Prospect ATCOs' Branch Position Paper On Ambient Microphones In ATC Operational Areas





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Executive Summary

Prospect ATCOs' Branch is responsible for Air Traffic Control Officers working in the United Kingdom representing them on Professional and Industrial issues. Additionally the ATCOs' Branch represents other Air Traffic specialist grades such as Watch Managers, Supervisors, Flight Information Officers, Capacity Managers, Training Staff and many other key roles within UK Air Traffic Management.

Introduction

It is a legal requirement for Air Traffic Control radio transmissions to be recorded and retained for a minimum of 30 days. ATC positions do not usually have live microphones and controllers are normally only recorded when they transmit or when a phone line is open.

Unlike aircraft cockpits background sound around ATC work stations is not usually recorded. Microphones designed to record background communications are variously referred to as area, background or ambient microphones.

Following the Uberlingen mid-air collision the following safety recommendation was made to ICAO:

To improve the investigation of future accidents and incidents ICAO should require ATS units in addition to present regulations - to be equipped with a recording device that records background communication and noises at ATCO workstations similar to a flight deck area microphone system.

As a result the following SARP (Standards and Recommended Practices) has been incorporated into Annex 11 3.3.3:

Air traffic control units should be equipped with devices that record background communication and the aural environment at air traffic controller work stations, capable of retaining the information recorded during at least the last twenty-four hours of operation.

Prospect ATCOs' Branch has also been approached by an employer who wished to trial ambient microphones in order to improve incident investigations, reinforce safety culture and to promote professional behaviours.

This paper seeks to set out Prospect ATCOs Branch policy on the introduction and use of ambient microphones.

What are the possible benefits of ambient microphones?

Incident investigations - The primary benefit of ambient recordings would be to provide investigators with more information following an ATC incident. Face to face coordination is not routinely recorded so if following an incident there are differing accounts of what coordination took place it is not always possible to definitively determine what took place.

Ambient recording may allow investigators to determine if distractions in the ops room may have been a factor during the period when an ATC incident occurred.

Professional behaviours - a secondary benefit to ambient recordings could be that the knowledge that everything is being recorded could alter some individual's behaviour for the better.

What are the possible disadvantages of ambient microphones?

Privacy - Ambient recordings could be a significant intrusion on individual's privacy. There are very few professions where individuals agree to be recorded at their workplace and to the consequent infringement of their privacy. ATC ops rooms are not sterile environments. Non-operational conversations regularly occur and in fact have been recognised by employers as one of the methods which can be employed by individuals to maintain alertness during quiet periods.

Conversations and language used by controllers whilst not transmitting could very easily be misinterpreted as unprofessional or indicative of not doing the job properly by a lay person.

ATC ops rooms can be high pressure environments and in stressful situations very strong language and black humour are often used.

There is the very real risk that mishandled recordings could be released into the public domain. Despite various legal provisions at EU and national level both Cockpit Voice Recordings (CVR) and ATC recordings have been inadvertently released into the public domain. Recordings inadvertently released or those played in open courts etc. could result in huge reputational damage to both individuals and ANSPs

Safety Culture - Ambient recordings could detrimentally affect safety culture. Reports are often filed voluntarily by ATCOs when there is no mandatory requirement to do so. This data may allow investigators to spot potential issues before incidents occur.

Individuals may be less inclined to file such voluntary reports if they know that raising it may result in ambient recordings being reviewed. There is also the possibility that individuals may not even file all mandatory occurrence reports for fear of their non-operational conversations being reviewed.

Individuals may also be less inclined to highlight what they believe may be errors by others and instead choose to look the other way to avoid their conversations being reviewed.

Disciplinary matters - Comments heard on ambient microphones out of context could lead to grievances / disciplinary cases.

Cost - Whilst ANSPs have been pushing for ambient recordings where convenient some are against the concept on the basis of cost.

ANSPs want ambient for safety reasons – what are some limitations and possible alternatives?

Prospect ATCOs Branch has already been engaged several times by an ANSP who wish to trial ambient microphones.

The issue was previously raised following concerns when an incident followed a handover of position between two controllers and there were differing opinions from the two parties as to what had and hadn't been handed over.

