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**ASSOCIATION OF
CHIEF POLICE OFFICERS**

UK PROCEDURES FOR DEALING WITH AIRBORNE SECURITY EVENTS

NATS
MINISTRY OF DEFENCE
DEPARTMENT FOR TRANSPORT
METROPOLITAN POLICE SERVICE
ASSOCIATION OF CHIEF POLICE OFFICERS
BRITISH AIRLINE PILOTS ASSOCIATION

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UK PROCEDURES FOR DEALING WITH AIRBORNE SECURITY EVENTS

KEY POINTS FOR PILOTS, AIRCRAFT OPERATORS & THREAT ASSESSORS

To avoid an incident, please ensure that:

- communications with ATC are maintained at all times;
- Transec Threats Office has 24/7 contact details for your operations centre; and
- a trained threat assessor is available at all times.

In order that any event is handled in the most appropriate manner:

- be aware of potential situations such as loss of two-way communications or inadvertent A7500 selection that may indicate a potential security alert to ATC and take all necessary precautions to prevent that happening.
- communicate clearly to all parties when in your opinion there is an actual or perceived security threat to your aircraft or to the UK.
- Threat Assessment - make contact with your company operations centre at the earliest opportunity to ensure all pertinent information is shared in a timely fashion – if necessary speaking with a trained company threat assessor.
- Volunteer information regarding the integrity of the flightdeck and the exact nature of the threat/concern to ATC and/or Transec in a timely manner and be clear and concise.
- Use appropriate Radio Transmission Facility (RTF) phraseology and special purpose Secondary Surveillance Radar (SSR) Mode A codes.
- Comply with government instructions whether given by radio or through visual intercept signals.
- Ensure that where agencies have been alerted to a threat, once it is 'coded' Red, Amber or Green, the agencies involved in the incident are informed immediately e.g. Transec Threats Office (office hours) 0207 944 2872 / 2870 or DfT Duty Office (out of hours) 020 7944 5999.

UK PROCEDURES FOR DEALING WITH AIRBORNE SECURITY EVENTS

I. Introduction

1. The following guidance should assist the understanding of aircraft operators, threat assessors and pilots of the procedures which will be followed by the appropriate UK authorities when handling airborne security events. The overall objective is to identify, contain and resolve an airborne security situation in an appropriate way and as quickly and safely as possible.
2. In the interests of national security both Air Traffic Control (ATC) and Air Defence (AD) agencies monitor UK airspace and its approaches for indications of suspicious activity which may indicate a developing airborne security event, so that suitable action can be taken to deal with the situation. An airborne security event is one where an aircraft is either subject to an actual or perceived threat, which may take the form of a hi-jack, bomb alert or other onboard disruption, or that aircraft is perceived to pose a threat to the UK. In either case the procedures used to determine the actuality, nature and extent of this threat will be similar. The procedures used to deal with each type of threat, however, are likely to be different.
3. If an airborne security event is believed to pose a threat to the UK it is likely that the AD Authority ((ADA) vested in the National Air Operations Centre (NAOC) RAF High Wycombe) may use Quick Reaction Alert (QRA) aircraft and other assets to gain further information and take necessary action to resolve the situation. The situation is likely to evolve rapidly and therefore timely passage of information and compliance with instructions is key.
4. These procedures are owned by HM Government and contain actions for a variety of agencies, principally the Ministry of Defence (MoD), NATS, the Department for Transport (DfT) and the Metropolitan Police Service. These procedures are regularly reviewed and are applicable whether the subject aircraft, regardless of nationality, is inbound, outbound or overflying the UK, and apply to the whole of UK airspace i.e. the London and Scottish Flight Information regions (FIRs) and Upper Information Regions (UIRs) and the Shanwick Oceanic Control Area.

II. Identification/Indication of Hijacks & Airborne Security Situations

5. Verified Hijack Status

Aircraft subject to hijacking should where possible be identified to Air Traffic Control (ATC) staff by the flightcrew by the selection of the Mode A code 7500 on the aircraft's transponder and/or declaration on the Radio Transmission Facility (RTF) frequency.

6. Other Security Alert Indicators

There are a range of indicators of suspicious aircraft/pilot activity which could highlight a potential security event to ATC and AD agencies and lead to the initiation of intervention procedures. These indicators include but are not limited to the following:

- no cleared flight profile, i.e. infringement of airspace;
- unauthorised deviation from cleared flight profile in the horizontal or vertical plane;
- refusal or inability to comply with ATC instructions, including vectoring, without good reason;
- loss of RTF contact, particularly associated with flight profile deviation;
- unauthorised Secondary Surveillance Radar (SSR) code changes or extended use of IDENT;
- use of non-standard phraseology by the crew or other covert attempts to highlight the situation (marked change in voice characteristics, etc.);
- notification of a threat or incident from official or non-official sources;
- open RTF transmission from the cockpit;
- non-ATC related RTF transmission (e.g. political statement); and
- specific / non-specific threat passed via third party e.g. Police / public.

