

OFFICIAL

**RAAF BASE TOWNSVILLE
BASE AIRCRAFT NOISE MANAGEMENT PLAN**



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RAAF BASE TOWNSVILLE BASE AIRCRAFT NOISE MANAGEMENT PLAN

References

- A. Air Force Aircraft Noise Management Strategy 2018 – 2023
- B. Air Command Standing Instruction (Operations) 03-11, Aircraft Noise Management
- C. Approval conditions for Flying Operations of the F-35A Lightning II, EPBC 2010/5747

Introduction

1. Aircraft noise is an unavoidable consequence of Air Force operations and training. The impact of aircraft noise affects communities in different ways. Air Force has an obligation to reduce the effects of aircraft noise on local communities to the maximum extent possible, whilst achieving operational and training outcomes for Government. Consequently, aircraft noise is managed locally by personnel who know and understand community concerns.
2. RAAF Base Townsville Base Aircraft Noise Management Plan (BANMP) informs and aims to improve public understanding of aircraft noise management strategies in the vicinity of RAAF Base Townsville.
3. Located 5 kilometers West of Townsville, RAAF Base Townsville is Australia's premier Forward Operating Base. It is the home of 5 Aviation Regiment (5AVN) and works in close collaboration with 3 Brigade ARA at Lavarack barracks.
4. Townsville Airport Propriety Limited (TAPL) is located on the Eastern area of RAAF Base Townsville and all civilian Regular Public Transport (RPT) and approved operator aircraft are required to comply with the RAAF Base Townsville BANMP. All noise related RPT complaints are managed by by Airservices Australia's [Noise Complaints and Information Service](#) (NCIS)¹.
5. RAAF Base Townsville is responsible for RAAF Base Scherger, which is located approximately 1,100 kilometer for Townsville in Far North Queensland. RAAF Base Scherger is one of Air Force's three bare bases, which are a part of a series of strategic outposts reaching from Learmonth in Western Australia to the Cape York Peninsula.

Background and scope

6. The BANMP has been raised in compliance with the Air Force Aircraft Noise Management Strategy, Reference A and Air Command Standing Instruction (Operations) 03-11, Reference B. The BANMP applies to all flying and ground operations involving Air Force aircraft, civil-registered aircraft leased by the Air Force, Defence contracted aircraft operated by external service providers and foreign military aircraft operating from RAAF Base Townsville.

¹ Aircraft noise enquires or complaints about non-military aircraft should be directed to Airservices Australia's Noise Complaints and Information Service (<https://www.airservicesaustralia.com/community/environment/aircraft-noise/about-making-a-complaint/>).

Description of standard Defence aircraft operations

7. Aircraft permanently based at RAAF Base Townsville include:
 - a. MRH90 helicopter, and
 - b. CH47 Chinook,
8. While not permanently hosting resident Air Force flying squadrons, RAAF Base Townsville provides support to single and joint Service exercise programs and operations.
9. RAAF Base Townsville does not exercise an airfield curfew and is available 24 hours a day. As such, night flying can be conducted at any time however is restricted to the minimum required to achieve training targets.
10. The average number of fixed wing military aircraft movements is 10 per week.
11. The average number of civilian RPT flights is 252 per week.
12. RAAF Base Townsville utilises six training areas as indicated at Figure one below.

