

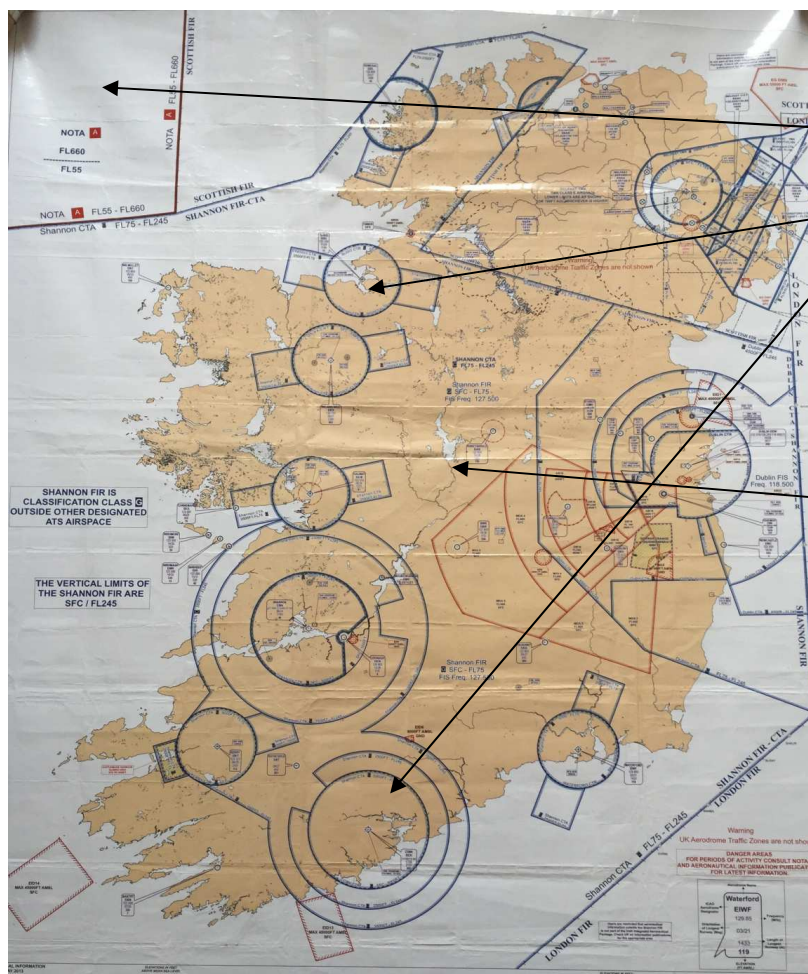
Review of Airspace in Ireland

GASCI Position Paper on Irish Airspace re-organisation

By Gerry Humphreys – Chairman GASCI

The General Aviation Safety Council of Ireland www.gasci.ie is a representative body for GA in Ireland whose aim is to promote Flight Safety in Ireland. GASCI participated in the IAA ANSP Operations & Strategy Directorate Airspace Workshop on 20th September 2016. This paper summarises the points put forward there, advocating a reduction in the size and shape of Control Zones in Ireland. This will have several Flight Safety-enhancing effects for both General and Commercial air traffic; it will reduce workload for tower controllers and have no adverse impact on current standards.

Controlled Airspace. Ireland is rightly proud of its international reputation for providing the highest standards of protection for all Air Traffic flying under Instrument Flight Rules within controlled airspace. Irish airspace consists of, primarily, Class C where all flights are controlled (with all IFR flights protected), and Class G - uncontrolled airspace. Controlled Airspace exists primarily to provide protection to airspace users, but also to promote an orderly and efficient flow of traffic.



Irish Controlled airspace structure.

Class A – IFR Only (Oceanic airspace)

Class C :

- All flights controlled.
- IFR Protected.
- VFR Vs VFR = Info
- Weather minima for VMC
 - o 5k Vis & 1500' cloudbase

Class G:

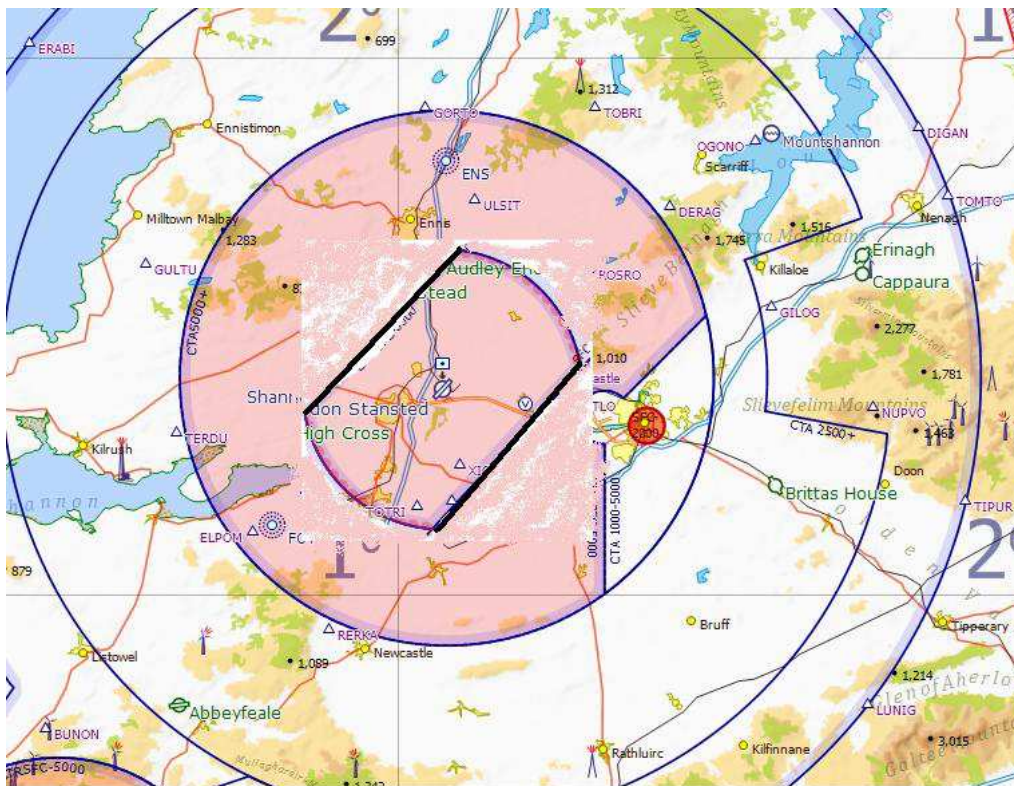
- Uncontrolled
- Lower Wx minima for light slow VFR traffic:
 - o 1500m vis
 - o Clear of cloud & in sight of surface

Uncontrolled airspace. VFR traffic typically operates at low level outside controlled airspace (OCAS), is responsible for its own terrain and traffic collision avoidance and must avoid entering controlled

airspace without a clearance. No flight plan is necessary, flight information service is available. Mid air collision is a risk which is minimised by route choice, lookout, lighting and electronic means.

Inside Controlled Airspace The core business of ATC in Controlled Airspace is to protect IFR Traffic. Every flight controlled, this implies less flexibility for VFR pilots and a higher workload for both pilots and controllers than the equivalent VFR operations OCAS. A flight plan is mandatory and there are significantly more restrictive weather minima for VFR Traffic than those minima in class G airspace. If the weather is below 'Visual Met Conditions' (below 5k Vis and 1500 ft cloud-base) restricted numbers are allowed. If conditions dictate IFR traffic only then no Visual traffic is permitted.

Control Zone Size Cork and Shannon Zones are generally 30NM in diameter. Regional zones are 20 NM diameter. These are large compared with equivalent control zones in other countries. For Example, the Stansted Zone superimposed on the Shannon zone looks something like this:



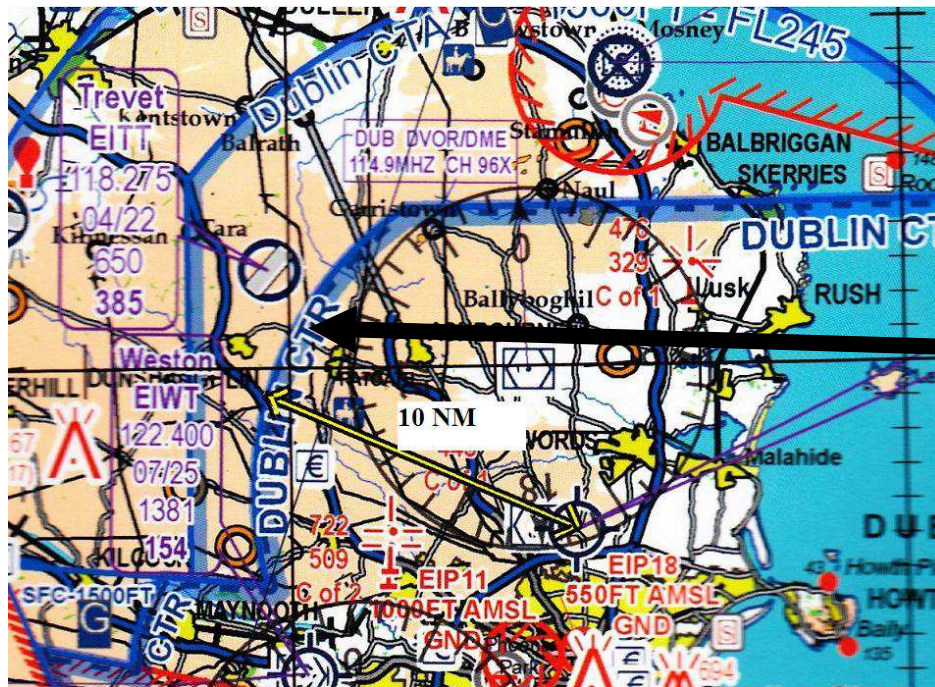
Comparing Stansted and Shannon Control Zones.

