The Auditor-General Auditor-General Report No.6 2021–22 Performance Audit

Management of the Civil Maritime Surveillance Services Contract

Department of Home Affairs

Australian National Audit Office

© Commonwealth of Australia 2021

ISSN 1036–7632 (Print) ISSN 2203–0352 (Online) ISBN 978-1-76033-681-3 (Print) ISBN 978-1-76033-682-0 (Online)

Except for the content in this document supplied by third parties, the Australian National Audit Office logo, the Commonwealth Coat of Arms, and any material protected by a trade mark, this document is licensed by the Australian National Audit Office for use under the terms of a Creative Commons Attribution-NonCommercial-NoDerivatives 3.0 Australia licence. To view a copy of this licence, visit <u>http://creativecommons.org/licenses/by-nc-nd/3.0/au/</u>.

You are free to copy and communicate the document in its current form for non-commercial purposes, as long as you attribute the document to the Australian National Audit Office and abide by the other licence terms. You may not alter or adapt the work in any way.

Permission to use material for which the copyright is owned by a third party must be sought from the relevant copyright owner. As far as practicable, such material will be clearly labelled.

For terms of use of the Commonwealth Coat of Arms, visit the *It's an Honour* website at <u>https://www.pmc.gov.au/government/its-honour</u>.

Requests and inquiries concerning reproduction and rights should be addressed to:

Senior Executive Director Corporate Management Group Australian National Audit Office GPO Box 707 Canberra ACT 2601

Or via email: <u>communication@anao.gov.au.</u>



Auditor-General Report No.6 2021–22 Management of the Civil Maritime Surveillance Services Contract



Canberra ACT 11 October 2021

Dear Mr President Dear Mr Speaker

In accordance with the authority contained in the *Auditor-General Act 1997*, I have undertaken an independent performance audit in the Department of Home Affairs. The report is titled *Management of the Civil Maritime Surveillance Services Contract*. Pursuant to Senate Standing Order 166 relating to the presentation of documents when the Senate is not sitting, I present the report of this audit to the Parliament.

Following its presentation and receipt, the report will be placed on the Australian National Audit Office's website — http://www.anao.gov.au.

Yours sincerely

A Hehi

Grant Hehir Auditor-General

The Honourable the President of the Senate The Honourable the Speaker of the House of Representatives Parliament House Canberra ACT

AUDITING FOR AUSTRALIA

The Auditor-General is head of the Australian National Audit Office (ANAO). The ANAO assists the Auditor-General to carry out his duties under the Auditor-General Act 1997 to undertake performance audits, financial statement audits and assurance reviews of Commonwealth public sector bodies and to provide independent reports and advice for the Parliament, the Australian Government and the community. The aim is to improve Commonwealth public sector administration and accountability.

For further information contact: Australian National Audit Office GPO Box 707 Canberra ACT 2601

Phone:(02) 6203 7300 Email: ag1@anao.gov.au

Auditor-General reports and information about the ANAO are available on our website: http://www.anao.gov.au

Audit team

Michelle Mant Sean Neubeck Jocelyn Watts Joshua Carruthers Kasia Rymkiewicz-Hill Brian Boyd

Auditor-General Report No.6 2021–22 Management of the Civil Maritime Surveillance Services Contract

Contents

Summary and	d recommendations	7		
Backgrou	nd	7		
Conclusio	n	8		
Supporting	g findings	9		
Recomme	ndations	11		
Summary	of Department of Home Affairs' response	11		
Key mess	ages from this audit for all Australian Government entities	12		
Audit finding	JS	13		
1. Backgroui	nd	14		
Introductio	n	14		
Rationale	for undertaking the audit	15		
	oach			
2. Has the co	ontract delivered against the planned cost, scope and delivery timeframe?			
What was	What was the expected cost, scope and timeframe when the contract was entered into?			
	xtent has the original contract been varied?			
Are contra	Are contract managers appropriately trained and experienced?			
3. Have the	3. Have the specified surveillance assets been provided?			
Have the	specified assets been provided?			
How has t	he department managed any shortfalls in the provision of the surveillance assets?	34		
4. Have the	specified surveillance services been provided?	41		
Have the	Have the surveillance services been provided?			
Have the	aircrew requirements been met?	53		
	Il performance met the contracted minimum threshold?			
How has t	he department managed any performance shortfalls?	64		
Appendices		69		
Appendix 1	Entity responses	70		
Appendix 2	Improvements observed by the ANAO	76		
Appendix 3	Key contract variations	77		
Appendix 4	Performance framework	82		
Appendix 5	Concessions on aircrew requirements and additional payments	85		
Appendix 6	Performance shortfalls			
Appendix 7	Maritime Aviation Specialist Officers	87		



Audit snapshot

Auditor-General Report No.6 2021–22

Management of the Civil Maritime Surveillance Services Contract



Why did we do this audit?

The contract is for fixed wing aerial surveillance to prevent people smuggling and manage other maritime threats across the North West approaches of Australia. It had a value of \$1,187 million when it was entered into and was to run for 12 years.

Key facts

- Variations to the contract have increased its estimated cost by more than 29 per cent to \$1,541 million.
- The current contracted annual Rate of Effort (RoE) is 15,000 flying hours, to be achieved by 28 qualified aircrew undertaking no more than 2,500 missions each year.
- 64 per cent of missions planned have been fully completed as briefed, 25 per cent of missions have been partially completed and 11 per cent have been cancelled or aborted.
- The number of aircrew on average each month has been 33 per cent below that contracted.



The Department of Home Affairs' (Home Affairs) management of the Civil Maritime Surveillance Services contract has not been effective and, as a result, while surveillance services have been provided, the quantum and range of those services has fallen short of the contractual requirements.

- ▶ With 40 contract variations, the scope of contract services has changed, the cost has increased and the delivery timeframe has been extended.
- There were shortfalls and delays in the provision of the contracted surveillance assets.
- Home Affairs has not received the required quantum of surveillance services and the aircrew requirements have not been met.

What did we recommend?

- The Auditor-General made four recommendations to Home Affairs for future civil maritime surveillance contracts aimed at developing a stronger framework for the next contract, and improved contract management practices.
- ► Home Affairs agreed to all four recommendations.

29%

higher contract costs due to variations.

92%

of months where the target for Overall Contract Performance has been met.

0%

of years where the contracted Rate of Effort (hours flown) has been met.

Summary and recommendations

Background

1. Civil maritime surveillance has been identified by the Department of Home Affairs (Home Affairs) as important to deterring, preventing, detecting and responding to civil maritime threats, including illegal maritime arrivals as part of Operation Sovereign Borders. Following a tender process, on 3 March 2006 a contract commenced between the Australian Government¹ and Surveillance Australia Pty Ltd (Surveillance Australia) for the provision of a 'Detect-Classify-Identify-Report' surveillance service to inform 'maritime zone awareness'.

2. The contract requires the provision of 10 fixed-wing Dash–8 aircraft (six Dash–8 202 and four Dash–8 315), modified with specialised surveillance information management system (SIM) equipment which links aerial surveillance assets to the Australian Border Operations Centre. The contractor is required to provide 15,000 flying hours per annum. Home Affairs is to make monthly payments comprising a service charge (covering one twelfth of the annual fixed charge, an hourly charge and any monthly performance deductions) and reimbursable expenses (including landing and navigation charges and accommodation and meal allowances).

3. At the time it was entered into, the contract was to expire on 31 December 2019² and had a reported value of \$1,187 million.³ Since the contract was executed, there have been 40 contract change proposals (CCPs) approved and Home Affairs has identified that these have significantly reshaped the contract.

Rationale for undertaking the audit

4. The contract with Surveillance Australia is the larger of two⁴ that are in place under 'Project Sentinel' for aerial surveillance to prevent people smuggling and manage other maritime threats across the North West approaches of Australia. This ANAO performance audit commenced in the second last year of the extended 14 year contract term to:

- assess and provide transparency over the services that have been provided to date;
- provide independent assurance to the Parliament as to whether Home Affairs is managing the provision of contracted services effectively given their importance to Project Sentinel; and
- examine whether there has been appropriate planning for the end of the contract on 31 December 2021.

5. This audit was undertaken in a similar timeframe to a separate audit of the Management of the Search and Rescue Contract by the Australian Maritime Safety Authority (AMSA), which provided an opportunity to compare and contrast two aircraft service contracts (and their

¹ Represented at the time by the Australian Customs Service, now the Department of Home Affairs.

² The initial operational term was defined in the contract to be twelve years after the scheduled handover date of 1 January 2008.

³ AusTender, *Contract Notice View – CN23257* [Internet], AusTender, available from <u>https://www.tenders.gov.au/Cn/Show/bd02aa0b-ca22-c96b-29dc-b1debd443e94</u> [accessed 1 April 2021].

⁴ The second contract is for helicopter response, surveillance and logistics support missions throughout the Torres Strait and Cape York regions.

management) with contractors that are subsidiaries of the same parent company, Cobham Ltd (Cobham).⁵ The report of the audit of AMSA was tabled on 18 January 2021 (Auditor-General Report No. 27 2020–21) and concluded that AMSA's management of the search and rescue contract has been fully effective.

Audit objective and criteria

6. The audit objective was to assess whether the Department of Home Affairs is effectively managing the Civil Maritime Surveillance Services contract.

- 7. To form a conclusion against the objective, the following high level criteria were adopted:
- Has the contract delivered against the planned cost, scope and delivery timeframe?
- Have the specified surveillance assets been provided?
- Have the specified surveillance services been provided?

8. At the time the audit commenced, there was a fourth criterion ('Has there been appropriate planning for the end of contract?') and the audit scope was to include the transitional arrangements in place for the period post the expiry of the contract on 31 December 2021. In December 2020, twelve months⁶ out from the expiry of the contract and with no further extension options available, the Secretary of Home Affairs did not agree to a recommendation from his department that he agree to issue a Request for Quote to the incumbent provider to continue providing services.

9. As a result of the path forward not having been resolved by Home Affairs by December 2020, the Auditor-General decided to remove the fourth criterion from the scope of the audit. As at August 2021 with four months remaining on the current contract, there are no arrangements in place for the next contract.

Conclusion

10. The department's management of the Civil Maritime Surveillance Services contract has not been effective and, as a result, while surveillance services have been provided, the quantum and range of those services has fallen short of the contractual requirements.

11. The contract has not been managed to secure delivery in line with the planned cost, scope and delivery timeframe. The contract has been varied on 40 occasions as of March 2021 with the effect of significantly changing the scope of the services to be delivered and increasing the term and value of the contract. The department has recognised that variations to the contract have significantly reshaped it and those variations have increased the cost by more than 29 per cent. There has been a high turnover of officers responsible for the management of the contract and the department has not ensured that each of its contract managers had appropriate training or experience.

⁵ Cobham is a UK-based company. It was sold in late 2019 to a United States company – Advent International.

⁶ A key message for Australian Government entities identified in Auditor-General Report No. 37 2019–20 *Procurement of Garrison Support and Welfare Services* that examined Home Affairs' procurement of garrison support and welfare services was that, in order to ensure that they meet the intent of the Commonwealth Procurement Rules to allow competitive procurement processes, entities should commence planning of complex procurements early in the process (p. 60).

12. There were shortfalls and delays in the provision of the contracted surveillance assets. At the commencement of services under the contract, delays in the modification program meant that four fully compliant aircraft were not available and nine of the 26 required aircrews were not provided. There was also a delay in the provision of the SIM required for the acceptance of the full surveillance system. The department did not effectively apply the contractual framework to manage the shortfalls and delays.

13. Home Affairs has not received the required quantum of surveillance services and the aircrew requirements have not been met. Under the contracted performance framework, Home Affairs has calculated that Overall Contract Performance (OCP) has met the specified 90 per cent threshold for 92 per cent of the period from 1 January 2008 to 31 December 2020. In contrast to this high level of calculated performance:

- the contracted Rate of Effort (RoE) in terms of hours flown has not been achieved in any year and has fallen short by an average of seven per cent each year;
- of the total missions planned, 25 per cent have only been partially completed and a further 11 per cent have been cancelled or aborted; and
- aircrew requirements have never been met with the number of aircrew on average each month 33 per cent below that contracted (where data is available for analysis).

Supporting findings

Contract delivery against planned cost, scope and timeframe

14. With an authorised cost of \$1,187.3 million or \$98.9 million per annum, the department contracted in March 2006 for the delivery of civil maritime surveillance services to December 2019, with an option to extend for a further two years. The contract requires that Surveillance Australia provide 10 Dash–8 aircraft, to be operated from bases at Darwin, Cairns, Broome and Horn Island from the scheduled handover date of 1 January 2008; the delivery of the SIM, and the provision of 26 aircrew to meet the annual planned rate of 13,613 flying hours.

15. The contract has been subject to 40 variations, with a significant variation to further extend the contract approved by the department in March 2021. The department has recognised that the variations have significantly reshaped the contract. The variations have also increased its duration by two years to date and have increased the authorised cost by more than 29 per cent.

16. Contract managers have not been provided with appropriate training and have not had appropriate experience. Contract managers have also not received appropriate support due to there being no approved contract management plan in place until August 2018, more than 12 years after the contract commenced. There has been significant turnover in contract management staff, in addition to contract management responsibilities changing a number of times, exacerbated by the poor state of records from the time the contract was entered into. Action has recently been taken by the department to improve the resourcing of the management of the contract.