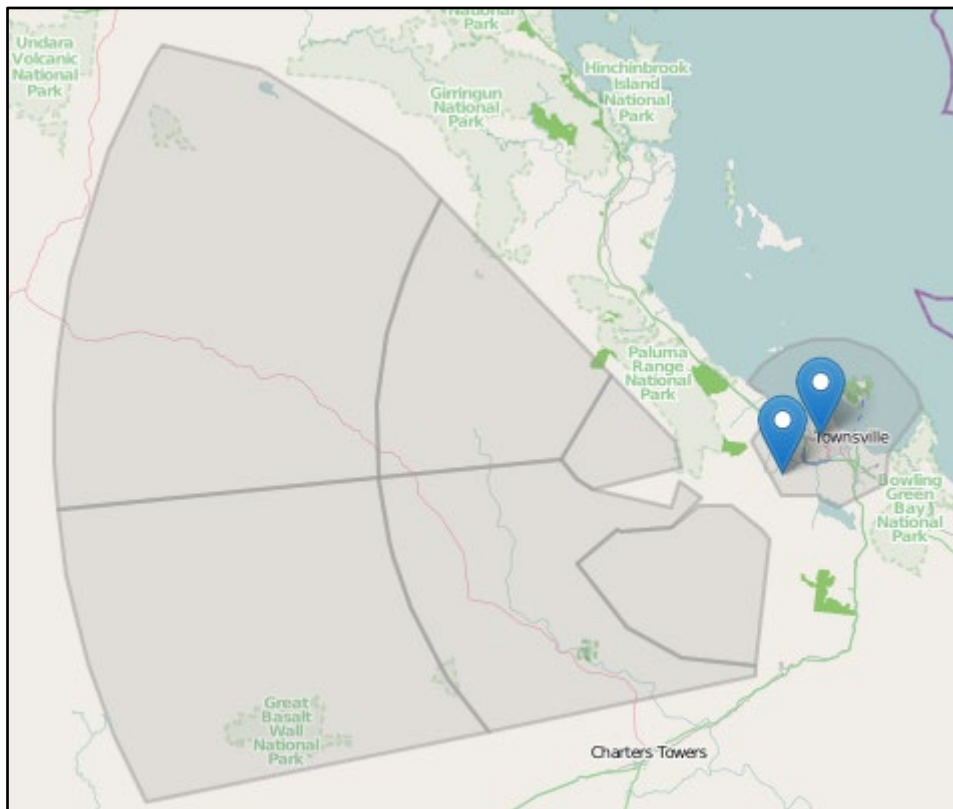


Figure One: RAAF Base Townsville Primary Training Areas

13. Where possible, RAAF Base Townsville will advise the local community of non-routine flying events. This is not always possible due to changes in weather conditions or operational restrictions which may require aircraft to operate over land training areas more frequently. Members of the public can access information regarding planned and non-routine flying via the [RAAF Base Townsville Flying Operations](https://aircraftnoisemap.airforce.gov.au/assets/site.html?312#base/7) website².

² Webpage link [https://aircraftnoisemap.airforce.gov.au/assets/site.html?312#base/7]

14. RAAF Base Townsville has a dual runway as shown in figure two. Runway 01/19 is aligned north to south and 07/25 is aligned southwest to northeast.

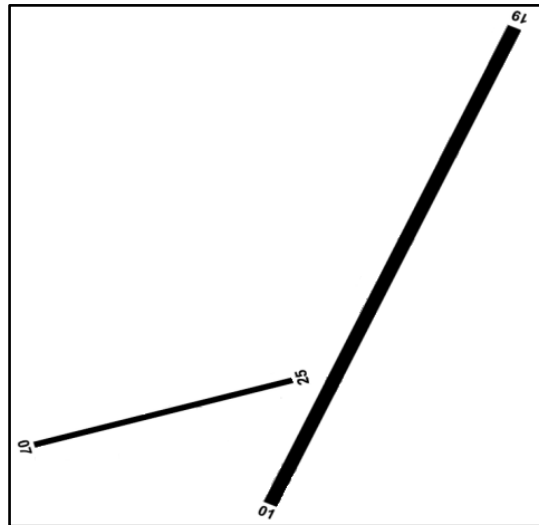


Figure Two: RAAF Base Townsville Runway Orientation

15. RAAF Base Townsville is surrounded from the North East through South to North West by densely populated suburbs, which are close to the aircraft routes for Runway 01/19 departures and arrivals. An Instrument Landing System used to guide pilots to a safe landing in poor weather services runway 01.

16. Preferred runway use is determined primarily by wind direction and is stipulated by Air Traffic Control (ATC) to ensure safety of flight. When ATC is not active, pilots determine the most suitable runway by examining the wind conditions from weather reports and also wind socks located at the airfield.

Variations to standard aircraft operations

17. The most common foreseeable variation to the regular flying schedule at RAAF Base Townsville is visiting aircraft from other Bases. At times, aircraft may operate outside Air Base Air Traffic Services operating hours. Attempts will be made where possible to advertise changes to the normal flying operations to the community. Defence has an extensive range of aircraft with differing engine configurations including:

- a. F-35A Lightning II, single jet engine
- b. F/A-18F Super Hornet, twin jet engine
- c. EA-18G Growler, twin jet engine
- d. C-17A Globemaster III, four turbofan engines
- e. Boeing B737 Business Jet, two turbofan engines
- f. C-130J Hercules, four turboprop engines
- g. C-27J Spartan, two turboprop engines

- h. CL604 Challenger, two turbofan engines
 - i. P-8A Poseidon, two turbofan engines
 - j. P-3C Orion, four turboprop engines
 - k. B350 King Air, two turboprop engines
 - l. Various single and multi-rotor aircraft, single and twin turboshaft engine
 - m. Visiting aircraft types from International Defence Forces
18. Unforeseeable variations (caused by inclement weather and aircraft serviceability issues) will occur from time to time. Noise control minimisation measures will be implemented as required and where possible.

