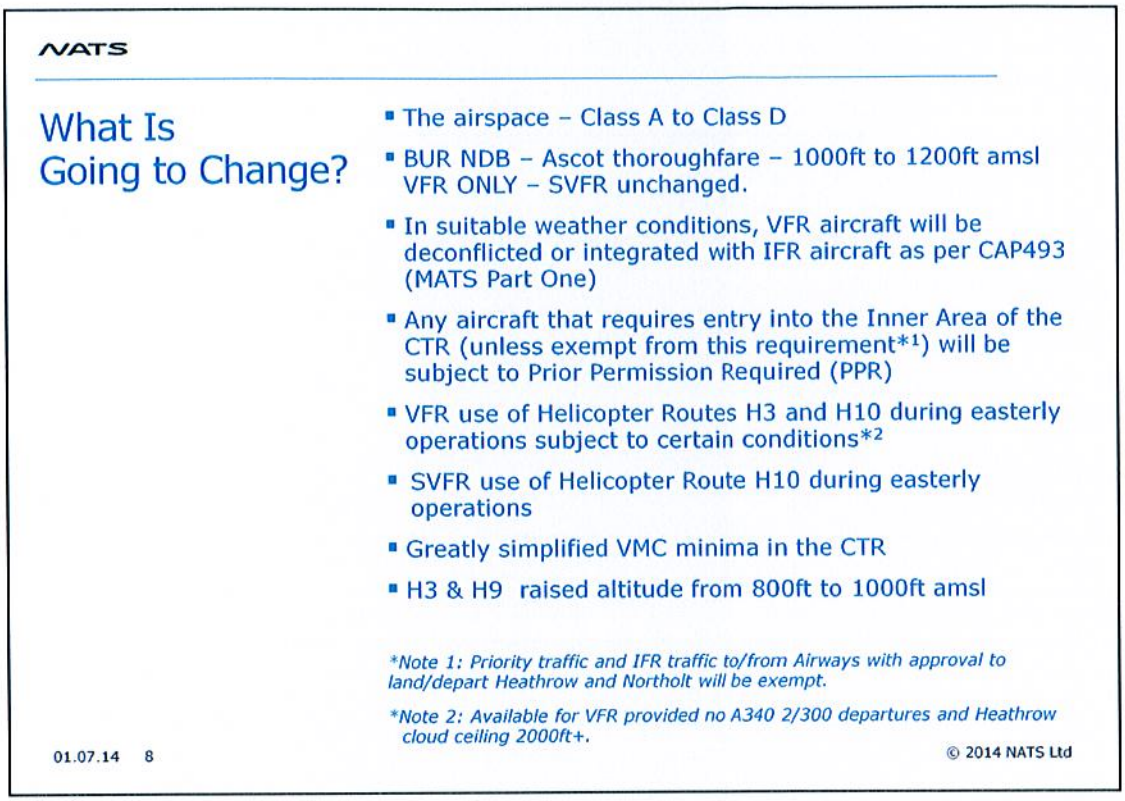


Speaking Notes/Script:

What is not going to change:

- IFR v IFR traffic e.g. the majority of landing / departing traffic from / to Heathrow so nothing effects IFR operations in general other than where as today Heathrow Terminal Control have to create a gap to allow helicopter operations through the inner area because of separation criteria of Class A, once it has changed to Class D, the approach controller should have more flexibility and not have to delay IFR traffic to allow helicopter traffic to cross. (CAT A B C etc)