The last three may mean that the identity of the aircraft is unknown until other factors become apparent. Individual events may not, in themselves, constitute suspicious aircraft / pilot activity. However, a combination of such events may be considered as an unusual event and then the appropriate alerting action will be undertaken by ATC.

III. Aircraft Commander/Aircraft Operator Responsibilities

7. Where information exists indicating an actual or perceived security threat to an aircraft, this information should be communicated to the handling ATC unit immediately by the aircraft commander or to the Threats Office in the DfT's Transport Security Strategy Division ("Transec") by the aircraft operator as appropriate. They should also instruct a trained airline threat assessor to evaluate the threat who should inform cascading findings/codings to Transec as soon as possible. Information regarding the integrity of the flightdeck should be provided to ATC in a timely manner, together with the phrase 'flightdeck secure' when this can be assured. This will ensure that the situation is handled in the most appropriate manner by the UK ADA.
8. Appropriate use of RTF phraseology and special purpose SSR Mode A codes is essential. If there is an actual security threat, the aircraft commander should not use either PAN or MAYDAY prefixed calls in isolation to communicate the threat to ATC. Details of the security threat must be passed in the same transmission. Where no security threat to the aircraft is perceived by the aircraft commander, appropriate use of either PAN (Possible Assistance Needed - no imminent danger to life) or MAYDAY (Distress call - imminent danger to life) should be

applied if the aircraft commander requires some form of priority ATC handling to the destination or a diversion airfield.

9. Aircrews should be strongly advised to monitor 121.5 MHz ("Guard") at all times. Routine monitoring of 121.5 significantly increases chances of hearing transmissions from ATC attempting to re-establish contact with the aircraft. In addition military aircraft will also simulcast on 121.5 in addition to standard ATC frequencies. Aircrew who for whatever reason find themselves without the correct frequency are also advised to request assistance from ATC using 121.5 MHz.
10. The combination of correct RTF calls and use of Mode A codes will assist ATC to take action appropriate to the situation.

IV. Communications

11. ATC: As soon as notification of an event is received, the handling ATC unit will pass the details to the ATC operations supervisor at a parent Area Control Centre (ACC) i.e. either Swanwick Centre or Prestwick Centre. It is then the responsibility of that individual to notify the UK ADA, via the military ATC organisation. The UK ADA will subsequently notify appropriate UK Government agencies, specifically Transec's Threats Office staff and the Metropolitan Police.

12. The Police:

- contribute to the intelligence picture and assist in the bomb threat assessment;
- act as a single point of contact (SPOC) for the passing of real time information between the UK ADA and the police force responsible for the receiving airport;
- deploy an effective and flexible police response that is commensurate with the threat and/or incident; and
- investigate crime.

13. The Metropolitan Police Service Counter Terrorism Command's (SO15) Reserve room acts as their duty office, take calls and provide the UK ADA with any intelligence that the police are aware of in respect of an airborne security incident. This includes their ability to search databases in respect of bomb threat codewords.

14. SO15 Reserve also acts as a SPOC for police forces receiving mobile phone calls from passengers or crew aboard the renegade aircraft or ground based relatives relaying such information. These calls, which may contain vital intelligence or information, are then relayed to the UK ADA to assist in the assessment of the developing incident.

15. As the event progresses, the civil ATC, military ATC and UK ADA will co-ordinate their actions and, where and when the relevant authority makes decisions, will implement any operational directives. The UK ADA will continue to liaise with Transec and SO15, both of whom will continue to provide intelligence and information as it becomes available, to aid the ADA's decision making process.