Townsville Noise Minimisation

19. RAAF Base Townsville maintains guidelines such as Base Standing Instructions and Range Standing Instructions, designed to provide a baseline for aircraft operations on Defence managed lands. Annex A outlines the noise abatement procedures at RAAF Base Townsville. All operators adhere to these instructions. Some of these instructions are designed to reduce noise impacts from aircraft operations. Air Combat Group (ACG) also has Standing Instructions, which provide the basis for aircraft operations flown by all ACG aircrew. These include:

- a. **Fly Neighbourly procedures.** ACG has developed fly neighbourly practices and guidance for subordinate units, including those that will operate the F-35A. The policy provides specific guidance for RAAF Base Townsville, however a summary of the main generic noise management guidelines for RAAF Base Townsville are as follows:
 - (1) Noise management is a briefing item for all flying. ACG aircrew conduct operations with due cognisance of the impact of noise on communities and residents under or in the vicinity of the flight path.
 - (2) Noise abatement procedures complement extant local procedures.
 - (3) Departure procedures are amended in the event of air traffic management directions or unsuitable weather conditions. In these circumstances standard visual or instrument departure and arrival procedures apply, as safety remains an important consideration.
- b. **Aircraft engine maintenance ground operations.** Post-aircraft maintenance may require installed engine ground testing across all power settings. This particular type of testing is performed during the day wherever possible, but may at times be during the evening for operational reasons. The following time restrictions apply to all engine runs at RAAF Base Townsville:
 - (1) Between 0730h and 1630h Monday – Friday – no restrictions.
 - (2) The above can be extended until 2100h, for exercise and visiting aircraft.

- (3) If engine runs are required outside of the above times, specific requests to the Airbase Command Post (ABCP) are required.
- (4) High power engine runs should be conducted at the Keyhole (an area located between taxiway L and B3), taxiway J or the Ordnance Loading Area complex. Prior contact with the ABCP is required to book these areas. Notice to local residents may occur if time permits.

20. **F-35A Lightning II.** F-35A Lightning II flying operations in Australia are subject to the conditions set out in Environment Protection and Biodiversity Conservation (EPBC) approval 2010/5747, Reference C. Enclosure 1 contains details on the status of compliance with approval condition 3 of Reference C.

Low flying

21. Low flying is defined flight below 500 feet (152 meters) over a non-built up area or 1,000 feet (304 meters) over a built up area, above obstacles within 968 feet (600 meters).

22. Designated low flying training areas are north of Townsville and are named the Eastern and Western Low Flying Areas and Western Training Area.

RAAF Base Townsville Airspace

23. Aircraft operating from RAAF Base Townsville utilise nearby Flying Training Areas (FTAs) for training and exercises. The locations are shown in figure three below.



Figure three: RAAF Base Townsville Airspace FTAs

Working with Community

24. Residents should consider the [Australian Noise Exposure Forecast \(ANEF\)](#)³ map for RAAF Base Townsville, which provides information about aircraft noise exposure. ANEF maps provide a forecast of anticipated noise for a future period, for that location. The ANEF does not show every flight path and homeowners with properties outside of the ANEF map zones may still experience aircraft noise. The Noise and Flight Path Monitoring Systems (NFPMS) has been developed to provide a more accurate and useful record of flight paths of all aircraft and noise events.

25. RAAF Base Townsville communicates regularly with the local council and community about on base operations in a variety of formal and informal means. The Townsville Community Aviation Consultation Group (CACG) is an important mechanism for local interaction and discussion in relation to aircraft noise. The [RAAF Base Townsville website](#)⁴ provides further information.

26. RAAF Base Townsville makes all attempts to advise local communities of non-routine flying operations via Media Releases, social media, emails to local registered community residents and on the [RAAF Base Townsville flying operations](#)⁵ website. Annex B provides the Air Force Fly Neighbourly Policy.

27. Where possible, RAAF Base Townsville will advise the local community of non-routine flying events. This is not always possible due to changes in weather conditions or operational restrictions which may require aircraft to operate over land training areas more frequently.

Noise monitoring

28. Defence operates the NFPMS to provide the community information about aircraft noise associated with military operations. The NFPMS website can be accessed at this link [Noise and Flight Path Monitoring System](#)⁶. On this site, RAAF Base Townsville has an interactive and accessible database which can be used to develop reports of aircraft flight paths and volume of aircraft traffic. The site also provides details of the monitoring station locations around RAAF Base Townsville. The stations are not located in training areas outside the immediate Townsville area.

