

Terms of Reference for the Aeronautical Study of Mangalore Airport

Background

The Office of Airspace Regulation (OAR) within the Civil Aviation Safety Authority (CASA) undertakes regular reviews of Australian-administered airspace in accordance with the *Airspace Act 2007*.

The OAR has committed to undertake an Aeronautical Study of the airspace around Mangalore, extending 25 nautical miles (NM) from the Mangalore airport (YMNG). The study will assess the airspace architecture and classification from the surface up to 8,500 feet above mean sea level to determine if the airspace is fit for purpose and provides an acceptable level of safety for all airspace users. This airspace volume will include Class G airspace and promulgated restricted and danger area airspace.

In recent years Mangalore has experienced a fluctuation in total air traffic movements but has become a popular location for undertaking flying training operations by organisations outside the Mangalore area. The flying training activities range from basic flight training through to multi engine command instrument rating training. The traffic volume at Mangalore previously averaged around 900 aircraft movements per month (prior to the impacts of COVID-19 starting in March 2020). The type and volume of aircraft activity around Mangalore and recent incident data validates the need for the OAR to conduct a review into the airspace architecture, service levels and any other relevant matters that would contribute to ensuring an acceptable level of safety. The study will assess risk levels and potential mitigation options to achieve an acceptable level of safety if needed.

CASA is aware that Mangalore was the location of a mid-air collision between 2 light twin engine aircraft on 19 February 2020 resulting in 4 fatalities. The Australian Transport Safety Bureau (ATSB) is completing an Aviation Safety Investigation report and the content of the report will inform the aeronautical study if it is available for public release before the study is completed.

Objectives

The objective of the aeronautical Study is to assess the airspace architecture, services, procedures and any other factors or information that may contribute to a review of the level of safety for all airspace users in the study area around Mangalore. CASA considers the primacy of aviation safety as the most important factor when conducting the study, but other factors will also be assessed which include:

- efficient use of the airspace
- equitable access to the airspace for all users of that airspace
- national security issues
- appropriateness of the airspace classification
- environmental issues (aviation specific)
- appropriateness of the existing services and facilities provided by the Air Navigation air navigation service provider (ANSP).

The aeronautical study will assess all relevant safety information and data, engage with local aircraft operators, conduct consultation with stakeholders such as Airservices Australia and flying organisations. It will conduct a risk assessment to determine the need for any changes to airspace architecture, airspace procedures, services or other safety related matters that will achieve an acceptable level of safety for all airspace users. The study will include robust analysis and justification for any proposed changes to the airspace environment around Mangalore.

Scope

The study will include the period between 1 January 2015 and 31 December 2020.

The study will include:

- analysis of aerodromes and surrounding airspace architecture in the vicinity of Mangalore
- an analysis of risks using safety incident reporting from the ANSP and the ATSB.
- stakeholder engagement
- consider the need for any airspace changes including the possible need for changes in airspace classification, architecture or volume, mandatory equipage by aircraft, new services by the ANSP, the establishment of a broadcast area, new airspace access rules, charts, VHF or surveillance coverage enhancements, or new services such as a surveillance flight information service (SFIS) or a control tower
- consideration of any airspace related safety findings by the ATSB related to the report on the mid-air collision south of Mangalore on 19 February 2020.
- an analysis of aircraft operations in the airspace surrounding Mangalore
- ANSP feedback about risks in the airspace around Mangalore and potential mitigation options
- an evaluation of the International Civil Aviation Organization (ICAO) airspace classifications and the need/justification for any special use airspace within the study area and

The following matters are outside the scope of this review:

- airspace issues at surrounding aerodromes which do not impact on operations at either Mangalore
- aerodromes and surrounding infrastructure which is not applicable to the study
- any off-airport development.

Duration

The aeronautical study will take approximately 4 to 6 weeks from study approval until a document can be released for consultation.

The target completion date for this study is the end of October 2021. It is anticipated that a draft will be available for consultation by mid October 2021.

Consultation Process

The OAR will undertake internal and external consultation. External consultation will include key stakeholders such as but not limited to:

- Airservices Australia.
- Australian Transport Safety Bureau.
- Aerodrome owners and airport operators.
- Royal Flying Doctor Service
- Defence.
- Victorian Aviation State Engagement Forum.
- Recreational Aviation Australia.
- Aircraft Owners and Pilots Association (AOPA) Australia
- Gliding Federation of Australia (GFA)
- Sports Aviation Federation of Australia; and
- Flying training organisations that undertake operations in the study area.