

Airspace infringements: Detailed information

CAP 2126

A large, abstract graphic composed of overlapping blue and teal shapes, primarily a large circle with a square cutout, occupying the lower two-thirds of the page.

Published by the Civil Aviation Authority, 2021

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First published April 2021

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Summary

The following three chapters contain detailed information regarding airspace infringement, including detailing how incidents that constitute an airspace infringement are reviewed in the first chapter entitled “Airspace infringements” (sub-heading “How incidents are reviewed”). The second chapter entitled “Reviewing the process and our actions” details the steps the CAA has taken to do this. The third chapter entitled “CAA infringement review recommendations and responses” presents a detailed list of ten recommendations and their related responses, with each recommendation paired with its corresponding response.

Chapter 1

Airspace infringements

Airspace Infringements (AI - the unauthorised entry of an aircraft into notified airspace) occur frequently, and across most parts of the UK; on average, around 1,200 are reported annually by ANSPs (Air Navigation Service Providers) through the MOR (Mandatory Occurrence Report) process.

When we receive these reports, we must investigate the circumstances of each one and determine whether lessons can be learned, and whether action can be taken to prevent or reduce future events.

It is up to each ANSP to first internally review every infringement before reporting it to us as an MOR if the circumstances dictate it.

We recognise that UK airspace can be complex and that there are many causal factors as to why an airspace infringement may occur; every infringement, however, has the possibility to cause a significant risk to the safety of aircraft; it is important therefore that all infringements are reported and all are subject to the same process regardless of its apparent immediate effects. For example, a pilot may not be immediately aware of the knock-on effect an infringement has had to air traffic control. The process must be smart-enough to examine the circumstances of each event and determine the best route-forward.

The vast majority of all incidents that we receive (around 99.5%) are processed through the CAP1404 Airspace Infringements: review and actions process. Throughout all our work we follow and promote Just Culture, in which people are treated fairly and are not punished for actions, omissions or decisions taken by them that are commensurate with their experience and training. The aim is to promote continuous learning from previous mistakes and to encourage pilots to openly and freely share essential safety related information.

When addressing safety-related issues within a Just Culture, it is vital that investigations and decisions are fair and timely and that we make all reasonable efforts to decide any action without delay.

Under “Just Culture”, any CAA investigation is not looking to apportion blame for an incident – it is seeking to establish the facts to fully-understand why the incident occurred and what remedial training/education actions can be taken to prevent a repeat. The best way the PIC can help is to engage with the investigation and be open and honest. “Threat and Error Management” (TEM) will also be looked at – did the PIC do everything possible to prevent the infringement? Were all tools available utilised? Did the PIC react as could be reasonably expected on the basis of the level of training and experience? The investigation will look at all the causal factors of the incident and what actions can be taken to ensure it does not happen again. This could be anything: improving the provision of information to pilots, correcting mistakes with information already provided, providing additional services to prevent reoccurrences or providing assistance in re-educating pilots

where genuine mistakes have been made. If the PIC has not been grossly negligent, or deliberately violated the airspace but have made an honest mistake, then punishment should not be necessary.

Extract from 'Just Culture' – A think piece on Just Culture from Greg Hardman, British Airline Pilots' Association (BALPA)

How incidents are reviewed

The Infringement Coordination Group (ICG) referenced in the CAP1404 process is a cross-CAA group chaired jointly by the Airspace, Aerodromes and Air Traffic Management teams and the GA Unit (GAU). The group meets weekly, examining all MORs that feature one or more of the following characteristics:

1. A safety impact (e.g. loss of separation, activation of ground/airborne collision avoidance tools, avoiding action turns given by air traffic control to aircraft under their control)
2. Applied safety intervention measures (e.g. departing aircraft held on the runway, arriving aircraft vectored from their planned track or delayed in holding patterns) as a safety barrier to prevent a mid-air collision or loss of separation
3. Previous infringement(s) by the pilot. A previous infringement will only be considered relevant if the related CAA decision on education/retraining requirements happened in the last two years.

Following this review, a number of courses of action are available to the group and are shown within CAP 1404.

The Airspace Infringement Working Group (AIWG) is a Civil Aviation Authority (CAA) sponsored cross-industry Working Group. Its purpose is to monitor airspace infringement data and identify trends in order to identify, propose and instigate corrective actions in order to significantly reduce the incidence of, and risks associated with, airspace infringements for the benefit of all airspace users. In identifying causal factors and determining corrective actions, the AIWG will consider whether airspace design or pilot training and competency are features of the pattern of infringements.