29. The NFPMS was developed by Defence to provide a public record of flying activity at RAAF Base Townsville. The NFPMS allows individuals to gain an understanding of all flying activity in the vicinity of the Base. Defence uses the data to publish a monthly report of all aircraft flight activity.

³ Webpage link
[https://www.defence.gov.au/AircraftNoise/_Master/Docs/ANEF/2036%20ANEF%20RAAF%20Base%20Townsville.pdf]
⁴ Webpage link [<https://www.defence.gov.au/AircraftNoise/Townsville/Default.asp>]
⁵ Webpage link [<https://aircraftnoisemap.airforce.gov.au/assets/site.html?563#base/7>]
⁶ Webpage link [<https://www.defence.gov.au/AircraftNoise/NFPMS/Default.asp>]

Noise complaints

30. RAAF Base Townsville manages noise complaints from the public in accordance with Reference B. Complaints regarding Air Force aircraft noise can be made via:

- a. the Defence switchboard on 1300 333 362 and ask to be connected to RAAF Base Townsville,
- b. online by the [aircraft noise enquiry or complaint form](#)⁷, or
- c. mail to:

Staff Officer Aircraft Noise Management
R8-03-030
Russell Drive
Russell
ACT 2601

31. On receipt of a noise complaint, a Defence member will initiate an investigation to determine the occurrence and likely operating Squadron. Contact will be made to the complainant to provide information on the nature of the operations to the query. Complaints relating to civilian aircraft will be directed to [Airservices Australia NCIS](#)⁸.

32. To assist with the investigation, the date and time, location, and a description of the event that prompted the enquiry or complaint should be clearly articulated. Following the guidelines of Defence Noise Management process, an initial response should be provided within 2 working days. If the complaint requires further investigation, the aim is to resolve the case within 28 working days

33. Military aircraft noise complaints are generally taken by RAAF Base Townsville ABCP and documented on webform OA039. All completed investigations are forwarded to Air Force Headquarters Staff Officer Aircraft Noise Management in Canberra via Headquarters Air Command for further vetting.

34. Further details on the aircraft noise complaint process can be found on the [Defence Aircraft Noise](#)⁹ website.

35. If a complainant is unsatisfied with how their aircraft noise complaint has been handled, the complainant may seek an independent review by the Aircraft Noise Ombudsman (ANO). The ANO will only review aircraft noise complaints that have already been submitted to the Department of Defence. Further information on the ANO including the ANO Charter and other policies can be found on the [ANO website](#)¹⁰.

36. A complaint investigation can be submitted to the ANO via:

- a. The ANO's [online complaint form](#)¹¹,

⁷ Webpage link [<https://www.defence.gov.au/AircraftNoise/OnlineForm.asp>]

⁸ Webpage link [<https://www.airservicesaustralia.com/community/environment/aircraft-noise/about-making-a-complaint/>]

⁹ Webpage link [<https://www.defence.gov.au/AircraftNoise/ContactUs.asp>]

¹⁰ Webpage link [<https://ano.gov.au/about/>]

¹¹ Webpage link [<https://ano.gov.au/complaints/form.asp>]

- b. Toll free phone number 1800 266 040,
- c. Email ano@ano.gov.au, or
- d. Mail:

Aircraft Noise Ombudsman
GPO Box 1985
Canberra City ACT 2601

Review and update process

- 37. This document will be reviewed annually.
- 38. The document will be made available on the [RAAF Base Townsville](#)¹² webpage of the [Defence Aircraft Noise website](#)¹³.

Annexes:

- A. Townsville Noise Abatement Procedures
- B. Air Force Fly Neighbourly Policy

Enclosure:

- 1. RAAF Base Townsville – Compliance with Condition 3 of EPBC Approval 2010/5747

¹² Webpage link [<https://www.defence.gov.au/AircraftNoise/Townsville/Default.asp>]

¹³ Webpage link [<https://www.defence.gov.au/AircraftNoise/Default.asp>]

TOWNSVILLE NOISE ABATEMENT PROCEDURES

1. Aircraft departing runway 01 or runway 07 on a visual departure (including VFR) shall remain at least 600 meters clear of Pallerenda built up areas when below A020 unless directed by ATC for operational reasons.
2. This may be achieved as follows:
 - a. YBCS/YPAM departure maintain upwind until over water then remain over water at least 600 meters clear of Pallerenda.
 - b. Westerly departure conduct left turn remaining at least 600 meters South of Pallerenda or maintain upwind until over water then remain over water at least 600 meters clear of Pallerenda and conduct left turn North of VFR Waypoint RDS (Radar Site) or when above A020.
3. Practice engine failures are not permitted on left crosswind runway 01.

