

# Review of Australian Super Hornet Flying Operations at RAAF Base Amberley August 2015

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# **1 Executive Summary**

- 1.1 In January 2015, the Aircraft Noise Ombudsman (ANO), the Department of Defence (Defence) and Airservices Australia (Airservices) signed a Memorandum of Understanding, which established the ANO as an independent review and complaints mechanism for Defence's aircraft noise management.
- 1.2 As a first priority, Defence requested that the ANO undertake an audit of Defence's compliance with the Conditions of Approval for Australian Super Hornet Flying Operations, RAAF Base, Amberley, QLD (EPBC 2008/4410), as varied by Ministerial approval in April 2014 (Conditions of Approval). This is the first major review that the ANO has undertaken of any Defence noise management activity and this report sets out the detailed review, ANO findings and recommendations.
- 1.3 The ANO found that Defence was meeting the intent of the Conditions of Approval and is managing aircraft noise issues effectively. Notably, in concluding the audit, the ANO found that Defence was compliant with six of the seven Conditions of Approval with an inconclusive finding against the seventh condition (see table below).

	Compliant	Needs improvement	Inconclusive	Total
Conditions of Approval	6	-	1	7

1.4 Defence subsequently developed a number of plans to meet the objectives of the Conditions of Approval. From these plans, the ANO identified 51 separate requirements to be assessed under this audit. From these, Defence was compliant with 32 requirements with 11 requiring some degree of improvement. There were eight requirements classified as inconclusive due to a lack of evidence to determine a definitive finding (see table below).

	Compliant	Needs improvement	Inconclusive	Total
Noise Management Plan V2.1	11	4	6	21
Noise Monitoring and Complaints Handling Strategy V1.0	12	6	2	20
Noise Mitigation and Complaint Resolution Strategy	9	1	-	10
	32	11	8	51

1.5 This report makes 12 recommendations aimed at improving Defence's compliance with the Conditions of Approval and subsequent requirements. Further, two suggestions to improve aircraft noise information more broadly have been included in this report. **Attachment 3** provides a summary of the recommendations and suggestions.

- 1.6 The key areas for improvement include:
  - Defence to adopt appropriate record management practices to ensure identified gaps in record-keeping are addressed
  - Defence to work with the Noise and Flight Path Monitoring System (NFPMS) supplier to improve the accuracy and reliability of the data captured by the NFPMS and presented in reports
  - Defence to align their Standing Instructions and other staff documentation as appropriate with the requirements of the Conditions of Approval and associated approved plans
  - Defence to routinely undertake documented reviews of the approved plans and seek timely approval of any resultant updates to these plans
  - Defence to establish an online complaint lodgement capability.
- 1.7 Defence has welcomed and supported the conduct of the review. The organisation has provided access to data and personnel without hesitation. This reflects the strong commitment in Defence to manage responsibly the aircraft noise associated with the operation of Super Hornets at RAAF Base Amberley. Commendably, as issues were identified during the audit process, Defence acted to rectify these immediately, where practical, rather than awaiting the final findings of this report.
- 1.8 In conclusion, the ANO considers that Defence not only complies with the intent of the Conditions of Approval, but has also demonstrated a commitment to going beyond the stipulated Conditions in managing the aircraft noise impacts of its flying operations on the community. Defence has shown it is open to new ideas and willing to make changes to improve its management of aircraft noise.

1B.

Ron Brent Aircraft Noise Ombudsman 12 August 2015

# 2 Introduction

# Context

- 2.1 In March 2010, the Commonwealth Environment Minister conditionally approved the introduction of Super Hornets to RAAF Base Amberley. The Conditions of Approval for Australian Super Hornet Flying Operations, RAAF Base, Amberley, QLD (EPBC 2008/4410), were varied by Ministerial approval in April 2014. Referred to subsequently in this document as the 'Conditions of Approval', these Conditions require that Defence "ensure that an Independent Audit of Compliance with the Conditions of Approval, including implementation of the requirements of **approved** plans, is conducted ...from the date of approval to 31 December 2014."
- 2.2 In January 2015, the ANO, Defence and Airservices signed a Memorandum of Understanding, which established the ANO as an independent review and complaints mechanism for Defence's aircraft noise management. In line with the ANO Charter, the ANO is an independent administrative office that:
  - a) reviews the handling of complaints or enquiries made to Airservices Australia (Airservices) or the Department of Defence (Defence) about Aircraft Noise
  - b) monitors and reports on the effectiveness of community consultation processes relating to Aircraft Noise undertaken by Airservices and Defence
  - c) monitors and reports on the effectiveness of the presentation and distribution of Aircraft Noise-related information
  - d) provides targeted reviews of specific aspects of Aircraft Noise management as requested by Airservices and Defence.
- 2.3 In accordance with the last of these, the ANO has undertaken this review as requested by Defence.
- 2.4 The ANO was approved as an independent auditor in line with the requirements of the Conditions of Approval (see **Attachment 1**).

# **Objective**

- 2.5 The objective of this review is to audit Defence's compliance with the Conditions of Approval including compliance with the requirements of approved plans, for the period from 23 March 2010 to 31 December 2014. Additionally, the review is to identify opportunities for continued improvement in aircraft noise management.
- 2.6 The Terms of Reference for the review are available at **Attachment 2**.

# **Report purpose and structure**

- 2.7 This report sets out the details of the ANO audit of Defence's compliance with the Conditions of Approval and with the requirements of the approved plans that Defence has developed to meet the Conditions of Approval.
- 2.8 Each condition or requirement is set out in a table including any comments from Defence, the ANO assessment undertaken and the ANO finding on each. The report is broken into sections as follows:
  - Section 3: Conditions of Approval (COA)
  - Section 4: Australian Super Hornet Noise Management Plan (NMP)
  - Section 5: Noise Monitoring and Complaints Handling Strategy (NMCHS)
  - Section 6: Australian Super Hornet Noise Mitigation and Complaint Resolution Strategy (NMCRS)

The acronyms in parentheses above are used to identify each distinct condition or requirement. For example, the Conditions of Approval are numbered COA-01 for Condition 1, COA-02 for Condition 2, etc.

# Methodology

- 2.9 The ANO independently established the list of requirements from the three approved plans that Defence has developed to meet the Conditions of Approval. Defence was given an opportunity to submit comments against each and the ANO independently assessed compliance (or otherwise) with each requirement. This detail is set out in the tables in Section 3 through to Section 6 of this report.
- 2.10 In conducting the review, the ANO undertook various activities to independently satisfy itself of the information Defence provided. This included:
  - A desktop review: including documentation supplied by Defence and publicly available material on the Defence and other websites
  - A site visit to RAAF Base Amberley: including interviews with key Defence personnel, reviewing on site procedures and other relevant documentation, observing the Amberley Community Working Group (ACWG) meeting of 24 February 2015, discussions with community stakeholders who attended the ACWG meeting and a tour of relevant facilities
  - Checking reported statistics: by analysing a sample of Noise and Flight Path Monitoring System (NFPMS) data to check for consistency between the raw data and the data Defence publish in their reports
  - Confirming details with other agencies: including writing to the Commonwealth Environment Department and the Commonwealth Ombudsman for independent verification of information provided by Defence
  - Discussions with other Defence staff: including from Air Force Headquarters and Defence Support Group.

2.11 The ANO has assessed Defence's level of compliance against each Condition of Approval and each requirement identified from the three approved plans. Where possible, a finding on the level of compliance has been made as per the following table:

Compliant	The requirement is met
Needs improvement	The requirement is met in part
Inconclusive	Insufficient data available to determine a finding

- 2.12 The category termed "Inconclusive" was included where a finding could not be determined. This occurred in a number of instances because Defence could not provide records that would support a finding of compliance, yet equally there was no evidence to support a finding of non or partial compliance.
- 2.13 Some requirements comprise more than one sub-requirement. In these cases, the ANO assessed the level of compliance against each sub-requirement before determining a compliance finding for the overall requirement.
- 2.14 In the conduct of this audit, it has not always been possible to determine whether or not events have occurred on or before 31 December 2014. Therefore, this audit may include commentary on or accept actions that have taken place between 31 December and the completion date of the audit report.

# **3 Conditions of Approval**

# **Background to the Conditions of Approval**

3.1 In March 2010, the Commonwealth Environment Minister conditionally approved the introduction of Super Hornets to RAAF Base Amberley. The Conditions of Approval for Australian Super Hornet Flying Operations, RAAF Base, Amberley, QLD (EPBC 2008/4410), were varied by Ministerial approval in April 2014.

# **Compliance with the Conditions of Approval**

- 3.2 Of the nine conditions (as varied), seven have been audited for compliance by the ANO. The remaining two (Conditions 4 and 7), which relate to environmental matters, are outside the ANO area of expertise and are being independently audited by Umwelt Environmental Consultants (Umwelt).
- 3.3 Six of the seven audited Conditions of Approval were found by the ANO to be fully complied with by Defence. One condition was classified as inconclusive due to a lack of evidence. The table below summarises the findings.

Compliant	Needs improvement	Inconclusive	Total
6	-	1	7

3.4 The overall objective of the Conditions would appear to be that aircraft noise impacts resulting from the introduction of Super Hornet flying operations at RAAF Base Amberley should be managed and mitigated as much as reasonably practicable. The ANO considers that, although there are some areas for improvement identified, Defence is keeping overall noise impacts within the levels forecast in the Public Environment Report, particularly during the more noise-sensitive times of evening and night.

#### Condition:

The person taking the action must implement the **approved** Australian Super Hornet Noise Management Plan.

The **approved** Australian Super Hornet Noise Management Plan must be revised to address any issues identified in the:

- a. Noise Monitoring Program, as outlined in the **approved** Noise Monitoring and Complaints Handling Strategy (condition 2); and
- b. Period 1 Independent Audit of Compliance with the Conditions of Approval (condition 5).

The revised Australia Super Hornet Noise Management Plan must be submitted to the **Minister** for approval by 31 December 2015. The **approved** revised Australian Super Hornet Noise Management Plan must be implemented in place of the Australian Super Hornet Noise Management Plan previously **approved**.

#### Defence comment:

Air Force has implemented the approved Australian Super Hornet Noise Management Plan. The original Plan was revised to Version 2.0 and then Version 2.1 as a result of internal reviews as required by the Noise Monitoring Plan. The approved Plan is now Super Hornet Noise Management Plan Version 2.1. A number of flight path changes were the main reason for the revision.

A review of the Plan was conducted in Feb 13 in accordance with paragraph 45 of the Noise Management Plan, however, there were no changes required at that time.

In the 2012 Annual Super Hornet Noise Report (completed in Nov 14) it was identified that Air Force has been conducting more afterburner take-off's as a proportion of all departures, than originally conceived. Through experience, Air Force has identified that almost all Super Hornet flights require an afterburner take-off, due to the requirement to carry external stores. The carriage of external tanks and stores provides for efficient value for money training and capability development for Air Force and the Government. The Noise Management Plan allowed for approximately 85% of departures to use full afterburning thrust and 15% using non afterburning thrust departures.

The effects of this variation are captured in the noise measurements made by the NFPMS and the Annual Super Hornet Noise Reports posted on the internet and tabled at the Amberley Consultative Working Group. It should be noted that afterburner take-off's increase noise close to the runway but have the effect of reducing noise in other locations as aircraft reach climb speed sooner, at which point power is reduced. The effective climb angle is steeper for an afterburner take-off.

Air Force intends to update the Noise Management Plan and future noise modelling to reflect actual use of afterburner. Air Force is currently working to include this change in the Noise Management Plan and in future noise modelling (2029 ANEF) being undertaken for RAAF Base Amberley. It is proposed that Air Force will have this amendment to afterburner use approved by the Department of Environment at the same time as any amendments are required as a result of this audit.

### Audit validation, testing, assessment and supporting documentation:

This condition comprises two components:

1. The first is that Defence must implement the approved Australian Super Hornet Noise Management Plan. The ANO found through the conduct of this audit that 11 of a total 21 requirements of the Super Hornet Noise Management Plan were met. The detailed assessment and findings are recorded in **Section 4** and summarised in the table below.

Compliant	Needs improvement	Inconclusive	Total
11	4	6	21

Given the above summary of findings, the ANO considers that Defence demonstrated compliance with this component of the condition, albeit some areas would benefit from improvement.

- 2. The second component requires that a revised Plan must be submitted to the Minister by 31 December 2015, addressing:
  - a. the issues identified in the Noise Monitoring Program
  - b. the findings of this audit.

This component has not been addressed as it is a future requirement and outside the scope of this audit.

Finding:	Compliant		
	Recommendations for improvements in response to specific requirements in the Noise Management Plan, where required, are detailed in <b>Section 4</b> .		

#### **Condition:**

The person taking the action must implement the **approved** Noise Monitoring and Complaints Handling Strategy.

#### Defence comment:

As Defence developed the initial Noise Monitoring and Complaints Handling Strategy it took longer than expected and it was approximately six months late. Defence had to ensure new resources, policies and procedures were in place to implement the Strategy. Defence communicated this delay. There were no issues for the community or the environment during this period as there were only a few Super Hornets operating at that time and they were operated in accordance with the Noise Management Plan. Defence continued to maintain its normal complaint handling system during this period.

Air Force has implemented the seven objectives of this strategy described in paragraph 7. An NFPMS was installed in 2009 to monitor aircraft noise and ensure compliance with the Noise Management Plan. Quarterly and annual noise reports have been produced and placed on the Defence Aircraft Noise website. These reports have also been tabled at the Amberley Consultative Working Group. Air Force and Defence Support and Reform Group are in the process of updating the ANEF for RAAF Base Amberley to 2029. This updated ANEF should be complete in late 2015.

#### Audit validation, testing, assessment and supporting documentation:

The ANO found through the conduct of this audit that 12 of a total 20 assessed requirements were compliant and six required some improvement. The detailed assessment and findings are recorded in **Section 5** and summarised in the table below.