Having considered statistical or other evidence, the AIWG will make recommendations for corrective action to the appropriate regulatory or industry body. It will also act through its membership to alleviate potential problem areas where this is deemed appropriate. Such recommendations may seek regulatory change, or the development of appropriate education and awareness material, and may either be UK-wide, site-specific, or user-specific. Membership includes representatives from:

- Air Navigation Service Providers (ANSP)
- Air Navigation Solutions Limited
- Air Traffic Control Services Limited
- Association of United Kingdom Flight Information Service Officers

- Birmingham Airport Air Traffic Limited
- NATS
- Southend Airport ATC

Airports

- Airport Operators' Association
- Airport Operators' Group

Associations, aviation groups and others

- British Hang-gliding and Paragliding Association
- British Gliding Association
- British Microlight Aircraft Association
- General Aviation Safety Council
- Guild of Air Traffic Control Officers
- Independent pilot/PhD student
- Light Aircraft Association
- London LAIT (Blackbushe Airport)
- PPL/IR Europe
- Vintage Aircraft Club

Regulatory Bodies

- CAA, Airspace, Air Traffic Management and Aerodromes
- CAA, Communications
- CAA, Flight Operations
- CAA, General Aviation Unit
- CAA, Safety Performance & Risk
- Military Aviation Authority

A number of LAITs (Local Airspace Infringement Teams) have been established with membership from those in the respective geographical areas and with local interest, to discuss Infringement related matters; these groups are able to hone in on issues specific to their operating area and bring together users, providers of services and the CAA.

The following are LAITs established to date:

- Stansted
- Luton
- Gatwick
- London (serving London Heathrow and London City airports)
- Midlands (serving Birmingham and East Midlands airports)
- Wessex (serving Southampton, Bournemouth and Farnborough airports)
- Yorkshire and Humberside (serving Doncaster-Sheffield, Leeds Bradford and Humberside airports)
- Northwest (serving Manchester and Liverpool airports and Hawarden and Manchester Barton aerodromes)

The GBASF (General and Business Aviation Strategic Forum – for which GAA, AOPA and BBGA represent all GA interests) meets routinely with senior leadership team members of the CAA to discuss all issues of importance; at their suggestion, we have initiated an informal series of meetings with other GA representatives to specifically discuss issues with the flying community. That body is called the Airspace Engagement Group (AEG) and GA representatives come from PPL/IR, AOPA, A4A and BGA. While this group is new, it is already beginning to identify areas where engagement between the regulator and airspace users could be improved and/or re-focussed.

We also use existing mechanisms for information sharing including NATMAC, GA Partnership, Mid-Air Collision Challenge Group and the Airspace Infringement Working Group.

Chapter 2

Reviewing the process and our actions

To make sure it remains fit for purpose, the process laid down in CAP1404 and our wider work in the area is subject to constant review.

As part of this aim, we have reviewed the process set out in CAP1404 from end-to-end. This was undertaken by a team independent of those who work on infringements. The review raised a number of recommendations (listed below together with a brief summary of what has changed as a result).

We are also in close contact with the Department for Transport to coordinate future work on infringements.

Against this background:

1. We want to deal with causes as well as effects – freeing up more airspace access for GA makes infringements less likely, so there is a clear linkage to the Airspace Modernisation Strategy, and to the greater use of technology, such as interoperable Electronic Conspicuity.
2. We want to build a better sense of shared safety interests; there has to be a meeting of minds.
3. We want to communicate better, explaining and engaging more, especially through representative bodies and media. For example, we want to focus on highlighting the importance of Just Culture and preventing future infringements. This will reduce the emphasis on licence suspension and add more emphasis on assistance towards individuals.
4. We will investigate with GASCo how the AIAC might be more widely available, particularly for trainee pilots.
5. We will ensure that the tone of our engagement during investigations supports Just Culture. For example, all correspondence is being reviewed and rewritten, with Just Culture as a guide and to emphasise that the process is there to assist, not accuse or punish. Correspondence will also explain why the CAA has come to a particular decision.
6. We have already made it clear that we will not tolerate abuse and intimidation of CAA staff, and that we will take further action where appropriate.
7. We are looking at our process to review whether colleagues responsible for investigating the complaints/allegations against pilots from third parties should be the same as those that make the decision on what action, if any, is warranted once the facts have been looked into.

Chapter 3

CAA infringement review recommendations and responses

Recommendation

CAP 1404 should be reviewed and amended to focus more on highlighting the importance of Just Culture and preventing future infringements, in line with the CAA 'Tone of Voice' and the Skyway Code. Remove any emphasis on suspension and add more on assistance towards individuals.

Response

1404 has been subject to a regular review, with focus on the application of Just Culture. Further amendments will be progressed as we continue to look into Infringements from end-to-end. Further iterations of 1404 will be forthcoming on that path.

Recommendation

CAP 1404 should include more stages of intervention, and whilst still providing the evidence, remove the accountability for the decision to provisionally suspend licences to another independent group.

