# **RAAF BASE PEARCE BASE**



# AIRCRAFT NOISE MANAGEMENT PLAN

Approved by:

**P Taylor** Wing Commander Senior Australian Defence Force Officer RAAF Base Pearce

Document ID - BP19010778

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# AMENDMENT / REVIEW CERTIFICATE

AL	Date	Change	Signature
0	Aug 2018	Original Document	
1	Mar 2019	Updated to include F-35A Noise Management	<u>į</u>
2	Jun 2020	Updated to include 2FTS Upgrade to PC-21 and the AIR7000 upgrades	<u>}</u>
3	Feb 2022	Re-write to standardise with other Bases	$\mathbf{\lambda}$

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# RAAF BASE PEARCE 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 Pearce Base Aircraft Noise Management Plan (BANMP) informs and aims to improve public understanding of aircraft noise management strategies in the vicinity of RAAF Base Pearce and its satellite airfield Gingin.

3. RAAF Base Pearce is located 40 kilometres north of Perth and is one of the busiest RAAF bases in the country in terms of total aircraft movements. Although its primary role is pilot training, Pearce remains the only permanent RAAF Base on the west coast and thus has a significant logistics role.

4. RAAF Base Pearce annually hosts major exercises typically featuring visiting aircraft and personnel from around the country and the world. Notable exercises include support to Army parachute operations and Navy fleet support. RAAF Base Pearce's weather and proximity to Muchea Air Weapons Range makes it an ideal location to conduct high-end training sorties for RAAF and coalition partners.

5. There are a number of small airstrips located around RAAF Base Pearce and its satellite airfield Gingin, with the Perth International Airport located 35 kilometres to the south. These civilian aerodromes service Regular Public Transport (RPT) and approved General Aviation (GA) operations that at times operate in Pearce airspace. All RPT and GA noise related complaints are managed by Airservices Australia's <u>Noise Complaints and</u> Information Service (NCIS)<sup>1</sup>.

# **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 Pearce.

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 aircraft operations

7. RAAF aircraft permanently based at RAAF Base Pearce include:

a. Pilatus PC-21 twin seat, single engine turbo propeller aircraft

b. BAE Systems Hawk twin seat, single Adour Mk 871 turbofan engine aircraft

c. Augusta Westland AW139 or Bell B412 turbo shaft helicopters operated by Canadian Helicopter Corporation for Search and Rescue (SAR).

8. The average number of military aircraft movements is 140 per week.

9. Aircraft Noise Exposure Forecast (ANEF) maps for RAAF Base Pearce and its satellite airfield Gingin, are reproduced in Figure One and Figure Two below.

