Think about it

You could say Airprox prevention starts even before you have climbed into the aircraft. Confused? You soon won't be, and here's why

Let's take a simple example: you're flying from a farm strip, done it hundreds of times before, no airspace nearby to worry about, the pleasure of not needing to use a radio, full throttle and off you go. Over the trees and… there's a low-flying helicopter carrying out a power cable check.

Okay, on the scale of probabilities it's at the unlikely end, but you get the point. It could happen, and a quick check of the NOTAMs would have flagged it up.

Or how about this: you're returning home when the weather deteriorates and forces you further off track than expected, and with one eye on the showers running in quickly you inadvertently fly straight through a gliding site that wasn't in your route plan as gliders are using the cables.

So yes, an Airprox can start before you get in the aircraft, but it doesn't take that long to cut the risk factors with a bit of planning. Take NOTAMs for example; checking them these days can be relatively quick and easy, and while pilots should check them before flight via the NATS AIS website at nats-uk.ead-it.com there's a lot of software that can help, with some of it displaying them graphically for easy assimilation.

What else can you do? We talked in the Communicate section about radio, so it's worth checking what ATC services might be available for the flight and making a note of their frequencies before you fly (much easier than trying to find them at the last minute) – and note them right through to the destination, which is where the risk factors start to ramp up. Forewarned is most definitely forearmed.

And what are those services that ATC can give? What do they mean? What do they do for you? Here's a reminder of some of the services available – you can read more in the Communicate section.

A Basic Service provides information including weather, changes of serviceability of facilities, conditions at aerodromes and general activity information within a unit's area of responsibility; a Traffic Service offers the same information plus radar-derived traffic information on relevant conflicting traffic; a Deconfliction Service (not for VFR flying) again offers the Basic Service information, plus the controllers will aim to assist you by passing traffic information and avoidance advice including headings and/or levels; at the top end a Procedural Service (not available for VFR flying) will provide deconfliction advice against other aircraft in receipt of a Procedural Service from the same controller. Perhaps time to dust off the latest version of CAP 774 (UK FIS), or at least read the short leaflet CAP1434 (Guide to UK FIS), and refresh your knowledge.

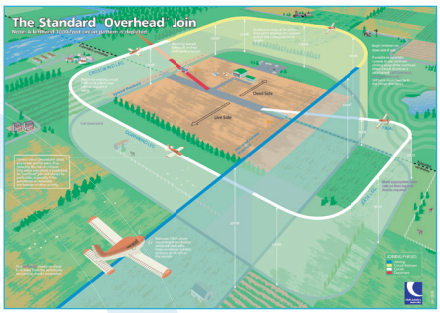
It's worth remembering, though, that avoiding other aircraft remains the pilot's responsibility with all these services – and that means a good lookout; you can read more about that in the Lookout section.

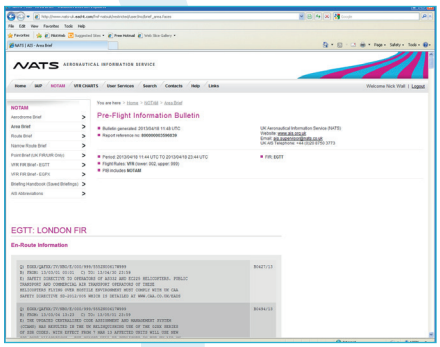
If you're not in receipt of a service you can still use a listening squawk; although a controller will generally only attempt to contact you if you are about to fly into controlled airspace, they might also warn you of a potential traffic conflict, though it's not a priority for them.

En route, things have altered a little since 2015 when the UK adopted, with some exemptions, the Standardised European Rules of the Air (SERA). While much hasn't changed while airborne, some parts of SERA do now make a difference.

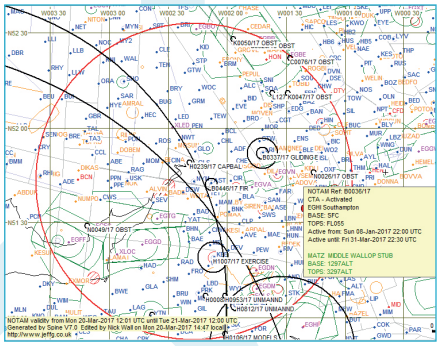
For example, the UK's cruising level system which used to be based on 'quadrantals' (changes of level each 90^0) to provide separation has switched to the 'semi-circular' system (changes of level for each 180^0) as applied throughout the rest of the world.

The rules haven't altered about what action to take if meeting another aircraft





Check NOTAMs on the NATS website; you can also get them graphically, too



'Mind you, it's not worth clinging to your rights regardless and not taking action if your converging tracks don't alter…'

head-on; aside from emergency avoiding action where you have to break away in the most appropriate direction, in circumstances where you have time to take deliberate action both pilots should still turn to the right to avoid each other.

Overtaking hasn't changed either; pass on the right well clear of the person you're overtaking (in case that pilot decides to turn right unaware that you're there), and the old saying for crossing or converging traffic of 'on the right, in the right' still holds good; ie, the aircraft to the left should make a course alteration to avoid the traffic on the right.

But do you know when an aircraft is overtaking versus converging? If you're just 20° or more behind the other aircraft's 3-9 line then you're overtaking so, even if you're on the right and you're just behind the 3-9 line as you converge then you have the responsibility to give way.

Mind you, it's not worth clinging to your rights regardless and not taking action if your converging tracks don't alter; there's no point in saying to St Peter at the Pearly Gates, "but I was in the right", he'll probably just shake his head... We liken that to walking out in front of a Number 10 bus on a pedestrian crossing; cold comfort when in your hospital bed to know that the bus should have stopped. Inaction by pilots is a common cause of Airprox so do something early because you can't rely on the other pilot having seen you – he may not have, and see-and-avoid only works if the 'see' bit is present.

So while things should be pretty straightforward en route with a good lookout and if receiving a traffic service, the same can't always be said for the end of the flight. Whether you're landing at home or away, every year there are a number of Airprox in the circuit.

Going back to where we came in, some of that comes down to pre-planning; a phone call or a few clicks on a webpage will tell you a lot about what you need to know about the destination if it's unfamiliar, and you can review its circuit patterns. It should warn you of any potential hazards, too, such as models being flown nearby.

While overhead joins are recommended (mandatory at some airfields) in practice people join the circuit at all sorts of different points, so think about potential conflicts and what's being said; you might know that a crosswind join is not the same as 'joining crosswind', but does the other pilot...

The well-known phenomenon that a pilot's brain-power reduces by half on stepping into the aircraft means that overhead joins can be tricky things to work out in the air, so have a think about it before getting airborne. A good tip is to keep the airfield to the left/right of you as you join depending on if the circuit is left/right – i.e. left-hand circuit, keep the airfield on your left as you join in the overhead. When you're already in the circuit, think about where others might conflict as they join, especially if they're 'radio fail' and neither you nor they know about each other.

The bottom-line is to get the information before you get airborne so that you're clear on circuit procedures and patterns.

The circuit is a busy time for any pilot and flexibility is the key – if someone departs from normal practice you need to be ready to deal with it; it might be annoying to see someone cross just ahead of you onto base leg when you're downwind, but simply letting it go and extending downwind (but not too much because you then become a non-standard hazard yourself!) or leaving the circuit altogether with an appropriate radio call and starting again is the right action; inflexibility could be a killer, whereas flexibility and fast adaptation, as in all flying, could save the day.