Surveillance assets

17. Not all specified assets have been provided as originally contracted. While four bases have been established and maintained, there was an eight month delay in establishing the fourth base.

While twelve aircraft have been provided, there were delays to the modification program that meant four fully compliant aircraft were not available at the commencement of services, and there was also a 23 month delay in the provision of the SIM required for the acceptance of the full surveillance system. At the commencement of services on 1 January 2008, the full contingent of aircrew was not provided, with only 17 aircrews out of the required total of 26 available, a shortfall of 35 per cent.

18. Home Affairs did not effectively manage shortfalls of surveillance assets through the contractual framework. Home Affairs approved contract variations and made additional concessions which reduced Surveillance Australia's exposure to penalties available under the original contractual framework.

Contracted surveillance services

19. Home Affairs has not been obtaining the full quantum of surveillance services it contracted to receive. The contracted annual RoE in terms of hours flown has not been achieved in any year, falling short by seven per cent on average. In addition, while 64 per cent of the total missions planned have been fully completed as briefed, a significant proportion have not with 25 per cent of missions partially completed and 11 per cent cancelled or aborted. Further, while the surveillance services have been undertaken seven days a week as intended, night missions have reduced significantly over time, long range missions are not being conducted and it has been more than nine years since any reserve missions have been planned or conducted.⁷

20. The full complement of qualified aircrew required under the contract has never been provided. On average over the life of the contract to 31 December 2020, the number of qualified aircrew has been 33 per cent below that contracted. The lack of aircrew has been a key contributing factor to shortfalls in the number of surveillance hours and missions flown. The ANAO estimates that Home Affairs may have paid \$87 million in monthly service charges for crew numbers that it did not receive.

21. Contracted minimum overall performance thresholds have been calculated to have been met in the significant majority of months:

- overall performance has been calculated to meet the contracted 90 per cent OCP metric for the Dash–8 aircraft for 92 per cent of the period to 31 December 2020; and
- for the Reims F406 aircraft, overall performance was calculated to meet the contracted 80 per cent OCP metric for 85 per cent of the four-year period to June 2015 that this requirement was in place.

22. Home Affairs has not effectively managed performance shortfalls and has continued to pay the full amount for services and aircrew it has not received. As a result of its reluctance to use performance management provisions in the contract to their full extent, Home Affairs has only applied \$2.3 million in performance deductions. Appropriate arrangements are not in place to provide assurance over contractor performance in undertaking missions.

Auditor-General Report No.6 2021–22 Management of the Civil Maritime Surveillance Services Contract

⁷ Under the contract, a reserve mission gives Home Affairs the ability to conduct a discretionary mission each day during hours of otherwise low activity.

Recommendations

Recommendation no. 1 In developing and managing the next surveillance services contract, Paragraph 3.48 In developing and managing the next surveillance services contract, the Department of Home Affairs adopt an approach that involves not paying charges for the bases and aircraft until they have been accepted into service and, once it has started paying charges, paying at a reduced rate until any remaining deficiencies are addressed.

Department of Home Affairs response: Agreed.

Recommendation no. 2 In developing and managing the next surveillance services contract, Paragraph 4.43 In developing and managing the next surveillance services contract, where it sets requirements for the provision of aircrew the Department of Home Affairs adopt an approach which links the contractual requirements to the performance measurement system.

Department of Home Affairs response: Agreed.

Recommendation no. 3 Paragraph 4.54 When developing and managing the next surveillance services contract, the Department of Home Affairs develop and use appropriate systems and processes that links data on operational activities with contractual performance requirements, including opportunities to apply technology solutions to increase automation thereby increasing transparency and reducing reliance on external processes. The Department should seek to leverage off the approach that the Australian Maritime Safety Authority developed to manage its search and rescue aircraft contract.

Department of Home Affairs response: Agreed.

Recommendation no. 4The Department of Home Affairs implement stronger assurance
arrangements for monitoring of mission performance.

Department of Home Affairs response: Agreed.

Summary of Department of Home Affairs' response

23. Home Affairs' summary response to the report is provided below and its full response is at Appendix 1. Formal comments from the contractor are also included in Appendix 1.

The Department of Home Affairs (the Department) welcomes this ANAO performance audit of the Management of the Civil Maritime Surveillance Services Contract (the Contract) and acknowledges the valuable role the ANAO plays in providing independent insights into potential areas of further improvement.

The aerial surveillance services provided under the Contract since its commencement in January 2008 have been an essential element of Australia's border protection surveillance capability.

This long running Contract has continued to adapt in response to unprecedented operational challenges, supporting the Department and other Commonwealth agencies respond to a broad range of maritime threats. It is not unusual to expect changes over the life of a Contract of this length, complexity, and operational nature. The Department and the Australian Border Force (ABF)

have also adapted during this time and continued to mature the approach to contract management in the years since this contract was established

While the ANAO report provides valuable feedback for the Department's consideration, recognition of the operational context under which the Contract functions, the major contract management improvements implemented, and the commitment shown by the Department's personnel to deliver critical surveillance services under extreme pressures, have not been adequately reflected.

The establishment of 'Operation Sovereign Borders' in 2013 required the Department to urgently respond to the operational challenges of a significant number of illegal maritime arrivals. This placed unprecedented pressures on the Department and Surveillance Australia to meet this Government priority. The Department agrees with the ANAO's recommendations, and will factor the advice and findings into the development of the next aerial surveillance procurement process and contract framework. The lessons learned through the life of the existing Contract, AMSA's experience, and the ANAO feedback is extremely valuable in our future surveillance capability planning.

Key messages from this audit for all Australian Government entities

24. Below is a summary of key messages that have been identified in this audit that may be relevant for the operations of other Australian Government entities.

Contract management

- Transparency, accountability and informed decision-making is supported by the making and keeping of records. This includes the creation of good quality information that contains sufficient detail to meet current business needs and that can be efficiently found and understood by others in the future, particularly in circumstances where there is regular turnover in those with responsibilities for contract management.
- Continuity in contract management staff, who are appropriately experienced and trained, along with clear lines of responsibility within an organisation, contributes to effective contract management.
- An appropriate information technology system that links data on operational activities with contractual performance requirements and the related payments assists with efficient and effective contract management.
- There are benefits from linking contract payments to the achievement of key performance indicators. Employing those contractual provisions from the commencement of the contract along with effective channels of communication with the contractor establishes clear performance expectations; as does maintaining a firm posture as delivery of the contract proceeds.
- Identifying lessons learned from across the organisation as well as by other entities can improve the value for money that is achieved when conducting a procurement and managing the resulting contract.

Audit findings

1. Background

Introduction

1.1 Civil maritime surveillance has been identified by the Department of Home Affairs (Home Affairs) as important to deterring, preventing, detecting and responding to civil maritime threats, including illegal maritime arrivals as part of Operation Sovereign Borders. Following a tender process, on 3 March 2006 a contract commenced between the Australian Government⁸ and Surveillance Australia Pty Ltd (Surveillance Australia) for the provision of a 'Detect-Classify-Identify-Report' surveillance service to inform 'maritime zone awareness'. Figure 1.1 depicts Australia's maritime zones.

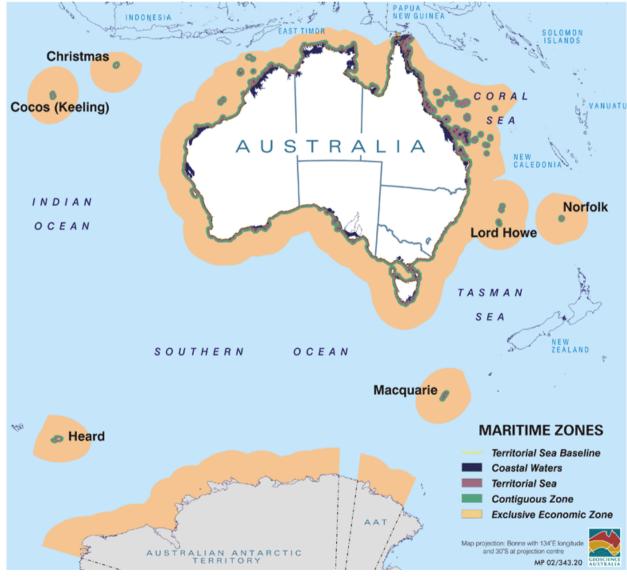


Figure 1.1: Australia's Maritime Zone

Source: Geoscience Australia.

Auditor-General Report No.6 2021–22 Management of the Civil Maritime Surveillance Services Contract

⁸ Represented at the time by the Australian Customs Service, now the Department of Home Affairs.

1.2 The contract requires the provision of 10 fixed-wing Dash–8 aircraft (six Dash–8 202 and four Dash–8 315), modified with specialised surveillance information management (SIM) equipment which links aerial surveillance assets to the Australian Border Operations Centre. The contractor is currently required to provide 15,000 flying hours per annum. Home Affairs is to make monthly payments comprising a service charge (covering one twelfth of the annual fixed charge, an hourly charge and any monthly performance deductions) and reimbursable expenses (including landing and navigation charges and accommodation and meal allowances).

1.3 At the time it was entered into, the contract was to expire on 31 December 2019⁹ and had a reported value of \$1,187 million.¹⁰ Since the contract was executed, there have been 40 contract change proposals (CCPs) approved and Home Affairs has identified that these have significantly reshaped the contract.

1.4 The contract provided that the term may be extended by up to two years, with not less than seven months written notice to be given to the contractor. Home Affairs elected to extend the contract by two years in October 2012, more than six years before any notice needed to be given to the contractor, and before the department was in a position to assess contractor performance over the majority of the contract period.¹¹ The decision was taken at this time in an attempt to reduce the annual cost of the contract. Home Affairs recorded that it would amortise the lower costs in the two additional years over the life of the contract.

1.5 The decision to extend took the contract expiry date out to 31 December 2021. Together with the approved contract changes, the extension increased the reported contract value to \$1,647 million.

1.6 On 29 March 2021, the department decided to:

- seek to extend the contract for an additional contract period of two years (from 1 January 2022 to 31 December 2023), with provision for a further one year extension option to be exercised at the sole discretion of the department, to be implemented by a deed of variation as no further extension options are available under the contract; and
- commence negotiations with Surveillance Australia to seek to agree the terms and conditions of the contract to apply during the additional contract period.

Rationale for undertaking the audit

1.7 The contract with Surveillance Australia is the larger of two¹² that are in place under 'Project Sentinel' for aerial surveillance to prevent people smuggling and manage other maritime threats across the North West approaches of Australia. This ANAO performance audit commenced in the second last year of the extended 14 year contract term to:

• assess and provide transparency over the services that have been provided to date; and

⁹ The initial operational term was defined in the contract to be twelve years after the scheduled handover date of 1 January 2008.

¹⁰ AusTender, *Contract Notice View – CN23257* [Internet], AusTender, available from <u>https://www.tenders.gov.au/Cn/Show/bd02aa0b-ca22-c96b-29dc-b1debd443e94</u> [accessed 1 April 2021].

¹¹ Legal advice provided to Home Affairs stated that a contract extension so early in the contract term would limit the performance expectations on Surveillance Australia.

¹² The second contract is for helicopter response, surveillance and logistics support missions throughout the Torres Strait and Cape York regions.

- provide independent assurance to the Parliament as to whether Home Affairs is managing the provision of contracted services effectively given their importance to Project Sentinel; and
- examine whether there has been appropriate planning for the end of the contract on 31 December 2021.

1.8 This audit was undertaken in a similar timeframe to a separate audit of the Management of the Search and Rescue Contract by the Australian Maritime Safety Authority (AMSA), which provided an opportunity to compare and contrast two aircraft service contracts (and their management) with contractors that are subsidiaries of the same parent company, Cobham Ltd (Cobham).¹³ The report of the audit of AMSA was tabled on 18 January 2021 (Auditor-General Report No. 27 2020–21) and concluded that AMSA's management of the search and rescue contract has been fully effective.

Audit approach

Audit objective, criteria and scope

1.9 The audit objective was to assess whether the Department of Home Affairs is effectively managing the Civil Maritime Surveillance Services contract.

- 1.10 To form a conclusion against the objective, the following high level criteria were adopted:
- Has the contract delivered against the planned cost, scope and delivery timeframe?
- Have the specified surveillance assets been provided?
- Have the specified surveillance services been provided?
- 1.11 The scope of the audit covered the period since contract execution in March 2006.

1.12 At the time the audit commenced, there was a fourth criterion ('Has there been appropriate planning for the end of contract?') and the audit scope was to include the transitional arrangements in place for the period post the expiry of the contract on 31 December 2021. In December 2020, twelve months¹⁴ out from the expiry of the contract and with no further extension options available, the Secretary of Home Affairs did not agree to a recommendation from his department that he agree to issue a Request for Quote to the incumbent provider to continue providing services.

1.13 As a result of the path forward not having been resolved by Home Affairs by December 2020, the Auditor-General decided to remove the fourth criterion from the scope of the audit. As at August 2021, with four months remaining on the current contract, there are no arrangements in place for the next contract.

¹³ Cobham is a UK-based company. It was sold in late 2019 to a United States company – Advent International.

¹⁴ A key message for Australian Government entities identified in Auditor-General Report No. 37 2019–20 *Procurement of Garrison Support and Welfare Services* that examined Home Affairs' procurement of garrison support and welfare services was that, in order to ensure that they meet the intent of the Commonwealth Procurement Rules to allow competitive procurement processes, entities should commence planning of complex procurements early in the process (p. 60).

