

Report from the Airspace Infringement Working Group's Causal Factors Working Group 2020

The Causal Factors Working Group is a sub-group of the Civil Aviation Authority's Airspace Infringement Working Group (AIWG). It includes three people, all independent of the UK Civil Aviation Authority: two industry experts whose experience covers microlight flying and instruction, higher performance commercial and IFR flying and instruction alongside a third member with experience in SEP flying and PhD level work in causal factors.

The members of the Causal Factors Working Group are:

- T Nathan, PPL/IR Board member, ATPL holder and Instrument Rating Instructor
- G Weighell, who at the time of the analysis was Chief Executive BMAA
- M Evans, PhD Student at University College, London, and SEP Pilot

The Airspace & Safety Initiative is a joint CAA, NATS, AOA, GA and MoD initiative to tackle major safety risks in UK airspace: airspacesafety.com

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Introduction

An airspace infringement is the unauthorised entry of an aircraft into notified airspace. This includes controlled, prohibited or restricted airspace (both permanent and temporary), active danger areas (both permanent and temporary), aerodrome traffic zones (ATZ), radio mandatory zones (RMZ) and transponder mandatory zones (TMZ).

This sub-group of the AIWG meets annually to analyse and discuss the previous year's infringements and are subject to Non-Disclosure Agreements.

Of the 748 reported airspace infringements in 2020, the Group had access to 545 casefiles (72.9%) which contained MORs and pilot reports. Where an incident is supported by an initial ATC report and a pilot report the working group has recorded certain numerical details and other information in order to establish trends and causes.

The categories which were considered are:

- Pilot qualification and experience
- Use of an air traffic service
- Altimetry
- Use of a moving map
- Planning
- Weather
- NOTAM
- Distraction
- Overload

Where numbers are expressed as a percentage it refers to the number of reports of that particular item, not of the total number of reports considered. Percentages are generally rounded to the nearest whole number.

Pilot qualification and experience

From data taken directly from pilot report forms it was established that the type of licence held by the pilot in command was as follows:

Students (no licence)	4%
PPL/LAPL/NPPL	69%
Professional (half of which also held an Flight Instructor qualification)	27%

Eight pilots (1.4%) held Federal Aviation Authority (FAA) qualifications. This low number suggests that holding a licence other than a UK issued licence is not a significant causal factor.

Total Hours

The pilot report form asks for pilot experience in terms of both total hours as Pilot-in-Command and hours flown within the periods of 90, 28 and 1 day prior to the incident. The Working Group collated the reported Total Hours which are grouped as follows:

less than 100 hours	10%
have more than 200 hours in total	75%
more than 1000 in total	38%

Although it might be expected that very low-hour pilots (in this case defined as less than 100 hours) would be more likely to infringe due to inexperience, there were very few that did. The Working Group noted that a significant number of very high-hour pilots (in this case defined as 1000 hours or more) had infringed. A factor which might have influenced this is that the higher-hour pilots are exposed to the possibility of infringement more often than low-hour pilots by virtue of flying a greater number of hours.

The Working Group also noted that there has been an increased workload on Flight Instructors, usually in the higher hour group, throughout certain periods of 2020 due to the need to carry out refresher training for private pilots following the easing of COVID