Compliant	Needs improvement	Inconclusive	Total
12	6	2	20

Further, the ANO notes that the original Condition 2 of the Conditions of Approval required that Noise Monitoring and Complaints Handling Strategy be submitted to the Minister for approval by June 2011. Version 1 was approved by Defence personnel on 7 December 2011 and submitted to the Environment Department at this time.

Given the above summary of findings, the ANO considers that Defence demonstrated compliance with this condition, albeit some areas would benefit from improvement.

Finding:	Compliant		
	Recommendations for improvements in response to specific requirements in the Noise Management Plan, where required, are detailed in <b>Section 5</b> .		

#### **Condition:**

The person taking the action must implement the **approved** Australian Super Hornet Noise Mitigation and Complaint Resolution Strategy.

#### **Defence comment:**

Air Force has implemented the Noise Mitigation and Complaints Resolution Strategy Version 1.0. The Strategy was approved and implemented by Defence in July 2012. However it was overlooked that the Strategy had not been formally approved by the Department of Environment. It was subsequently approved by the Department of Environment without any changes, in April 2014.

In May 2012 Air Force and the Commonwealth Ombudsman agreed to a Memorandum of Understanding (MoU) to establish the Commonwealth Ombudsman as an appropriately qualified independent aircraft noise complaint mechanism. In January 2015 this MoU was replaced with a tri-partite MoU between Defence, the Aircraft Noise Ombudsman (ANO) and Airservices. This new relationship fulfils this independent noise complaint role not just for Super Hornet, but all of Defence. Under this new MoU the ANO provides an independent review mechanism for Defence aircraft noise management.

The Noise Mitigation and Complaints Resolution Strategy will be amended to include this recent change from the Commonwealth Ombudsman to the ANO. The Department of Environment has been made aware of this change and final approval for the new version of this Plan will be sought along with any recommendations from this independent audit.

The Amberley Air Base Command Post (ABCP) has maintained complaint management records since Super Hornet Operations began in 2010. Air Force is currently undertaking a trial with RAAF Base Amberley to implement a new comprehensive complaint management database called 'Noise Desk' that will be rolled out across all Air Force bases in 2015.

Defence is not aware of any complaint that has been referred to the Commonwealth Ombudsman since the endorsement of the original MoU in May 2012.

#### Audit validation, testing, assessment and supporting documentation:

The ANO found through the conduct of this audit that 9 of a total 10 requirements were met. The detailed assessment and findings are recorded in **Section 6** and summarised below.

Compliant	Needs improvement	Inconclusive	Total
9	1	-	10

Further, the ANO notes that the original Condition 3 specified a date for submission of the Complaint Resolution Strategy to the Minister. While Defence did not meet this deadline, it was subsequently submitted and approved and published. In addition, the amended Conditions approved by the Minister in 2014 removed any timeline requirement.

Given the above, the ANO considers that Defence has demonstrated compliance with this component of the condition, albeit some areas would benefit from improvement.

#### Finding:

#### Compliant

Recommendations for improvements in response to specific requirements in the Noise Management Plan, where required, are detailed in **Section 6**.

#### Condition:

The person taking the action must implement the **approved** Air Quality Monitoring Plan.

#### **Defence comment:**

To be dealt with by Umwelt and Defence.

#### Audit validation, testing, assessment and supporting documentation:

Outside scope of ANO terms of reference – see Attachment 2.

#### Condition:

The person taking the action must ensure that an Independent Audit of Compliance with the Conditions of Approval, including implementation of the requirements of **approved** plans, is conducted for each of the following periods.

- a. Period 1: from the date of the approval to 31 December 2014;
- b. Period 2: from 1 January 2015 to 31 December 2018.

Each auditor's report must be submitted to the **Minister** within 6 months of the end of the period to which the report applies. Each auditor's report must be published on the web site of the person taking the action within 3 months of the report being submitted to the **Minister**.

The independent auditor must be **approved** prior to commencement of each audit.

#### Defence comment:

This independent audit is addressing this requirement. Defence still needs to make sure that funding is made available to conduct the final audit in 2018. Recommend that this final audit is completed by an independent firm so that the effectiveness of the relationship between Defence and the ANO can also be addressed, after it has matured.

#### Audit validation, testing, assessment and supporting documentation:

This condition has several components:

 Defence must engage an approved auditor to conduct an independent audit of compliance with the Conditions of Approval for each of the defined periods. For period 1 (from the date of the approval to 31 December 2014), the Department of Environment approved the ANO to conduct the audit (see **Attachment 1**). This report constitutes the audit as required in this Condition of Approval.

Note: In the conduct of this audit, it has not always been possible to determine whether or not events have occurred on or before 31 December 2014. Therefore, this audit may include commentary or accept actions that have taken place between 31 December and the completion date of the audit report.

- 2. A second audit for the period from 1 January 2015 to 31 December 2018. As this is a future requirement, it is outside the scope of this audit.
- 3. Each auditor's report must be submitted to the Minister within six months of the end of the period to which the report applies. As this is a future requirement, it is outside the scope of this audit, although it is noted that the six month requirement will not be met.
- 4. The auditor's report must be published on the Defence website within three months of the report being submitted to the Minister. Again, as this is a future requirement, it is outside the scope of this audit.

The ANO considers that Defence demonstrated compliance with this condition.

Finding:

#### **Condition:**

The person taking the action must publish on their web site all plans and strategies within 3 months of each plan or strategy being **approved.** 

#### Defence comment:

Defence has done its best to achieve this condition by publishing all plans and strategies on the Defence Aircraft Noise website. Defence has not been keeping specific records that show compliance with this Condition. It is likely that some plans and strategies were not published within 3 months of being approved.

#### Audit validation, testing, assessment and supporting documentation:

The ANO reviewed the Defence website and notes that as at the date of this report, all plans and strategies are available.

This Condition also requires that the plans and strategies be published within three months of approval. Defence was unable to provide records of the website publication dates to demonstrate compliance with this requirement. As such, the ANO could not determine compliance (or otherwise) with this requirement and has therefore recorded an 'inconclusive' finding.

Finding:	Inconclusive	
	Refer to <b>Recommendation 1</b> under COA-09 below.	

#### Condition:

If the **Minister** believes that it is necessary or convenient for the better protection of listed threatened species and communities (s18& s18A) to do so, the **Minister** may request that the person taking the action make specified revisions to the management plans specified in the conditions and submit the revised management plans for the **Minister**'s written approval. The person taking the action must comply with any such request. The revised approved management plans must be implemented. Unless the **Minister** has approved the revised management plans then the person taking the action must continue to implement the management plans originally approved, as specified in the conditions.

#### **Defence comment:**

There has been no requirement for this Condition as yet. This will be fully addressed by the Umwelt audit.

#### Audit validation, testing, assessment and supporting documentation:

Outside scope of ANO terms of reference – see Attachment 2.

#### Condition:

If the person taking the action wishes to carry out any activity otherwise than in accordance with the management plans as specified in the conditions, the person taking the action must submit for the **Minister's** written approval a revised version of that management plan. The varied activity shall not commence until the **Minister** has approved the varied management plan/s in writing. The **Minister** will not approve a varied management plan unless the revised management plan would result in an equivalent or improved environmental outcome over time. If the **Minister** approves the revised management plan, that management plan must be implemented in place of the management plan originally approved.

#### **Defence comment:**

Defence has complied with the intent of this Condition. This process was followed when implementing new flight paths resulting in Version 2.1 of the Noise Management Plan.

#### Audit validation, testing, assessment and supporting documentation:

During the conduct of this audit, the ANO did not identify any activities that were not in accordance with the approved management plans.

The ANO notes that Defence has published two revisions to the Noise Management Plan since approval of the first version on 9 March 2010:

- The first change was made 13 days after the first version to incorporate changes requested by the Department of Environment.
- The second change followed an internal annual review and incorporated a change to the flight paths for departing aircraft that delivered an improved noise and safety outcome.

These changes are in accordance with the foreseeable variations described in the Noise Management Plan, which do not require prior Ministerial approval. There is an additional requirement within the Noise Management Plan that any foreseeable variations require approval of the Senior Australian Defence Force Office (SADFO) – Amberley. Compliance with this requirement is assessed in **Section 4**.

The ANO considers that Defence demonstrated compliance with this condition.

Finding:

#### Condition:

The person taking the action must maintain accurate records substantiating all activities associated with or relevant to the Conditions of Approval, including measures taken to implement the management plans required by this approval, and make them available upon request to the **Department**. Such records may be subject to audit by the **Department** or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the Conditions of Approval. Summaries of audits will be posted on the **Department's** website. The results of audits may also be publicised through the general media.

#### **Defence comment:**

Through the process of drafting the Super Hornet Annual Noise Reports Air Force has examined 82 Wing and RAAF Base Amberley activity records and cross referenced these with the NFPMS output to ensure Air Force compliance with the Super Hornet noise plans and strategies. Keeping more detailed records to demonstrate compliance with the Conditions of Approval will require additional procedures and resources to be allocated within Defence.

#### Audit validation, testing, assessment and supporting documentation:

There are a number of components in this condition:

- Defence must maintain accurate records substantiating all activities associated with or relevant to the Conditions of Approval, including measures taken to implement the management plans required by this approval. During the conduct of this audit, Defence provided a significant number of records that substantiated their activities associated with the Conditions of Approval. However, there were some instances where Defence was not able to provide records to substantiate some actions taken in accordance with the approved plans and strategies, for example:
  - Website publication dates
  - Compliance with response requirements for individual aircraft noise complaints
- 2. Defence shall make records available upon request by the Department of Environment. Defence reported that no such requests had been received. The ANO confirmed this with the Department of Environment.
- 3. Summaries of audits will be posted on the Department of Environment's website. The ANO confirmed with the Department of Environment that there were no audits undertaken.

Given the above summary of findings, the ANO considers that Defence demonstrated compliance with this component of the condition, albeit some areas would benefit from improvement.

Finding:	Compliant		
	<b>Recommendation 1:</b> Defence should adopt appropriate record management practices to ensure identified gaps in record-keeping are addressed.		

# 4 Noise Management Plan V2.1

# Background to the Noise Management Plan V2.1

4.1 Condition 1 of the Conditions of Approval requires that Defence implement the approved Australian Super Hornet Noise Management Plan. The first version of the Noise Management Plan was approved on 9 March 2010 as part of the Ministerial approval of the Conditions of Approval. Version 2 was subsequently approved two weeks later to incorporate some minor changes requested by the Department of Environment. Following an annual review, the Noise Management Plan was updated to reflect a change to departure flight paths, which was approved by the Environment Minister's delegate on 29 April 2014 as version 2.1.

# Compliance with the Noise Management Plan V2.1

- 4.2 To conduct this component of the audit, the ANO reviewed the Noise Management Plan V2.1 and extracted the statements that placed a requirement on Defence for action. These 'requirements' are highlighted in this section in the green text box and include the relevant page number from the Noise Management Plan V2.1 for ease of cross-referencing. Each requirement is numbered using the format NMP-XX, where XX is the requirement reference number.
- 4.3 The following table summarises the ANO's findings in relation to Defence's compliance with the requirements of the Noise Management Plan.

Compliant	Needs improvement	Inconclusive	Total
11	4	6	21

4.4 The ANO considers that Defence has generally complied with the intent of the Noise Management Plan V2.1, albeit some areas would benefit from improvement.

#### **Requirement:**

Page 7 - Super Hornet operations will only be conducted on Runway 15/33. Runway 04/22 will only be used by Super Hornet for exceptional circumstances, such as emergency or when Runway 15/33 is obstructed.

#### **Defence comment:**

Super Hornet operations have all been conducted on Runway 15/33 except for a short period (26 May – 30 July 2014) when runway works precluded the safe use of 15/33.

#### Audit validation, testing, assessment and supporting documentation:

The ANO reviewed the Annual Super Hornet Noise Reports for 2011-2013 to check that all Super Hornet operations were conducted on Runway 15/33. To validate the integrity of the Annual Super Hornet Noise Reports, the ANO analysed 2013 raw data from the NFPMS supplier and cross-checked this with the information ultimately presented in the 2013 Annual Super Hornet Noise Report. Although some issues were identified during the conduct of the audit that challenged the reliability of some of the flight track data, the noise impacts of flights are likely to have been detected by the noise monitoring component of the system even if a flight track was not recorded for all flights. Therefore the ANO considers it acceptable to reference the NFPMS data in considering this requirement. A review of the noise data in 2013 and 2014 did not identify any noise levels that would indicate activity that did not comply with this requirement.

Additionally, the ANO reviewed the NFPMS data for 2014 and found that, other than in the exceptional circumstance from 26 May to 30 July 2014 when runway works precluded the use of Runway 15/33, Super Hornet activity appeared to comply with this requirement.

The ANO notes that Defence undertook public communication on the closure. A publication on the issue detailed the additional steps taken to minimise noise impacts during this period. These included that "other than a planned fly past on Saturday 31 May, there will be no programmed F/A-18F Super Hornet night or weekend flying during this period – flying activity will take place only during daylight hours Monday to Friday. Every effort will be made to minimise noise disturbance in affected suburbs."

The ANO considers that Defence demonstrated compliance with this requirement.

Finding:

#### Requirement:

Page 7 - In general, Super Hornet operations will occur on weekdays and night flying, when scheduled, will typically occur on Monday to Thursday nights. Weekend flying day or night, will occur in circumstances detailed in the Variations section.

#### Defence comment:

This has been analysed in the Super Hornet Annual Noise Reports. Air Force has complied with these requirements.

#### Audit validation, testing, assessment and supporting documentation:

This requirement comprises several components:

- 1. Super Hornet operations will occur on weekdays. The ANO notes that the Annual Super Hornet Noise Reports include a graph of the 'Super Hornet movements by day of week', which clearly indicates that Super Hornet operations were predominantly on weekdays.
- 2. Super Hornet night flying, when scheduled, will typically occur on Monday to Thursday nights. The ANO notes that Defence has included in their Annual Super Hornet Noise reports a commentary on the degree of Friday night flying. For example, in the 2012 report it reads "only one track was observed after 5pm on Friday" (page 20).
- 3. Weekend flying day or night, will occur in circumstances detailed in the Variations section. The graphs included in the Annual Super Hornet Noise Reports indicate that less than 1% of Super Hornet movements occurred on the weekends. The Variations section of the Noise Management Plan requires that any planned Super Hornet weekend flying be approved by the Senior Australian Defence Force Officer (SADFO)-Amberley. During the conduct of the audit, interviews with relevant staff indicated that SADFO approval is routinely obtained for foreseeable variations. In addition, the ANO notes that Defence provided an example of SADFO approval for a weekend departure, albeit in January 2015 (outside the audit review period).