Audit methodology

1.14 The audit methodology included examination and analysis of Home Affairs records and interviews with relevant Home Affairs staff.

1.15 The audit was conducted in accordance with the ANAO Auditing Standards at a cost to the ANAO of approximately \$877,000.

1.16 The team members for this audit were Michelle Mant, Sean Neubeck, Jocelyn Watts, Joshua Carruthers, Kasia Rymkiewicz-Hill and Brian Boyd.

2. Has the contract delivered against the planned cost, scope and delivery timeframe?

Areas examined

ANAO examined whether the contract has delivered against the cost, scope and delivery timeframe as envisaged when the contract commenced.

Conclusion

The contract has not been managed to secure delivery in line with the planned cost, scope and delivery timeframe. The contract has been varied on 40 occasions as of March 2021 with the effect of significantly changing the scope of the services to be delivered and increasing the term and value of the contract. The department has recognised that variations to the contract have significantly reshaped it and those variations have increased the cost by more than 29 per cent. Over the life of the contract, there has been a high turnover of officers responsible for the management of the contract and the department has not ensured that each of its contract managers had appropriate training or experience.

Areas for improvement

The ANAO has not made any potential recommendations as the department commenced taking action in 2020 to improve its management of the contract. It is too soon to be able to assess whether the steps being taken by the department will lead to the necessary improvement in management of the Surveillance Australia Pty Ltd (Surveillance Australia) contract.

2.1 To assess whether the contract has delivered against the cost, scope and delivery timeframe envisaged when it commenced, the ANAO examined:

- how payments are tracking against the level of expenditure authorised and budgeted;
- the number and effect of variations that have been made to the contract; and
- the training and experience of those officers responsible for contract management.

2.2 The analysis was made difficult by the state of the department's records of its management of the contract. Analysis of the management of contract expenditure was impeded by the department not meeting the requirement¹⁵ for it to maintain adequate records of the original procurement including the approval of the decision to enter into the contract. The Department of Home Affairs (Home Affairs) was also unable to locate spending proposals and approvals for all variations that increased the cost of the contract.¹⁶

¹⁵ Paragraphs 7.2 and 7.3 of the Commonwealth Procurement Rules (CPRs) require entities to 'maintain for each procurement a level of documentation commensurate with the scale, scope and risk for the procurement' and outline that the 'documentation should provide accurate and concise information on: the requirement for the procurement; the process that was followed; how value for money was considered and achieved; relevant approvals; and relevant decisions and the basis of those decisions': Department of Finance (Finance), *Commonwealth Procurement Rules*, 20 April 2019, paragraphs 7.2–7.3, [Internet], Finance, available from https://www.finance.gov.au/sites/default/files/2019-11/CPRs-20-April-2019_1.pdf [accessed 24 May 2021].

¹⁶ In response to the 2017–18 internal audit into the maritime surveillance section, the department had to request copies of eight contract change proposals (CCPs) from Surveillance Australia.

What was the expected cost, scope and timeframe when the contract was entered into?

With an authorised cost of \$1,187.3 million or \$98.9 million per annum, the department contracted in March 2006 for the delivery of civil maritime surveillance services to December 2019, with an option to extend for a further two years. The contract requires that Surveillance Australia provide 10 Dash–8 aircraft, to be operated from bases at Darwin, Cairns, Broome and Horn Island from the scheduled handover date of 1 January 2008; the delivery of the surveillance information management system (SIM), and the provision of 26 aircrew to meet the annual planned rate of 13,613 flying hours.

2.3 Under the contract, Surveillance Australia is responsible for the acquisition and delivery of the surveillance assets and systems over the life of the contract, including the provision of:

- ten fixed wing aircraft—six Dash–8 202 aircraft and four Dash–8 315 aircraft that operate day and night, in all but the most extremes of weather, 365 days a year;
- on-board sensor and communication systems; the Inmarsat satellite communication system; and the SIM (including SIM development work and subsequent delivery and integration of the SIM), both airborne and ground elements;
- annual rate of effort (RoE) of 13,613 hours (26 qualified aircrews); and
- four bases in Darwin, Cairns, Broome and Horn Island.

2.4 The original timeframe for services to commence was at the scheduled handover date of 1 January 2008, for an initial operational term of 12 years.¹⁷ Unlike the Australian Maritime Safety Authority (AMSA) contract¹⁸, there was no staged transition period to align with the end of the prior contract, so there was no contingency for delays.¹⁹ The contract has been varied significantly in terms of the timeframes, cost and scope (as discussed below).

2.5 Surveillance Australia was selected as the preferred tenderer on the basis that the development of a suitable SIM solution could be resolved through contract negotiations. At contract execution in March 2006, the SIM solution remained unresolved. Instead, provision was made in the contract for the SIM to be resolved by way of a CCP with an expected delivery of the SIM to coincide with the full service delivery date of 1 July 2008, provided that a suitable SIM CCP was agreed between Surveillance Australia and the department by 31 May 2006.²⁰

2.6 On 17 February 2006, the Minister for Finance authorised Home Affairs entering into the contract with Surveillance Australia at a total cost up to \$1,187.3 million over 14 years (a contract

Auditor-General Report No.6 2021–22

Management of the Civil Maritime Surveillance Services Contract

¹⁷ The handover date was when the entire surveillance service, with the exception of the delivery of the SIM, was to be provided.

¹⁸ Refer to Auditor-General Report No. 27 of 2020–21 *Management of the Search and Rescue Contract,* paragraph 2.3.

¹⁹ Surveillance Australia was the incumbent service provider, having provided civil maritime surveillance services for CoastWatch since 1995.

²⁰ The CCP was not approved before 31 March 2006, and as a result, the full service delivery date was amended to the SIM delivery date of 7 June 2010.

cost of \$98.9 million per annum over the expected 12 years of operations²¹), including the two year transition in period.²² In his approval, the Finance Minister advised that his authorisation did not remove the responsibility on the authorised officials approving the spending proposal to satisfy the requirements for the expenditure of public money (which related to undertaking reasonable inquiries to be satisfied that the spending proposal was an effective, economical, efficient and ethical use of public money). Home Affairs has not retained evidence of the approval of the spending proposal prior to entering into the contract.

2.7 The CPRs require that key details of contracts that have been awarded be reported on AusTender within 42 days of the contract being entered into or amended. This reporting obligation was not met. On 4 July 2006, 120 days after the contract was signed, Home Affairs reported that a \$1,187.3 million contract with Surveillance Australia had been entered into covering the period 3 March 2006 to 31 December 2019. The department has also not always met its obligation to report on AusTender changes in the contract value as a result of variations, with 16 amendments that impacted the contract value by a total of \$43.1 million not reported at all.

2.8 In seeking the Finance Minister's authorisation to enter into the contract,²³ the Minister for Justice and Customs advised that 73 per cent of the annual charge is fixed²⁴ and 27 per cent is variable. Contract payments cover the monthly service charge, which comprises the following components:

- monthly fixed charge which is calculated as one twelfth of the annual fixed charge;
- monthly hourly charge which covers all the variable charges, including fuel, and is calculated by multiplying the hourly rate by the number of hours flown for the month;
- monthly reimbursable expenses including:
 - landing and navigation charges incurred by Surveillance Australia while providing the surveillance service; and
 - accommodation and meal allowances at the agreed travel rate paid by Surveillance Australia to staff in respect of each overnight stay other than at the Broome, Darwin and Cairns Bases and at the Horn Island 'Resourced Deployment Base' while providing the service; and
- monthly performance deductions which are the amounts, if any, by which the monthly service charge is reduced under the performance measurement system.

2.9 Figure 2.1 illustrates the total cumulative expenditure for each of the three major expense types under the contract for 1 January 2008 to 31 December 2020. The ANAO's analysis of invoice data and Home Affairs systems identified that \$121 million of expenditure attributed to the current Surveillance Australia contract actually related to the previous contract during the transition-in

²¹ In comparison, the Request for Tender had outlined that a budget of \$74 million per annum (this does not include indexation) was in place covering both prior contracts for fixed wing and helicopter surveillance and that a 'similar' budget was expected for the two new contracts (including the one let to Surveillance Australia following the tender process) although the Request for Tender stated that 'Tenderers are not precluded from submitting bids in excess of the current budget that offer superior value for money'.

²² This amount included GST and indexation.

²³ Regulation 10 of the Financial Management and Accountability Regulations 1997 prohibited the approval of a spending proposal that was not fully supported by an available appropriation (either in an Act or proposed in a Bill before the Parliament), unless the Finance Minister had given written authorisation for the approval.

²⁴ ANAO analysis of the invoice data confirmed that approximately 70 per cent is fixed.

period from March 2006 to December 2007. There was also \$17 million in recorded expenditure that Home Affairs was unable to provide invoices in support of. As outlined at paragraph 1.4, in an attempt to reduce the annual cost of the contract, options to extend it were executed in October 2012 notwithstanding that it did not have to make any decision on exercising the options until May 2019 (seven months prior to contract expiration). Nevertheless, in 2017–18, after 10 years, the cumulative expenditure reached and exceeded the \$1,187 million authorised by the Finance Minister in 2006.²⁵ While the Finance Minister's authorisation reflected a contract cost of \$98.9 million per annum, actual expenditure has exceeded this amount in each full year that the contract has been in place and has been on average 22 per cent higher, at \$120.2 million per annum. Excluding the \$121 million that relates to the prior contract, actual expenditure on the current contract has been on average 10 per cent higher, at \$109.2 million per annum.

²⁵ By way of comparison, Auditor-General Report No.27 2020–21 *Management of the Search and Rescue Aircraft Contract* found that costs under the contract between AMSA and Cobham for the search and rescue aircraft contract are tracking below budget (see pages 17 and 18 of that audit report).

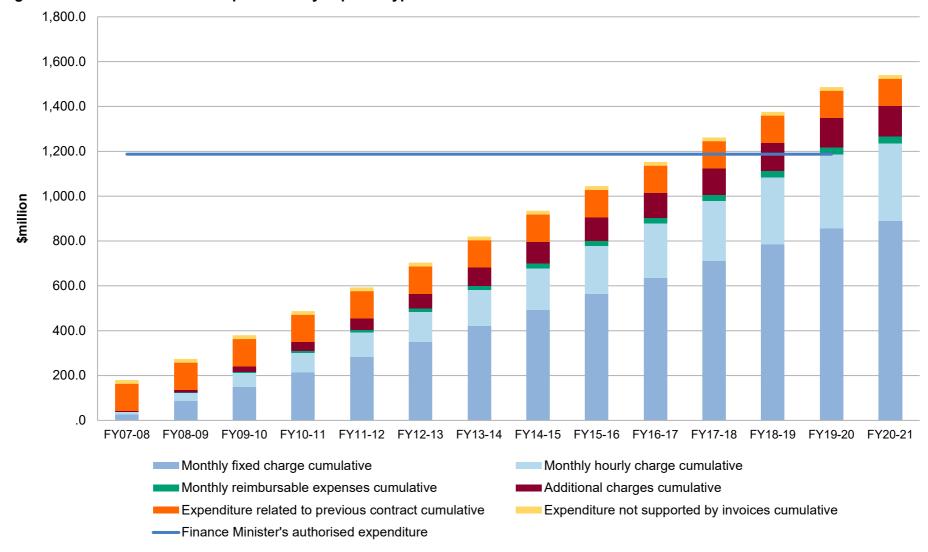


Figure 2.1: Total cumulative expenditure by expense types

Source: ANAO analysis of Home Affairs invoice records.

2.10 Due to an absence of Home Affairs records, it was not possible to establish the extent to which the variable charges under the contract had led to the cost exceeding \$1,187 million earlier than had been expected. Specifically, Home Affairs did not retain evidence of the original breakdown of the budgeted expenses for each category of the service charge at the time the spending proposal for the contract was approved. This type of baseline information is important to effectively manage contracts, as well as to inform the identification of any lessons learned when future procurement processes are undertaken.

2.11 The records that were available evidenced that additional costs are primarily attributable to the contract extension executed in October 2012 at an estimated cost of \$208.9 million and increases in the annual RoE at an estimated cost of \$65.7 million. Another factor contributing to the contract costing more was that it has been varied to include additional services and related charges, which have totalled \$76.5 million to date (22 per cent of total additional costs to date). The most expensive of these involved:

- the introduction of additional surveillance services using Reims 406 aircraft with an annual RoE of 2,000 hours over a six year period, including refurbishment of the aircraft and pilot guarantee payments of \$4.0 million (total estimated cost of \$47.6 million);
- additional services and costs associated with the development, installation and support of the SIM (total estimated cost of \$13.8 million);
- additional costs associated with the provision of satellite data services (total estimated cost of \$6.3 million); and
- modification of five Dash–8 aircraft with air operable doors to setup first response drop capability (total estimated cost of \$3.4 million).

2.12 In October 2019, Home Affairs identified that the remaining funds for the contract would be depleted by February 2020, 22 months before the contract was due to expire. The department considered that this could be attributed to:

- underestimating the actual cost of indexation over the contract term at execution;
- underestimating the actual cost of implementing new policy proposals and estimates variations in response to changes in operational priorities;
- procurement spending proposals for allocating expenditure for certain services over a set period, and those services continuing beyond that period without further funding approval being sought²⁶; and
- monthly reimbursable expenses being difficult to forecast (land and navigation charges, accommodation and meal allowances, and expenses relating to remote deployments and tactical operations).