As safety professionals the Branch agreed there would be benefits to having had a recording of the handover but felt that continuous ambient recording and the subsequent loss of privacy for staff wasn't required to achieve this. Prospect ATCOs' Branch proposed that handovers could be recorded to ensure that there would be a record of what was actually said. This procedure is now in force at several units. Not only has this solved the issue of recording the handover but anecdotal evidence suggests an added benefit has been that handovers are now conducted in a more structured and formal manner, with controllers consciously selecting and deselecting the recording (by means of live microphones). More recently we have again been approached over the introduction of ambient microphones purportedly on safety grounds. The proposal was presented as a brief to the Branch with the hope to get our support.

The reasoning given on this occasion was that there had been a couple of incidents where it was unclear what coordination had been effected and a couple of incidents where ATCOs cited distractions in ops rooms from visitors being shown around as a contributory factor.

Given the previous success of the ATCOs Branch initiated recording handovers procedure to address ANSPs concerns it was somewhat disappointing that ANSPs again defaulted straight to ambient microphones as a solution rather than considering the problems and jointly looking to work together to find solutions. This default to what seemed like pushing an agenda was disappointing as were the proposals for the handling of recordings which would have seen the only requirement for media to be reviewed to be a decision from the unit General Manager. We believe the ability to review recordings in this manner would be open to abuse and could be perceived as less about safety and more about managers being able to monitor staff.

On the distractions in the ops room issue the Branch feel ambient microphones would have been of very limited in these cases. Distraction is very much a subjective thing and if a controller has stated that it was an issue for them then it is hard to imagine how ambient recordings could disprove this (as to why we'd want to question the ATCO and disprove this is another matter). With the same visitors in the same ops room one ATCO could be facing the front concentrating on the traffic with both ears of their headset on whereas another was turning round, trying to eavesdrop and had one ear off their headset. Ambient recordings would not be able to differentiate between these two scenarios. If distractions in the ops rooms due visitors is perceived as a problem the Branch suggests that ANSPs review their procedures for hosting visitors.

On the coordination issue we agree that recordings of coordination could be useful in many (but not all) scenarios. Much non-verbal coordination (pointing, thumbs up etc.) is conducted in ops rooms and sound recordings would be of little help in determining what coordination had taken place in these instances. The Branch have requested that the ANSP investigates the feasibility of recording coordination as a possible solution to this issue and were informed that this work would be conducted.

The data protection act

Employers may wish to monitor their workplace for various reasons, the Data Protection Act does not prevent employers from monitoring workers, but employers should remember workers are entitled to some privacy at work. Employers must tell employees about any monitoring arrangements and the reason for it.

Key considerations recommended before introducing monitoring in the workplace:

- 1. Clarity as to the reasons (and benefits) for monitoring staff.
- 2. Identification of any negative effects the monitoring may have on staff by way of an "Impact Assessment".
- 3. Consideration of whether there are any, less intrusive, alternatives to monitoring.
- 4. Assessment of whether the monitoring is justified, taking into account all of the above.

In our discussions with ANSPs thus far point 1 has been covered to a certain extent as discussed above. We do not feel that points 2-4 have been considered or addressed by employers in any meaningful way.

Proposed European legislation

It is likely that European Legislation rather than employers proposals will result in ambient recordings in ops rooms. The below is proposed:

ATS.OR.465 - Background communication and aural environment recording

- A. When so prescribed by the competent authority, ATS units shall be equipped with devices that record background communication and the aural environment at air traffic controller, or the FISO, or the AFISO work stations, as applicable, capable of retaining the information recorded during at least the last 24 hours of operation.
- B. Such recordings shall be used primarily for occurrence investigation purposes.
- C. Without prejudice to Regulation (EU) No 996/2010 of the European Parliament and of the Council, recordings in point (a) shall not be disclosed or used unless:
 - (i) A procedure related to the handling of recordings and of their transcript is in place;
 - (ii) All air traffic controllers/FISO/AFISO concerned have given their prior consent; and
 - (iii) They are used only for maintaining or improving safety.

This text is not yet finalised. Representations to the consultation have proposed removing the requirement for these recordings or strictly limiting them to the activities for occurrence investigations. A representation was made that the word 'primarily' in paragraph (B) should be replaced by 'exclusively'.

CAA view

The UK CAA "agrees that value can be obtained from allowing the recording of background communication and the aural environment at ATCO workstations" and that "from the perspective of aviation related investigations, the insights that can be gained on the factors affecting the performance of ATS personnel are invaluable".

