

Safety Bulletin

PREVENTING THE RISK OF A RUNWAY INCURSION

07 JUNE 2018

BACKGROUND

A recent investigation conducted by Airservices into a runway incursion at a Metro D aerodrome highlighted a number of safety factors that are applicable to both pilots and air traffic controllers around situational awareness, traffic management and runway crossing clearances. This Safety Bulletin aims to highlight the issue and provide guidance regarding clearances required before crossing a runway.

DEFINITIONS

For the purposes of this Safety Bulletin, the following definitions apply, which have been extracted from AIP GEN 2.2 – DEFINITIONS.

Air Traffic Control Clearance: Authorisation for aircraft to proceed under conditions specified by an ATC unit. *Note: For convenience, the term “Air Traffic Control Clearance” is normally abbreviated to “Clearance” when used in appropriate context.*

Manoeuvring Area: That part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, excluding aprons.



INTRODUCTION

Thorough planning is essential for safe taxi operations and deserves the same attention that flight planning receives. Clearances and instructions issued by air traffic control (ATC) exist to facilitate safe and efficient operations at aerodromes by regulating aircraft/vehicle movements on the manoeuvring area. Although ATC and ground personnel reduce the likelihood of a collision on the ground, the ultimate responsibility rests with the pilot in command.

The following is a summary of information related to preventing a runway incursion and general runway safety.

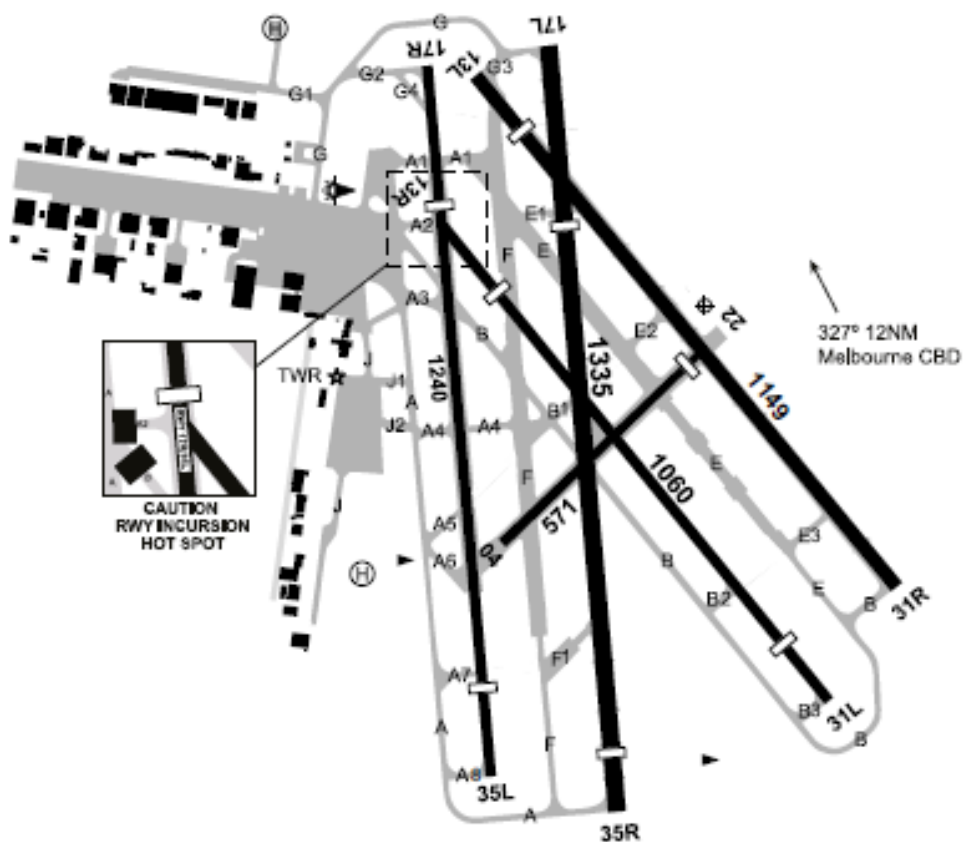
PLANNING AN AERODROME OPERATION

Key areas when planning for navigating around an aerodrome are:

- study of the layout of the aerodrome paying particular attention to complex intersections and RWY incursion hotspots in ERSA
- anticipate your taxi route to and from the RWY in use based on information from the ATIS, NOTAMs, ERSA, recent experience and the aerodrome chart
- have the aerodrome chart or diagram readily available to use during the planning phase and while taxiing
- check the route on which you are taxiing against the chart or ERSA and again, pay special attention to any complex intersections
- continually scan for conflicting traffic and holding point markings
- confirm your assigned route if you are in doubt of the taxi instructions received from a controller.