Huge scope for 'freeing up' Class G airspace to enhance Flight Safety for GA while maintaining standards at or above current levels for Protected traffic inside Controlled Airspace.

Consideration should be given to reducing zones size in Ireland. This would:

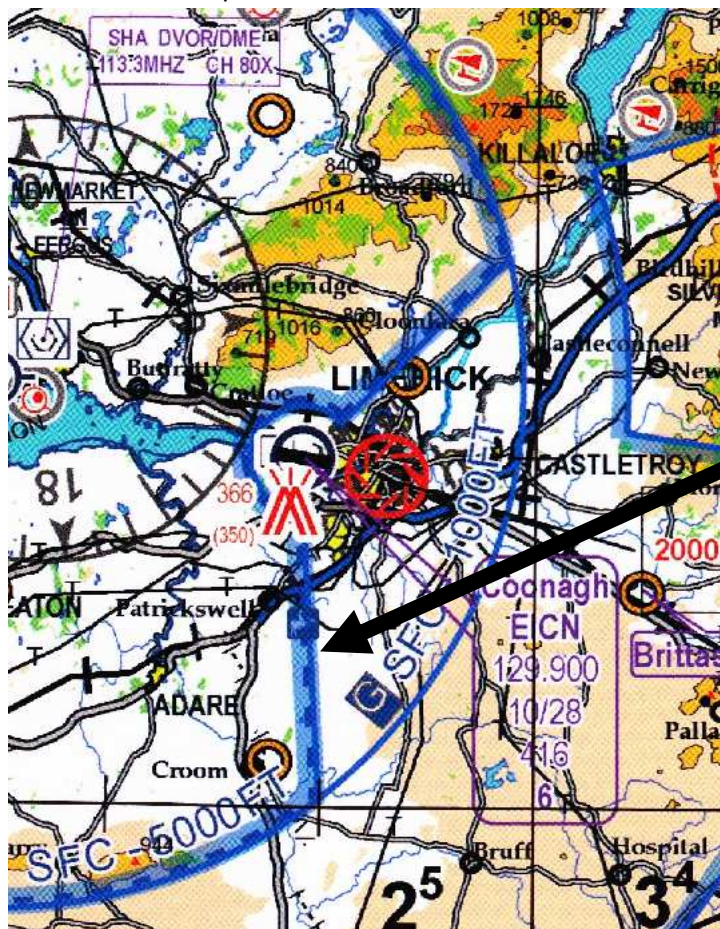
- **Increase airspace available to VFR GA thereby**
 - o Reducing the risk of Mid Air Collision OCAS for VFR Traffic
 - o Increasing route flexibility for VFR Traffic
- **Decrease risk of Airspace busts by VFR traffic (less CAS = less risk of bust)**
- **Decrease controller workload thereby enhancing safety for all Traffic inside CAS**
 - o Zone controllers would not be concerned with traffic operating at low level 10 – 15 miles away from the airfield
- **Have zero impact on IFR or Commercial Air Transport ops**

The Dublin Zone already conforms to these principles to the North and West of the airfield, with the zone boundary shaped to maximise available Class G airspace and minimise controller workload.



Existing Dublin Zone Shape to North and West maximises Class G airspace.

Similarly, the 'Coonagh fillet' to the East of Shannon, 'frees up' Class G to GA traffic while having no adverse effect on protected traffic.