2.13 In December 2019, Home Affairs requested that its Minister write to the Finance Minister to seek approval to increase the expenditure under the Surveillance Australia contract. On 13 February 2020 the Finance Minister authorised the total cost of the contract until its expiry on 31 December 2021 increasing to \$1,619 million. ANAO analysis indicates that, in contrast to the

²⁶ For example, the provision of satellite services agreed under CCP045 exceeded the approved expenditure of \$4.2 million (by \$1.1 million) and continued past the review date of pre-30 June 2016. Home Affairs continued to pay the invoices provided by Surveillance Australia, with \$3.2 million expended to date since the service was originally to be reviewed or cease on 30 June 2016.

advice provided by the department to the Minister for Home Affairs and the Finance Minister, the reasons for the increased expenditure primarily related to:

- expenditure of \$121 million being incorrectly attributed to the contract (see paragraph 2.9); and
- contract variations impacting the contract value by a total of \$43.1 million but not reported on AusTender.

2.14 Subsequently, the department identified a further shortfall of \$27.6 million for the remaining contract period and received delegate approval in December 2020 to increase the total value of the contract to \$1,647 million (39 per cent above the original authorisation). This represented an average annual cost of more than \$117.6 million, 19 per cent higher than had been authorised when the contract was entered into.

2.15 In addition to the factors identified by the department in paragraph 2.12, the increased contract costs reflect a lack of governance and controls in place. The department has not had systems and procedures in place to track contract costs against budget. As a result, to inform audit analysis, the ANAO obtained all available invoice records²⁷ over the life of the contract. As discussed at paragraph 2.2, Home Affairs has not retained appropriate records for the management of the contract. Home Affairs' invoice records were also incomplete, with a gap totalling \$17 million of expenditure that cannot be supported by invoices.²⁸ This analysis also identified that payment controls have not been to an appropriate standard, for example:

- authorisations not being recorded with 43 per cent of invoices analysed by the ANAO not having evidence of delegate approval resulting in \$452 million being paid without evidence of a recorded approval;
- invoices identified as incorrect but approved for payment with the intent to seek credit notes at a later date,²⁹ due to lack of evidence and timeframes for payment; and
- payments not provided for under the contract for additional fees levied by the supplier of fuel due to increased transportation costs at the Gove airfield. A contract variation executed in April 2020 included a formal variation to the service charges for additional fees for fuel costs from the Gove airfield. The additional fees have been paid by Home Affairs since December 2011 and total \$1.09 million.

2.16 In addition, Home Affairs identified in November 2018 that it had continued to pay for services agreed under CCP045 beyond their expiry date. The delegate approved a total of \$4.2 million expenditure. Home Affairs was unable to determine if the payments had exceeded the original approval because it had not retained all relevant records. Invoice records before July 2015 pre-date the implementation of the current electronic financial management system. Home Affairs

Auditor-General Report No.6 2021–22

Management of the Civil Maritime Surveillance Services Contract

²⁷ The ANAO requested 170 archived folders relating to invoicing prior to the introduction of the current electronic financial management system (SAP). Not all requested were available due to poor records management; missing records and the destruction of some records.

²⁸ Home Affairs moved to its current electronic financial management system in July 2015; the ANAO has been able to reconcile invoices to the system since that date. The expenditure not supported by invoices relates to the period 1 January 2008 to 30 June 2015.

²⁹ The state of the department's records resulted in ANAO being unable to verify that all credit notes were sought.

relied on calculating the average expenditure following a review of the available data in its electronic financial management system back to July 2015.

To what extent has the original contract been varied?

The contract has been subject to 40 variations, with a significant variation to further extend the contract approved by the department in March 2021. The department has recognised that the variations have significantly reshaped the contract. The variations have also increased its duration by two years to date and have increased the authorised cost by more than 29 per cent.

2.17 Since execution of the original contract, there have been 55 CCPs submitted. Of these, 40 have been executed, 14 have not proceeded, and one remains open. The department's contract management plan identifies that these variations have 'significantly reshaped' the contract (see Appendix 3 for table of key contract variations).

2.18 The high number of CCPs reflect the negotiations did not end upon contract signature. Matters negotiated after signature have included the provision of the SIM, the application of liquidated damages and the performance measurement system (PMS), as well as concessions to contractual provisions in relation to bases and pilots.

2.19 The contract variations have increased the overall cost of the contract as well as the scope of the services to be provided.³⁰ Appendix 3 summarises the key contract variations, highlighting the frequency with which variations have impacted the contract cost, scope and/or timeframes of services summarised as follows:

- variations to the contract have increased its estimated cost by \$354.1 million to \$1,541.4 million, more than 29 per cent higher than the amount authorised by the Finance Minister when the contract was originally entered into;
- there have been two variations finalised to date related to the contracted timeframes delaying full commencement and then extending its duration.³¹ In March 2021, the department decided to further vary the contract to extend its duration by a further two years with a one year extension option. At the time of ANAO audit fieldwork, the related variation had not yet been made to the contract;
- the contracted annual RoE has increased by 10 per cent from 13,613 hours to 15,000 hours, commencing from 1 October 2008. The contract provides for an annual review of the RoE and includes principles for RoE adjustments to accommodate such adjustments. The increase to the contracted RoE requires provision of an additional two crew (28 crew in total) and includes an increase in the fixed component of the monthly service charge. The extent to which the aircrew requirements have been met and the

³⁰ By way of comparison, Auditor-General Report No.27 2020–21 *Management of the Search and Rescue Contract* identified that, while there have been 10 variations to the contract between AMSA and Cobham for search and rescue aircraft, those variations have not extended the contract or increased its cost (see pages 19 to 21 of that audit report).

The first delayed the full service delivery date, which included the delivery of the SIM that had originally been planned for 1 July 2008 and was delayed to 7 June 2010, 23 months later (with additional associated costs of \$13.8 million). The second related to the early exercise of the option to extend the contract term by two years to 31 December 2021.

contracted RoE has been achieved is examined in paragraphs 4.9 to 4.13 and 4.28 to 4.42; and

• the introduction of additional surveillance services using Reims F406 aircraft for a period of six years from 1 July 2009 to 30 June 2015 with an annual RoE of 2,000 hours. This represents an increase of 3,387 hours or 24 per cent above the original 13,613 hours RoE to 17,000 hours for that period of time. This included four 'pilot guarantee payments' totalling \$4 million. The extent to which the aircrew requirements have been met and the additional contracted RoE was achieved is examined in paragraphs 4.9 to 4.13 and 4.28 to 4.42.

2.20 In addition to the increases outlined in paragraph 2.11, the contract value has been increased on four other occasions not related to CCPs. These include aerial surveillance in support of Operation Sovereign Borders for \$9.9 million and deployments to Christmas Island and Cocos Keeling Island on two occasions totalling \$2.8 million.

Are contract managers appropriately trained and experienced?

Over the life of the contract, contract managers have not been provided with appropriate training and have not had appropriate experience. Contract managers have also not received appropriate support due to there being no approved contract management plan in place until August 2018, more than 12 years after the contract commenced. There has been significant turnover in contract management staff, in addition to contract management responsibilities changing a number of times, exacerbated by the poor state of records from the time the contract was entered into. Action has recently been taken by the department to improve the resourcing of the management of the contract.

2.21 The department has not had in place the necessary underpinnings for appropriate management of this high risk, high cost long term contract, including:

- as outlined at paragraph 2.2, the department has not maintained adequate records of the terms of the decision to enter into the contract or of all subsequent variations to the contract. In addition, key contract information has been stored in disparate locations across multiple systems;
- prior to August 2018, the department did not have an up to date consolidated contract reflecting all variations made; and
- a draft contract management plan from 2009 was located by the ANAO as part of the ANAO's examination of archived records. There was no evidence to suggest it was finalised and used by the department. In August 2018, consultants³² contracted by Home Affairs prepared a new contract management plan for the Surveillance Australia contract that reflects the department's Contract Management Framework.³³

2.22 Since the contract was signed in 2006, responsibility for contract management has been transferred between multiple divisions, branches and sections within the department. There has

Auditor-General Report No.6 2021–22

³² The consultant engaged to perform this work was Callida Consulting.

³³ An initial contract management plan was developed by Surveillance Australia in 2007. The department did not develop a contract management plan or other key documentation to assist in the management of the contract.

Management of the Civil Maritime Surveillance Services Contract

also been high turnover in staff directly involved with managing the contract. The ANAO identified 19 individual staff held the contract management role up until August 2020, either in an acting capacity or as the substantive Executive Level 2. Of these 19 staff, six had experience managing large-scale contracts and/or have held formal contract management training and/or qualifications. None of the 19 staff were involved in the development of the original request for tender or contract negotiation process.³⁴The ANAO was advised by the department that the APS staff responsible for supporting the contract managers throughout the life of the contract and undertaking day-to-day invoicing and contract administration processes also had little to no experience or formal contract management training.³⁵

2.23 An internal audit in 2017 focussing on contracts within the Air and Marine Capability Branch found that 'an assessment of the Division's capability and resourcing profile identified that there is a capability and capacity gap, with a number of contracts not supported by appropriately qualified personnel...these capacity limitations may result in the ineffective management and administration of the contracts', with a number of contracts, including the Surveillance Australia contract, under-resourced and not supported by appropriately qualified personnel..³⁶ The internal audit stated that the division required significant improvement in ensuring that contract management teams were appropriately trained with the required knowledge, skills and expertise to effectively manage and administer the contracts.³⁷

2.24 A change in senior executive level staff in the division in late 2017, and in response to the ANAO flagging a potential audit of management of the Surveillance Australia contract, led to the engagement of consultants³⁸ to undertake remediation work across a range of contracts.³⁹ This included assisting with the development of key contract documentation (finding and saving in the records a complete consolidated version of the Surveillance Australia contract, developing a contract management plan and other key documentation that was either out of date or missing) and improve contract management processes.

³⁴ The ANAO identified in Auditor-General Report No.27 2020–21 *Management of the Search and Rescue Aircraft Contract* audit that continuity in contract management staff, who are appropriately experienced and trained, along with clear lines of responsibility within an organisation, contributes to effective contract management. Understanding of the contract objectives and its terms may be further aided by having some of those involved in the procurement process also involved in the management of the contract (pages 22 and 23 of that audit report).

³⁵ By way of comparison, Auditor-General Report No.27 2020–21 *Management of the Search and Rescue Aircraft Contract* found that the AMSA staff involved in managing the search and rescue aircraft contract it has in place with Cobham are experienced and had received appropriate training, and that some of those staff have been involved since the development of the request for tender (see pages 22 and 23 of that audit report).

³⁶ This internal audit also identified insufficient documentation had been maintained by the division for all eight contracts examined, including the Surveillance Australia contract: an absence of contract management plans, risk management plans and registers; supporting meeting minutes and progress reports to evidence regular communication and document key decisions made by the division and its contractors.

³⁷ Deficiencies in the department's contract management framework and deficiencies with procurement and contract management have been identified through previous ANAO audit reports, most recently focussed on review of procurement and contract management for offshore processing centres. The department commenced procurement and contract management reform in 2017–2018 with a focus on enhancing governance and business systems and processes, while simultaneously building capability within the workforce.

³⁸ The consultant engaged to perform this work was Callida Consulting.

³⁹ The ANAO had flagged its intention to audit the Civil Maritime Surveillance Services Contract in 2018–19 Annual Audit Work Program.

2.25 Since 2018, Home Affairs has sought to provide a clearer separation of roles and responsibilities between those involved in the contract management and those involved in the operational tasking of the surveillance assets. The Marine Logistics and Aviation Section, which sits within the Air and Marine Capability Branch is the area responsible for management of the Surveillance Australia contract. As at 16 August 2021, the branch currently has a team of five staff⁴⁰ within the Marine Logistics and Aviation Section that are actively involved in the management of its surveillance service contract with Surveillance Australia, and report directly to the Superintendent, Air and Marine Capability. The Superintendent is responsible for managing both aviation contracts, as well as the marine logistics contracts.⁴¹ The current occupant has held the Superintendent position since August 2020 and was recruited for their experience of upwards of 20 years managing high risk and high value government contracts; as well as previous experience managing aviation contracts. The team that supports the Superintendent has been involved with the contract since August 2020 onwards and were all recruited for their experience working on high risk, high value contracts.

2.26 Of the current team of five staff responsible for managing the aviation contracts:

- one team member holds a Diploma of Government (Contract Management); Diploma and Advanced Diploma of Government (Procurement and Contracting);
- one team member holds a Certificate IV in Government (Procurement and Contracting) and a Diploma of Government (Procurement and Contracting);
- one team member holds an Advanced Diploma of Government (Procurement and Contracting); and
- two team members hold a Certificate IV in Government (Procurement and Contracting).

2.27 The team of five is further supported by members of the Operations and Safety Section that work closely with the contract manager, and act as the interface between the Maritime Border Command (MBC)⁴² and the contracts area. This team is responsible for managing the operational aspects of the contract, including: managing service provider and asset performance; asset availability; monitoring MBC's planning activities to ensure they are within contractual limits (RoE versus budget)⁴³; and enforcement of the performance measurement system and mission evaluations.

Auditor-General Report No.6 2021–22 Management of the Civil Maritime Surveillance Services Contract

⁴⁰ Of these five staff, one is a Cordelta contractor responsible for financial reporting; and one is a part-time Callida consultant. The Department advised in August 2021, that a second Callida consultant with a Certificate IV in Government (Procurement and Contracting) and a Diploma of Government (Procurement and Contracting) was due to commence employment with the team on 23 August 2021.