To validate the integrity of the Annual Super Hornet Noise Reports, the ANO analysed 2013 raw data from the NFPMS supplier and cross-checked this with the information ultimately presented in the 2013 Annual Super Hornet Noise Report. Although some issues were identified during the conduct of the audit that challenged the reliability of some of the flight track data, the impacts, where they may have been understated, are likely to have been done so consistently. The relative percentages of flying during weekdays versus weekends, and night flying are not likely to have been materially affected. Therefore the ANO considers it acceptable to reference these in considering this requirement.

The ANO considers that Defence demonstrated compliance with this requirement.

Finding:

#### **Requirement:**

Page 7 - The RAAF plans to fly Super Hornets at RAAF Base Amberley for approximately 46 weeks of the year, with scheduled breaks from flying through the year.

#### Defence comment:

This has been analysed in the Super Hornet Annual Noise Reports. Air Force has complied with these requirements.

#### Audit validation, testing, assessment and supporting documentation:

The ANO notes that the Annual Super Hornet Reports include commentary on the degree of Defence compliance with this requirement, as well as graphing 'Super Hornet movements by week'. Each report indicates that each year there is approximately 4 weeks of no activity over the Christmas/New Year period. Additionally, scheduled squadron downtime throughout the year leads to a number of weeks with significantly fewer Super Hornet movements, which the ANO agrees is equal to "approximately 46 weeks of [flying throughout] the year".

The ANO considers that Defence demonstrated compliance with this requirement.

Finding:

#### Requirement:

Page 7 - Super Hornet aircraft will generally follow standard flight paths and altitudes when operating within the vicinity of Amberley. Instrument approach and departures are required to be performed in accordance with published procedures that are subject to change. When a change occurs, the Super Hornet will operate in accordance with the published procedure and this Noise Management Plan will be updated at the next annual review with the new flight profile.

#### **Defence comment:**

This has been analysed in the Super Hornet Annual Noise Reports. Air Force has complied with these requirements.

#### Audit validation, testing, assessment and supporting documentation:

This requirement comprises a number of components:

- 1. Super Hornet aircraft will generally follow standard flight paths and altitudes when operating within the vicinity of Amberley. The ANO notes that the Annual Super Hornet Noise Reports include arrival and departure density plots, which demonstrate that Super Hornet aircraft generally follow standard flight paths and altitudes.
- 2. Instrument approach and departures are required to be performed in accordance with published procedures. The ANO notes that the Annual Super Hornet Noise Reports include arrival and departure density plots, which demonstrate a concentration of tracks along the instrument approach and departure paths.
- 3. When a change occurs, the Super Hornet will operate in accordance with the published procedure and this Noise Management Plan will be updated at the next annual review. The ANO notes that the Annual Super Hornet Noise Report for 2011 outlined the change to published departure procedures during the year and the track plots indicated that Super Hornet operations were in accordance with the new procedure. Further, the ANO notes that V2.1 of the Noise Management Plan was approved in 2012 to reflect this change.

To validate the integrity of the Annual Super Hornet Noise Reports, the ANO analysed 2013 raw data from the NFPMS supplier and cross-checked this with the information ultimately presented in the 2013 Annual Super Hornet Noise Report. Although some issues were identified during the conduct of the audit that challenged the reliability of some of the flight track data, the arrival and departure density plots are not likely to have been materially affected. Therefore the ANO considers it acceptable to reference these in considering this requirement.

The ANO considers that Defence demonstrated compliance with each component of this requirement.

Finding:

#### Requirement:

Page 7 - Super Hornet aircraft will not fly below 1,500 ft (450 m) within 10 nm (18.5 km) of RAAF Base Amberley, except when landing, taking off or in the circuit.

#### **Defence comment:**

This has been analysed in the Super Hornet Annual Noise Reports. Air Force has complied with these requirements. Errors in the NFPMS relate to the overall movement count and not altitude or position tracking. During 2014 Defence has been working closely with the NFPMS contractor to improve movement counting of the NFPMS. The system is reliably tracking the lead aircraft in each formation. As such Air Force believes that it has identified all instances where aircraft have flown below 1500ft within 10Nm of RAAF Base Amberley. These have been confirmed as being approved in accordance with the NMP.

#### Audit validation, testing, assessment and supporting documentation:

The ANO notes that the Annual Super Hornet Noise Reports include a commentary on compliance with this requirement. During the conduct of the audit, including interviews with relevant staff, the ANO was satisfied that Defence conducts a detailed analysis of the NFPMS data to determine the level of compliance with this requirement.

In total, the 2011, 2012 and 2013 Annual Super Hornet Noise Reports identified that there were four instances when aircraft did not meet the altitude requirement above. All four instances were investigated by Defence and found to be approved by the Senior Australian Defence Force Officer (SADFO)-Amberley in accordance with the Foreseeable Variations section of the Noise Management Plan.

To validate the integrity of the Annual Super Hornet Noise Reports, the ANO analysed 2013 raw data from the NFPMS supplier and cross-checked this with the information ultimately presented in the 2013 Annual Super Hornet Noise Report. However, there were some issues identified during the conduct of the audit that challenged the reliability of the previously published flight track data. Without reliable data to reference in considering this requirement, the ANO has not been able to determine with certainty whether or not Defence complied with this requirement and has therefore made a finding of 'inconclusive'.

Finding:	Inconclusive
	<b>Recommendation 2:</b> Defence should work with the NFPMS supplier to improve the accuracy and reliability of the data captured by the NFPMS and presented in reports.

#### Requirement:

Page 8 - The Super Hornet will not make a left-hand turn after take-off from Runway 15 before climbing towards Brisbane. The Super Hornet will instead turn right and climb to the west of the Base before passing over Ipswich at higher altitude.

#### Defence comment:

This has been analysed in the Super Hornet Annual Noise Reports. Air Force has complied with these requirements. Errors in the NFPMS relate to the overall movement count only and do not affect this requirement. The NFPMS is reliably tracking the lead aircraft in each formation. Air Force believes that all instances of left turns of Runway 15 have been identified and investigated.

#### Audit validation, testing, assessment and supporting documentation:

The ANO notes that the Annual Super Hornet Noise Reports include a commentary on compliance with this requirement. During the conduct of the audit, including interviews with relevant staff, the ANO was satisfied that Defence conducts a detailed analysis of the NFPMS data to determine the level of compliance with this requirement.

In total, the 2011, 2012 and 2013 Annual Super Hornet Noise reports identified that there were seven instances when aircraft did not meet the left-hand turn requirement above. All instances were investigated by Defence and the circumstances described in the Annual Super Hornet Noise report. The ANO considers that one of the seven instances is not described as clearly meeting the requirements of the Variations section of the Noise Management Plan.

To validate the integrity of the Annual Super Hornet Noise Reports, the ANO analysed 2013 raw data from the NFPMS supplier and cross-checked this with the information ultimately presented in the 2013 Annual Super Hornet Noise Report. However, there were some issues identified during the conduct of the audit that challenged the reliability of the previously published flight track data. Without reliable data to reference in considering this requirement, the ANO has not been able to determine with certainty whether or not Defence complied with this requirement and has therefore made a finding of 'inconclusive'.

Finding:	Inconclusive
	Refer to <b>Recommendation 2</b> in NMP-05 above.

#### **Requirement:**

Page 8 - For visual departures, the Super Hornet will delay to 4nm (7.4 km) turning to the west after take-off on Runway 33, to avoid overflying Walloon and Thagoona. Instrument departures for Runway 33 will be in accordance with the published procedure that requires the aircraft to commence a left hand turn at the end of the runway.

#### **Defence comment:**

This has been analysed in the Super Hornet Annual Noise Reports. Air Force has complied with these requirements. This requirement is contained in rules and procedures that all pilots must comply with, unless there is an operational reason not to do so. As the NFPMS is only capable of reliably tracking the lead aircraft in a formation, it is possible that some instances of aircraft turning inside 4nm have not been captured. However, turns inside 4nm remain at a low percentage of departures off RWY33 and are in accordance with operational requirements.

#### Audit validation, testing, assessment and supporting documentation:

The ANO notes that the Annual Super Hornet Noise Reports include a commentary on compliance with this requirement. During the conduct of the audit, including interviews with relevant staff, the ANO was satisfied that Defence conducts a detailed analysis of the NFPMS data to determine the level of compliance with this requirement.

In total, the 2011, 2012 and 2013 Annual Super Hornet Noise reports identified that the only instances when aircraft turned left inside 4nm were in accordance with the published instrument departure procedures for Runway 33. Preliminary analysis of the NFPMS data for the 2014 period indicates compliance with this requirement.

To validate the integrity of the Annual Super Hornet Noise Reports, the ANO analysed 2013 raw data from the NFPMS supplier and cross-checked this with the information ultimately presented in the 2013 Annual Super Hornet Noise Report. However, there were some issues identified during the conduct of the audit that challenged the reliability of the previously published flight track data. Without reliable data to reference in considering this requirement, the ANO has not been able to determine with certainty whether or not Defence complied with this requirement and has therefore made a finding of 'inconclusive'.

Finding:	Inconclusive
	Refer to <b>Recommendation 2</b> in NMP-05 above.

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#### Requirement:

Page 8 - Planned Super Hornet arrival flight paths for visual procedures are illustrated in Annex C. The majority of arrivals will be via an Initial and Pitch procedure, which is illustrated in Annex D. Approximately 5% of arrivals in good weather will be via straight-in approaches.

#### **Defence comment:**

This has been analysed in the Super Hornet Annual Noise Reports. Air Force has complied with these requirements. Although the NFPMS is unable to quantify this requirement for straight-in approaches, Defence can confirm that through years of experience operating fighter aircraft only about 5% of approaches in good weather are via a straight-in approach. This is because a straight-in approach is only flown for currency requirements or for an emergency recovery. A straight-in approach is an inefficient way of recovering a fuel critical military fighter aircraft and therefore Air Force naturally tries to minimise its use of a straight-in recovery.

The majority will be via an Initial and Pitch procedure, which is illustrated by the NFPMS track plots and density plots.

#### Audit validation, testing, assessment and supporting documentation:

The ANO notes that the Annual Super Hornet Noise Reports include a commentary that indicates that "approximately 5% of arrivals in good weather are via straight-in approaches". This statement was supported by interview comments made by Defence staff during the conduct of the audit. Unfortunately, however, the Annual Super Hornet Noise Reports do not include any quantitative data that could be used to validate the 5% figure. Defence did not provide any other quantitative data to support compliance (or otherwise).

The ANO considers it highly likely that Defence complied with this requirement. However, without quantitative data, the ANO has not been able to determine with certainty whether or not Defence complied with this requirement and has therefore made a finding of 'inconclusive'.

Finding:	Inconclusive
	Refer to <b>Recommendation 1</b> in COA-09 above.

#### Requirement:

Page 8 – All Super Hornet landing circuits are planned to be flown to the west of Runway 15/33. Circuits will only be flown over Ipswich in exceptional circumstances. Circuits will be flown at 1,500 ft (450 m) unless required for training or under stress of weather.

#### **Defence comment:**

This has been analysed in the Annual Super Hornet Noise Reports. Air Force has complied with these requirements.

#### Audit validation, testing, assessment and supporting documentation:

The ANO notes that the Annual Super Hornet Noise Reports include the following statement "the circuit pattern is flown to the West of the aerodrome" and this is supported by the arrival density plots and arrivals track plots in the reports. During the conduct of the audit, including interviews with relevant staff, the ANO was satisfied that Defence conducts a detailed analysis of the NFPMS data to determine the level of compliance with this requirement.

To validate the integrity of the Annual Super Hornet Noise Reports, the ANO analysed 2013 raw data from the NFPMS supplier and cross-checked this with the information ultimately presented in the 2013 Annual Super Hornet Noise Report. Although some issues were identified during the conduct of the audit that challenged the reliability of some of the flight track data, the arrival and departure density plots are not likely to have been materially affected. Therefore the ANO considers it acceptable to reference these in considering this requirement.

The ANO considers that Defence demonstrated compliance with this requirement.

Finding:

#### **Requirement:**

Page 8 – While the RAAF plans to conduct most Super Hornet night practice while deployed to other locations, approximately 20% of ASH flights at RAAF Base Amberley will occur at night.

#### **Defence comment:**

This has been analysed in the Super Hornet Annual Noise Reports. Air Force has complied with these requirements.

#### Audit validation, testing, assessment and supporting documentation:

The ANO has interpreted this requirement to be *up to* approximately 20% of flights will occur at night. Analysis of the NFPMS data and the Annual Super Hornet Noise reports indicates that night flying is well below the 20% originally anticipated. The actual percentages of night flying (7pm to 7am) for the four years reported are as follows:

- 2011 14%
- 2012 13%
- 2013 8%
- 2014 9%

To validate the integrity of the Annual Super Hornet Noise Reports, the ANO analysed 2013 raw data from the NFPMS supplier and cross-checked this with the information ultimately presented in the 2013 Annual Super Hornet Noise Report. Although some issues were identified during the conduct of the audit that challenged the reliability of some of the flight track data, the impacts are likely to have understated activity consistently. The relative percentages of flying during weekdays versus weekends, and night flying are not likely to have been materially affected. Therefore the ANO considers it acceptable to reference these in considering this requirement.

The ANO considers that Defence demonstrated compliance with this requirement.