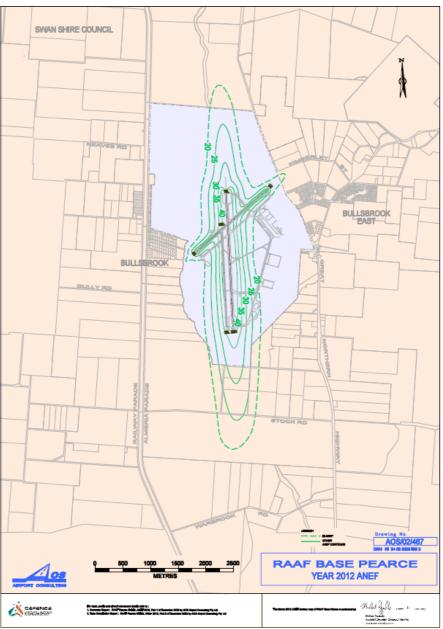


Figure One: RAAF Base Pearce Aircraft Noise Exposure Forecast

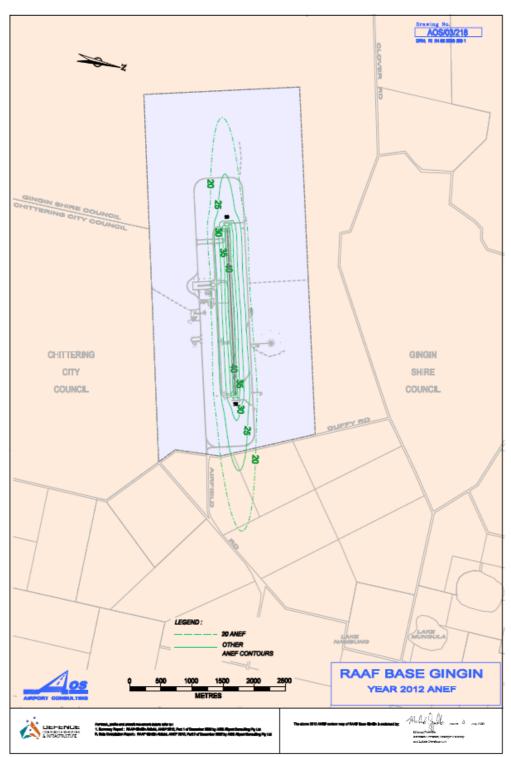


Figure Two: Gingin Satellite Airfield Aircraft Noise Exposure Forecast

10. Where possible, RAAF Base Pearce 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 <u>Air Force Flying Operations</u> website<sup>2</sup>.

Webpage link [https://www.airforce.gov.au/operations/flying-operations/PearceGinGin/]

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11. RAAF Base Pearce has two runway surfaces 05/23 and 18/36 aligned northeast /southwest and north/south respectively. The Gingin satellite airfield has a single runway surface 08/26 aligned west-southwest/east-northeast. Bullsbrook townsite is located immediately to the east, and West Bullsbrook is immediately to the west of RAAF Base Pearce close to the aircraft flight paths for Runway 05/23 departures and arrivals.

12. 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

13. The most common foreseeable variation to the regular flying schedule at RAAF Base Pearce is visiting aircraft from other Bases. At times, aircraft may operate outside normal airfield operating hours with approval granted by the Pearce Air Base Executive Officer. Attempts will be made where possible to advertise changes 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. E-7A Wedgetail, 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. B350 King Air, two turboprop engines,
- k. Boeing BBJ, two turbofan engines,
- 1. Falcon 7X, three turbofan engines,
- m. Various single and multi-rotor aircraft, single and twin turboshaft engines, and
- n. Visiting aircraft types from International Defence Forces.

14. Unforeseeable variations (caused by inclement weather and aircraft serviceability issues) will occur from time to time. Noise abatement measures will be implemented where possible.

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# **Pearce Noise Minimisation**

15. RAAF Base Pearce maintains guidelines such as Base Standing Instructions and Range Standing Instructions, designed to provide a baseline for aircraft operations on Defence managed lands. All operators adhere to these instructions. Annex A outlines the Air Force Fly Neighbourly policy. Air Combat Group (ACG) and Air Force Training Group (AFTG) 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 Pearce, however a summary of the main generic noise management guidelines for RAAF Base Pearce are as follows:

(1) Noise management is a briefing item for all flying. ACG and AFTG 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.

(4) Aircraft will avoid overflying homes and communities within the training areas.

16. **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 Pearce:

a. Between 0730h and 1630h Monday – Friday – no restrictions.

b. The above times may be extended until 2100h, for exercise and visiting aircraft subject to prior approval being sought from the Air Base Command Post (ABCP).

c. Engine runs outside of the above times, require the approval of the RAAF Base Pearce Air Base Executive Officer.

17. **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 one contains details on the status of compliance with approval condition 3 of the EPBC 2010/5747 that relates to Aircraft Noise Management Plans.

# Low flying

18. 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).

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19. Designated low flying training areas are north and northeast of Pearce and are named the Western, Northern, Outer and Eastern Low Flying Areas. In addition, aircraft operate at low levels in the vicinity of Beermullah and an area north of the Base known as the Multi-Formation Training Area (MFTA).