⁴¹ The department has a second aviation contract for rotary-wing surveillance capability (helicopter) as well as a range of marine logistics contracts, for example, Aspen Medical and Toll Remote Logistics.

⁴² MBC is a multi-agency taskforce that utilises personnel, aircraft and vessels provided from the ABF and Australian Defence Force to conduct civil maritime security operations. MBC is responsible for tasking of the Dash–8 aircraft under the Surveillance Australia contract.

⁴³ Historically, poor governance and management of the Surveillance Australia contract led to a misalignment between MBC's tasking of assets and the available contract budget. This resulted in overspends on the Surveillance Australia contract.

3. Have the specified surveillance assets been provided?

Areas examined

This chapter examines whether the contracted surveillance assets have been provided within the contracted timeframes.

Conclusion

There were shortfalls and delays in the provision of the contracted surveillance assets. At the commencement of services under the contract, delays in the modification program meant that four fully compliant aircraft were not available and nine of the 26 required aircrews were not provided. There was also a delay in the provision of the surveillance information management system required for the acceptance of the full surveillance system. The department did not effectively apply the contractual framework to manage the shortfalls and delays.

Area for improvement

The ANAO made one recommendation aimed at stronger management of any shortfalls or delays in the provision of surveillance assets under the next civil maritime surveillance services contract.

3.1 The contract requires that Surveillance Australia Pty Ltd (Surveillance Australia) acquire the 'surveillance assets' necessary to perform the contract with a handover date of 1 January 2008.⁴⁴ The contract defines surveillance assets as:

- 12 aircraft, comprising:
 - six Dash 8–202 aircraft;
 - four Dash 8–315 aircraft; and
 - two Reims F406 aircraft (for the period of 1 July 2009 to 30 June 2015);
- the surveillance information management system (SIM)⁴⁵, sensors and other equipment in the aircraft; and
- qualified aircrew to operate the aircraft and equipment, interpret the surveillance information and provide the required reporting to the department, as follows:
 - 26 qualified aircrew (from 1 January 2008 to 30 September 2008);
 - 28 qualified aircrew (from 1 October 2008 to 30 June 2009);
 - 30 qualified aircrew (from 1 July 2009 to 30 June 2015); and
 - 28 qualified aircrew (from 1 July 2015 to 31 December 2021).
- 3.2 The ANAO examined:
- whether the specified surveillance assets have been provided; and

⁴⁴ By way of comparison, Auditor-General Report No.27 2020–21 *Management of the Search and Rescue Aircraft Contract* outlined that Australian Maritime Safety Authority's (AMSA) approach involved search and rescue units being established progressively with the entry into service dates for the aircraft at each base aligning with the relevant establishment dates (see p. 25).

⁴⁵ The Reims F406 aircraft did not require installation of the SIM (see paragraph 3.17).

• shortfalls or delays in the provision of the specified assets, and how those shortfalls or delays have been managed.

Have the specified assets been provided?

Not all specified assets have been provided as originally contracted. While four bases have been established and maintained, there was an eight month delay in establishing the fourth base. While twelve aircraft have been provided, there were delays to the modification program that meant four fully compliant aircraft were not available at the commencement of services, and there was also a 23 month delay in the provision of the SIM required for the acceptance of the full surveillance system. At the commencement of services on 1 January 2008, the full contingent of aircrew was not provided, with only 17 aircrews out of the required total of 26 available, a shortfall of 35 per cent.

Bases

3.3 When it was entered into, the contract required that aerial surveillance bases be established⁴⁶ and maintained in four locations: Cairns, Darwin, Broome and Horn Island.

3.4 Not all bases were established as contracted at the commencement of services in January 2008. Bases were established in Cairns, Darwin and Broome. Negotiations to replace the requirement for a Horn Island base with a base at Weipa commenced in August 2007 and had not been resolved at the time services commenced under the contract.⁴⁷ The contract was not varied to reflect the change in requirements until August 2008, eight months after the commencement of services.

3.5 Less than three years later, in June 2011, the contract was again varied to replace Weipa as a base (with Horn Island) and as a result, the contract now requires that, in addition to bases at Cairns, Darwin and Broome, a 'Resourced Deployment Base' be maintained at Horn Island. A 'Resourced Deployment Base' means a deployed location operated as a satellite operation from a 'home' base (that is, Cairns, Darwin or Broome), where the aircrew are 'domiciled' at the home base and deployed on operations to the 'Resourced Deployment Base'.

Aircraft

Dash–8 aircraft

3.6 From its commencement, the contract required Surveillance Australia to acquire ten Bombardier Dash–8 aircraft, to deliver aerial surveillance services. The ten aircraft are comprised of six Dash–8 202 and four Dash–8 315. The Dash–8 315 were selected with the intent to offer missions of longer endurance (up to 13 hours) than the Dash–8 202 aircraft.

⁴⁶ Under the prior contract the bases were at Cairns, Darwin and Broome.

⁴⁷ The Department of Home Affairs (Home Affairs) wrote to Surveillance Australia in August 2007 to confirm that there would be an ongoing requirement for surveillance coverage of the Gulf of Carpentaria and that this requirement could be supported equally by having a base at Horn Island (as contracted) or at Weipa.

3.7 The aircraft are required to be fitted with a range of equipment including radars, communications systems and SIM equipment.⁴⁸

3.8 Surveillance Australia transferred five Dash–8 202 aircraft to service from the previous maritime surveillance contract and acquired an additional five aircraft (one Dash–8 202 and four Dash 8–315).⁴⁹ Three of the four Dash 8–315 aircraft were new assets acquired under a leasing arrangement.

3.9 Modifications to the aircraft were conducted in two stages:

- Stage 1 modifications required for the 'handover date' configuration were completed in Adelaide and included the installation of the electro-optical system, radar system, racks and consoles and console equipment, and a radio and communications system. These modifications were made to the aircraft between March 2006 and March 2008; and
- Stage 2 modifications required for the 'SIM delivery date'⁵⁰ configuration were also completed in Adelaide and involved the integration of the SIM with the aircraft systems and sensors. These modifications were made to the aircraft between November 2008 and June 2010.

3.10 The contract requires all ten Dash–8 aircraft to be fully compliant with the handover date configuration, which consists of all Sentinel mission equipment except for the SIM, and to be delivered at the handover date of 1 January 2008 specified in the contract. The SIM delivery date configuration consists of the handover date configuration plus the SIM, to be delivered at the SIM delivery date of 7 June 2010 as defined in the SIM contract variation approved in December 2006.

3.11 While services commenced in line with the contracted handover date of 1 January 2008, there were two contractual non-compliances related to the provision of aircraft:

- one of the Dash–8 315 aircraft was not available to deliver services due to delays in completing the modifications; and
- the three other Dash–8 315 aircraft were not compliant with the 'handover configuration' as the long range fuel tanks were not installed as contracted. This reduced the capability of the aircraft, in particular its ability to perform longer-endurance surveillance missions (see further at paragraphs 4.18 to 4.21).

3.12 Surveillance Australia had in place a test and evaluation plan which detailed the approach and activities for acceptance testing for each of the aircraft. Home Affairs has not retained sufficient records regarding its acceptance of all ten aircraft. While test and evaluation documentation was able to be located for all ten aircraft, Home Affairs has not retained the acceptance certificates for all aircraft in the 'handover' configuration. Departmental records included six of the ten aircraft acceptance certificates.

⁴⁸ The SIM integrates information from aircraft surveillance sensors and communications systems on-board aircraft, and links the aerial surveillance assets to the Australian Border Operations Centre and other command posts.

⁴⁹ Surveillance Australia acquired one used Dash 8–315 aircraft and one used Dash–8 202 aircraft from National Jet Systems.

⁵⁰ The original contract included a 'full service delivery date' configuration. This milestone was replaced by the SIM contract variation.

SIM delay

3.13 As discussed in Chapter 2, the commencement of full service delivery on 1 July 2008 was dependent on submission of a SIM Contract Change Proposal (CCP) by 31 March 2006. As indicated in Table 3.1, ongoing contract negotiations⁵¹ between Home Affairs and Surveillance Australia resulted in delayed signature of the SIM contract variation by around six months.

Contractual milestone	Original contracted date	Date of achievement	Length of delay
SIM CCP submission	31 March 2006	20 October 2006	~6 months
SIM CCP agreement	31 May 2006	23 December 2006	~6 months
Commencement of services excluding SIM	1 January 2008	1 January 2008	No delay
Full Service Delivery ^a	1 July 2008	8 June 2010	~23 months

Table 3.1:	Chronology of SIM delays
------------	--------------------------

Note a: This milestone changed to 'SIM delivery date' on 18 December 2006, as part of the SIM contract variation. Source: ANAO analysis of departmental records.

3.14 The aerial component of the SIM was progressively installed in each aircraft throughout 2009 and 2010. Completion of modifications was delayed on all aircraft due to difficulties with development of the SIM software.⁵² For example, acceptance of the first aircraft occurred eight months later compared to the schedule attached to the SIM contract variation.

3.15 Following acceptance of all ten aircraft in Stage 2 configuration by June 2010, acceptance of the surveillance service, including the SIM, was achieved on 8 June 2010. The acceptance certificate listed deficiencies with the SIM software, which were resolved by Surveillance Australia by early 2011.

Additional assets — Reims F406 aircraft

3.16 Following a May 2009 Budget measure for increased aerial surveillance of Australia's northern waters, the department approved a contract variation for additional surveillance services in July 2009 to introduce two Reims F406 aircraft and two additional crews to provide 2,000 surveillance hours per annum for an initial two year period at an estimated cost of \$16.5 million. The Reims F406 aircraft were on contract to the department prior to the current contract with Surveillance Australia, and to cover shortfalls in the delivery of the surveillance service from January to April 2008 (discussed further at paragraph 3.31). In parallel with the negotiations for the contract variation, the two Reims F406 aircraft were contracted under a charter agreement.

3.17 The Reims F406 aircraft were not part of the original tender process or the original awarded contract. The procurement for the services was a direct source approach to Surveillance Australia on the basis that the Sentinel contract allowed for additional services. The aircraft were equipped with a search radar (of lesser range than the Dash–8) and a compatible communications suite to the Dash–8, but did not include the SIM. The capability of the Reims F406 when compared to the

Auditor-General Report No.6 2021–22

⁵¹ The tendered SIM solution offered by Surveillance Australia was to be provided by an alternate company.

⁵² The department's records indicate that manual mission records were being used prior to the installation of the SIM on the aircraft.

Management of the Civil Maritime Surveillance Services Contract

Dash–8 was lesser such that the department agreed that one hour of Reims F406 surveillance was equal to 0.75 Dash–8 hours.

3.18 The F406 Service Level Agreement was extended on three more occasions despite not meeting performance requirements (see further at paragraph 4.47) by subsequent contract variations following further budget measures, with services concluding on 30 June 2015 at an additional estimated cost of \$32.2 million when the contract variations were entered into. The extent to which the contracted Rate of Effort (RoE) was achieved is examined in Chapter 4, paragraphs 4.9 to 4.13.

Aircrew

3.19 The contract also specifies the number and composition⁵³ of the aircrew. Specifically, at commencement of the contract, Surveillance Australia was to provide and maintain 26 qualified aircrew⁵⁴ to deliver the surveillance services at the contracted annual RoE of 13,613 hours. At the commencement of services on 1 January 2008, the full contingent of aircrew was not provided, with only 17 qualified aircrew out of the required total of 26 available, a shortfall of 35 per cent. This shortfall, along with the non-compliances relating to the aircraft highlighted in paragraph 3.11, triggered the contract liquidated damages regime. The department's management of these shortfalls is addressed in paragraphs 3.22 to 3.47.

3.20 In July 2014, in response to a request from AMSA for information to assist with its procurement process for the search and rescue aircraft contract, Home Affairs advised that:

The numbers of crew required to conduct different annual flying rates is defined within the Contract. This has been a source of continuing tensions as the actual numbers of crew, as defined in the Contract, has not been provided. Soon after the commencement of the contract, *[Surveillance Australia]*, like most operators globally, were faced with a pilot shortage and implemented an expensive Pilot Retention Bonus system. *[Home Affairs]* and the Service Provider encountered higher than normal tensions with the manner and duration of this bonus. Currently *[Surveillance Australia]* rely on using some of their 'Management' crews to supplement the protracted low operational crew numbers. This reduced numbers of available crews occasionally manifests itself with "lost" or abbreviated missions due personal crew duty limits or insufficient reserve crews to permit short notice crew cancellations.

3.21 The contractually specified number of qualified aircrew has varied to reflect changes to the contracted annual RoE. As noted at paragraph 2.19 the contract was varied in October 2008 to increase the annual RoE to 15,000 hours, which required an additional two crew to be provided taking the contract requirement to a total of 28 qualified aircrew. ⁵⁵ As outlined in paragraph 3.16, the introduction of additional services under the contract using two Reims F406 aircraft required an additional two aircrew, increasing the total to 30 qualified aircrew for the period of 1 July 2009 to 30 June 2015. The extent to which the aircrew requirements have been provided over the term of the contract is addressed in Chapter 4, paragraphs 4.28 to 4.42.

⁵³ The composition comprises: pilots in command (captain); co-pilots; mission coordinators and observers.