Finding:

#### **Requirement:**

Page 8 - Super Hornet flying operations at RAAF Base Amberley will be planned to comply with the following limits:

a. no continuous practice circuits will be flown between 10:00 pm and 7:00 am

b. no flights will depart from or arrive at the Base between 11:00 pm and 7:00 am.

#### **Defence comment:**

This has been analysed in the Annual Super Hornet Noise Reports. Air Force has complied with these requirements.

#### Audit validation, testing, assessment and supporting documentation:

This requirement comprises two components:

1. No continuous practice circuits will be flown between 10:00 pm and 7:00 am. The ANO notes that the Annual Super Hornet Noise Reports include a table outlining the total number of movements in the 10pm to 7am period, as follows:

2011 – 2 movements

2012 - 7 movements

2013 – 7 movements

2014 - 15 movements

Unfortunately there is no commentary in the Annual Super Hornet Noise Reports to indicate whether or not these operations were continuous practice circuit flights. To assess compliance with this component of the requirement, the ANO reviewed the 2013 raw NFPMS data and confirmed that the reported 7 movements between 10 pm and 7 am were as follows:

- two arrivals at 10:42 pm on 8 August 2013

- five arrivals at 10:27 pm on 21 August 2013

The ANO did not identify any continuous practice circuits occurring between 10 pm and 7 am in the sampled data. The ANO considers that Defence demonstrated compliance with this component of the requirement.

2. No flights will depart from or arrive at the Base between 11:00 pm and 7:00 am. The ANO notes that across the three Annual Super Hornet Noise Reports available at the time of this audit, only one exception was identified (2011 report, paragraph 31). This occurred on 7 November 2011 at 6.54am, which is 6 minutes prior to the 7am requirement.

Although Defence was unable to provide documentation to support the approval of this flight in accordance with the Noise Management Plan, the ANO considered the following to determine compliance (or otherwise):

- Only one breach of the requirement was identified over a three year period.
- The flight occurred over three years ago.
- The flight was only minutes before the prescribed departure time, and not in a more noise-sensitive time such as the middle of the night.

On balance, the ANO considers that Defence demonstrated compliance with the intent of this component of the requirement.

To validate the integrity of the Annual Super Hornet Noise Reports, the ANO analysed 2013 raw data from the NFPMS supplier and cross-checked this with the information ultimately presented in the 2013 Annual Super Hornet Noise Report. Although some issues were identified during the conduct of the audit that challenged the reliability of some of the flight track data, the impacts of flights in these noise-sensitive night times are likely to have been detected by the noise monitoring component of the system even if a flight track was not recorded for all flights. Therefore the ANO considers it acceptable to reference the NFPMS data in considering this requirement. A review of the noise data in 2013 and 2014 did not identify any noise levels that would indicate activity that did not comply with this requirement.

Given the above considerations, the ANO considers that Defence demonstrated compliance with the intent of this requirement.

Finding:	Compliant
•	

#### Requirement:

Page 9 - RAAF has planned for a total of 4,648 Super Hornet movements per year at RAAF Base Amberley.

#### **Defence comment:**

This has been analysed in the Annual Super Hornet Noise Reports. The 2014 data now shows that Air Force has overflown the NMP total by at least 20%. Noting that 2014 was not an indicative year due to operational requirements, Air Force is looking at the reasons behind the increased movement count. As operational requirements are likely to continue, Air Force will be seeking to address this through the NMP and consultation with the Department of Environment. It should be noted that the overall noise impact at Amberley remains within that predicted by the PER due to improvement of the flight profiles and fewer visiting fast jet aircraft than used in the PER predictions.

#### Audit validation, testing, assessment and supporting documentation:

The ANO notes that the Annual Super Hornet Noise Reports each include a table detailing the annual number of movements. These were as follows:

2011 - 3744 movements

2012 - 4476 movements

2013 - 4481 movements

2014 - 6276 movements

To validate the integrity of the Annual Super Hornet Noise Reports, the ANO analysed 2013 raw data from the NFPMS supplier and cross-checked this with the information ultimately presented in the 2013 Annual Super Hornet Noise Report. However, there were some issues identified during the conduct of the audit that challenged the reliability of the previously published flight path data. Without reliable data to reference in considering this requirement, the ANO has not been able to determine with certainty whether or not Defence complied with this requirement and has therefore made a finding of 'inconclusive'.

Finding:	Inconclusive
	Refer to <b>Recommendation 2</b> in NMP-05 above.

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#### Requirement:

Page 10 – There will be no flight line engine running at 80% power between 11:00 pm and 7:00 am.

Page 10 – High power engine running at Engine Test Cell 3 will not take place between 10:00 pm and 7:00 am.

#### **Defence comment:**

This has been analysed in the Annual Super Hornet Noise Reports. Air Force has complied with these requirements.

#### Audit validation, testing, assessment and supporting documentation:

The ANO could not identify any references in the Annual Super Hornet Noise Reports about Defence's compliance with these requirements. During the conduct of the audit, Defence provided a copy of the Amberley Standing Instruction (OPS) 05-04 which states that:

*'Aircraft engines are not to be ground run for maintenance purposes between 2300h and 0600h due noise restrictions' (Paragraph 43).* It then goes on to state, in relation to Super Hornets, that these times relate to flight line engine running at 80% power as well as high power engine running at Engine Test Cell 3.

Interviews conducted during the audit indicated that staff were not aware that the restriction on time was until 7 am, and not 6 am as per their instructions. Further, high power engine running at Engine Test Cell 3 is required to not take place after 10 pm yet the instructions that staff rely on indicate it can occur up to 11 pm.

While there is a discrepancy in the documentation, the ANO was not able to determine whether or not engine running actually occurred during the precluded times. As such, the ANO has reached a finding of 'Needs improvement'.

Finding:	Needs improvement
	<b>Recommendation 3:</b> Defence should ensure that requirements in Standing Instructions and similar documents are aligned with the Super Hornet Conditions of Approval and associated plans and strategies.

#### **Requirement:**

Page 11 - Foreseeable variations to the planned Super Hornet flying operations described previously will require approval of the Senior Australian Defence Force Officer (SADFO) – Amberley. In deciding whether to approve a foreseeable variation, the SADFO-Amberley will consider the potential environmental effects against the operational need.

#### Defence comment:

This has been analysed in the Annual Super Hornet Noise Reports. Air Force has complied with these requirements.

#### Audit validation, testing, assessment and supporting documentation:

During the audit, Defence staff confirmed their awareness of this requirement as well as verbal assurance that it did occur. In addition, Defence provided email evidence to show explicit approval of the SADFO-Amberley on the occasion when a foreseeable variation occurred.

The email evidence did not indicate whether or not the SADFO-Amberley had considered 'the potential environmental effects against operational need' however the ANO was satisfied through interviews that such consideration was applied. In addition, the ANO took into account the rarity of such occurrences.

The ANO considers that Defence demonstrated compliance with this requirement.

Finding:

#### Requirement:

Page 13 – Defence will complete a review of the effects of Super Hornet aircraft noise to activities on RAAF Base Amberley which are not covered by Occupational Health and Safety policies. This review will:

- a. include measurements of Super Hornet aircraft noise,
- b. assess the adequacy of building design and shielding to achieve sound levels in accordance with appropriate noise standards, and
- c. recommend measures to address any impacts from Super Hornet aircraft noise

Defence will implement all recommended measures and conduct further assessments to determine whether the implemented measures are effective in managing impacts from Super Hornet aircraft noise.

Defence will provide a report to the Environment Minister by June 2013 that includes a copy of the review and a description of how its recommendations were implemented.

#### **Defence comment:**

Defence is investigating the status of this review. Air Force has undertaken a large study into the effects of aircraft noise on child care centres on Air Force bases. The outcomes of these studies are yet to be determined. Air Force has maintained an NFPMS at RAAF Base Amberley. Future buildings are being built with consideration of aircraft noise and WHS. For example future C-27 Spartan and EA-18G Growler facilities are being designed based on the 2029 ANEC currently being developed prior to the issue of the 2029 ANEF. All Air Force personnel continue to be provided with adequate hearing protection when working within designated high noise areas.

#### Audit validation, testing, assessment and supporting documentation:

Defence provided a copy of a 2011 draft report completed by Vipac engineers and scientists Limited (Vipac). Vipac had been commissioned by Defence to perform a comprehensive occupational noise survey for RAAF Base Amberley. The report found that, in general, all base personnel surveyed required improved provision, and use, of hearing protection, and as a result, a number of recommendations were made. At the time of the audit, Defence was still investigating the state of implementation against the report recommendations.

Finding:	Needs improvement	
	Recommendation 4: Defence should as soon as possible	
	<ul> <li>a. conduct a review of the state of implementation against the recommendations of the Vipac report completed in 2011.</li> </ul>	
	<ul> <li>report the findings of this review to the Commonwealth Department of Environment in accordance with the Conditions of Approval.</li> </ul>	
# **Requirement:**

Page 14 - The Australian Super Hornet Noise Management Plan is available on the following website: http://www.airforce.gov.au/bases/amberley.aspx

# **Defence comment:**

The website has been updated to http://www.defence.gov.au/aircraftnoise.

# Audit validation, testing, assessment and supporting documentation:

Although the plan is not published at the specific website address as stipulated, it is readily available on the Defence website.

The ANO considers that Defence demonstrated compliance with the intent of this requirement.

Finding:	Compliant
	<b>Improvement Suggestion 1:</b> Defence should review the Noise Management Plan, Noise Monitoring and Complaints Handling Strategy and Noise Mitigation and Complaints Resolution Strategy to ensure all relevant website details are correct.

Requirement:		
Page 14 - Additionally, the Plan will be provided to the Ipswich Library at 40 South Street, Ipswich. Members of the public may also request a copy of the Plan by contacting the RAAF Base Amberley Air Base Command Post on (07) 5461 1111.		
Defence comment:		
Defence are unable to determine if a copy of the Noise Management Plan was provided to the Ipswich Library in 2012 when it was last updated.		
Audit validation, testing, assessment and supporting documentation:		
This requirement co	mprises a number of components:	
1. The Plan will be provided to Ipswich library. Defence was unable to provide evidence of the Noise Management Plan being provided to the Ipswich Library. In addition, a search on the Ipswich Library online facility did not find any reference to the plan.		
<ol> <li>A copy of the Plan is available by phoning (07) 5461 1111. A call made to this number on 15 April resulted in a recorded message advising that the call could not be connected.</li> </ol>		
The ANO has been unable to determine whether or not this requirement was met.		
Finding:	Inconclusive	
	Recommendation 5: Defence should:	
	<ul> <li>a. update the Noise Management Plan and delete the requirement for a copy to be provided to the Ipswich Library, or provide a copy to the library</li> </ul>	
	b. update the Noise Management Plan to correct the telephone number for obtaining a copy of the Plan.	

# Requirement:

Page 14 - Wherever possible, the RAAF will advise the public when there will be significant events, which result in peak periods of aircraft noise, or when there are significant changes to the Super Hornet flying operations limits outlined above.

# Defence comment:

Defence meet this requirement by:

- discussing forthcoming significant events with the Amberley Consultative Working Group
- providing notifications through the local press
- undertaking letterbox drops when conditions warrant (for example, closure of the main runway for repairs)
- providing information on the Amberley Base website about the weekly flight program. Website address is as follows -<u>https://aircraftnoisemap.airforce.gov.au/assets/site.html?618#base/5/region/77/ev</u> <u>ents</u>

# Audit validation, testing, assessment and supporting documentation:

During the conduct of the audit, that ANO noted:

- significant events were discussed during an Amberley Consultative Working Group meeting that the ANO staff attended
- Amberley Consultative Working Group meeting minutes indicate that recent activities and future events at RAAF Base Amberley were discussed at other meetings as appropriate
- advice provided by Defence indicating the use of local media
- advice provided by Defence indicating letter box drops were used when runway 15/33 was not available in mid-2014
- the information available on the Defence website at <u>https://aircraftnoisemap.airforce.gov.au/assets/site.html?618#base/5/region/77/ev</u> <u>ents</u> and <u>http://www.airforce.gov.au/Operations/Flying-Operations/?RAAF-</u> <u>hPR1ZyegIMWKiaNtrjPMdufiX/RBJSoR</u>

The ANO considers that Defence demonstrated compliance with this requirement.

Finding:

# **Requirement:**

Page 14 - When significant events occur or significant changes are made, the RAAF will advise the public, as time permits, through the following:

- a. the Amberley Community Engagement Forum;
- b. the Amberley Consultative Working Group;
- c. media releases to all local media outlets, including local newspapers; and
- d. updates to the RAAF Base Amberley web page.

# **Defence comment:**

See comments under previous requirement.

# Audit validation, testing, assessment and supporting documentation:

The ANO noted during the audit that the Amberley Community Engagement Forum no longer convenes as the consultative requirements are met through the establishment of the Amberley Consultative Working Group.

The ANO noted that Defence advised the public through the other channels as appropriate. See comments made under previous requirement (**NMP-18**).

The ANO considers that Defence demonstrated compliance with this requirement.

# Finding: Compliant Improvement Suggestion 2: Defence should update the Noise Management Plan and the Noise Monitoring and Complaints Handling Strategy to delete references to the Amberley Community Engagement Forum.

# **Requirement:**

Page 14 - The RAAF will report all variations to the planned flying operations (foreseeable and unforeseeable) on the RAAF Base Amberley web page within one week of them occurring.

# Defence comment:

Refer to RAAF Base Amberley web page as appropriate. Defence has a policy in place to advise the public of foreseeable variations to planned flying operations; however, Defence does not consistently report unforeseeable variations other than in the annual reports. This will need to be rectified.

# Audit validation, testing, assessment and supporting documentation:

The ANO reviewed the RAAF Base Amberley web page to seek evidence that this requirement has been met. While the Defence website –

<u>http://www.airforce.gov.au/Operations/Flying-Operations/?RAAF-hPR1ZyeqIMWKiaNtrjPMdufiX/RBJSoR</u> does contain some information on upcoming events, there is no consolidated list or report of all variations to planned flying operations as per this requirement. For example, there is no information to explain the 32 weekend movements that occurred in 2013.

