



SAFETY ALERT 01/2015

Issued: 29 January 2015

SUBJECT:

ATC Human Factors and use of surveillance tools

RELATED PUBLICATION:

SAFETY ALERT 06/2014 issued 09th September 2014

CATEGORY:

Attention and recommendation

APPLICABILITY:

ATC Controller and ATC Unit Management

INTRODUCTION

A vital component driving provision of safety, efficient and sustainable air traffic service operations, by controllers, is being able to maintain focus when conducting operational activities. A break in focus or attention can easily lead to errors in judgment, coordination, following procedures and result in degraded surveillance and situational awareness.

PURPOSE

The purpose of this Safety Alert is to highlight the responsibilities of controllers to maintain a high standard of surveillance, situational awareness and focus on accuracy when exercising the privileges of an ATC Licence.

CONTROLLER ATTENTION

- 1) Controller focus can be jeopardised through many reasons. An important tool which enables controllers to self-identify the presence, causal and contributory factors and ultimately resolution or mitigation of factors which may lead to degradation of their ability to perform their operational tasks with the highest level of attention, is having a good knowledge and awareness of human factors and lifestyle pressures which may adversely affect controller mental acuity.
- 2) Controllers should be alert to recognize the following work related factors/ stressors which may degrade their ability to focus at work:
 - a) Environmental Factors
 - i. Extreme temperatures (too warm or too cold)



- ii. Loud or repetitious noises
 - iii. Low lighting level, glare or flickering lights
 - iv. Irritating smells such as chemical or cleaning agents
 - b) Visitors in operations room
 - c) Colleagues engaged in non-work related conversations
- 3) Controllers should be alert to recognize the following life style related factors/ stressors which may degrade their ability to maintain focus at work:
 - a) Family commitments
 - b) Lack of regular exercise
 - c) Poor diet
 - d) Prescribed or recreational drugs
 - e) Personal financial or budget pressures
 - f) Excessive socialising
 - g) Irregular sleep patterns or insomnia
- 4) While efforts are made to regulate and manipulate rosters and duty hour requirements to the maximum extent possible to ensure that controller are not over-worked and have adequate periods available to rest, ultimately it remains the responsibility of controllers to realistically assess, monitor and adjust their lifestyles to minimize situations which may create fatigue, excessive stress or other personal conditions which may affect their ability to remain focused during work periods.
- 5) Controllers are reminded of the significant burden of responsibility which rests with them to provide their utmost ability and attention at all times when working operations. Any time a scenario may exist, where a controller feels his/ her ability to focus may be jeopardised they are urged to immediately communicate the issue to ATS Management, to discuss ways in which to resolve or mitigate the issue.

SURVEILLANCE TOOLS

- 1) Some recent aviation incidents have involved pilots and airfield drivers not correctly following ATC Clearances, becoming disorientated on a manoeuvring area, entering runways with a clearance or not lining up on the runway centreline for take-off.
- 2) A key aspect of providing a control service is for controllers to be vigilant when monitoring the progress of aircraft under control, particularly when operating on or near the high risk area of the active runway.
- 3) While the tower is designated a Visual Control Room, and the primary focus is the visual surveillance monitoring of aircraft, there are a number of additional tools which greatly assist in the execution of the controller's duties. These can include surface movement radars, as well as other surveillance equipment, cameras, binoculars, etc.



- 4) Controllers are reminded to maximise the utilisation of all equipment available to them to ensure the safe operation of aircraft under their control. Equally any personnel within the operations, should be made aware of their responsibility, if they notice or detect any potential unsafe operation by aircraft, which are not under their control, to bring this to the attention of the controller concerned as soon as practicable.

ATTENTION

To draw ATS Management attention to the need to comply with a non-punitive policy as required by CAR Part X, in order to ensure controllers have the confidence to report identified human factor issues which they may not be able to immediately address or resolve without assistance.

RECOMMENDATIONS

- 1) Controllers should:
 - a) Controllers should be alert to identify and mitigate work and life style related factors/ stressors which they may be experiencing, that lead to degradation of mental acuity and focus.
 - b) Controllers should realistically assess, monitor and adjust their lifestyles to minimize situations which may create fatigue, excessive stress or other personal conditions which may affect their ability to remain focused during work period.
 - c) Controllers should utilise all available surveillance tools available to maintain the highest level of situational awareness and surveillance of traffic under their control.
- 2) ATS Management should:
 - a) ATS Management should provide human factors training to controllers and supporting staff and refresher for Human Factor training should be provided at least once every 2 years.

QUERIES

Any queries or further guidance on the content of this Safety Alert should be addressed to:

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