⁵⁴ The contract contains different qualification requirements for pilots, observers and support personnel. For example, pilot qualifications include an Air Transport Pilot; 2000 hours total pilot; 1000 hours in command fixed; 100 hours night flying experience; 100 hours turbine fixed wing experience and five command instrument renewals. If aircrew meet the contracted requirements, they are considered to be 'qualified'.

⁵⁵ The aircrew requirements have never been met, as discussed further in Chapter 4, paragraphs 4.28 to 4.42.

How has the department managed any shortfalls in the provision of the surveillance assets?

Home Affairs did not effectively manage shortfalls of surveillance assets through the contractual framework. Home Affairs approved contract variations and made additional concessions which reduced Surveillance Australia's exposure to penalties available under the original contractual framework.

3.22 The ANAO's recent audit⁵⁶ of AMSA's management of its contract for search and rescue aircraft outlined an initial delay in the provision of the contracted search and rescue units including the acceptance into service of the aircraft and that AMSA managed those delays through the contractual framework. Specifically, AMSA did not pay the standing charge for the bases and aircraft until they had been accepted into service and, once it started paying the charge, paid at a reduced rate until the remaining deficiencies had been addressed.

3.23 Home Affairs advised the ANAO in July 2021 that:

The Department does not agree with the overall comparison between the Department's Surveillance Australia Contract with Cobham and the AMSA Search and Rescue Contract with Cobham. There are significant differences between the two Services, for example:

- length of time since commencement of the Contracts (15 years versus 6 years), e.g. ten variations over six years for AMSA (1.7 p.a.), versus 41 variations over 15 years for ABF (2.7 p.a.);
- differing Service requirements (different outcomes, primarily planned surveillance versus emergency response driven, differing operational context)
- different fleet (aircraft and size), and base locations (primarily regionally based versus metropolitan based); and
- lessons learned from Department shared to support AMSA contract development.

Commencement of services

3.24 As outlined at paragraph 3.11, the surveillance services commenced under the contract at the 1 January 2008 handover date with contractual non-compliances relating to the provision of aircraft and qualified aircrew.⁵⁷ In particular, one of the Dash–8 315 aircraft was not provided until 23 March 2008, while the remaining three Dash–8 315s required long range fuel tanks to be retrofitted as part of subsequent maintenance programs to be fully compliant with the contract.

3.25 Home Affairs was not liable to pay Surveillance Australia the monthly service charge⁵⁸ until the issue of an acceptance certificate that the service provider was providing the entire surveillance

⁵⁶ Auditor-General Report No.27 2020–21 *Management of the Search and Rescue Contract* pp. 27-28.

⁵⁷ By way of comparison, Auditor-General Report No.27 2020–21 *Management of the Search and Rescue Aircraft Contract* found that AMSA amended the contracted delivery dates, rather than accept a partial service, which meant that AMSA did not start paying the contracted monthly standing charge for the aircraft until each base and aircraft had been accepted into service (see page 27 of that audit report).

⁵⁸ The monthly service charge is comprised of a fixed charge, an hourly charge which covers all variable charges including fuel, and reimbursable expenses which includes landing and navigation charges, and meal allowances (refer to paragraph 2.8 for more information).

service (with the exception of the SIM).⁵⁹ Only six of the ten aircraft were fully compliant with the contracted handover configuration and the full contingent of crew was not provided. While Home Affairs did not issue an acceptance certificate for the surveillance service at handover, it commenced payments to Surveillance Australia at the full amount available (\$4.5 million per month).⁶⁰ This included:

- payment of the fixed component of the monthly service charge for the Dash–8 315 aircraft that was not available for almost all of the first three months of service delivery, which amounted to \$1.4 million; and
- payment of the full fixed component of the monthly service charge for the three remaining non-compliant Dash–8 315 from the handover date, despite the reduction in capability. At commencement the fixed component of the service charge for the Dash–8 315 was 27 per cent greater than the Dash–8 202.

3.26 In addition, a proportion (estimated at 37 per cent) of the fixed component of the service charge is based on the provision of the contracted number of qualified aircrew. Due to the anticipated shortfall in qualified aircrew, in December 2007, the Governance Board overseeing the implementation of the Sentinel project noted that Home Affairs would be required to 'negotiate lesser payments to Surveillance Australia consistent with the reduced capability, in addition to any liquidated damages that may arise.' Despite this direction, Home Affairs paid the full fixed component of the service charge. In effect, Home Affairs paid for a capability that was not being provided.

3.27 The shortfalls in aircraft and qualified aircrew at the handover date triggered the contract liquidated damages regime, which covered the first six months of service delivery before the performance measurement system came into effect from 1 July 2008 (see Chapter 4, paragraph 4.45).⁶¹

3.28 Liquidated damages apply if full service is not delivered for the period 1 January 2008 to 30 June 2008. The original contract contained two different liquidated damages provisions:

- from 1 January 2008 to 31 March 2008, liquidated damages apply at the percentage of actual RoE compared to planned RoE, multiplied by \$100,000 per day;⁶² and
- from 1 April 2008 to 30 June 2008, liquidated damages apply at a flat rate of \$100,000 per day.

3.29 In December 2007, Home Affairs agreed to implement a contract variation (CCP0018) to amend the liquidated damages regime. This effectively removed the 1 April 2008 to 30 June 2008 regime to reflect the arrangements that apply from 1 January 2008 to 31 March 2008 and thereby

⁵⁹ Home Affairs legal advice stated that the provisions in the contract made it clear that the entire surveillance service was required before the department was obligated to pay the relevant charges.

⁶⁰ By way of comparison, Auditor-General Report No.27 2020–21 *Management of the Search and Rescue Aircraft Contract* found that the monthly standing charges that were paid were reduced to reflect the reduced capability provided at the commencement of services until contractual non-compliances and deficiencies were remediated to AMSA's satisfaction (see pages 27 and 28 of that audit report).

⁶¹ While it was not used to calculate deductions, the performance measurement system was used to measure performance in the first six months of service delivery.

⁶² To be calculated as the percentage of the full RoE (as agreed in the monthly deployment plan) less the actual RoE, multiplied by \$100,000 per day (the number of days in the applicable month). If the actual RoE achieved is less than 50 per cent then \$100,000 per day applies.

removing Surveillance Australia's exposure to the flat \$100,000 per day. Under that regime, Surveillance Australia would have been exposed to \$9 million in liquidated damages for failure to provide the contracted number of qualified aircrew.⁶³ In return for this concession, Home Affairs was to receive 'offsets' which allowed 'increased planning flexibility', including the opportunity to plan each month to 110 per cent of the proportional annual RoE from 1 January 2009.

3.30 Negotiations between Home Affairs and Surveillance Australia regarding how liquidated damages would be applied continued into February 2008 when it was agreed that liquidated damages would apply if the achieved RoE fell below a threshold of 95 per cent of the planned RoE, measured retrospectively for each month. Formal correspondence between Home Affairs and Surveillance Australia highlighted that this agreement occurred after the respective 'teams have undertaken a significant amount of work in trying to reach a suitable outcome for us all'.

3.31 To 'mitigate' Surveillance Australia's exposure to liquidated damages and assist it in meeting the planned RoE during the liquidated damages period, Home Affairs agreed to:

- plan missions taking into consideration Surveillance Australia's ability to perform the missions;⁶⁴
- credit all missions that are completed as tasked with:
 - six hours, or the planned flight time, if this is above six hours⁶⁵; or
 - the actual hours flown where the hours flown are greater than six hours;
- enable Surveillance Australia to fill the shortfall of aircraft by using the Reims F406 aircraft to deliver surveillance services between 1 January 2008 and 31 March 2008; and
- enable Surveillance Australia to fill the shortfall of aircrew by using pilots not trained for the purposes of this contract.

3.32 Home Affairs anticipated that without 'mitigations', achievement of the planned RoE was likely to be in the region of 76 per cent to 88 per cent during January to June 2008. A summary of performance during the period covered by the liquidated damages regime is presented in Table 3.2.

Auditor-General Report No.6 2021–22 Management of the Civil Maritime Surveillance Services Contract

⁶³ By contrast, the total performance deductions applied under the performance measurement system since 1 July 2008 to date is \$2.3 million.

⁶⁴ Formal correspondence from Home Affairs to Surveillance Australia acknowledged that the monthly deployment plan for January 2008 had been tailored to accommodate Surveillance Australia's crewing numbers rather than the department's actual operational imperatives.

For example, if the actual flight time for a completed mission was 5.8 hours and the planned mission time was 6.2 hours, the mission would be credited with an 'adjusted' time of 6.2 hours.

	Planned rate of effort (hours)	Actual rate of effort (hours)	Actual vs planned	Overall Contract Performance score	Liquidated damages applied?
January 2008	1103	1059	96%	78.99	×
February 2008	1146	1015	89%	66.75	×
March 2008	1139	1007	88%	81.54	\checkmark
April 2008	1141	1055	93%	80.18	×
May 2008	1120	1094	98%	80.57	×
June 2008	1142	1086	95%	88.25	×

Table 3.2:Contractor performance under the liquidated damages regime1 January 2008 to 30 June 2008

Source: ANAO analysis of departmental records.

3.33 Table 3.2 highlights the percentage of the actual RoE against the planned RoE before Home Affairs applied adjustments to actual flight times of less than six hour duration as described in paragraph 3.31. There were shortfalls against the 95 per cent on three occasions (February, March and April).

3.34 In April 2008, further adjustments to how liquidated damages would be calculated were agreed. Instead of the actual planned RoE agreed in the monthly deployment plans, Home Affairs agreed the average monthly contracted RoE would be used to establish the monthly liquidated damages threshold.

3.35 ANAO analysis of Home Affairs records indicates that an amount of \$168,640 of liquidated damages was paid by Surveillance Australia in March 2008. This is the only identified occurrence of Home Affairs electing to apply liquidated damages during the period from 1 January 2008 to 30 June 2008. While Home Affairs has not retained records of all adjustments to the calculated percentages for each month, the ANAO identified a further instance of where liquidated damages should have also applied based on the records available. The unadjusted shortfall against the 95 per cent threshold for February 2008 was six per cent. After Home Affairs adjusted the actual RoE by up-scoring missions completed in less than six hours, the shortfall was reduced to four per cent, resulting in potential application of liquidated damages of \$116,000.⁶⁶ A record of the decision to not apply liquidated damages has not been retained. Home Affairs has also not retained a record of the effect of the adjustments on the April 2008 shortfall, but liquidated damages were not applied.

⁶⁶ Without the adjustments applying the mitigation factors described in paragraph 3.31 of crediting missions as six hours or more for all missions completed in less than six hours, liquidated damages of \$188,500 would have applied.

3.36 The Overall Contract Performance (OCP)⁶⁷ scores highlight the extent to which mitigations were applied to assist Surveillance Australia in achieving the RoE and avoid liquidated damages. While the performance measurement system was not in effect for the first six months of service delivery for the purpose of applying performance deductions, it was used in this period to measure contractor performance. Table 3.2 above illustrated that the OCP scores for the first six months were all well below the 90 per cent threshold, under which performance deductions under the PMS regime would apply. The average shortfall against the threshold was 10.6 per cent.

3.37 The 'entire surveillance service (with the exception of the SIM)' required by the contract was not provided at the conclusion of the liquidated damages period. While the contractual non-compliances related to the aircraft were resolved during the liquidated damages period, the provision of qualified aircrew remained an ongoing issue after 1 July 2008.

3.38 Negotiations around the contracted number and resource distribution of bases also continued past the six month liquidated damages period. To assist Surveillance Australia with meeting its contractual obligations in relation to establishing the contracted number of bases and resource distribution, the department:

- considered purchasing accommodation in Weipa to lease to Surveillance Australia;
- agreed to Surveillance Australia's 'Broome Manning Proposal', in September 2007, which reallocated some of the contractually required Broome-based resources (one of the three aircraft, and a maximum of five crews) to Darwin. At the handover date, only one aircraft was positioned in Broome with the second aircraft moved to Broome after 1 July 2008;
- agreed to a one off 'fly in, fly out' cost for a six month period for the Broome base of \$244,000 in July 2009;
- agreed to lease three of its residential properties in Broome to Surveillance Australia from 1 July 2009 to assist with attracting aircrew to Broome in order to complete the services required under the contract. The rent payable⁶⁸ for each of the properties was:
 - Up to 28 October 2009: \$34 per week;
 - From 29 October 2009: \$35 per week;

The properties were returned to Home Affairs on 14 October 2016; and

- approved a contract variation in April 2010 to introduce base specific arrangements for Weipa and Broome, including:
 - increases to the annual fixed charges of \$795,980 (indexed) from 1 October 2009 to 30 June 2011 to support deployments to Weipa;
 - increases to the annual fixed charge of \$222,000 (indexed) per annum from 1 September 2009 for the remaining term of the contract to support operations from Broome.⁶⁹

⁶⁷ The OCP score for a month is calculated by averaging the overall mission performance scores for all missions within the monthly deployment plan for that month. The assessment of contractor performance is discussed further in Chapter 4, paragraphs 4.44 to 4.54.

⁶⁸ The rent payable was based upon the rent paid by Home Affairs staff under their Enterprise Agreement.

⁶⁹ This replaced the 'fly-in-fly-out' Broome Base payment agreed under a previous contract variation.

3.39 These additional payments contributed to the increase in the contract value above the original Finance Minister's authorisation (discussed in paragraph 2.6).