The ANO notes that variations are identified, and reported on, in the Annual Super Hornet Noise Reports. However, given the timing of report publication is well after the end of the period reported on, this does not meet the requirement for the variations to be reported via the website within a week of occurrence.

The ANO considers that Defence could improve public reporting of variations to planned flying operations.

Finding:	Needs improvement	
	<b>Recommendation 6:</b> Defence should review the reporting requirements in the Noise Management Plan and establish systems to ensure adherence to the requirements.	

# **Requirement:**

Page 15 - The Australian Super Hornet Noise Management Plan will be reviewed annually. The review is to consider:

- a. any changes approved under the process outlined in paragraph 31;
- b. any changes to Super Hornet flying operations limitations or planning assumptions, which occur as a result of the complaints process detailed in the Noise Monitoring and Complaints Handling Plan; and
- c. the results of audits of compliance with the Super Hornet PER Conditions of Approval.

In order to comply with the PER Conditions of Approval, the RAAF will submit to DEWHA revised versions of the Australian Super Hornet Noise Management Plan in February 2013 and February 2015. The revised Plans are to address issues arising from noise monitoring that is conducted and the compliance audits directed by the Environment Minister as part of the Conditions of Approval for Super Hornet flying operations.

# **Defence comment:**

Annual reviews were undertaken by Defence (including a review in February 2013) through normal business processes and the drafting of annual Super Hornet Noise Reports, however, they did not result in any changes being proposed to the Plan. Air Force has decided not to undertake any further reviews until the findings of this audit are available to incorporate.

# Audit validation, testing, assessment and supporting documentation:

Defence staff interviewed during the audit advised that reviews had been undertaken, however Defence was unable to provide any evidence that a review of the Australian Super Hornet Noise Management Plan was undertaken since the most recent version was published in 2012.

Additionally, the ANO considers that, if such a review had been effectively undertaken, it would have identified the need for updates to the Plan.

The ANO notes that Defence:

- advised during the audit that reviews had been undertaken, and
- intends to conduct a further review of the Plan shortly after the findings of this audit are finalised.

Finding:	Needs improvement
	<b>Recommendation 7:</b> Defence should routinely review and update (as required) the Noise Management Plan in line with the documented requirements. Defence should document the review process and outcomes.

# 5 Noise Monitoring and Complaints Handling Strategy V1.0

# Background to the Noise Monitoring and Complaints Handling Strategy

5.1 Condition 2 of the Conditions of Approval requires that Defence must implement the approved Noise Monitoring and Complaints Handling Strategy. The first and only version of Defence's Noise Monitoring and Complaints Handling Strategy was approved by the Environment Minister on 16 March 2012.

# Compliance with the Noise Monitoring and Complaints Handling Strategy

- 5.2 To conduct this component of the audit, the ANO reviewed the Noise Monitoring and Complaints Handling Strategy V1.0 and extracted the statements that placed a requirement on Defence for action. These 'requirements' are highlighted in this section in the green text box and include the relevant page number from the Noise Monitoring and Complaints Handling Strategy V1.0 for ease of cross-referencing. Each requirement is numbered using the format NMCHS-XX, where XX is the requirement reference number.
- 5.3 One requirement was not assessed as part of this review. This relates to the requirement that "an independent audit of compliance with the Conditions of Approval is to be conducted in 2012, 2014 and 2018" (page 13). This requirement was superseded by the April 2014 amendment to the Conditions of Approval (EPBC2008/4410). Therefore, compliance with this requirement was not assessed and no finding has been made.
- 5.4 The following table summarises the ANO's findings in relation to Defence's compliance with the requirements of the Noise Monitoring and Complaints Handling Strategy.

Compliant	Needs improvement	Inconclusive	Total
12	6	2	20

5.5 The ANO considers that Defence has generally complied with the intent of the Noise Monitoring and Complaints Handling Strategy V1.0, albeit some areas would benefit from improvement.

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# **Requirement:**

Page 5 - Air Force must implement the latest version of the Australian Super Hornet Noise Monitoring and Complaints Handling Strategy approved by the Environment Minister.

# **Defence comment:**

Defence has implemented the Australian Super Hornet Noise Monitoring and Complaints Handling Strategy V1.0 as approved. See also Defence comments under each subsequent requirement in this section of the report.

# Audit validation, testing, assessment and supporting documentation:

The ANO identified 20 requirements to be met by Defence within the Australian Super Hornet Noise Monitoring and Complaints Handling Strategy V1.0. The 20 requirements as listed in this section are summarised as follows:

Compliant	Needs improvement	Inconclusive	Total
12	6	2	20

Given the above summary of findings, the ANO considers that Defence has generally demonstrated compliance with this requirement, albeit some areas would benefit from improvement.

Finding:	Compliant
	Refer to recommendations throughout this section.

# **Requirement:**

Page 5 - Air Force to monitor the noise generated from the operation of the Super Hornet and to have systems in place to manage noise enquiries (complaints) related to Super Hornet flying operations [with] effective mechanisms to consult with individuals, community groups, and organisations.

# **Defence comment:**

Defence maintains a NFPMS at RAAF Base Amberley and has worked with the contractor to improve this system for military application. Defence maintains an aircraft noise complaint management system and is currently in the process of employing a new state of the art system that is connected to the NFPMS which will allow for improved investigation and complaint response times. RAAF Base Amberley conduct regular community consultation forums and publish information on the Defence Aircraft Noise website.

# Audit validation, testing, assessment and supporting documentation:

This requirement comprises several components:

- Defence shall monitor the noise generated from the operation of the Super Hornet. Defence has implemented a comprehensive Noise and Flight Path Monitoring System at RAAF Base Amberley. The system enables the monitoring and reporting of noise at specific points around the Air Force Base, provided by an external provider, Bruel & Kjaer (B&K). Analysis allows for identification of Super Hornet operations distinct from other operations. The ANO is satisfied that the reports demonstrate the existence and operation of an effective noise monitoring system.
- 2. Defence shall have systems in place to manage noise enquiries (complaints) related to Super Hornet flying operations. During the audit, Defence demonstrated that noise enquiries (complaints) are managed in accordance with published procedures and instructions (see DI(AF) Ops 3-7 Amendment No. 2). Defence staff were able to demonstrate familiarity and a high level of compliance with the procedures.
- 3. Defence shall have effective mechanisms to consult with individuals, community groups, and organisations. Defence demonstrated a number of ways that it meets this requirement:
  - During the audit, the ANO reviewed a sample of complaint records. These indicated timely and appropriate consultation with individuals about their aircraft noise concerns.
  - The ANO attended the Amberley Community Working Group meeting on 25 Feb 2015. Such meetings are held regularly and the minutes published on the Defence website. The ANO considers this an effective mechanism for consultation with individuals, community groups and organisations.
  - The Defence website provides access to a range of information about Super Hornet operations originating from RAAF Base Amberley.
  - Defence provided examples of using local media and letterbox drops to advise the community of upcoming Super Hornet activities.

The ANO considers that Defence demonstrated compliance with this requirement.

Finding:

# **Requirement:**

Page 7 - Super Hornet operations will only be conducted on Runway 15/33. Runway 04/22 will only be used by Super Hornet for exceptional circumstances, such as emergency or when Runway 15/33 is obstructed.

# **Defence comment:**

Super Hornet operations have all been conducted on Runway 15/33 except for a short period (26 May to 30 July 2014) when runway works precluded the safe use of 15/33.

# Audit validation, testing, assessment and supporting documentation:

The ANO reviewed the Annual Super Hornet Noise Reports for 2011-2013 to check that all Super Hornet operations were conducted on Runway 15/33. To validate the integrity of the Annual Super Hornet Noise Reports, the ANO analysed 2013 raw data from the NFPMS supplier and cross-checked this with the information ultimately presented in the 2013 Annual Super Hornet Noise Report. Although some issues were identified during the conduct of the audit that challenged the reliability of some of the flight track data, the impacts of flights are likely to have been detected by the noise monitoring component of the system even if a flight track was not recorded for all flights. Therefore the ANO considers it acceptable to reference the NFPMS data in considering this requirement. A review of the noise data in 2013 and 2014 did not identify any noise levels that would indicate activity that did not comply with this requirement.

Additionally, the ANO reviewed the NFPMS data for 2014 and found that, other than in the exceptional circumstance from 26 May to 30 July 2014 when runway works precluded the safe use of Runway 15/33, the data suggests compliance with this requirement.

The ANO notes that Defence undertook public communication on the closure. A publication on the issue detailed the additional steps taken to minimise noise impacts during this period. These included that "other than a planned fly past on Saturday 31 May, there will be no programmed F/A-18F Super Hornet night or weekend flying during this period – flying activity will take place only during daylight hours Monday to Friday. Every effort will be made to minimise noise disturbance in affected suburbs."

The ANO considers that Defence demonstrated compliance with this requirement.

Finding:

# Requirement:

Page 8 - NFPMS reports are produced quarterly and enable the validation (or otherwise) of the Super Hornet noise modelling and compliance with the Super Hornet Noise Management Plan. An NFPMS report will provide the following metrics:

- a. average 24 hour LAeq;
- b. quarterly average LAeq;
- c. LAmax (low, high and average) for departures, arrivals and circuits, and
- d. total and average N70, N85 and N95 noise events.

# **Defence comment:**

Quarterly reports have been published since 2010. Defence produces NFPMS reports quarterly and annually. Data collected by the NFPMS is made available to Air Force to enable validation of the Super Hornet Noise Management Plan.

NFPMS reports for RAAF Base Amberley have undergone revision and data is now reported as daily LAeq, daily and quarterly number above noise events (N70, N80 and N90) and daily and quarterly total noise events

The above noise metrics are available for arrivals, departures and circuit operations.

Defence intends to introduce daily LAmax to the reporting in Q1 2015 pending the outcome of consultation with a local residents group at RAAF Base Williamtown.

# Audit validation, testing, assessment and supporting documentation:

This requirement comprises several components:

- 1. NFPMS reports are produced quarterly. This requirement has been met and reports are published on the Defence website.
- 2. NFPMS reports enable validation (or otherwise) of the Super Hornet noise modelling and compliance with the Super Hornet Noise Management Plan. Defence draws on the quarterly NFPMS reports to produce the Annual Super Hornet Noise reports in which Super Hornet noise modelling and compliance with the Noise Management Plan are considered.
- 3. An NFPMS report will provide the following metrics:
  - a. average 24 hour LAeq this requirement has been met
  - b. quarterly average LAeq this requirement has been met
  - c. LAmax (low, high and average) for departures, arrivals and circuits this requirement has been partially met. NFPMS reports include average LAmax metrics, but do not include LAmax low and high for departures, arrivals and circuits
  - d. total and average N70, N85 and N95 noise events this requirement has been partially met. NFPMS reports do not include N95 noise events, but do provide N70, N80 and N90 so equivalent information is available to inform the community.

The ANO considers that Defence demonstrated partial compliance with this requirement.

Finding:	Needs improvement
	<b>Recommendation 8:</b> Defence should ensure that future quarterly reports include information to support the requirements of the current version of Noise Monitoring and Complaints Handling Strategy.

# **Requirement:**

Page 8 - Consultation with noise affected people or groups in the area surrounding RAAF Base Amberley will inform any future requirements for the relocation or addition of EMUs [Environmental Monitoring Units]. This consultation will occur through the established Amberley Community Engagement Forum (ACEF) and Amberley Consultative Working Group (ACWG). In addition, the number and location of EMUs must as a minimum comply with the operating requirements of the NFPMS to ensure the efficient collection of noise data.

# **Defence comment:**

ACWG Meetings have been conducted biannually with Minutes recorded. Additional EMUs are being considered for the Noise and Flight Path Monitoring System (NFPMS). Defence has informed the Amberley community through the ACWG and given them the opportunity to voice their opinion on the location of these EMUs.

# Audit validation, testing, assessment and supporting documentation:

This requirement comprises two components:

- 1. Consultation with noise affected people or groups in the area surrounding RAAF Base Amberley (through the established Amberley Community Engagement Forum (ACEF) and Amberley Consultative Working Group (ACWG)) will inform any future requirements for the relocation or addition of EMUs. The ANO noted during the audit that the Amberley Community Engagement Forum no longer convenes as the consultative requirements are met through the establishment of the Amberley Consultative Working Group. The ANO attended the ACWG on 24 February 2015 and noted that the location of EMUs was discussed and community input welcomed. The subsequent minuted for this meeting reflect this fact. The ANO also reviewed the published ACWG minutes from previous meetings however was unable to identify any reference to consultation about EMUs. Defence did advise that consultation had occurred previously, albeit not recorded in the published minutes. The ANO considers that Defence has demonstrated compliance with this component of the requirement.
- 2. The number and location of EMUs must as a minimum comply with the operating requirements of the NFPMS to ensure the efficient collection of noise data. Four EMUs have been located outside RAAF Base Amberley and configured by the NFPMS supplier to ensure the efficient collection of noise data. The ANO considers that Defence demonstrated compliance with this component of the requirement.

Given the above, the ANO considers that some improvement in the consultation on EMU locations is warranted.

Finding:	Compliant
	Refer to Improvement Suggestion 2 in NMP-19 above.

# **Requirement:**

Page 9 - NFPMS reports will be produced on a quarterly basis [and] DSG is to make the quarterly reports available via the DSG website

#### Defence comment:

Defence has produced quarterly NFPMS reports, which are made available publicly on the Defence website.

#### Audit validation, testing, assessment and supporting documentation:

The ANO confirmed that the NFPMS reports are produced quarterly and are available on the Defence website at:

http://www.defence.gov.au/aircraftnoise/nfpms/Default.asp

The ANO considers that Defence demonstrated compliance with this requirement.

Finding:
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Compliant Refer to Improvement Suggestion 1 in NMP-16 above.

# Requirement:

Page 9 - RAAF Amberley Air Base Executive Officer is to coordinate the compilation of an Annual Super Hornet Noise Report that compares the NFPMS quarterly reports with the Australian Super Hornet Noise Management Plan. The Annual Super Hornet Noise Reports are to evaluate the accuracy of noise modelling undertaken for the PER and monitor compliance with the Australian Super Hornet Noise Management Plan.