16. In the event of specific information being required or communicated, the Transec Threats Office may contact aircraft operators' operations centres and/or notified key personnel (e.g. threat assessors). Such channels may be used in attempting to establish the security and integrity of the flightdeck and/or the nature and degree of the threat posed to or by an aircraft. This channel of communication is vital in determining the nature and extent of the threat.
17. It is therefore essential that the aircraft operator provide Transec Threats Office with a 24/7 contact number for their operations centre so that Transec staff can communicate immediately with (i) the airline when seeking to advise of lost communications and requesting associated actions and (ii) a trained threat assessor who can assist Government agencies in responding proportionately and in a timely fashion to the situation as it unfolds. The lack of a trained threat assessor and/or operations centre point of contact severely limits an airlines ability to participate in, and contribute to, what can be a dynamic and rapidly changing decision making process. Aircraft operators should ensure updated contact details for operations centres and threat assessors are sent to the Transec Threats Office via email: TICB@dft.gsi.gov.uk
18. The Transec Threats Office are contactable (office hours) on: **0207 944 2872 / 2870**, and via the DfT Departmental Duty Office at all other times on: **0207 944 5999**. These numbers should be held by Airline Operations Centres and Threat Assessors who may be required to pass/receive timely information to assist in the effective handling of a crisis situation.

V. UK Air Defence Authority (and associated agencies) Actions

19. When notified of a potential airborne incident or threat, the UK ADA determines the initial actions to be taken to ensure the security of UK airspace. Prior to the official declaration of a security incident, the UK ADA may elect to take certain actions to prepare the AD forces. This may include ordering the QRA aircraft to an increased state of readiness and/or launching the QRA aircraft to intercept the aircraft of concern.
20. Once advised by the UK ADA, the Transec Threats Office will make every effort to contact the airline operations centre and/or threat assessor. Transec will seek to enlist the help of both parties to ensure any response by Government agencies is timely, proportionate and effective. **It is imperative that airline staff understand that this is a key opportunity to influence and/or educate the decision making process at this time e.g. by assisting ATC to regain communications with the aircraft and/or assessing the threat (i.e. Red, Amber, Green).** Failure to be available and/or respond in a timely fashion may limit the options available to Government when considering how best to respond to a fast moving and dynamic situation.
21. If and when the UK ADA initiates the launch of the QRA aircraft, the Military Supervisor at either London or Scottish ATC Centres(ATCCs) will telephone the Metropolitan Police Central Command Complex (CCC) in London. CCC will then initiate the police notification plan and link the Military Supervisor to the Force

Control Centre of the police force responsible for the airport where the aircraft will land.

22. The provision of real time information in this way assists the police ground response and permits continual re-assessment of the threat (in particular by the airline threat assessor) to help the receiving force to deploy the most suitable and proportionate police response. The aim of this response is to preserve life, minimise injury, ensure an early return to normality and to preserve evidence.
23. If the interception of a civil aircraft is ordered by the UK ADA, QRA aircraft will close on the left hand side of the aircraft while attempting to make contact with the cockpit using VHF radio communications; the military aircraft will simulcast on 121.5 MHz in addition to standard ATC frequencies. Details of Visual Interception Signals used by military aircraft are detailed in the CAA Safety Sense Leaflet 11 – Interception Procedures¹ and can be found at: <http://www.caa.co.uk/docs/33/20110217SSL11.pdf>
24. Voice communications with the cockpit and compliance / non-compliance with the interception signals assist the UK ADA in determining the intent of those in control of the aircraft. The UK ADA's conclusions will be communicated to the Government who will determine what further action should be taken.
25. Such actions could result in the aircraft being diverted into an alternative airport from that which was originally intended.

VI. False Alarms

26. False alarms continue to be generated on regular basis and are in the overwhelming majority of cases caused by:
 - i) "civil aircraft operated as a controlled flight not maintaining a continuous listening watch on the appropriate radio frequency of, and establishing two-way communication as necessary with, the appropriate air traffic control unit"² as they approach or enter UK airspace or
 - ii) less frequently, bomb threats made against aircraft in-flight where trained airline threat assessors are uncontactable and unable to assist in understanding and coding the nature and severity of the threat.
27. NATO colleagues or other ATC agencies will also alert the UK ADA or UK ATC agencies if an aircraft, due to land in or overfly the UK, loses communications for a significant period of time or is faced with a potential threat situation. This can trigger the UK ADA actions described in section 5 above. Thus a loss of communications combined with the aircraft deviating from its flight plan is likely to trigger an immediate launch of the QRA aircraft which may result in the interception and diversion of the aircraft.

¹ This document is in accordance with the ICAO standards included in Schedule 11 of the Air Navigation Order

² ICAO Radio Communication Failure Procedures document, Annex 2, Chapter 3.