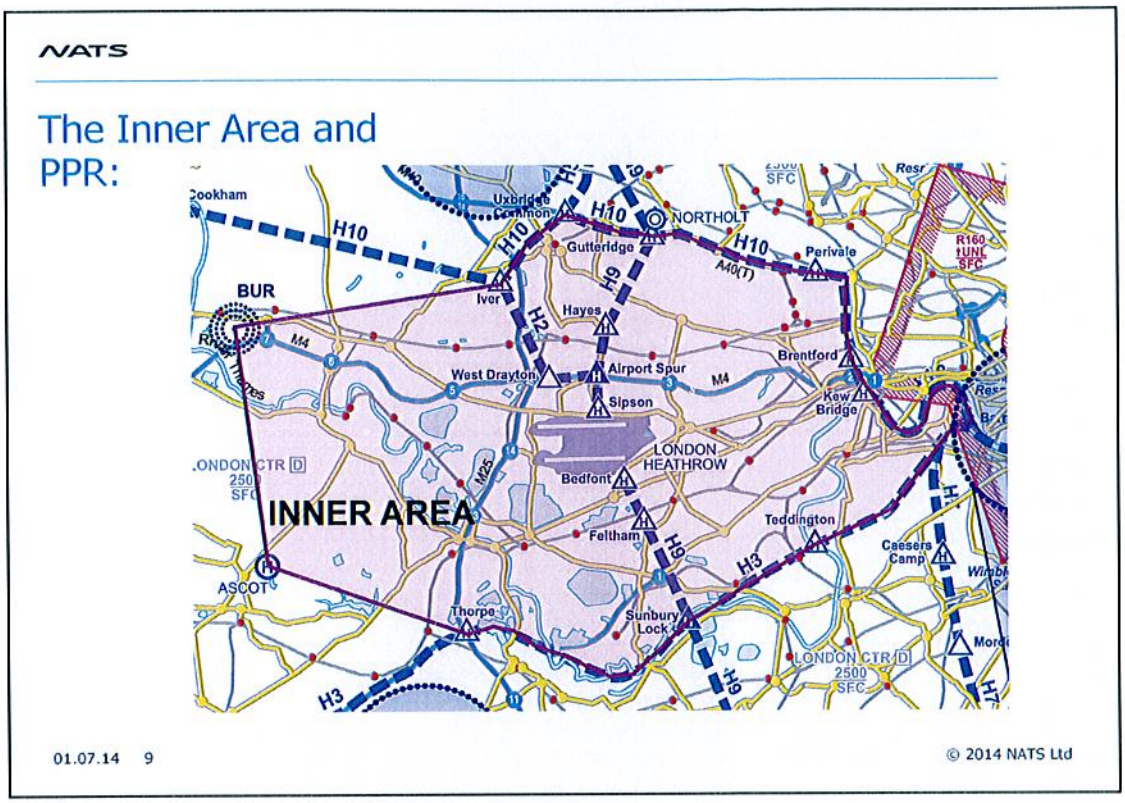
- The position of 'Heathrow Radar' Special VFR will still have a dedicated controller (unless unforeseen circumstances like sickness etc in which case it will be NOTAM'd closed.)
- Local Flying Areas are being retained and Northolt is unchanged.
- The Inner Area size and shape remains the same.
- The SVFR rules for the Burnham – Ascot thoroughfare are unchanged. The SVFR rules for any off route operations at Battersea also remain unchanged.
- London City operates the same way as today. The TMZ with elementary Mode S is retained and the LFA's are exempt apart from Battersea which is mandatory. However, if the aircraft is equipped with a transponder, then it should be used.



Speaking Notes/Script:

What is going to change?

- The airspace – Class A to Class D
- Burnham NDB – Ascot thoroughfare is changing from 1000ft to 1200ft amsl for VFR flight. As per the previous slide, SVFR rules are unchanged.
- In suitable weather conditions, VFR aircraft will be deconflicted or integrated with IFR aircraft as per CAP493 (MATS Part One).
- Any aircraft that requires entry into the Inner Area of the CTR (unless exempt from this requirement like high priority traffic) will be subject to Prior Permission Required (PPR) and we'll go through that in more detail on the next slide.
- VFR use of Helicopter Routes H3 and H10 will be available during easterly operations subject to certain conditions - only available for VFR provided no slow climbing departures (aircraft types like A340 – 200/300) and Heathrow cloud ceiling 2000ft and above.
- SVFR use of Helicopter Route H10 during easterly operations – separated from all Heathrow departures except heavy and super wake turbulence category due to low rates of climb.
- Greatly simplified VMC minima in the CTR
- Some portions of H3 & H9 have raised altitudes from 800ft to 1000ft amsl



Speaking Notes/Script:

- The 'Inner Area' has been used for some time between Swanwick Terminal Control and Heathrow Tower to simplify coordination and to protect the Heathrow operation.
- For the change to Class D, the Inner Area becomes PPR only – Prior Permission Required; for aircraft intending to operate within the airspace.
- This is to protect the Heathrow operation because it is the busiest UK airport and LON CTR is a busy piece of airspace in it's own right – Northolt operation, lots of priority air ambulance and police helicopter operations, and on the edge London City airport and its operation as well. There are also a number of high category flights for members of the Royal Family and Heads of State flights (The Government). These are all factors which sets the LON CTR apart from other CTA/CTR's in the UK, the fact this particular piece of airspace overlays the capital city of the UK.
- So therefore, transit aircraft will not normally be approved to operate within the Inner Area between 0430 and 2300 local due to the intense IFR operation at Heathrow and the general traffic levels within the core of the London CTR.
- Exempt from PPR: CAT A/B/C/D/E, ACN/NSF and helicopters remaining on the helicopter routes without landing or departing inside the Inner Area.
- All other aircraft are required to obtain permission at least 60 mins before entry clearance is required on the day they intend to fly. If approved, PPR aircraft will be issued with a PPR number and the SVFR controller will verify the code before issuing clearance into the Inner Area (so very important that the pilot has the number with them)
- If you meet the criteria of an aircraft which is subject to PPR who hasn't followed the process, you will be refused clearance into the Inner Area.
- The procedure to follow (telephone numbers etc) is in the EGLL textual data part of the AIP (section 2.2)

Speaking Notes/Script:

In order to protect the Heathrow operation, it is NATS intention to operate the London CTR with access for SVFR/VFR aircraft **neither increasing** or **decreasing** by the change from Class A to Class D. As previously stated, it is unlikely for general aviation flights to have access across the Inner Area between the hours of 0430 and 2300 local because of the intense IFR operation at Heathrow. If you wish to transit across the London CTR, it is more likely you will be offered a routeing outside and around the Inner Area.

If you believe you have a good reason to access the Inner Area, please read EGLL AD 2.2 in the UK AIP* carefully which sets out all the requirements for making a request for PPR to enter the Inner Area. Please ensure you have all details of your flight to hand when you ring ATC in order to assist ATC staff. ATC staff will require the following details – callsign and a contact telephone number, for helicopters, the site name you intend to land/depart from if inside the Inner Area as well as the LAT and LONG. We also need aircraft type, your requested routeing and where you are departing from/landing to if outside the Inner Area. Please know your requested ETA/ETD – please be as accurate as possible and most importantly of all – if your request is approved, please ensure you have your PPR number with you in the cockpit as the SVFR controller will require this information before issuing a clearance to cross the Inner Area.

Speaking Notes continued ...

Speaking Notes continued ...

The London CTR in general:

It's very important to understand that the LON CTR is very busy and therefore the frequency may be congested. ATC may have to ask you to standby and remain outside controlled airspace. Ensure that you arrange your flight to remain outside of the CTR boundary until you are in a receipt of a clearance to enter. Please also be aware that ATC may not always be able to grant a clearance to enter the CTR. It is a good idea to have alternative routeings in mind / a contingency plan should a clearance not be available.

What you need to do:

- Ensure you have briefed comprehensively – AIP EGLL AD 2.2 for PPR process, check current NOTAMs for the area.
- Are your maps up to date?
- Are you familiar with VFR/SVFR and the differences? SVFR traffic will be separated, VFR is own look out, traffic information may be supplied by ATC.
- RTF – Do you know what ATC will request from you in terms of information? The frequency may be busy so have a clear idea of the information you may need to supply over the RT.
- Still unsure about flying into the London CTR? It might be a good exercise to fly to other areas of Class D airspace in the UK which aren't as busy as the LON CTR to gain experience before planning your flight through the LON CTR.
- A few years ago, NATS assisted in making some DVD's to assist pilots in navigating around London. These are available to view http://vfr.airspacesafety.com/content/ but please bear in mind they will be referring to Class A airspace. What they do demonstrate is some visual features around London and give some examples of RTF exchanges between SVFR and pilots.

If you have any queries, please visit the NATS website – www.nats.aero/londonctr

**Changes to the UK AIP are available to view on the website – www.ais.org.uk from 24th July (AIP Amendments - 56 Day) but valid from 18th September.*