# **Defence comment:**

Completed for 2011/2012/2013. The 2014 report is currently being finalised. There have been a number of issues associated with the accuracy of the NFPMS to accurately count the number of Super Hornet movements. Defence believes that the contractor has now developed strategies that significantly improve the movement count.

# Audit validation, testing, assessment and supporting documentation:

This requirement comprises a number of components:

- RAAF Amberley Air Base Executive Officer is to coordinate the compilation of an Annual Super Hornet Noise Report. The ANO is satisfied that the RAAF Amberley Air Base Executive Officer has coordinated compilation of the Annual Super Hornet Noise Reports for 2011, 2012 and 2013. The 2014 report is in progress.
- 2. The Annual Super Hornet Noise Reports compare the NFPMS quarterly reports with the Australian Super Hornet Noise Management Plan. The ANO is satisfied that the Annual Super Hornet Noise Reports for 2011, 2012 and 2013 draw data from the four relevant quarterly reports and compares this with the requirements of the Australian Super Hornet Noise Management Plan.
- 3. The Annual Super Hornet Noise Reports enable evaluation of the accuracy of noise modelling undertaken for the PER. The ANO is satisfied that Annual Super Hornet Noise Reports evaluate the accuracy of noise modelling undertaken for the PER. Each report includes a section titled "Comparison of measured noise with public environment report data" which runs for several pages and includes a detailed conclusion on the accuracy of the noise modelling undertaken for the PER. For example, see page 22 ff of the 2013 Annual Super Hornet Noise Report.
- 4. The Annual Super Hornet Noise Reports enable monitoring compliance with the Australian Super Hornet Noise Management Plan. The ANO is satisfied that Annual Super Hornet Noise Reports provide information that compares actual Super Hornet operations with planned operations set out in the Australian Super Hornet Noise Management Plan. For example, the "Evaluation of Flight Paths" section in the 2013 Annual Report pages 9 to 21 inclusive.

The ANO notes that during the conduct of the audit some issues with the reliability of the flight track data in the NFPMS reports have been identified. This does call into question the reliability of the Annual Super Hornet Noise Reports as reliable for comparison or monitoring compliance with the Noise Management Pan (as required by components 2 and 4 above). Given this, the ANO considers that some improvement is necessary to fully meet this requirement.

Finding:	Needs improvement
	Refer to <b>Recommendation 2</b> in NMP-05 above.

# **Requirement:**

Page 9 - Annual Super Hornet Noise Reports will be tabled at the Amberley Consultative Working Group (ACWG). Additionally, the Annual Super Hornet Noise Reports and minutes of the ACWG meetings are to be made available on the RAAF Amberley internet website.

# **Defence comment:**

Whilst Defence has placed the Annual Super Hornet Noise Reports on the Defence Aircraft Noise Website, they had not been officially tabled at the ACWG until 2015. Annual Super Hornet reports and ACWG Minutes are available on the Defence website Defence is currently examining ways to improve its processes to have the Reports and Minutes published in a quicker timeframe.

# Audit validation, testing, assessment and supporting documentation:

This requirement comprises two components:

- Annual Super Hornet Noise Reports will be tabled at the Amberley Consultative Working Group (ACWG). Defence advised that the 2011 report was distributed at a subsequent ACWG meeting. As at 31 December 2014 (the closing date of the audit period), the 2012 and 2013 reports had not been tabled at an ACWG Meeting. The ANO notes that both were subsequently tabled at the February 2015 ACWG Meeting.
- 2. The Annual Super Hornet Noise Reports are to be made available on the RAAF Amberley internet website. At the time of this report, the ANO notes that the 2011, 2012 and 2013 Noise Reports are available on the Defence website.
- 3. The minutes of the ACWG meetings are to be made available on the RAAF Amberley internet website. At the time of this report, the ANO notes that, while there have been delays in the past with publication of these minutes, the minutes of all meetings to date are available on the Defence website.

Due to the significant delays in tabling and publishing the 2012 and 2013 annual reports, and the delays in publishing ACWG minutes, the ANO considers that some improvement is necessary to fully meet this requirement.

Finding:	Needs improvement	
	<b>Recommendation 9:</b> Defence should publish reports and meeting minutes in a reasonable timeframe.	

# Requirement:

Page 9 - The aircraft noise monitoring and reporting described [in the Noise Monitoring and Complaints Handling strategy] will occur for a minimum of three years from Jan 2012.

# **Defence comment:**

Monitoring has been conducted throughout the period and Defence intends to continue with the NFPMS to support improved aircraft noise management outcomes for the Amberley community. Furthermore, the NFPMS will be used to support Defence in managing aircraft noise complaints more efficiently.

# Audit validation, testing, assessment and supporting documentation:

The ANO notes that noise monitoring commenced well before January 2012 and has been continuous since. As at the date of this report, reports published on the Defence website include:

NFPMS reports:

- All quarterly reports from Q1-2010 to Q1-2015
- All annual reports for 2010 2014
- Interactive reporting capability for 2013 present

Annual Super Hornet Noise Reports:

- All annual reports for 2011 - 2013

The ANO notes Defence personnel indicated that they will continue noise monitoring and reporting beyond the minimum requirement, i.e. post-January 2015. The ANO supports this, given the issues identified during the conduct of this audit that challenged the reliability of some of the NFPMS flight track data previously reported.

The ANO considers that Defence demonstrated compliance with this requirement.

Finding:

# **Requirement:**

Page 10 - Air Force has an established noise enquiry / complaints handling process in operation at RAAF Base Amberley. In order to minimise nuisance to local communities, Air Force Instructions and RAAF Amberley Standing Instructions provide guidance on actions to be undertaken by aircraft captains, air traffic personnel and maintenance personnel to minimise aircraft noise.

# **Defence comment:**

Air Force has an established noise enquiry / complaints handling process in operation at RAAF Base Amberley.

# Audit validation, testing, assessment and supporting documentation:

This requirement comprises two components:

- Defence has established a noise enquiry/complaint handling process at RAAF Base Amberley. The ANO visited RAAF Amberley and spoke with staff responsible for the administration of the noise enquiry / complaints handling process and those engaged in responding to individual complaints. Clear processes are established and well understood by staff. In addition, the ANO reviewed the Amberley Defence Instruction (DI(AF) OPS 3-7) that outlines the noise enquiry/complaint handling process at RAAF Base Amberley. The ANO considers that Defence demonstrated compliance with this component of the requirement.
- 2. Air Force instructions and RAAF Amberley Standing Instructions provide guidance on actions to be undertaken by aircraft captains, air traffic personnel and maintenance personnel to minimise aircraft noise. The ANO noted the following relevant instructions:
  - Amberley Defence Instruction (DI(AF) OPS 3-7), which provides guidance to aircraft captains, air traffic control and maintenance personnel on noise minimisation
  - Airfield Ground Operations (AMB SI(OPS) 05-04), which provides guidance for maintenance and air traffic personnel on noise minimisation
  - Amberley Flying Operations (AMB SI(OPS) 03-02), which provides guidance to aircraft captains and air traffic personnel on noise minimisation

The above are examples that the ANO considers demonstrate compliance with this component and are not an exhaustive list of all relevant instructions.

The ANO considers that Defence demonstrated compliance with this requirement.

Finding:

# Requirement:

Page 10 - The ABCP Operations Clerk or DM will complete a Record of Aircraft Noise Complaint, including specific details as follows:

a. full name and contact details of the complainant;

- b. time and date of the incident;
- c. details of the complainant's location (preferably a Lat/Long if available);
- d. number (and type, if known) of aircraft, altitude and heading;
- e. any other details the complainant may wish to provide; and
- f. whether the complainant requests further action.

# **Defence comment:**

Defence provided a copy of the "Record of Aircraft Noise Complaint" form (OA 039 revised Mar 2004).

# Audit validation, testing, assessment and supporting documentation:

The ANO reviewed the "Record of Aircraft Noise Complaint" form (OA 039 revised Mar 2004) and noted that it contained the following fields:

- 'Name of complainant', 'Address', and 'Telephone number'. The ANO considers this to be in compliance with component a. above.
- 'Time of incident' and 'Date of incident'. The ANO considers this to be in compliance with component b. above.
- 'Address' and 'Details of complaint'. While a lat/long field is not included on the form, the ANO considers that the intent of component c. above is met.
- 'Details of complaint', 'Nature of operation relevant to complaint', and 'Aircraft type and markings'. While there are no specific fields included on the form for number of aircraft, altitude or heading, the ANO considers that these details may not always be relevant to the investigation and there is room for recording these details (when known) in free-text fields. The ANO therefore considers this to be in compliance with the intent of component d. above.
- 'Details of complaint' and other free-text fields. The ANO considers this to be in compliance with component e. above.
- 'Details of explanation to complainant and any response'. The ANO considers this to be in compliance with component f. above.

Finding:

# **Requirement:**

Page 10 - Complaints may also be received through the internet via the RAAF website address <a href="http://www.airforce.gov.au/contactus/aircraftnoise.aspx">http://www.airforce.gov.au/contactus/aircraftnoise.aspx</a>>.

# **Defence comment:**

The Defence website includes information on how to submit a complaint, including a link to the ANO website where a complaint may be submitted electronically through the internet. In addition, Defence are planning to implement new complaint software which will allow electronic entry of noise complaints in the future.

# Audit validation, testing, assessment and supporting documentation:

The ANO notes that the Defence website includes information on the methods of complaint lodgement available to complainants. These methods do not, at the time of this report, include a method of online complaint lodgement through the internet, except through the link to the ANO online form. Should a complainant lodge their complaint through the ANO online form, the ANO has agreed to forward complaints received electronically to Defence to respond to in the first instance until the Defence electronic submission system is available.

The ANO considers that some improvement is necessary to fully meet this requirement and is pleased that Defence is intending to provide an electronic submission system in the future. The ANO encourages Defence to expedite implementation across Australia.

Finding:	Needs improvement	
	<b>Recommendation 10:</b> Defence should expedite establishment of an online complaint lodgement capability.	

# **Requirement:**

Page 10 - The noise enquiry is then referred to the relevant Squadron for investigation. Upon completion of the investigation, the complainant will be contacted by Base Management to discuss the event that caused the noise enquiry. Base Management will contact the complainant as soon as practicable, but no later than 28 days from when the complaint was recorded.

# Defence comment:

Defence has established systems and procedures to ensure that noise enquiries are referred to the relevant Squadron for investigation, as required. Complainants are contacted by Base Management within the required timeframes.

# Audit validation, testing, assessment and supporting documentation:

This requirement comprises several components:

- 1. The noise enquiry is referred to the relevant Squadron for investigation. The ANO notes that the Defence instruction 'Aircraft Noise Complaints (AMB SI(OPS) 03-09)' requires that the complaint be referred to the relevant Squadron for investigation. In addition, the ANO interviewed relevant officers to confirm compliance with this component of the requirement.
- 2. On completion of the investigation, the complainant will be contacted by Base Management to discuss the event that caused the noise enquiry. The ANO notes that Defence instruction 'Aircraft Noise Complaints (AMB SI(OPS) 03-09)' requires that the Base Operations officer contacts the complainant and advises the outcome of the investigation. Interviews and review of sampled complaints indicate general compliance with this component of the requirement.
- 3. Base Management will contact the complainant as soon as practicable, but no later than 28 days from when the complaint was recorded. The ANO notes that the Defence Instruction (DI AF(OPS) 3-7) requires that FEG Commanders are responsible for ensuring that an investigation into a complaint is concluded within 28 days. The Record of Aircraft Noise Complaint form also specifies that the investigation of complaint is "To be concluded within 28 days of incident". Additionally, the ANO sampled a selection of individual 'Record of Aircraft Noise Complaint' forms as well as the 2014 spreadsheet that is used to track complaints. While the ANO noted that in some sections the paperwork was incomplete, the ANO considers that in general complainants are contacted well within the 28 day period.

The ANO considers that Defence demonstrated compliance with this requirement.

Finding:

# **Requirement:**

Page 10 – If the complaint requires further action, or Base Management believes that the matter warrants further investigation, the matter is then passed to 82 Wing Headquarters, who will investigate the matter. 82 Wing Headquarters have a range of mitigation and resolution options available to deal with the noise enquiry. These options include, but are not limited to:

a. contact with the complainant to discuss the matter,

- b. a review of 82 Wing procedures for notification of abnormal events,
- c. application of avoidance measures to operating units, or
- d. the possible establishment of a Noise Sensitive Area.

# **Defence comment:**

Defence has complied with this requirement.

# Audit validation, testing, assessment and supporting documentation:

This requirement details the mitigation and resolution options to be considered by Defence when further action is required, beyond an initial investigation and explanation to the complainant. During the conduct of the audit, the ANO did not identify any instances where these escalation processes were required. Regardless, the ANO noted that the mitigation and resolution options listed above were routinely considered as part of the initial investigation process.

Defence provided examples of each of the four options above having been implemented by Defence in response to noise enquiries handled in the period up to December 2014.

The ANO considers that Defence demonstrated compliance with this requirement.

Finding:

# **Requirement:**

Page 11 - The final notification of the outcome of the investigation conducted by Base Management will include:

- a. information on the option of referring the complainant for independent review in accordance with Condition 3, (see paragraph 8.b.); and
- b. an offer to refer the complaint for independent review in accordance with Condition 3, provided that the complainant provides written consent for that referral.

# **Defence comment:**

The Defence website contains information on the option for a complainant to contact the ANO for an independent review. In addition, establishment of the MOU with the ANO has received considerable press coverage and has been a matter for discussion at community consultation meetings.

Defence has now implemented a new Standing Instruction that details how to manage complaints, including when a complaint should be referred to the ANO.

# Audit validation, testing, assessment and supporting documentation:

The ANO has reviewed the new Standing Instruction and the Defence website to confirm appropriate details are available about the option of seeking an independent review of complaints handled by Defence.