28. The UK ADA may ask to speak to the commander of any aircraft that triggers an alert (regardless of the actions subsequently taken) once it has landed and further action may be requested through the relevant national authorities if negligence is suspected or no explanation for the loss of communications is offered. Equally, an airline's inability to contribute to the UK Government's understanding of the threat in a timely fashion e.g. by having a trained threat assessor available, may result in Transec seeking clarification of an airlines contingency planning capabilities.
29. It is accepted that some false alarms will continue to be generated because of operator error and RTF/ground based communication failures. However, it should be borne in mind that they are wasteful of both industry and Government resources and have the potential to create danger for those on board and the UK more generally.
30. Transec will ask for an explanation of false alarms, particularly for those which result in the launch of QRA aircraft and may request a copy of the internal investigation in to such an incident and details of remedial action taken to prevent repetition. Working with BALPA, Transec has developed a self-reporting form which pilots involved in comm loss incidents can complete and return to Transec to aid with any subsequent investigation. A copy of this form can be found in Annex A.

VII. Situation Containment

31. As part of the reaction to airborne security situations, decisions regarding routeing, flight profile and destination (including possible airborne holding) may be taken outside of normal aircraft operator / aircraft commander arrangements. In the event that ATC or the UK ADA feel they have reason to question whether the communication from the flight deck is being made under duress, the aircraft may be instructed to perform specific manoeuvres. It is essential that any such instructions are complied with whether passed by ATC or via standard ICAO intercept procedure signals.
32. It should be noted that certain information may be withheld from the aircraft commander during events of this nature, and that some requests by either the aircraft operator or aircraft commander may not be approved by the appropriate UK authorities.
33. As part of the response, ATC may be directed to effect airspace clearance measures. These actions may affect other aircraft in the vicinity, including on the ground, and the continuation of existing flight plans may not be permitted. ATC may require diversion to alternate airfields or may withhold clearances. During such times, the flight safety of all aircraft will remain paramount and, as such, aircraft may be issued with non-standard ATC clearances.
34. The extent, sequence and priority of any actions to clear airspace will be at the discretion of the Parent ACC Watch Supervisor, who will co-ordinate his actions with the relevant Military ATC Supervisor. Priority shall be given to clearing traffic away from all regulated airspace through which the subject aircraft is anticipated

to progress. The Parent ACC Watch Supervisor will act as overall co-ordinator for the required airspace clearing process, and will use methods such as:

- cancelling all relevant ATC clearances into airspace likely to be affected by the incident;
- applying Air Traffic Flow Management measures;
- co-ordinating with adjacent ATC Units, with particular consideration for the effects on airport operations (e.g. cessation of airborne holding, diversions, etc.) as well as the ability of these units to assist in the off-loading of traffic for affected sectors;
- temporary re-routeing of aircraft to avoid the subject aircraft and progress thereof; and
- cancelling or amending ATC co-ordination arrangements.

The DfT may order the closure of UK airspace if necessary and all aircraft will be required to comply with the directions given by ATC to achieve this.

VIII. Situation Recovery

35. Normal ATC operations will not resume until authorised by the relevant authority. Subsequent recovery measures required for the overall ATC system may be managed by the NATS Air Traffic Incident Co-ordination & Communication Cell (ATICCC).

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ANNEX A**Loss of communications in flight: incident report form**

Expected communications between ATC and an aircraft in flight is monitored constantly by UK civil/military ATC. Communications loss is one potential example of suspicious behavior which may indicate a possible in-flight security incident. This form enables aircrew to report such an incident so that a) the correct information is recorded as to what exactly happened and b) necessary steps can be taken to reduce the chance of repetition.

1/ Date	
2/ Time UTC	
3/ Operator (airline)	
4/ Flight Number	
5/ Aircraft Call sign (if different)	
6/ Departure airport Destination airport	
7/ Squawk/SSR code	
8/ Aircraft Type	
9/ Registration/Tail Number	
10/ Altitude (at time of incident) FL/feet	
11/ Speed (at time of incident): Mach No/Kts	
12/ Phase of Flight	
13/ Location	
14/ Routing	
15/ Weather conditions	
16/ Channel Frequency (MHz)	
17/ Controlled by (ATC sector)	

UNCLASSIFIED

18/ Description of incident	
19/ Cause(s): please tick or circle	<ul style="list-style-type: none"> a) pilot error b) ATC hand over error c) technical issues d) any other cause - please specify:
18/ Was A/C to A/C relay attempted by ATC and result (if attempted)?	
19/ Was Ground to A/C comms on 121.5 attempted?	
20/ Were any other communication methods attempted (ACARS, Satellite, Company frequency etc)?	
21/ Any other pertinent information	
22/ Contact details (name, telephone or e-mail address)	

When complete please return to the Threats Office, Department for Transport at TICB@dfat.gsi.gov.uk