AIR FORCE FLY NEIGHBOURLY POLICY

1. Air Force is working with local communities near airbases, training areas and air weapons ranges to reduce noise impacts whilst balancing operational and training requirements.
2. Air Force commits to undertake flying operations in a manner which is considerate of our local communities, whilst maintaining safe operation of our aircraft and achieving the required levels of capability. Guided by these principles Air Force will:
 - a. comply with published airfield noise abatement procedures
 - b. use appropriate runway length for departures to maximise height over local communities
 - c. minimise the use of afterburner on fast jets during take-off and minimise noise during climb out
 - d. limit the speed of aircraft over populated areas
 - e. minimise flight over residential areas and other noise sensitive buildings such as hospitals, schools and farming communities
 - f. avoid low flying over known noise sensitive areas such as livestock yards minimise flying late at night or early in the morning
 - g. include aircraft noise awareness in pilot training and familiarization
 - h. notify local communities of major exercises or other non-routine training and flying activities such as flying displays.
3. To further minimise noise at some bases Air Force will:
 - a. limit continuous circuit training at night and on weekends and public holidays
 - b. use satellite airfields for repetitive aircraft circuits
 - c. vary flight paths to share noise
 - d. consider continuous descents to reduce noise
 - e. implement local engine run-ups procedures
 - f. minimise jet or turbo prop engine testing at night.
4. For further information, please see the [Defence Aircraft Noise](https://www.defence.gov.au/AircraftNoise/Default.asp)¹⁴ website

¹⁴ Webpage link [<https://www.defence.gov.au/AircraftNoise/Default.asp>]

Table E-1: RAAF Base Townsville – Compliance with Condition 3 of EPBC Approval 2010/5747

Condition	Condition requirement	Response
3	<p>Prepare and implement Aircraft Noise Management Plan(s), as described in the Aircraft Noise Management Strategy, at RAAF Base(s) to minimise noise disturbance at sensitive receptors from the flying operations of the F-35A Lightning II aircraft. The plan(s) must include, but not be limited to, the following measures:</p>	<p>Air Force has prepared the RAAF Base Townsville Base Aircraft Noise Management Plan (BANMP) (Document ID: BP389244). It is an operational document which addresses noise arising from all Air Force aircraft that utilise RAAF Base Townsville, including F-35A aircraft.</p> <p>The RAAF Base Townsville BANMP is prepared and implemented as described in, and works towards the objectives of, the Air Force Aircraft Noise Management Policy.</p> <p>Air Force maintains an Australia-wide Hazard and Noise Database (HAND), that is centrally updated periodically and depicts all hazards and noise sensitive areas on a map. Pilots use HAND data in order to plan low level flying operations outside of Air Traffic Control (ATC) controlled airspace. When within ATC controlled airspace, pilots follow ATC procedures for arrivals, departures and training profiles (practice circuits and instrument approaches).</p> <p>F-35A flying operations will commence at other RAAF Bases (Tindal, Darwin and Townsville) no earlier than 2020.</p>
3.a	<p>Comparison of actual flight activity of F-35A Lightning II aircraft with those predicted in the Environmental Impact Statement;</p>	<p>To date (May 2021) there has been no F-35A flying activity at RAAF Base Townsville. A comparison of F-35A flight activity at RAAF Base Williamtown in relation to the Environmental Impact Statement, has been underway since 2019. The release of the 2021 Biennial report (in June 2021) will be the first in a series of reports that compare flight activity of the F-35A.</p> <p>As the F-35A has not operated at RAAF Base Townsville, no comparisons are possible within the BANMP. However, comparisons will be provided in the biennial report for 2023 as F-35A operations commence at RAAF Base Townsville. F-35A operations are expected to begin from mid-2021 and comparisons will be included in future revisions of this BANMP.</p>