### **RAAF Base Pearce Airspace**

20. Aircraft operating from RAAF Base Pearce utilise nearby Flying Training Areas (FTAs) for training and exercises. The locations are shown in Figure Three below.



Figure Three: RAAF Base Pearce Airspace

# FTAs Working with Community

21. Residents should consider the <u>Australian Noise Exposure Concept (ANEC)</u><sup>3</sup> map for RAAF Base Pearce, which provides a forecast of cumulative annual aircraft noise. ANEC and Australian Noise Exposure Forecast (ANEF) maps provide a forecast of anticipated noise for a future period, for that location. The ANEC/ANEF does not show every flight path and homeowners with properties outside of the map zones may still experience aircraft noise.

Webpage link [https://www.defence.gov.au/AircraftNoise/ANEF/Default.asp]

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22. RAAF Base Pearce engages regularly with the Bullsbrook Ratepayers Association. The Senior Australian Defence Force Officer (SADFO) RAAF Base Pearce and the Base Manager are available to discuss all matters relating to RAAF Base Pearce and its satellite airfield Gingin, that might impact the local region, including noise and environmental issues.

23. RAAF Base Pearce 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 <u>Air Force flying operations</u><sup>4</sup> website. Annex A provides the Air Force Fly Neighbourly Policy.

24. Where possible, RAAF Base Pearce 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**

25. Defence operates the NFPMS to provide the community information about aircraft noise and flight paths associated with military operations. The NFPMS website can be accessed via the <u>Defence Aircraft Noise Website Monitoring</u><sup>5</sup> tab. On this site, RAAF Base Pearce will have a similar map as those that are currently displayed from RAAF Base Williamtown, Townsville and Amberley should fast jet posture change. This interactive and accessible database can be used to develop reports of aircraft flight paths and volume of aircraft traffic. The site will also provide details of the monitoring station locations around RAAF Base Pearce.

26. The NFPMS allows individuals to gain an understanding of all flying activity near the Base. Defence uses the data to publish a monthly report of fast jet flying activity, and all aircraft flight activity. Further details on Noise Monitoring Sites will be provided in future updates of this BANMP.

# Noise Complaints

27. RAAF Base Pearce 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 Pearce,

b. online by the <u>aircraft noise enquiry or complaint form<sup>6</sup></u>, or

c. mail to:

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

<sup>4</sup> Webpage link [https://www.airforce.gov.au/operations/flying-operations/flying-activity]

<sup>&</sup>lt;sup>5</sup> Webpage link [https://www.defence.gov.au/AircraftNoise/NFPMS/Default.asp]

<sup>&</sup>lt;sup>6</sup> Webpage link [https://www.defence.gov.au/AircraftNoise/OnlineForm.asp]

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28. 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 should be directed to <u>Airservices Australia NCIS</u><sup>7</sup>.

29. 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

30. Military aircraft noise complaints are generally taken by RAAF Base Pearce Air Base Command Post (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.

31. Further details on the aircraft noise complaint process can be found on the <u>Defence</u> <u>Aircraft Noise</u><sup>8</sup> website.

32. 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 <u>ANO website</u>9.

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

- a. The ANO's <u>online complaint form</u><sup>10</sup>,
- 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

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

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

<sup>9</sup> Webpage link [https://ano.gov.au/about/]
 <sup>10</sup> Webpage link [https://ano.gov.au/complaints/form.asp

#### **Review and update process**

34. This document will be reviewed annually.

35. The document will be made available on the <u>RAAF Base Pearce</u><sup>11</sup> webpage of the <u>Defence Aircraft Noise website</u><sup>12</sup>.

# Annex:

A. Air Force Fly Neighbourly Policy

#### **Enclosure:**

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

<sup>11</sup> Webpage link [https://www.defence.gov.au/AircraftNoise/PearceGingin/Default.asp] Webpage link [https://www.defence.gov.au/AircraftNoise/Default.asp] 12

# 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 <u>Defence Aircraft Noise<sup>13</sup></u> website.

<sup>13</sup> 

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

5. 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.