Management of SIM delays

3.40 Home Affairs agreed to cost and schedule concessions to ensure delivery of a full SIM capability. In particular, as previously illustrated in Table 3.1, Home Affairs agreed to delay full service delivery by 23 months from July 2008 to June 2010. The cost of the SIM offered by the selected contractor was around \$1.6 million per annum above the annual 'not to exceed price' stipulated in the original contract. On 12 December 2006, the Finance Minister authorised an additional \$10.1 million to increase the value of the contract to reflect the increased cost of the SIM.⁷⁰

3.41 The first SIM modified aircraft was accepted eight months later compared to the schedule attached to the SIM contract variation. Home Affairs was not liable to pay Surveillance Australia for the SIM until acceptance of the first SIM modified aircraft. Nevertheless, Home Affairs agreed to amend the contract to commence payments for the SIM prior to the acceptance of the first aircraft.

3.42 Home Affairs has not retained all invoice records for the SIM payments prior to July 2013. ANAO analysis of Home Affairs records indicates that \$4.2 million was paid for the SIM prior to the acceptance of the first SIM-modified aircraft in July 2009.

SIM unserviceability

3.43 The contract also established a penalty framework to deal with unavailability⁷¹ of the SIM Ground (SIM-G) component. Surveillance Australia was liable to pay \$1,000 per hour of unavailability of the system. Home Affairs was entitled to deduct the amount owing to it from the monthly service charge.

3.44 There were two instances of SIM-G unavailability in early 2011, including:

- between 21 and 25 January 2011, where mission briefs could be sent to the aircraft, but no mission data could be displayed by SIM-G users. The debt calculated as owing to the department was \$87,296.48; and
- on 30 May 2011, the SIM-G node was unavailable for 24 hours as a result of the implementation of a software update, causing nine missions to be delayed. The debt calculated as owing to the department was \$23,000.00.

3.45 Home Affairs advised Surveillance Australia of its intent to deduct \$110,296 from the monthly service charge in written correspondence. These claims prompted a negotiation with Surveillance Australia regarding the appropriateness of the debt-recovery clauses in the contract. Surveillance Australia claimed that it was exposed to 'high levels of penalty for a situation beyond

⁷⁰ In his authorisation, the Finance Minister advised that his authorisation did not remove the responsibility on the authorised officials approving the spending proposal to satisfy the requirements for the expenditure of public money (which related to undertaking reasonable inquiries to be satisfied that the spending proposal was an effective, efficient and ethical use of public money). Home Affairs has not retained evidence of approval of the spending proposal prior to entering into the contract variation.

⁷¹ The SIM-G component is considered available if it is fully functioning according to its specifications in Home Affairs' production environment.

their reasonable control' due to the subcontracted SIM provider's inability to access the SIM-G interface, which impacts Surveillance Australia's ability to rectify unavailability of the SIM.

3.46 In July 2012, Home Affairs and Surveillance Australia amended the contract, including the penalty clauses in the contract. Under the new provisions, Home Affairs is entitled to recover money in the event of SIM-G unavailability if Surveillance Australia fails to rectify the problem within 12 hours, rather than immediately upon notification of the unavailability. Home Affairs described this change as a 'more sophisticated approach' to the management of SIM unserviceability, which would lead to better outcomes for both parties in the contract variation.

3.47 Surveillance Australia also conducted remedial work to improve the SIM-G systems during this period, including acquisition of a standby server, backup server and spare parts. Home Affairs agreed to contribute to the remedial works, paying an additional \$60,511 as an offset to Surveillance Australia's costs.

Recommendation no. 1

3.48 In developing and managing the next surveillance services contract, the Department of Home Affairs adopt an approach that involves not paying charges for the bases and aircraft until they have been accepted into service and, once it has started paying charges, paying at a reduced rate until any remaining deficiencies are addressed.

Department of Home Affairs response: Agreed.

3.49 In developing and managing the next surveillance services contract, the Department of Home Affairs will adopt an approach that involves not paying charges for the bases and aircraft until they have been acceptedinto service. If once accepted into service, deficiencies are identified, then paying at a reduced rate until deficiencies are addressed.

4. Have the specified surveillance services been provided?

Areas examined

This chapter examines whether the Department of Home Affairs (Home Affairs) has received the surveillance services as required under the contract, whether aircrew requirements were met and whether the services have been provided to the contracted level of performance.

Conclusion

Home Affairs has not received the required quantum of surveillance services and the aircrew requirements have not been met. Under the contracted performance framework, Home Affairs has calculated that Overall Contract Performance (OCP) has met the specified 90 per cent threshold for 92 per cent of the period from 1 January 2008 to 31 December 2020. In contrast to this high level of calculated performance:

- the contracted Rate of Effort (RoE) in terms of hours flown has not been achieved in any year and has fallen short by an average of seven per cent each year;
- of the total missions planned, 25 per cent have only been partially completed and a further 11 per cent have been cancelled or aborted; and
- aircrew requirements have never been met with the number of aircrew on average each month 33 per cent below that contracted (where data is available for analysis).

Areas for improvement

For the future civil maritime surveillance services contract, the ANAO has made three recommendations relating to the department:

- where it sets requirements for aircrew linking that requirement to the performance measurement system;
- using an appropriate information technology system that links data on operational activities with contractual performance requirements and has appropriate automation and controls; and
- implementing stronger assurance arrangements for monitoring of mission performance.

The development and management by the Australian Maritime Safety Authority (AMSA) of its contract for search and rescue aircraft services with a contractor that is a subsidiary of the same parent company as Surveillance Australia Pty Ltd (Surveillance Australia), demonstrates that these improvements are able to be made (see Auditor-General Report No. 27 2020–21). AMSA's approach was informed by Home Affairs' experience at the time of the AMSA procurement and, similarly, Home Affairs should now look to benefit from AMSA's experience.

More broadly, there would be benefits in Home Affairs engaging with AMSA to seek to develop a contractual framework that better links calculations of overall performance to the provision of surveillance assets, conduct of missions and provision of qualified aircrew.

4.1 To assess whether the specified surveillance services have been received by Home Affairs, the ANAO examined:

- whether the contracted surveillance services have been provided;
- whether aircrew requirements have been met;
- the extent to which the service performance threshold specified in the contract has been calculated to have been met; and
- how Home Affairs has managed any shortfalls in the services that have been provided.

4.2 The analysis was made difficult by the state of the department's records of its management of the contract, including significant gaps in data on aircrew numbers. The analysis of contract performance was also made difficult by the quality of the data and the apparent disconnect between key aspects of the contracted service level agreement and the OCP calculation. Data quality concerns identified by the ANAO include:

- instances of mismatches between flying hours invoiced and flying hours recorded in base data;
- instances of mismatches of the quantum of missions and missions scores between the OCP calculation and base data;
- mission records that are incorrect, haven't been updated, or are incomplete; and
- inconsistent processes in place through the use of free text to input important context for mission data.

4.3 Home Affairs has not performed quality assurance checks over the base data contained in the Geospatial Data Mart (GDM) Reporting and Operations Command (GROC) system⁷² since the system was implemented in July 2011. ANAO identified and raised some data quality concerns with Home Affairs throughout the audit and as a result Home Affairs corrected the base data records.

4.4 Home Affairs was not liable to pay any service charge or monthly reimbursable expenses until it accepted the full surveillance service (with the exception of the surveillance information management system (SIM)). Home Affairs paid the full service charge from 1 January 2008, and has continued to pay the full service charge throughout the term of the contract.⁷³

Auditor-General Report No.6 2021–22

⁷² GROC is the primary system used by Maritime Border Command (MBC) to monitor and manage surveillance mission data passed through from the surveillance assets. It holds both operational and contract management data.

⁷³ By way of comparison, Auditor-General Report No.27 2020–21 *Management of the Search and Rescue Aircraft Contract* (page 37) found that the quantum of the monthly standing charge that is paid by AMSA is determined by performance against the contracted KPIs.

Have the surveillance services been provided?

Home Affairs has not been obtaining the full quantum of surveillance services it contracted to receive. The contracted annual RoE in terms of hours flown has not been achieved in any year, falling short by seven per cent on average. In addition, while 64 per cent of the total missions planned have been fully completed as briefed, a significant proportion have not with 25 per cent of missions partially completed and 11 per cent cancelled or aborted. Further, while the surveillance services have been undertaken seven days a week as intended, night missions have reduced significantly over time, long range missions are not being conducted and it has been more than nine years since any reserve missions have been planned or conducted.⁷⁴

4.5 The Request for Tender (RFT) documentation issued by Home Affairs that led to the contract being awarded to Surveillance Australia outlined that:

The Service Provider will be required to achieve a defined Rate of Effort (RoE) each year (Annual Planned RoE), distributed over the year on a pro-rata basis. However, the level of Services to be provided in any month may vary by up to ten percent (10%) above or below the pro-rata amount.

4.6 Consistent with the RFT, the service level agreement included in the signed contract includes a requirement that Surveillance Australia 'deliver the Annual Planned Rate of Effort' (subject to not being required to undertake more than a specified number of missions each year—see paragraph 4.14 and Figure 4.4). Also consistent with the RFT, the service level agreement included in the contract provides that the annual RoE is distributed across the year on a monthly pro-rata basis (that is, it is calculated as the annual RoE divided by 12) and provides flexibility by permitting the actual RoE in any month to be up to five per cent above, or 10 per cent below, the monthly pro-rata figure.

4.7 Table 4.1 outlines the annual RoE requirement included in the service level agreement at different periods of time over the life of the contract. The contract currently requires that Surveillance Australia achieve an annual RoE of 15,000 hours, with the proviso that it not be required to undertake any more than 2500 missions each year to achieve that RoE. In addition to the overall RoE requirement included in the service level agreement, the contract required that Surveillance Australia provide late night missions, long range missions; and reserve missions.

Period	Annual RoE	No. of aircraft	No. of qualified aircrew
1 January 2008 to 30 September 2008	13,613 hours	10	26
1 October 2008 to 30 June 2009	15,000 hours	10	28
1 July 2009 to 30 June 2015	17,000 hours	12	30
1 July 2015 to 31 December 2021	15,000 hours	10	28

Table 4.1: Key contract requirements and annual RoE over the life of the contract

Source: ANAO analysis of Home Affairs records.

74 Under the contract, a reserve mission gives Home Affairs the ability to conduct a discretionary mission each day during hours of otherwise low activity.

4.8 The calculation of the funding provided for the Surveillance Australia contract has been based on an annual RoE of 15,000 hours, with additional funding provided for an additional 2,000 hours during the Reims period from 2009 to 2015 plus an additional 215 Dash 8 'surge' hours⁷⁵ from 2009 to 2014.

Rate of effort

4.9 Figure 4.1 illustrates that the contracted annual RoE has not been achieved in any year of the contract to 30 June 2021. Up until 30 June 2021, the aggregate shortfall has been 14,256 hours, which is close to one full year of effort. On average, the shortfall each year has been 1018 hours, or 7 per cent. The most significant shortfalls occurred from 2010–11 to 2014–15 during the period the Reims F406 aircraft were in service and the annual contracted RoE was increased to 17,000 hours.⁷⁶ In 2011–12, the RoE fell below 15,000 hours, the contracted annual RoE prior to introduction of the Reims F406 service.

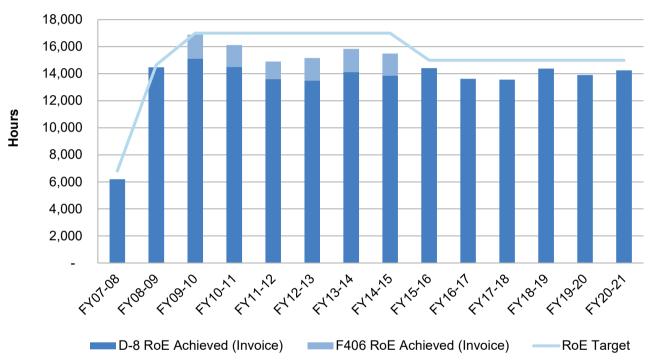


Figure 4.1: Total RoE achieved versus target

Source: ANAO analysis of Home Affairs records.

4.10 The Reims F406 service was withdrawn at the end of 2014–15 with a corresponding reduction in the contracted RoE back to 15,000 hours. This RoE benchmark of 15,000 hours has not been met in any year it has applied. The lowest RoE achieved was in 2017–18 (13,561 hours), which was below the original contracted annual RoE of 13,613 and significantly below the then applicable contracted RoE of 15,000 hours. While moderate increases off this low point have occurred in subsequent years, reflecting the contractual arrangements put in place Home Affairs has continued

Auditor-General Report No.6 2021–22 Management of the Civil Maritime Surveillance Services Contract

⁷⁵ In contrast to the 2,000 Reims F406 hours, and notwithstanding that funding was provided through the Budget for the 215 Dash 8 'surge' hours, those 215 hours were not included as a contractual requirement by way of a variation to the contract.

⁷⁶ While the contracted RoE was increased by 2,000 hours the actual hours flown by the Reims F406 ranged from a high of 1,762 in the first year to a low of 1,299 in 2011-12.

to pay the full fixed component of the service charge based on the contracted RoE of 15,000 hours, notwithstanding that the annual contracted RoE has not been achieved in any year.

- 4.11 In addition, as illustrated by Figure 4.2 below, the Dash–8 service:
- on five occasions exceeded the maximum monthly planning threshold allowable under the contract;⁷⁷ and
- on 35 occasions was below the minimum monthly planning threshold under the contract.⁷⁸

⁷⁷ The maximum and minimum planning thresholds allow for planning flexibility on a monthly basis, without exceeding the contracted maximum annual RoE. The contract allows for a maximum planning threshold of five per cent above the monthly average RoE.