Response

Development of the 1404 process has ensured appropriate steps are available to reduce the likelihood of repeat events; those steps include the provision of educational material, tutorial and basic testing of understanding, targeted awareness training, more in-depth theory training and practical flight training. The membership of the Coordination Group ensures all skill sets are included and decision-making on which of the available training opportunities is most appropriate are agreed by all members ensuring no one individual exercises undue influence. As the CAA is not involved in the provision of air traffic services or the generation of MORs, its role is independent to the two involved parties (airspace control authority and pilot); the members of the ICG act as experts in their field and are best placed to examine the circumstances of each event and prescribe follow-up action where it is deemed to add value to the PIC. Provisional suspension of a licence is a pre-flagged function of the process and determined according to that process. 'Independent' oversight of the group is maintained by the functional Head of the CAAs Airspace, Air Traffic Control and Aerodromes team under the authority of the Group Director SARG.

Recommendation

All correspondence should be reviewed and rewritten in layperson language, with Just Culture as a guide and emphasise that the process is there to assist, not accuse or punish. The correspondence should also explain why the CAA has come to a particular decision.

Response

All communications material between the CAA and the subject pilot has been reviewed to address the issue of tone, understanding and culture. Standard templates are used for consistency, with specifics relating to the individual case added to explain the understanding of the Coordination Group in coming to its decision.

Recommendation

CAP 1404 should include the requirement for pilots of applicable aircraft to submit MORs and encourage pilots of Annex I aircraft to do the same. The process should not compromise the requirements of Regulation 376/2014 in any way.

Response

Pilots of UK Part 21 aircraft (formally categorised as EASA Annex II aircraft) are required to submit a Mandatory Occurrence Report (MOR) following an airspace infringement.

For aircraft that are classified as UK Non-Part 21 (formally categorised as EASA Annex I), occurrence reporting remains voluntary. However pilots are strongly encouraged to submit an MOR (or complete the questionnaire) to enable the CAA to carry out a full, independent review of the event and to understand if future infringements similar to the reported occurrence could be prevented. The MOR allows the reporter to share their account, including causal and contributory factors

Recommendation

Discussion should be held at SARG leadership level about how the safety accountabilities of each respective department can be exercised in the CAP 1404 process.

Response

While the safety accountability for Mid-air Collisions (MACs) lies with the Airspace, Air Traffic Management and Aerodromes team, all capability areas represented on the Infringement Coordination Group and wider AI team have safety accountabilities relating to MAC and AI prevention.

Recommendation

Departments should ensure that their representatives on the group have enough capacity in their day job to attend and suitably prepare for ICG meetings. Consideration should be given to having safety accountabilities drawn up for all ICG members.

Response

It is essential that the core membership of the Infringement Coordination Group is represented at each and every meeting to ensure that MOR reviews are conducted with the correct level of technical and non-technical input and apply adequate scrutiny leading to accurate and relevant decisions. Standard attendance at meetings is between 10 and 15 members as each area has more than one representative nominated to offer resilience to the process.

Recommendation

All current and prospective members of the ICG should be appropriately trained. These requirements should be drawn up in a procedure to be stored in the SARG MS and achievement of training appropriately recorded.

Response

All members of the Infringement Coordination Group are experts in their respective regulatory field. Additional training (for systems and process) is provided where the need is identified in Just Culture, MOR process and handling, UK airspace, and in conducting regulatory interviews. In addition, all members of the group attend the AIAC.

Recommendation

SARG should investigate with GASCo how the Airspace Infringement Course might be more widely available, particularly for trainee pilots.

Response

GASCo has developed and is delivering a new webinar on Airspace Infringement Avoidance. These webinars are repeated fortnightly, depending on demand. This webinar is open to all and completely free of charge. Details of course dates and registration can be found at: <https://www.gasco.org.uk/>. This training is a subset of the full Airspace Infringement Awareness Course (AIAC) and, in the same format as the full course, is available only online.

Recommendation

SARG should ensure that all new joiners have training in the CAA's social media policy and what to do when subject to abuse. Periodic professional development training should also include these topics as reminders.

Response

Historically, members of the AI team have, when engaging with pilots whose occurrences have been subject to 1404 review, been subject to verbal abuse and harassment via social media. The CAA does not tolerate such treatment of its staff and takes further action where appropriate.

Recommendation

SARG should consider the method by which suspensions are communicated and attempt to avoid telephone conversations, which by their nature may develop into System 1 conversations. Alternatives such as letters, emails or face to face interviews in serious circumstances should be considered.

Response

The process now ensures initial notification of provisional suspension of a licence is communicated via email; a follow-up telephone call is made to confirm receipt.