6. 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:

i. comply with published airfield noise abatement procedures

j. use appropriate runway length for departures to maximise height over local communities

k. minimise the use of afterburner on fast jets during take-off and minimise noise during climb out

1. limit the speed of aircraft over populated areas

m. minimise flight over residential areas and other noise sensitive buildings such as hospitals, schools and farming communities

n. avoid low flying over known noise sensitive areas such as livestock yards minimise flying late at night or early in the morning

o. include aircraft noise awareness in pilot training and familiarization

p. notify local communities of major exercises or other non-routine training and flying activities such as flying displays.

- 7. To further minimise noise at some bases Air Force will:
- a. limit continuous circuit training at night and on weekends and public holidays
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- d. consider continuous descents to reduce noise
- e. implement local engine run-ups procedures
- f. minimise jet or turbo prop engine testing at night.
- 8. For further information, please see the <u>Defence Aircraft Noise</u><sup>13</sup> website.

<sup>13</sup> 

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

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

Condition	Condition requirement	Response
3	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:	Air Force has prepared the RAAF Base Pearce, Base Aircraft Noise Management Plan (BANMP) (Document ID: BP19010778). It is an operational document that addresses noise arising from all Air Force aircraft that utilise RAAF Base Pearce, including F-35A aircraft. The RAAF Base Pearce BANMP is prepared and implemented as described in, and works towards the objectives of, the Air Force Aircraft Noise Management Policy. 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). F-35A flying operations will commence at other RAAF Bases (Tindal, Darwin and Townsville) no earlier than 2020.
3.a	Comparison of actual flight activity of F- 35A Lightning II aircraft with those predicted in the Environmental Impact Statement;	F-35A flying activity at RAAF Base Pearce are not currently planned for the near future. 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 is the first in a series of reports that compare flight activity of the F-35A. As the F-35A has not operated at RAAF Base Pearce, no comparisons are possible within the BANMP. However, comparisons will be provided in the biennial report for 2023 should F-35A operations commence at RAAF Base Pearce.

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	3.b	A review of existing noise management programmes	<ul> <li>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.</li> <li>Defence's Aircraft Noise Management Policy contains Strategic guidance, being the Air Force Aircraft Noise Management Strategy and Air Force's Fly Neighbourly Policy as well as operational policies aimed at tactical implementation of noise management/mitigation strategies.</li> <li>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 (every 5 years). The Strategy outlines six strategic objectives and appropriate stakeholders to: <ol> <li>minimise the impact of aircraft noise on local communities</li> <li>continue proactive community engagement planning teams</li> <li>conduct responsible environmental planning</li> <li>Integrate a comprehensive aircraft noise management system into Air Force's Fly Neighbourly Policy sets an overarching commitment to balance operational and training requirements while undertaking flying operations in a manare that is considerate of our local communities, safe and achieves capability requirements. Minimisation strategies such as limiting speed over populated areas,</li> </ol> </li> </ul>
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		<ul> <li>avoiding flying over known sensitive locations, minimising flying late at night and early in the morning are a few of the strategies employed</li> <li>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: <ul> <li>Aircraft noise mitigation procedures</li> <li>Aircraft noise complaint management</li> <li>Communication and collaboration</li> <li>Monitoring and review.</li> </ul> </li> <li>There are a number of other Instructions and that are used internally to ensure consistency across all airbases in Australia. Some examples include: <ul> <li>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</li> <li>Air Combat Groups Fly Neighbourly Policy (ACG SI(OPS) 03-03)</li> <li>Flight Information Handbook Australia (FIHA)</li> <li>General Planning Australia (GPA)</li> <li>En Route Supplement Australia (ERSA)</li> <li>AC SI (OPS) 03-04: Supersonic Flight</li> </ul> </li> </ul>
3.c	to sensitive receptors at RAAF Base	F-35A Lightning II aircraft is yet to operate from RAAF Base Pearce however there is potential for operations from December of 2021. 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