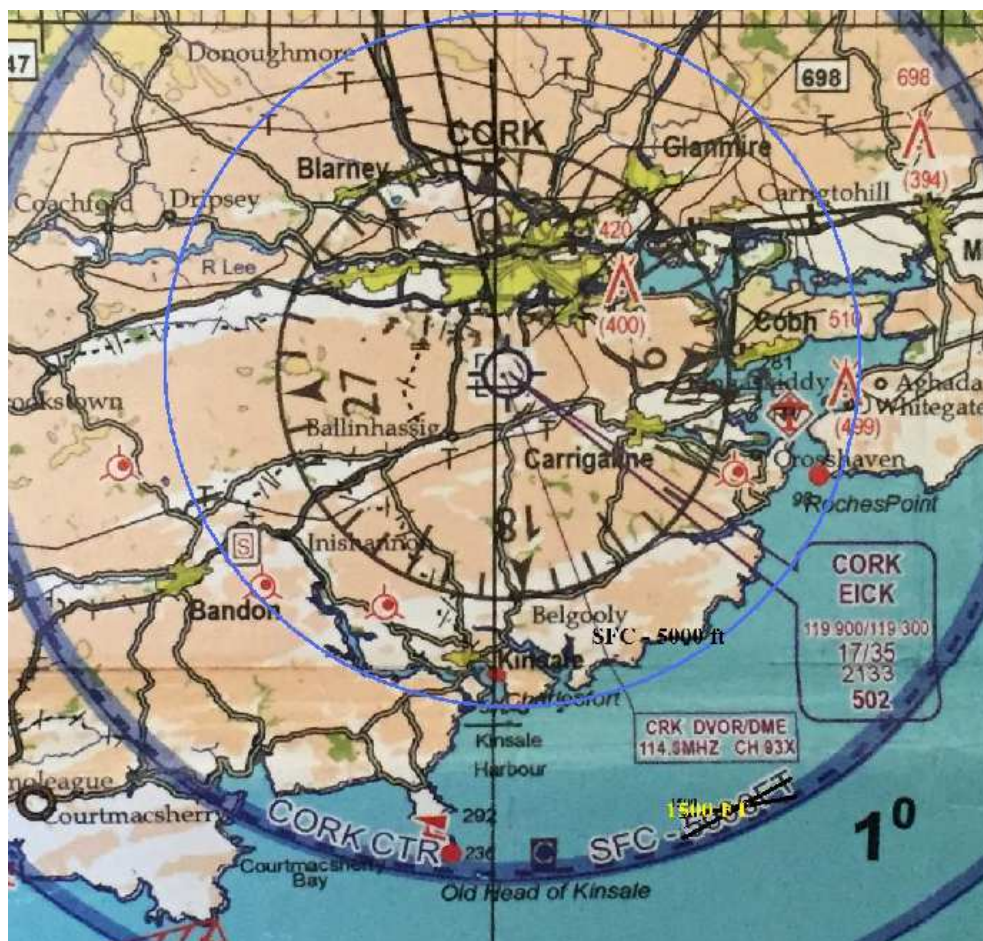
'Coonagh Fillet' maximises Class G airspace

Choke point VFR Traffic operating OCAS between the Connaught and Sligo Zones is squeezed into a narrow bottleneck by controlled airspace that could be 'freed up' by a re-design of regional control zones where appropriate. Protected traffic inside controlled airspace would be completely unaffected.



Choke point
Potential Class G airspace

Cork Zone The Cork zone poses a particular challenge with many VFR movements from Cork-based Training traffic and frequent Commercial helicopter traffic operating to the Old Head of Kinsale, the latter which is inside the current 30-mile diameter zone. Local conditions at Cork airfield (500ft AMSL) are frequently below VFR minima for Class C airspace whilst frequently, 10 miles away, especially to the south, conditions would allow VFR flight in Class G airspace. SVFR operations inside the zone are restrictive and impose high workload on controllers and aircrews. Reducing the size of the zone would increase flexibility for locally-based traffic (less time to transit to & from the zone boundary). Commercial operators would have far more flexibility in routing and a big workload reduction if the Cork Zone size was reduced to, say, 10 NM with appropriate changes to the base of Class C. IFR traffic and approaches would be unaffected.



Cork Zone 10 NM radius proposal, with 'step up' base of 1500 ft to existing 15 nm boundary. IFR approaches unaffected.

Vast area 'freed up' to GA traffic – especially when Cork local conditions below Class C VFR limits. (frequently)

Controller and GA pilot workload reduced.

Conclusion. Ireland's current airspace structure affords amongst the best protection in the world to traffic inside its Controlled airspace. Consideration should be given to reducing the size and adjusting the shape of Control Zones in Ireland with a view to maximising the volume of low-level Class G airspace available to General Aviation traffic. This would have significantly enhance flight safety for GA traffic by reducing the risk of mid air collision outside controlled airspace and reducing the risk of 'airspace busts'. It would in addition reduce tower controllers' workload and have no adverse impact on Commercial or IFR traffic.