Condition	Condition requirement	Response
3.b	A review of existing noise management programmes	<p>Air Force’s Aircraft Noise Management Policy and the Fly Neighbourly Policy contains a commitment to conduct a biennial evaluation of the aircraft noise management system. Air Force will review and evaluate the performance of the aircraft noise management system (which includes noise management programs) with the aim of validating the integrity of the system and ensuring continual improvement.</p> <p>Defence’s Aircraft Noise Management Policy contains Strategic guidance, being the Air Force Aircraft Noise Management Strategy and Air Force’s Fly Neighbourly Policy and well as operational policies aimed at tactical implementation of noise management/mitigation strategies.</p> <p>The Air Force Aircraft Noise Management Strategy is the governing framework that supports how Air Force meets environmental and public objectives for managing Aircraft Noise. The Strategy is reviewed quinquennially. The Strategy outlines six strategic objectives and appropriate stakeholders to:</p> <ol style="list-style-type: none"> 1. minimise the impact of aircraft noise on local communities 2. continue proactive community engagement and consultation 3. manage noise complaints effectively and in a timely manner 4. minimise urban encroachment on Air Force airfields and training areas through liaison with state and local government planning teams 5. conduct responsible environmental planning 6. integrate a comprehensive aircraft noise management system into Air Force activities. <p>Air Force’s Fly Neighbourly Policy sets an overarching commitment to balance operational and training requirements while undertaking flying operations in a manner that is considerate of our local communities, safe and achieves capability requirements. Minimisation strategies such as limiting speed over populated areas, avoiding flying over known sensitive locations, minimising flying late at night and early in the morning are a few of the strategies employment</p>

Condition	Condition requirement	Response
		<p>One of the key aspects of the Aircraft Noise Management Strategy is the internal Aircraft Noise Management System (AC SI(OPS) 03-11) (the System). The System is reviewed biennially, but can be amended out of session if warranted. The system outlines:</p> <ul style="list-style-type: none"> • Aircraft noise mitigation procedures • Aircraft noise complaint management • Communication and collaboration • Monitoring and review. <p>There are a number of other Instructions and that are used internally to ensure consistency across all airbases in Australia. Some examples include:</p> <ul style="list-style-type: none"> • Air Activities Environmental Management Plan (AAEMP), which provides guidance for planners and aircrew to identify and avoid sensitive receptors in order to manage impacts from aircraft noise • Air Combat Groups Fly Neighbourly Policy (ACG SI(OPS) 03-03) • Flight Information Handbook Australia (FIHA) • General Planning Australia (GPA) • En Route Supplement Australia (ERSA) • AC SI (OPS) 03-04: Supersonic Flight • Base Aircraft Noise Management Plan
3.c	<p>Monitoring, to validate predicted noise impacts to sensitive receptors at RAAF Base Williamtown (including Salt Ash Air Weapons Range), RAAF Base Tindal and RAAF Base Townsville. This must include, but not be limited to:</p> <ol style="list-style-type: none"> i. An investigation of alternative noise measurement and analysis methods; ii. Utilisation of Noise and Flight Path Monitoring Systems (where installed), to provide ongoing noise information, 	<p>F-35A Lightning II aircraft is yet to operate from RAAF Base Townsville however operations are expected to commence from mid-2021.</p> <p>3.c.i. The proposals presented in the Environmental Impact Statement are currently the world’s best practice in noise and flight activity monitoring. Noise and flight activity measurement and analysis methods in Australia are guided by technical, scientific and government organisations including Standards Australia and the Department of Infrastructure, Transport, Regional Development and Communities. Defence will continue to be advised by aircraft noise industry experts on how to comply with accepted and contemporary noise and flight activity measurement and analysis methods. Defence will conduct periodic</p>

Condition	Condition requirement	Response
	<p>and the development of a noise measuring system at RAAF Base Tindal;</p> <p>iii. Comparison of actual measured F-35A Lightning II aircraft noise levels with those predicted in the Environmental Impact Statement; and</p> <p>iv. Biennial review of noise monitoring locations, unless agreed with the Minister.</p>	<p>reviews of the NFPMS to ensure best practice approaches for noise and flight activity monitoring are enacted.</p> <p>In July 2021, Defence released the report for EPBC 2010/5747 named ‘Review of F-35A Aircraft Noise Management and Reporting’. The review was conducted by Marshal Day Acoustics and was based on a desktop/literature review of recent publications, new or updated policies, technologies and websites from other Air Force bases or major civilian airports whom report on aircraft noise.</p> <p>Alternative noise measurement and analysis methods investigated included the Casper, Aerovision and Topsonic systems. The report concluded that it would be unlikely that alternative platforms would provide any added practical benefit over the current system and that the current system provides a comparable level of information to these methods.</p> <p>For further information and to read the full report, see the F-35A EIS¹⁵ website</p> <p>3.c.ii. Monitoring is conducted by the Noise and Flight Path Monitoring System (NFPMS) at RAAF Base Townsville. Refer to Noise Monitoring section of the RAAF Base Townsville BANMP.</p> <p>3.c.iii. F-35A aircraft operations will be very similar wherever the aircraft is operated. Data being gathered at RAAF Base Williamtown throughout 2019 and 2020 in accordance with the F-35A Noise and Flight Activity Verification Program at Table 1 of the RAAF Base Williamtown BANMP will inform other bases. The ‘Conclusion’ phase of the Program will occur in 2021. In this phase, the measurements of flight activity and noise levels will be analysed and compared to each of the predictions in the EIS to determine whether any potential exceedances have occurred. The response to condition 3.a acknowledges that the F-35A has not operated at RAAF Base Townsville and therefore no comparisons are possible within the BANMP. Comparisons will be provided in the biennial report for 2023 as F-35A operations commence at RAAF Base Townsville. F-35A operations are expected to begin from mid-2021 and comparisons will be</p>