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<b>[</b>		
	provide ongoing noise information, and the	reviews of the NFPMS to ensure best practice approaches for noise and flight
	development of a noise measuring system at	activity monitoring are enacted.
	RAAF Base Tindal;	In July 2021, Defence released the report for EPBC 2010/5747 named 'Review
	1	of F-35A Aircraft Noise Management and Reporting'. The review was
	Lightning II aircraft noise levels with those	conducted by Marshal Day Acoustics and was based on a desktop/literature
	predicted in the Environmental Impact	review of recent publications, new or updated policies, technologies and
	Statement; and	websites from other Air Force bases or major civilian airports whom report on
	iv. Biennial review of noise monitoring	aircraft noise.
	locations, unless agreed with the Minister.	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.
		For further information and to read the full report, see the $F-35A$ EIS <sup>14</sup> website
		3.c.ii. There is currently no plan to establish a NFPMS at RAAF Base Pearce.
		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 Pearce and
		therefore no comparisons are possible within the BANMP. Comparisons will be
		provided in the biennial report for 2023 should F-35A operations commence at
		RAAF Base Pearce. F-35A operations are not expected at RAAF Base Pearce in
		the known future. Any change to the noise monitoring and reporting systems at
		RAAF Base Pearce will be reflected in the RAAF Base Pearce BANMP,
		revisions of which must and will be submitted to the Commonwealth
		Department of Environment in accordance with condition 9 of EPBC Act
		approval EPBC 2010/5747.
		3.c.iv. Noise monitoring locations will be reviewed biennially, with the first
	1	preserve and an and the production with the review of oremany, what the first

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r F 3.d a b	f 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.	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. The 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. Not applicable until the aircraft is flying in the locations. Data gathered at RAAF Base Williamtown throughout 2019 and 2020 in accordance with the F-35A Noise and Flight Activity Verification Program will inform operations at 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. Any potential exceedances will be comprehensively investigated and if confirmed, appropriate corrective measures will be developed and undertaken. 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. Appropriate corrective measures will take into account environmental impact as well as operational, safety and training needs. Corrective actions will be applied until an agreement with the Environment Minister is reached. Not applicable until the aircraft is flying in this location.
40	1 0 1	There is no Noise and Flight Path Monitoring System (NFPMS) currently at

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[	manitoring data. This must include 1	DAAE Deer Tindels herreren Defense will establish a NEDMO -+ DAAE Deer
	-	RAAF Base Tindal; however, Defence will establish a NFPMS at RAAF Base
	limited to:	Tindal by the end of 2021. This will allow the NFPMS to monitor F-35A activity
		at RAAF Base Tindal. If the timing of a noise event matches the radar track of
	effectiveness of flight activity monitoring and	an F-35A, then that noise event will be attributed to the F-35A and will appear in
	programmes at RAAF Base(s) until agreed in	NFPMS reports. The NFPMS will inform the 2023 F-35A biennial report.
	writing by the Minister;	3.e.i. Air Force's Aircraft Noise Management Policy commits Air Force to
	ii. Annual publication on the Defence	conducting a biennial evaluation of the noise management and monitoring
	Aircraft Noise website of.	system. Through the Aircraft Noise Management Policy annual reporting
	a. noise levels and flight activity	process, Defence will compile information and evaluate the effectiveness of
	monitoring data of the F-35A Lightning II	flight activity monitoring and programs at relevant RAAF Bases using data
		provided by the NFPMS. Noise monitoring will be reported as per the NFPMS at
	and flight activity of the F-35A Lightning II	RAAF Base Tindal.
	with those predicted in the Environmental	3.e.ii.i. Defence will publish NFPMS reports for RAAF Base Tindal on the
	Impact Statement. This must include, but not be	
	limited to:	https://www.defence.gov.au/AircraftNoise/NFPMS/Default.asp and F-35A
	i. noise management measures;	specific reports at
	ii. days and hours of operation;	https://www.defence.gov.au/AirCraftNoise/Environment/F35EIS.asp. These
	iii. flight paths used to reduce noise; and	reports will respond to conditions 3.c.iii (comparison of actual and predicted
	iv. frequency and type of activities that	noise levels) and conditions 3.d (investigation into the materially of any
	occur at Salt Ash Weapons Range.	exceedance).
	b. annual review and update of the	3.e.ii.ii (a); (b); (c). the principals of the Air Combat Group (ACG) Fly
	Aircraft Noise Management Plan for the first	Neighbourly Policy which aims to reduce noise impact of fast jet operations
	three years following the commencement of the	within safety and operational requirements will be applied. The BANMP also
	action, and then biennially, unless agreed in	provides a basis for operations. The NFPMS at RAAF Base Tindal will report on
	writing by the Minister.	the requirements of this condition as relevant to RAAF Base Tindal, including a
		comparison of actual and predicted flight activity and noise levels. Such reports
		will be published on the Defence Aircraft Noise website at_
		https://www.defence.gov.au/AircraftNoise/NFPMS/Default.asp.
		3.e.ii.ii.(d). Not applicable
		3.e.iii. BANMPs will be reviewed and updated annually, in accordance with Air
		Force's Aircraft Noise Management Policy.