In their response the CAA did express concerns over the misuse of recordings and expressed the opinion that ATC ambient recordings should be restricted in a similar manner to CVR data.

The recording of background communication and the aural environment at ATCO workstations is analogous to cockpit voice recording (CVR), which is a long-established and accepted practise. However, in accordance with CAT.GEN.MPA.195, the use of CVR data is restricted to those events involving an accident, an incident that is subject to mandatory reporting, or for 'other purposes' subject to the consent of all crew members and maintenance personnel concerned. Detailed AMC has been provided to support such use of recorded data to prevent its misuse. The Agency's proposals in relation to ATS.OR.465 do not constrain the use of the recorded data and the UK CAA strongly believes that this should be addressed in order for the principle of recording the aural environment to be acceptable.

Conclusion / recommendations

Whilst as safety professionals Prospect ATCOs Branch accept that ambient recordings could be useful in some incident investigations we do not believe that the benefits of ANSP proposals for ambient recordings thus far have been sufficient to outweigh the invasion of privacy to staff and the possible detrimental impact on safety culture.

We remain receptive to any dialogue with employers regarding ambient recordings but will strive in the first instance to address any safety concerns by other methods which won't require ambient recordings.

Should the authority prescribe the use of ambient microphones Prospect ATCOs Branch will make representations to ensure that any procedure for the handling of recordings and

transcripts is robust, safety driven, and where possible would require the prior consent of the individuals involved.

Prospect ATCOs' Branch 7th November 2017 International Biggin Hill Birmingham Blackpool Bournemouth Bristol Cambridge Cardiff Carlisle Coventry Doncaster Durham East Midlands Edinburgh Exeter Farnborough Gatwick Gibraltar Glasgow Gloucester Guernsey Heathrow Humberside Isle of Man Jersey Lands End Leeds Liverpool London Area Control Centre London City London Terminal Control Centre Luton Lydd Manchester Middle Wallop NATS Corporate & Technical Centre NATS Training Netheravon Newcastle Newquay Norwich Oxford Prestwick Centre Scilly Isles Shoreham Southampton Southend St Athan Stansted Warton Wattisham Wittering Aberdeen Aberporth Alderney Ashford Ashford Barkston Heath Battersea Belfast City Belfast International Biggin Hill Birmingham Blackpool Bournemouth Bristol Cambridge Cardiff Carlisle Coventry Doncaster Durham East Midlands Edi sephorough Gatwick Gibraltar Glasgow Gloucester Guernsey Heathre Lands End Leeds Liverpool London Area Control rol Centre Luton Lydd Manchester Middle V Training Netheravon Newcastle Newqui am Southampton Southend St A porth Alderney Ashford Ashfo al Biggin Hill Birmingham Doncaster Durham Ea Gloucester Guernsey don Area Control (er Middle Wallop N lewquay Norwich t Athan Ashford Stanste Barksto ackpool lidlands Bourner Edinburd eathrow Humbers **Centre** London C lop NATS Corporate ich Oxford Prestwick (ed Warton Wattisham ston Heath **Battersea Belf** Bournemouth nds Edinburgh **Bristol** Cambrido ow Humberside Exeter Farnborough Isle of Man Jersey La Centre London City allop NATS Corporate & London Terminal Control C Technical Centre NATS Training wquay Norwich Oxford Prestwick Centre Scilly Isles Shoreham Southampton Southend St Athan Stansted Warton Wattisham Wittering Aberdeen Aberporth Alderney Ashford Ashford Barkston Heath Battersea Belfast City Belfast International Biggin Hill Birmingham Blackpool Bournemouth Bristol Cambridge Cardiff Carlisle Coventry Doncaster Durham East Midlands Edinburgh Exeter Farnborough Gatwick Gibraltar Glasgow Gloucester Guernsey Heathrow Humberside Isle of Man Jersey Lands End Leeds Liverpool London Area Control Centre London City London Terminal Control Centre Luton Lydd Manchester Middle Wallop NATS Corporate & Technical Centre NATS Training Netheravon Newcastle Newguay Norwich Oxford Prestwick Centre Scilly Isles Shoreham Southampton Southend St Athan Stansted Warton Wattisham Wittering Aberdeen Aberporth Alderney Ashford Ashford Barkston Heath Battersea Belfast City Belfast

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