¹⁵

Webpage link [<https://www.defence.gov.au/AirCraftNoise/Environment/F35EIS.asp>]

Condition	Condition requirement	Response
		<p>included in future revisions of this BANMP.</p> <p>3.c.iv. Noise monitoring locations will be reviewed biennially, with the first review in 2023. The review will incorporate confirmation of monitoring locations subject to a change in aircraft noise levels with the introduction of the F-35A. Findings will be compared with those in the Environmental Impact Statement and as such will inform if the monitoring locations are such that they capture representative aircraft noise levels. This review of monitoring locations would also consider track variation in the area, distance of noise monitoring terminals to flight tracks and communities, and how noise levels may vary spatially in the vicinity of noise monitoring terminals and the community.</p>
3.d	<p>If actual measured F-35A Lightning II aircraft noise levels, and flight activity exceed those predicted in the Environmental Impact Statement then corrective action be developed and implemented at RAAF Base(s) and forward operating RAAF Base(s), until an appropriate assessment of noise levels and flight activity has been reached, as agreed with the Minister.</p>	<p>Not applicable until the aircraft is flying in the locations.</p> <p>Data gathered at RAAF Base Williamtown throughout 2019 and 2020 in accordance with the F-35A Noise and Flight Activity Verification Program which will inform operations at other bases.</p> <p>The ‘Conclusion’ phase of the Program will occur in 2021. In this phase, the measurements of flight activity and noise levels will be analysed and compared to each of the predictions in the Environmental Impact Statement to determine whether any potential exceedances have occurred.</p> <p>Any potential exceedances will be comprehensively investigated and if confirmed, appropriate corrective measures will be developed and undertaken.</p> <p>Any required corrective measures will be implemented and verified in 2021, with a report, consult, review and update cycle to occur in the ‘Ongoing’ phase in 2022.</p> <p>Appropriate corrective measures will take into account environmental impact as well as operational, safety and training needs.</p> <p>Corrective actions will be applied until an agreement with the Environment Minister is reached.</p>

Condition	Condition requirement	Response
3.e	<p>Reporting, to ensure clear and timely public access to noise levels and flight activity monitoring data. This must include but not be limited to:</p> <ul style="list-style-type: none"> i. conducting a biennial evaluation of the effectiveness of flight activity monitoring and programmes at RAAF Base(s) until agreed in writing by the Minister; ii. Annual publication on the Defence Aircraft Noise website of: <ul style="list-style-type: none"> i. noise levels and flight activity monitoring data of the F-35A Lightning II aircraft; and ii. a comparison of actual noise levels and flight activity of the F-35A Lightning II with those predicted in the Environmental Impact Statement. This must include, but not be limited to: <ul style="list-style-type: none"> a. noise management measures; b. days and hours of operation; c. flight paths used to reduce noise; and d. frequency and type of activities that occur at Salt Ash Weapons Range. iii. annual review and update of the Aircraft Noise Management Plan for the first three years following the commencement of the action, and then biennially, unless agreed in writing by 	<p>Not applicable until the aircraft is flying in this location.</p> <p>Defence publishes NFPMS reports for RAAF Base Townsville on the Defence Aircraft Noise website at http://www.defence.gov.au/aircraftnoise. The NFPMS reports include aircraft noise and flight activity information.</p> <p>3.e.i. Air Force’s Aircraft Noise Management Policy commits Air Force to conducting a biennial evaluation of the noise management and monitoring system. Through the Aircraft Noise Management Policy annual reporting process, Defence will compile information and evaluate the effectiveness of flight activity monitoring and programs at relevant RAAF Bases using data provided by the NFPMS. Noise monitoring will be reported as per the temporary NFPMS installed at RAAF Base Darwin.</p> <p>3.e.ii.i. F-35A operations in Townsville will only occur for Exercises and Operational requirements. Notable Exercises are Pitch Black and Talisman Sabre. These exercises are not conducted at the same time with Pitch Black and Talisman Sabre running on alternate years. This means only a small percentage of total F-35A operations will be conducted at RAAF Base Townsville. Defence publishes NFPMS reports for RAAF Base Townsville on the Defence Aircraft Noise website at https://www.defence.gov.au/AircraftNoise/NFPMS/Default.asp and F-35A specific reports at https://www.defence.gov.au/AirCraftNoise/Environment/F35EIS.asp.</p> <p>3.e.ii.ii (a); (b); (c). the principals of the Air Combat Group (ACG) Fly Neighbourly Policy which aims to reduce noise impact of fast jet operations within safety and operational requirements will be applied. The BANMP also provides a basis for operations. The NFPMS at RAAF Base Townsville will report on the requirements of this condition as relevant to RAAF Base Townsville, including a comparison of actual and predicted flight activity and noise levels. Reports will be published on the Defence Aircraft Noise website at https://www.defence.gov.au/AircraftNoise/NFPMS/Default.asp.</p> <p>3.e.ii.ii.(d). Not applicable</p>