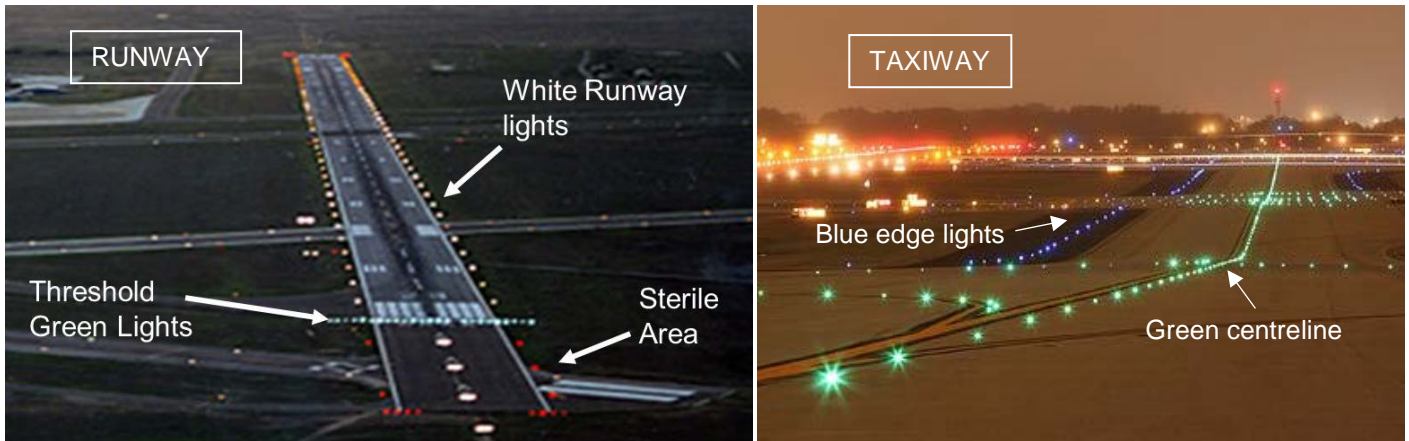
A specific clearance is required to enter, backtrack, line-up on, cross or take-off from a runway. When taxiing ensure that you have received a specific clearance to cross any runway on your taxi route. The clearance will include your callsign and the words 'CROSS RWY XX'. An ATC clearance to line-up does not authorise the pilot to backtrack on the runway.

Moorabbin aerodrome diagram (ERSA):



AVOIDING THE POSSIBILITY OF RUNWAY CONFUSION

Runway confusion occurs when pilots enter, take-off or land on the wrong runway, or potentially confuse taxiways and RWYs. This is a particular problem at those aerodromes with parallel runways and taxiways.



Runway confusion can be avoided by:

- paying careful attention to runways in clearances
- always reading back an assigned runway in full
- taking sufficient time during the approach briefing to determine how positive runway identification will be achieved, particularly if using a non-precision, circling or visual approach
- visually identifying the correct runway before entering or landing on it, depending on weather conditions
- distinguishing between runway lighting and taxiway lighting, which are coloured differently
- ensuring your 'ready' call is on the correct aerodrome control frequency.

STANDARD OPERATING PROCEDURES

While taxiing, following standard operating procedures and radiotelephony (RTF) increases the safety of operations at an aerodrome. This includes following instructions from ATC, confirming understanding of ATC instructions by ensuring correct readbacks, maintaining situational awareness, using all resources available to you and ensuring effective pilot/controller communication practices. Using non-standard radio calls or readbacks affects the ability of ATC to understand your intentions and confirm that you have understood your clearance.

The principle of good communication is to effectively articulate:

- who you are
- where you are; and
- what you want

'ARCHER GROUND ABC ON A4 REQUEST CROSS RWY 17R TO THE SOUTHERN APRON'SUMMARY

Both pilots and air traffic control have a part to play in reducing the risk of a runway incursion. The use of effective communication and resources available will significantly mitigate this risk.

REFERENCES AND FURTHER INFORMATION

- [AIP - GEN 2.2 Definitions and Abbreviations](#)
- [AIP – ENR 1.1 General Rules and Procedures](#)
- [AIC 32/15](#) – Safety of Ground Movement on a Controlled Aerodrome
- Local aerodrome information can be found in [ERSA](#)
- Tips for flying sheets are available for Moorabbin, Bankstown, Parafield, Jandakot and Archerfield on the [Safety Publications page of the Airservices website](#)
- [Pilot's Guide to Runway Safety](#)

Further information

For further information please contact safety.communications@airservicesaustralia.com.