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Consultation activities, to ensure adequate communication with stakeholders, including local residents and relevant authorities. Consultation activities must include, but no b limited to: i. regular review of communication arrangements with affected stakeholders and communities; ii. clear and timely notification of information regarding varied flight activity a future plans, which may impact stakeholders including but not limited to: a. days and hours of operation; b. flight paths; and c. higher noise events. iii. continued participation at communit forums; and iv. development of a concise location specific package of key information related t noise levels and flight activity monitoring da that addresses community concerns in an eas understandable manner for the lay person.	<ul> <li>where community members can raise questions via the process indicated on Katherine Town Councils website (https://www.katherine.nt.gov.au/council-meetings/). Any actions are captured within the minutes of the meeting. SADFO RAAF Base Tindal manages and reviews community engagement by attending these meetings. Air Force continuously improves its communication arrangements to ensure current and up-to-date information is provided to the community</li> <li>3.f.ii. Initial F-35A operations at RAAF Base Tindal will be promoted via media releases and community engagement activities to promote the beginning of operations for the aircraft.</li> <li>Any large-scale deployments i.e. Pitch Black will have dedicated community engagement activities well in advance of the exercise. This includes community engagement activities and flying program notifications to local residents and a dedicated website.</li> <li>Small-scale exercises and deployments at RAAF Base Tindal will be accompanied by public affairs activities such as media releases.</li> </ul>
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		<ul> <li>3.f.iii. SADFO or representative attend local community forums to advise of upcoming activities where required</li> <li>3.f.iv. Location specific information related to noise levels and operational flight activity monitoring is already available on the <u>Defence Aircraft Noise Website</u><sup>15</sup>. Defence will continue to refine and develop information for Pearce as noise levels and flight activity monitoring data and knowledge surrounding F-35A operations continue to grow.</li> <li>Any information published will be developed with operational security issues considered.</li> </ul>
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	Complaint Handling and Resolution is conducted in accordance with Air Command Noise Management System and applicable paragraphs in this BANMP. 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.
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 ink [https://www.defence.gov.au/AirCraftNoise/Environment/F35EIS.as]	RAAF Base Pearce BANMP to be signed by the SADFO. The RAAF Base Pearce BANMP to be submitted to the Department of Agriculture, Water and Environment.

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Webpage link [https://www.defence.gov.au/AirCraftNoise/Environment/F35EIS.asp] Webpage link [https://www.defence.gov.au/AircraftNoise/NFPMS/Default.asp]