Condition	Condition requirement	Response
	the Minister.	3.e.iii. BANMPs will be reviewed and updated annually, in accordance with Air Force’s Aircraft Noise Management Policy.
3.f	<p>Consultation activities, to ensure adequate communication with stakeholders, including local residents and relevant authorities. Consultation activities must include, but no be limited to:</p> <ul style="list-style-type: none"> i. regular review of communication arrangements with affected stakeholders and communities; ii. clear and timely notification of information regarding varied flight activity and future plans, which may impact stakeholders, including but not limited to: <ul style="list-style-type: none"> i. days and hours of operation; ii. flight paths; and iii. higher noise events. iii. continued participation at community forums; and iv. development of a concise location specific package of key information related to noise levels and flight activity monitoring data that addresses community concerns in an easily understandable manner for the lay person. 	<p>3.f.i. RAAF Base Townsville Senior Australian Defence Force Officer (SADFO) role is to manage whole-of-Defence matters including Defence Assistance to the Civil Community (DACC), community engagement and stakeholder engagement with local residents and local and territory authorities. SADFO RAAF Base Townsville does this by attending the Townsville Community Aviation Consultation Group (CACG), which sets out the process for improvements and changes (https://www.townsvilleairport.com.au/community/consultative-communities). In addition, Air Force continuously improves its communication arrangements to ensure current and up-to-date information is provided to the community.</p> <p>3.f.ii. F-35A operations in Townsville will be only as per Exercises and Operational requirements. This will mean only a small percentage of total F-35A operations will be conducted in this location.</p> <p>FEG-based media releases and community engagement activities are conducted to promote F-35A Exercises and deployments to RAAF Base Townsville. Large Scale deployments i.e. Talisman Sabre, will have dedicated community engagement activities well in advance of the exercise. This includes community engagement activities and flying program notifications to local residents.</p> <p>Small-scale exercises and deployments to RAAF Bases Townsville will be accompanied by public affairs activities such as media releases.</p> <p>Social media posts will be issued around activities being conducted.</p> <p>RAAF Base and flying program notifications – conducted as part of standard ops to inform the public of flying activities.</p> <p>Those who submit noise complaints have the option to be added to a local distribution list. In additional they are advised of the Air Force Flying Operation website (https://www.airforce.gov.au/operations/flying-operations/flying-activity)</p>

Condition	Condition requirement	Response
		<p>and other social media platforms where timely information on days and hours of operation, flightpaths and higher noise events are advertised.</p> <p>3.f.iii. SADFO or representative attends Townsville CACG.</p> <p>3.f.iv. Location specific information related to noise levels and operational flight activity monitoring is already available on the Defence Aircraft Noise Website for RAAF Base Townsville. e. Defence will continue to refine and develop information for Townsville as noise levels and flight activity monitoring data as knowledge surrounding F-35A operations continue to grow.</p> <p>Any information published will be developed with operational security issues considered.</p>
3.g	Complaint Handling and Resolution, to ensure enquiries and complaints about F-35A Lightning II aircraft flying operations are received, recorded, reported, responded to and resolved, as defined in the Aircraft Noise Management Strategy	<p>Complaint Handling and Resolution is conducted in accordance with Air Command Noise Management System and applicable paragraphs in this BANMP.</p> <p>Complaints regarding Air Force aircraft noise and flying operations should be made by calling 1300 333 362, and asking to be connected to the nearest RAAF Base, or by submitting an aircraft noise complaint/enquiry form</p>
3 (condition end note)	The plan must be submitted to the Department for approval. The approval holder must not commence the action unless the Minister has approved this plan	<p>RAAF Base Townsville BANMP is to be signed by the SADFO.</p> <p>The RAAF Base Townsville BANMP is to be submitted to the Department of Agriculture, Water and Environment.</p>