The ANO considers that Defence demonstrated compliance with this requirement.

Finding:

# **Requirement:**

Page 12 - The Australian Super Hornet Noise Monitoring and Complaints Handling Strategy will be made available on the website within three months of the Environment Minister's approval of this strategy. <a href="http://www.airforce.gov.au/bases/amberley.aspx">http://www.airforce.gov.au/bases/amberley.aspx</a>>

# **Defence comment:**

This Strategy was placed on the website as soon as possible after approval; however it could not be determined if this was within three months.

# Audit validation, testing, assessment and supporting documentation:

This requirement comprises two components:

- The Australian Super Hornet Noise Monitoring and Complaints Handling Strategy (the 'Strategy') will be made available on the website. At the time of the audit, the ANO noted that the latest version of the Strategy was available on the Defence website. The ANO considers that Defence demonstrated compliance with this component of the requirement.
- 2. The Strategy will be published on the Defence website within three months of the Environment Minister's approval. Defence was unable to provide records of the website publication dates to demonstrate compliance with this requirement. As such, the ANO could not determine compliance (or otherwise) with this component of the requirement and has therefore recorded an 'inconclusive' finding.

Given the above findings, the ANO could not determine compliance (or otherwise) with this requirement and has therefore recorded an 'inconclusive' finding.

Finding:

# Inconclusive

Refer to Recommendation 1 under COA-09 above.

# **Requirement:**

Page 12 - NFPMS quarterly reports are to be published on the website <a href="http://www.defence.gov.au/id/nfpms.htm">http://www.defence.gov.au/id/nfpms.htm</a>> within three months of report finalisation.

# Defence comment:

The NFPMS quarterly reports were placed on the website as soon as possible after completion; however it could not be determined if this was within three months.

# Audit validation, testing, assessment and supporting documentation:

This requirement comprises two components:

- The NFPMS quarterly reports will be made available on the website. At the time of the audit, the ANO noted that NFPMS quarterly reports up to Q1 2015 were available on the Defence website (although not at the actual address specified in the requirement). The ANO considers that Defence demonstrated compliance with this component of the requirement.
- 2. The NFPMS quarterly reports will be published on the Defence website within three months of report finalisation. Defence was unable to provide records of the website publication dates to demonstrate compliance with this requirement. As such, the ANO could not determine compliance (or otherwise) with this component of the requirement and has therefore recorded an 'inconclusive' finding.

Given the above findings, the ANO could not determine compliance (or otherwise) with this requirement and has therefore recorded an 'inconclusive' finding.

Finding:	Inconclusive	
	Refer to <b>Recommendation 1</b> in COA-09 above.	
	Refer to Improvement Suggestion 1 in NMP-16 above.	

# **Requirement:**

Page 12 - Annual Super Hornet Noise Reports are to be published on the website <a href="http://www.airforce.gov.au/bases/amberley.aspx">http://www.airforce.gov.au/bases/amberley.aspx</a>> within three months of report completion.

# **Defence comment:**

This has been done; however, due to resource constraints Defence was a number of months late in producing these annual reports.

# Audit validation, testing, assessment and supporting documentation:

This requirement comprises two components:

- The Annual Super Hornet Noise Reports will be made available on the website. At the time of the audit, the ANO noted that Annual Super Hornet Noise Reports for 2011, 2012 and 2013 were available on the Defence website (although not directly at the link provided in the requirement). The ANO considers that Defence demonstrated compliance with this component of the requirement.
- 2. The Annual Super Hornet Noise Reports will be published on the Defence website within three months of report completion. Defence was unable to provide records of the website publication dates to demonstrate compliance with this requirement. However, the ANO noted that the 2012 and 2013 reports were not approved until well after the period being reported on and that these were subsequently published within three months of the report approval date. The reports' availability on the website was confirmed by the ANO early in the conduct of the audit. While the reports were significantly delayed in being finalised and approved (e.g. the 2012 report approved in Nov 2014 was available on the website when checked by the ANO in February 2015), the ANO considers that Defence demonstrated compliance with this component of the requirement.

Given the above findings, the ANO considers Defence demonstrated compliance with this requirement. Additionally, the ANO notes that records of website publication dates should be recorded appropriately so that Defence can demonstrate compliance and relevant website details should be correctly included in documentation available to the public.

Finding:	Compliant	
	Refer to <b>Recommendation 1</b> in COA-09 above.	
	Refer to Improvement Suggestion 1 in NMP-16 above.	

# Requirement:

Page 13 - The Australian Super Hornet Noise Monitoring and Complaints Handling Strategy will be reviewed annually by the RAAF Base Amberley Air Base Executive Officer, in the first quarter of each year. Where a review of the strategy identifies a need for its modification, then a revised strategy will be submitted, through Air Force Headquarters, to the Environment Minister for approval. Until such time the new strategy is approved, noise monitoring and complaints handling will adhere to the most recently approved strategy. The strategy review is to consider:

- a. any changes required to the positioning or number of NFPMS noise measurement terminals, informed through public consultation;
- b. any changes in Defence policy that affect this strategy; and
- c. amendments to the strategy as a result of audits of compliance with the Super Hornet PER Conditions of Approval.

# **Defence comment:**

Defence understands this was completed every year; however, documentary evidence could not be found to support this conclusion. During the day to day operation of the Super Hornet staff refer to the Noise Management Plan and associated Strategies at least monthly and probably more often. In the course of this routine operation, it is normal Defence practice that if there are any issues or discrepancies Defence staff are notified up the chain of command for revision.

# Audit validation, testing, assessment and supporting documentation:

During the audit, Defence advised that annual reviews of the Australian Super Hornet Noise Monitoring and Complaints Handling Strategy were undertaken. However Defence did not provide any evidence that a review by the RAAF Base Amberley Air Base Executive Officer had taken place in the first quarter of each year.

Additionally, the ANO considers that, if such a review had been undertaken, it would have identified the need for a revised strategy to be submitted to the Environment Minister for approval.

The ANO notes that Defence:

- a. advised during audit that reviews had been undertaken, and
- b. intends to conduct a further review of the Strategy shortly after the findings of this audit are finalised.

Finding:	Needs improvement
	<b>Recommendation 11:</b> Defence should routinely review and update (as required) the Australian Super Hornet Noise Monitoring and Complaints Handling Strategy in line with the documented requirements. Defence should document the review process and outcomes.

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# **Requirement:**

Page 13 - Accurate records substantiating all activities associated with the implementation of this strategy must be maintained. These records must be made available upon request from DSEWPC [Department of Sustainability, Environment, Water, Pollution and Communities] and may be subject to audit by DSEWPC or an independent auditor, or used to verify compliance with the Conditions of Approval.

# **Defence comment:**

Air Force has maintained a transparent approach to all records concerning its activities and the aircraft noise generated. This is also outlined in the recent Air Force Aircraft Noise Management Strategy, published in mid-2014.

# Audit validation, testing, assessment and supporting documentation:

This requirement comprises two components:

- Defence will maintain accurate records substantiating all activities associated with the implementation of this strategy. During the conduct of this audit, Defence provided a significant number of records that substantiated their activities associated with the Noise Monitoring and Complaints Handling Strategy. However, there were some instances where Defence was not able to provide records to substantiate some activities related to implementation of this strategy. Exceptions are documented elsewhere in this audit. Therefore, the ANO considers that Defence has demonstrated partial compliance with this component of the requirement.
- 2. These records must be made available upon request (to the Commonwealth Environment department or an independent auditor) to verify compliance with the Conditions of Approval. During the audit, Defence provided records (where available) to substantiate certain activities related to implementation of this strategy. The ANO confirmed with the Commonwealth Environment Department that no requests for records had been made by their office. Therefore, the ANO considers that Defence demonstrated compliance with this component of the requirement.

Given the above, the ANO considers Defence could improve its records management to fully comply with this requirement.

Finding:	Needs improvement
	Refer to <b>Recommendation 1</b> under COA-09 above.

# 6 Noise Mitigation and Complaint Resolution Strategy

# Background to the Noise Management and Complaint Resolution Strategy

6.1 Condition 3 of the Conditions of Approval requires that Defence must implement the approved Noise Management and Complaint Resolution Strategy. The first version of Defence's Noise Monitoring and Complaints Handling Strategy was approved by the Environment Minister's delegate on 29 April 2014.

# Compliance with the Noise Management and Complaint Resolution Strategy

- 6.2 To conduct this component of the audit, the ANO reviewed the Noise Management and Complaint Resolution Strategy V1.0 and extracted the statements that placed a requirement on Defence for action. These 'requirements' are highlighted in this section in the green text box and include the relevant page number from the Noise Management and Complaint Resolution Strategy V1.0 for ease of cross-referencing. Each requirement is numbered using the format NMCRS-XX, where XX is the requirement reference number.
- 6.3 The following table summarises the ANO's findings in relation to Defence's compliance with the requirements of the Noise Management and Complaint Resolution Strategy.

Compliant	Needs improvement	Inconclusive	Total
9	1	-	10

6.4 The ANO considers that Defence has generally complied with the intent of the Noise Management and Complaint Resolution Strategy, albeit one area would benefit from improvement.

# Requirement:

Page 7 – Super Hornet operations will only be conducted on Runway 15/33. Runway 04/22 will only be used by Super Hornet for exceptional circumstances, such as emergency or when Runway 15/33 is obstructed.

# **Defence comment:**

Super Hornet operations have all been conducted on Runway 15/33 except for a short period (26 May – 30 July 2014) when runway works precluded the safe use of 15/33.

# Audit validation, testing, assessment and supporting documentation:

The ANO reviewed the Annual Super Hornet Noise Reports for 2011-2013 to check that all Super Hornet operations were conducted on Runway 15/33. To validate the integrity of the Annual Super Hornet Noise Reports, the ANO analysed 2013 raw data from the NFPMS supplier and cross-checked this with the information ultimately presented in the 2013 Super Hornet Noise Report. Although some issues were identified during the conduct of the audit that challenged the reliability of some of the flight track data, the impacts of flights are likely to have been detected by the noise monitoring component of the system even if a flight track was not recorded for all flights. Therefore the ANO considers it acceptable to reference the NFPMS data in considering this requirement. A review of the noise data in 2013 and 2014 did not identify any noise levels that would indicate activity that did not comply with this requirement.

Additionally, the ANO reviewed the NFPMS data for 2014 and found that, other than in the exceptional circumstance from 26 May to 30 July 2014 when runway works precluded the safe use of Runway 15/33, the data suggests compliance with this requirement.

The ANO notes that Defence undertook public communication on the closure. A publication on the issue detailed the additional steps taken to minimise noise impacts during this period. These included that "other than a planned fly past on Saturday 31 May, there will be no programmed F/A-18F Super Hornet night or weekend flying during this period – flying activity will take place only during daylight hours Monday to Friday. Every effort will be made to minimise noise disturbance in affected suburbs."

The ANO considers that Defence demonstrated compliance with this requirement.

Finding:

# **Requirement:**

Page 9 – Recommendations made to Air Force in accordance with paragraph 16 of this Strategy [recommendations by the Commonwealth Ombudsman] will be considered by the Senior Australian Defence Force Officer (SADFO) Amberley.

# **Defence comment:**

During the life of the Memorandum of Understanding with the Commonwealth Ombudsman, no formal recommendations were made.

# Audit validation, testing, assessment and supporting documentation:

Review of the Commonwealth Ombudsman's website and internet searches did not reveal evidence of any formal recommendations having been made during the term of the MOU between Royal Australian Air Force and the Commonwealth Ombudsman. The ANO also asked the Commonwealth Ombudsman's staff if they had made any recommendations and was advised: "I have not located any formal recommendations from this office to Defence about aircraft noise management issues during the relevant period".

Although no recommendations were made, the ANO was satisfied that systems and procedures are in place to ensure that the SADFO Amberley would have considered any such recommendations.

The ANO considers that Defence has demonstrated compliance with this recommendation.

Finding:

# Requirement:

Page 9 – SADFO Amberley will advise affected persons in writing of the recommendations made by the Commonwealth Ombudsman and the specific action taken by Air Force in response. Where the action taken was other than implementation of the recommendation in full, SADFO Amberley will advise affected persons and the Ombudsman of the reasons for the decision.

# **Defence comment:**

During the life of the MOU with the Commonwealth Ombudsman, no formal recommendations were made.

# Audit validation, testing, assessment and supporting documentation:

Review of the Commonwealth Ombudsman's website and internet searches did not reveal evidence of any formal recommendations having been made during the term of the MOU between Royal Australian Air Force and the Commonwealth Ombudsman. The ANO also asked the Commonwealth Ombudsman's staff if they had made any recommendations and was advised: "I have not located any formal recommendations from this office to Defence about aircraft noise management issues during the relevant period".

Although no recommendations were made, the ANO was satisfied that systems and procedures are in place to ensure that the SADFO Amberley would have appropriately advised affected persons of any such recommendations.

The ANO considers that Defence has demonstrated compliance with this recommendation.

Finding:

# **Requirement:**

Page 9 – If an affected person is not satisfied with a decision made by the SADFO in relation to the implementation of a recommendation from the Commonwealth Ombudsman, the complaint will be referred to the Air Commander Australia (ACAUST).

# **Defence comment:**

During the life of the MOU with the Commonwealth Ombudsman, no formal recommendations were made.

# Audit validation, testing, assessment and supporting documentation:

Review of the Commonwealth Ombudsman's website and internet searches did not reveal evidence of any formal recommendations having been made during the term of the MOU between Royal Australian Air Force and the Commonwealth Ombudsman. The ANO also asked the Commonwealth Ombudsman's staff if they had made any recommendations and was advised: "I have not located any formal recommendations from this office to Defence about aircraft noise management issues during the relevant period".

Although no recommendations were made, the ANO was satisfied that systems and procedures are in place to ensure the appropriate escalation of complaints if required.

The ANO considers that Defence has demonstrated compliance with this recommendation.

Finding:

# **Requirement:**

Page 9 – Upon receipt of a referral under paragraph 19, ACAUST will review the decision of SADFO Amberley and decide whether it is appropriate to implement the recommendation. ACAUST will communicate this decision to the affected person and the Ombudsman. Where the decision is other than implementation of the recommendation in full ACAUST will advise the affected person and the Ombudsman of the reasons for the decision.

# **Defence comment:**

During the life of the MOU with the Commonwealth Ombudsman, no formal recommendations were made.

# Audit validation, testing, assessment and supporting documentation:

Review of the Commonwealth Ombudsman's website and internet searches did not reveal evidence of any formal recommendations having been made during the term of the MOU between Royal Australian Air Force and the Commonwealth Ombudsman. The ANO also asked the Commonwealth Ombudsman's staff if they had made any recommendations and was advised: "I have not located any formal recommendations from this office to Defence about aircraft noise management issues during the relevant period".

Although no recommendations were made, the ANO was satisfied that systems and procedures are in place to ensure the appropriate consideration by ACAUST as required.

The ANO considers that Defence has demonstrated compliance with this recommendation.

Finding:

# **Requirement:**

Page 9 – SADFO Amberley is to coordinate the publication of an annual report that details:

- a. all recommendations that have been made by the Commonwealth Ombudsman during the reporting period in relation to the Australian Super Hornet Noise Management Plan and the Australian Super Hornet Noise Monitoring and Complaints Handling Strategy;
- b. the action taken by Air Force in response to each recommendation; and
- c. where the action taken was other than implementation of the recommendation in full, the reasons for the decision.

# **Defence comment:**

During the life of the MOU with the Commonwealth Ombudsman, no formal recommendations were made.

# Audit validation, testing, assessment and supporting documentation:

Review of the Commonwealth Ombudsman's website and internet searches did not reveal evidence of any formal recommendations having been made during the term of the MOU between Royal Australian Air Force and the Commonwealth Ombudsman. The ANO also asked the Commonwealth Ombudsman's staff if they had made any recommendations and was advised: "I have not located any formal recommendations from this office to Defence about aircraft noise management issues during the relevant period".

Although no recommendations were made, the ANO was satisfied that systems and procedures are in place to coordinate the publication of recommendation related information in the annual reports as required.

The ANO considers that Defence has demonstrated compliance with this recommendation.

Finding:

# **Requirement:**

Page 10 – NFPMS data will be collected for a minimum of three cycles of the Annual Super Hornet Noise Report, in accordance with the undertakings outlined in the Australian Super Hornet Noise Monitoring and Complaints Handling Strategy. Relevant data will be made available to The Ombudsman, noting this data may have limited value in regards to individual noise complaints.

# Defence comment:

This has been completed for 2011, 2012 and 2013. Defence intend upon also completing as report for 2014 to confirm aircraft operations are as expected as the aircraft maintains its full operating capability.

# Audit validation, testing, assessment and supporting documentation:

This requirement comprises two components:

 NFPMS data will be collected for a minimum of three cycles of the Annual Super Hornet Noise Report, in accordance with the undertakings outlined in the Australian Super Hornet Noise Monitoring and Complaints Handling Strategy. The ANO notes that Defence has collected NFPMS data since quarter 1 of 2010, and has issued three Annual Super Hornet Noise Reports (2011, 2012, 2013).

To validate the integrity of the Annual Super Hornet Noise Reports, the ANO analysed 2013 raw data from the NFPMS supplier and cross-checked this with the information ultimately presented in the 2013 Annual Super Hornet Noise Report. Although some issues were identified during the conduct of the audit that challenged the reliability of some of the flight track data, the impacts of flights are likely to have been detected by the noise monitoring component of the system even if a flight track was not recorded. Therefore the ANO considers it acceptable to reference the NFPMS data in considering this requirement.

The ANO also notes that Defence is working with the NFPMS supplier to address the issues and to ensure greater accuracy in future data and reports. Therefore, the ANO considers that Defence has demonstrated compliance with the intent of this component of the requirement.

2. Relevant data will be made available to The Ombudsman. The NFPMS reports have been published on the Defence website and to this extent are available to the Commonwealth Ombudman's office. The ANO considers that Defence demonstrated compliance with this component of the requirement.

The ANO considers that Defence demonstrated compliance with this requirement.

Finding:

# **Requirement:**

Page 10 – The Australian Super Hornet Noise Mitigation and Complaint Resolution Strategy will be reviewed annually by the Air Base Executive Officer – RAAF Base Amberley, in the first quarter of each year. Where a review of the Strategy identifies a need for its modification, then a revised Strategy will be submitted, through Air Force Headquarters, to the Environment Minister for approval.

# **Defence comment:**

Defence understands this was completed every year; however, documentary evidence could not be found to support this conclusion. During the day to day operation of the Super Hornet staff refer to the Noise Management Plan and associated Strategies at least monthly and probably more often. In the course of this routine operation, it is normal Defence practise that if there are any issues or discrepancies staff are notified up the chain of command for revision.

# Audit validation, testing, assessment and supporting documentation:

Defence staff interviewed during the audit advised that reviews had been undertaken, however Defence was unable to provide any evidence that a review of the Australian Super Hornet Noise Mitigation and Complaint Resolution Strategy was undertaken by the RAAF Base Amberley Air Base Executive Officer in the first quarter of each year.

Additionally, the ANO considers that, if such a review had been effectively undertaken, it would have identified the need for a revised strategy to be submitted to the Environment Minister for approval.

The ANO notes that Defence

- a. advised during audit that reviews had been undertaken and
- b. intends to conduct a further review of the Strategy shortly after the findings of this audit are finalised.

Finding:	Needs improvement
	<b>Recommendation 12:</b> Defence should routinely review and update (as required) the Australian Super Hornet Noise Mitigation and Complaint Resolution Strategy in line with the documented requirements. Defence should document the review process and outcomes.

# **Requirement:**

Page 10 – In accordance with the EPBC Act approval Condition 7, the Environment Minister may request specific revisions to this strategy at any time, should the Minister believe it is necessary or desirable for the better protection of the environment.

# **Defence comment:**

No requests for revision of the strategy have been made by the Environment Minister.

# Audit validation, testing, assessment and supporting documentation:

The ANO confirmed with the Commonwealth Environment Department that no requests for specific revisions to the Australian Super Hornet Noise Mitigation and Complaint Resolution Strategy had been made by their office or the Environment Minister.

Given that Defence has been responsive to other such requests in relation to other plans, the ANO is satisfied that Defence would act accordingly in the event of such a request.

The ANO considers that Defence demonstrated compliance with this requirement.

Finding:

# **Requirement:**

Page 10 – Accurate records substantiating all activities associated with the implementation of this strategy must be maintained. These records must be made available upon request from the Department of Sustainability, Environment, Water, Population and Communities (CDSEWPC) and may be subject to audit by DSEWPC, or an independent auditor, or used to verify compliance with the Conditions of Approval.

# **Defence comment:**

See earlier comments relating to record management.

# Audit validation, testing, assessment and supporting documentation:

This requirement comprises two components:

- Defence will maintain accurate records substantiating all activities associated with the implementation of this strategy. During the conduct of this audit, Defence was able to provide records substantiating all activities undertaken related to implementation of the Australian Super Hornet Noise Mitigation and Complaint Resolution Strategy, with the exception of any documentation to confirm that regular reviews of the Strategy were undertaken. This deficiency is addressed in NMCRS-08, and the ANO considers that Defence has otherwise demonstrated compliance with this component of the requirement.
- 2. These records must be made available upon request (to the Commonwealth Environment Department or an independent auditor) to verify compliance with the Conditions of Approval. During the audit, Defence provided records (where available) to substantiate certain activities related to implementation of this strategy. The ANO confirmed with the Commonwealth Environment Department that no requests for records had been made by their office. Therefore, the ANO considers that Defence demonstrated compliance with this component of the requirement.

Given the above, the ANO considers that Defence demonstrated compliance with this requirement.

Finding:

# Attachment 1 Approval of ANO as auditor

Australian Government Department of the Environment Our reference: 2008/4410 Contact Officer. Peter Blackwell Telephone: (02) 6274 1470 Facsimile: (02) 6274 1878 Email: post.approvals@environment.gov.au Mr Kitcher, OAM Air Commodore Director General Capability Planning - Air Force R1-6-C072 PO Box 7902 CANBERRA BC ACT 2610 Dear Mr Kitcher Australian Super Hornet Flying Operations (EPBC 2008/4410) Appointment of Independent Auditors Thank you for your letter dated 16 January 2015 regarding the independent audit of compliance with the conditions of approval under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) dated 23 March 2010 and subsequent variations dated 30 January 2012 and 23 April 2014. In your letter you have sought, in accordance with condition 5 of EPBC Approval 2008/4410, for the Aircraft Noise Ombudsman and Umwelt Environmental Consultants to be appointed as Independent Auditors. The request has been assessed and I am pleased to advise, as delegate of the Minister, that I approve the Aircraft Noise Ombudsman and Umwelt Environmental Consultants to be appointed as the Independent Auditors. I look forward to receiving a copy of the audit report. If you would like to discuss this matter further please contact Mr Peter Blackwell on 02 6274 1470. Yours sincerely Shadder Shane Gaddes Assistant Secretary Compliance & Enforcement Branch Environment Assessment and Compliance Division / 2015 GPO Box 787 Canberra ACT 2501 • Telephone 02 6274 1111 • Facsimile 02 6274 1666 • www.environment.gov.au

Aircraft Noise Ombudsman

# Attachment 2 Terms of reference

Review Objectives	<ol> <li>To review compliance with the Conditions of Approval Australian Super Hornet Flying Operations, RAAF Base, Amberley, QLD (EPBC 2008/4410), as varied in April 2014, specifically related to noise. This will include an independent review of compliance for implementation of the requirements of approved plans, for the period from 23 March 2010 to 31 December 2014.</li> <li>To identify opportunities for continued improvement in aircraft noise management.</li> </ol>
Review Scope	The review will assess the level of compliance achieved by Defence against each requirement of the Conditions of Approval Australian Super Hornet Flying Operations, RAAF Base, Amberley, QLD (EPBC 2008/4410), as varied in April 2014, specifically related to noise.
	The review will consider relevant data and documents, including but not limited to:
	• The approved Australian Super Hornet Noise Management Plan, the approved Noise Monitoring and Complaints Handling Strategy, and the approved Australian Super Hornet Noise Mitigation and Complaint Resolution Strategy.
	<ul> <li>Defence instructions, publications and reports relating to environmental management</li> </ul>
	Strategic documents relating to environmental management
	<ul> <li>Records substantiating activities associated with or relevant to the Conditions of Approval</li> </ul>
	Environmental monitoring data related to noise
	The review will include a site visit to Air Force Headquarters, RAAF Base Amberley and other sites as required, to interview and consult with relevant stakeholders and key personnel.
	A report will be prepared on the findings of the compliance review and submitted to the Chief of Air Force. It will include recommendations where a non-compliant or partially compliant finding is made. Additionally, suggestions for continued improvements in aircraft noise management will be provided where relevant.
Scope	The review will not consider:
exclusions	<ul> <li>any aspects of the Conditions of Approval that do not relate specifically to noise</li> </ul>
	• all other activities outside of Super Hornet flying operations, although some recommendations or suggestions for improvement may be applicable at other locations or to other activities undertaken by Defence.
Report issue	Draft: April 2015 Final: June 2015

# Attachment 3 Recommendations and Suggestions

The following table lists the recommendations made in this review.

# Recommendations arising from this review

**Recommendation 1 -** pages 13, 16, 25, 56, 57, 58, 60 and 71: Defence should adopt appropriate record management practices to ensure identified gaps in record-keeping are addressed.

**Recommendation 2** – pages 22, 23, 24, 30 and 47: Defence should work with the NFPMS supplier to improve the accuracy and reliability of the data captured by the NFPMS and presented in reports.

**Recommendation 3** – page 31: Defence should ensure that requirements in Standing Instructions and similar documents are aligned with the Super Hornet Conditions of Approval and associated plans and strategies.

Recommendation 4 – page 33: Defence should as soon as possible

- a. conduct a review of the state of implementation against the recommendations of the Vipac report completed in 2011.
- b. report the findings of this review to the Commonwealth Environment Department in accordance with the Conditions of Approval.

**Recommendation 5 –** page 35: Defence should:

- a. update the Noise Management Plan and delete the requirement for a copy to be provided to the Ipswich Library, or provide a copy to the library
- b. update the Noise Management Plan to correct the telephone number for obtaining a copy of the Plan.

**Recommendation 6** – page 38: Defence should review the reporting requirements in the Noise Management Plan and establish systems to ensure adherence to the requirements.

**Recommendation 7** – page 39: Defence should routinely review and update (as required) the Noise Management Plan in line with the documented requirements. Defence should document the review process and outcomes.

**Recommendation 8** – page 44: Defence should ensure that future quarterly reports include information to support the requirements of the current version of Noise Monitoring and Complaints Handling Strategy.

**Recommendation 9 –** page 48: Defence should publish reports and meeting minutes in a reasonable timeframe.

**Recommendation 10 –** page 52: Defence should expedite establishment of an online complaint lodgement capability.

**Recommendation 11 –** page 59: Defence should routinely review and update (as required) the Australian Super Hornet Noise Monitoring and Complaints Handling Strategy in line with the documented requirements. Defence should document the review process and outcomes.

**Recommendation 12 –** page 69: Defence should routinely review and update (as required) the Australian Super Hornet Noise Mitigation and Complaint Resolution Strategy in line with

# Recommendations arising from this review

the documented requirements. Defence should document the review process and outcomes.

The following table lists the improvement suggestions made in this review.

# Improvement suggestions arising from this review

**Improvement suggestion 1 –** pages 34, 46, 56, 57 and 58: Defence should review the Noise Management Plan, Noise Monitoring and Complaints Handling Strategy and Noise Mitigation and Complaints Resolution Strategy to ensure all relevant website details are correct.

**Improvement suggestion 2 –** page 37 and 45: Defence should update the Noise Management Plan to delete reference to the Amberley Community Engagement Forum.