⁷⁸ The contract allows for a minimum planning threshold of 10 per cent below the monthly average RoE.

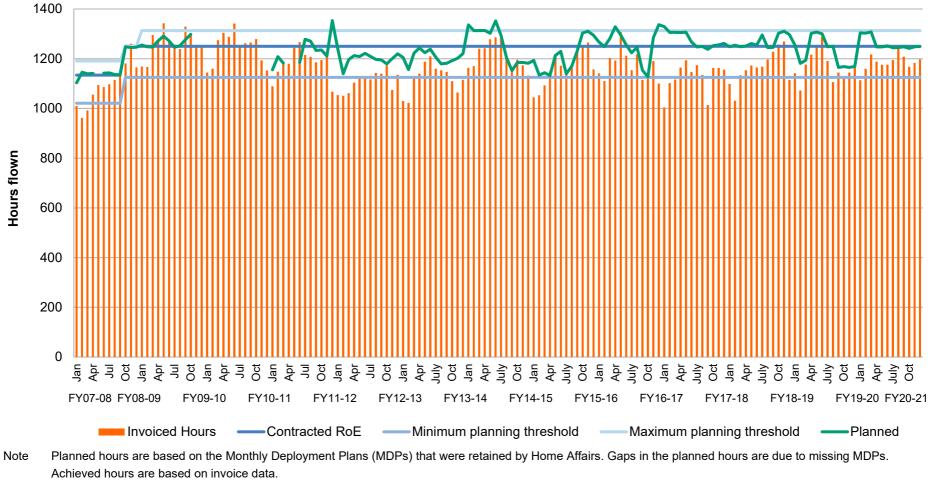
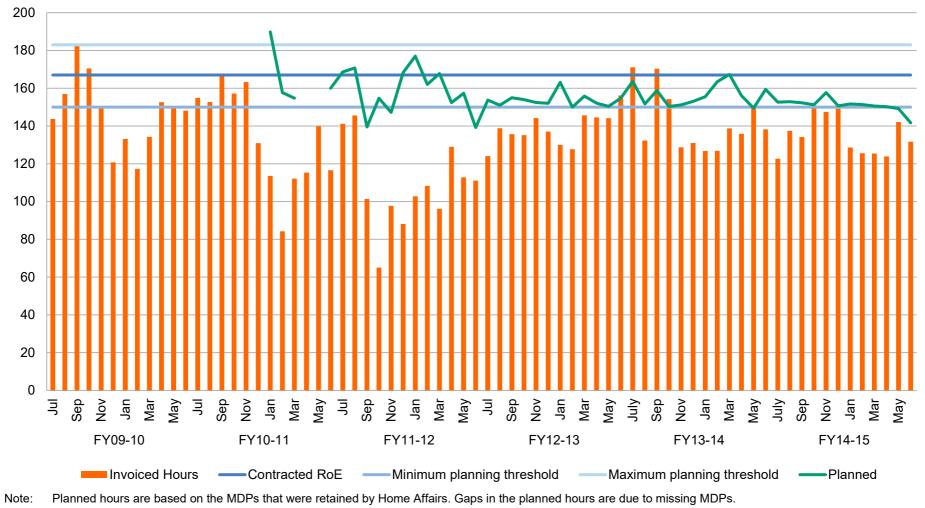


Figure 4.2: Dash–8 planned versus achieved RoE

Between 1 January 2008 and 31 March 2008, Home Affairs agreed to fill the shortfall of Dash–8 aircraft by using the Reims F406 aircraft to deliver surveillance services. This graph includes those hours.

Source: ANAO analysis of Home Affairs records.





Achieved hours are based on invoice data.

Source: ANAO analysis of Home Affairs records.

- 4.12 Figure 4.3 above illustrates that, the Reims F406 service:
- on one out of 72 months (1.4 per cent), exceeded the maximum monthly planning threshold allowable under the contract; and
- on 57 out of 72 months (79 per cent), was below the minimum monthly planning threshold under the contract.

4.13 For a consecutive period of 32 months, between November 2010 and July 2013, the Reims F406 service did not achieve the pro-rata monthly RoE. In October 2011, the RoE fell as low as 64 hours, compared to the pro-rata monthly RoE of 167 hours. The monthly performance deductions for the service were \$25,448, compared to a total price for the service of \$45.2 million.

Missions

4.14 From January 2008 to December 2020 there were 35,193 missions planned. There has been a total of 31,794 missions flown⁷⁹ with 64 per cent of planned missions fully completed as briefed, 25 per cent of missions partially completed and 11 per cent cancelled or aborted.⁸⁰ As illustrated by Figure 4.4 below, in no year has the number of missions (fully and partially completed) reached the contracted maximum of 2,500 missions meaning there was capacity, under the contractual framework so long as the required aircrew were available (see paragraphs 4.28 to 4.42), for more missions to have been undertaken which would have increase the annual RoE to be closer to the contractual requirement (see paragraphs 4.9 and 4.10 and Figure 4.1).

Auditor-General Report No.6 2021–22 Management of the Civil Maritime Surveillance Services Contract

⁷⁹ This data is based on the total number of missions completed as briefed, or partially completed. This data also includes the 'other services' for the first six months, which included missions conducted by non-Sentinel crews under the contract due to the shortfalls in the provision of qualified aircrew at the commencement of the contract.

⁸⁰ A 'cancelled mission' is a contractual term which means a mission that Surveillance Australia has elected not to proceed with, while an 'aborted mission' is not defined in the contract but means a mission where 'wheels up' has occurred but the mission has ended and no meaningful surveillance coverage is completed.

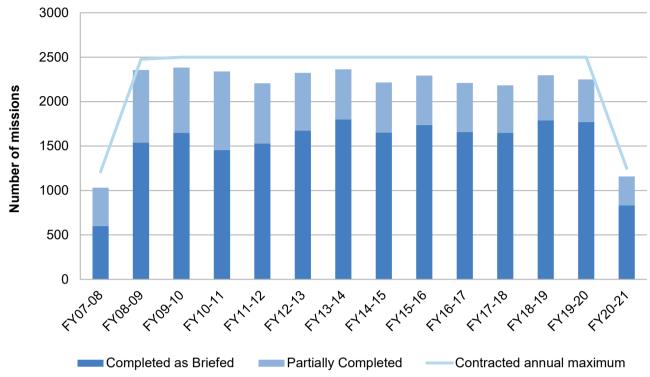


Figure 4.4: Dash–8 completed and partially completed missions January 2008 to December 2020

Note: This analysis includes data from both systems used: the 'GROC' system holds all data entries related to the civil maritime surveillance service contract from July 2011 onwards; and the earlier Coastwatch Command and Support System (CWCSS) which holds all data entries from January 2008 to June 2011.

Source: ANAO analysis of Home Affairs records.

4.15 Of a total of 22,989 missions recorded from July 2011 onwards⁸¹, 19,641 were day missions and 3,348 were night missions. Figure 4.5 below provides the breakdown of these 22,989 missions by day of the week and time of the day, indicating that the surveillance services are undertaken seven days a week. The 2006 Budget papers outlined that funding was provided to the department to increase the range and amount of night time surveillance. Since 2018–19, planning for night missions has reduced significantly. Since September 2018, only two 'late night' missions have been flown.

⁸¹ Prior to July 2011, CWCSS was used to record mission data. There was no specified field for 'night missions', and free text was used to indicate whether a mission was conducted at night. As the CWCSS data was incomplete, it has been excluded from this analysis.

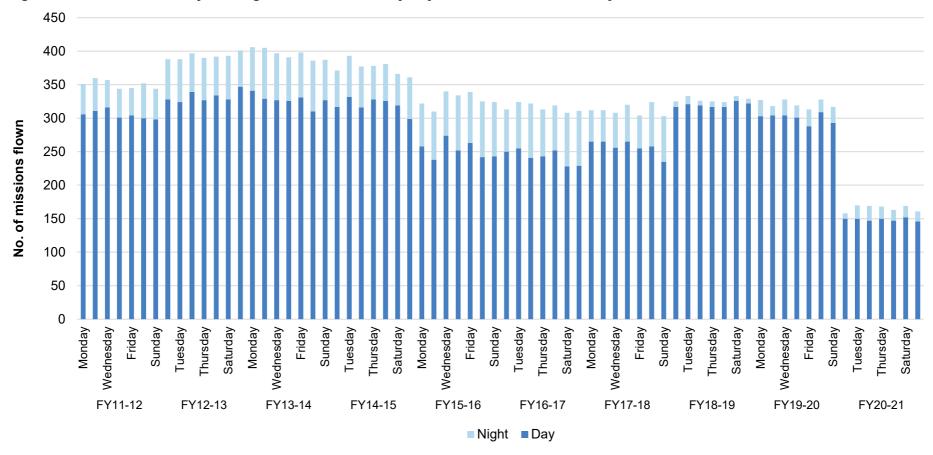


Figure 4.5: Number of day and night missions flown by day of the week between July 2011 and December 2020

Note: This analysis is based on data from the 'GROC' system used by Home Affairs. 'GROC' holds all data entries related to the civil maritime surveillance service contract from July 2011 onwards. Data from the earlier CWCSS had free text inputs for this analysis, was incomplete and therefore unreliable, and has not been included. Source: ANAO analysis of Home Affairs records.

Late night missions

4.16 Under the contract, Surveillance Australia is to ensure that it is able to provide 20 per cent of the monthly planned RoE as late night operations, whether or not tasked by Home Affairs at that level. In 2006, Home Affairs obtained additional Budget funding to increase the range and amount of night time surveillance under the contract, and this led to two contract variations (CCP015 and CCP023) at a combined cost of \$63.2 million (see Appendix 3).

4.17 ANAO analysis of Home Affairs records between July 2011 and December 2020 compared the percentage of planned late night RoE to the overall planned RoE. Table 4.2 highlights that, at most, Home Affairs has planned late night missions at 20 per cent or more for only six of 114 months (5 per cent).

Table 4.2:	Planned late night RoE since July 2011
------------	--

Late night RoE planned (%)	Number of months
0	36
1 to 9	62
10 to 19	10
20 or more	6

Source: ANAO analysis of Home Affairs records.

Long-range missions

4.18 As discussed previously in Chapter 3 at paragraph 3.11, one deliverable, the long-range fuel tank capability (longer endurance flights of up to 13 hours duration) has not been realised. As part of the original tender, Surveillance Australia proposed changes to the fuel tanks on the Dash–8 315 aircraft to provider longer duration missions. Home Affairs advised AMSA in 2014 that both the current Dash–8 202 and Dash–8 315 can only provide an endurance of 6.5 to 7 hours, with fuel holdings.

4.19 The department has, since commencement of the contract in January 2008, paid additional costs through both the monthly service charge and flying hours for a service it has not received. Home Affairs has paid approximately 27 per cent higher in costs than for the Dash–8 202 aircraft (\$16 million per Dash–8 315 aircraft over the life of the contract).

4.20 A key reason that the long-range fuel tank capability has not been provided is because many of the runways to be used at the bases and for deployments, preclude take-off at the current maximum take-off weights; meaning that weight limitations are reached well before the increased weights of the proposed fuel endurance can be achieved, and therefore they cannot carry the additional fuel.

4.21 Figure 4.6 below illustrates the comparison of duration of Dash–8 202 aircraft and the Dash–8 315. Despite the Dash–8 315 being fitted with long range tanks to extend flight duration to 13 hours (of surveillance time), flight data collected by the ANAO shows the longest recorded mission duration was 10 hours and 43 minutes, completed using a Dash–8 202 aircraft.

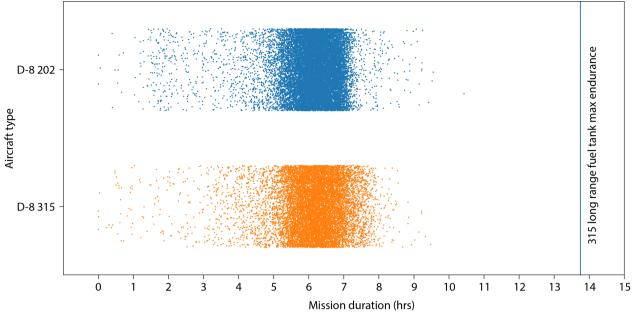


Figure 4.6: Comparison of the Dash–8 202 and Dash–8 315 flight duration

Note: Dash-8 202 n=18,029; Dash-8 315 n=11,981.

One record was identified as an error and excluded from this dataset (Dash 8–315 mission of duration of 26 hours).

Source: ANAO analysis of Home Affairs data.

Reserve missions

4.22 Under the contract, a reserve mission gives Home Affairs the ability to conduct a discretionary mission each day during hours of otherwise low activity, in response to unforeseen operational requirements.

4.23 In July 2008, internal correspondence noted that:

[Surveillance Australia] will not be consistently providing the capacity for Reserve Missions until they achieve full air crew numbers in September...[Home Affairs] should request Reserve Missions if required and insist under the Contract that [Surveillance Australia] demonstrate the full Contract capacity prior to signing any agreement for Additional Hours (which requires an additional ... two full air crew).

4.24 In April 2009, as part of negotiations relating to CCP 023, Surveillance Australia sought to remove the obligation of reserve missions from the contract. This was not agreed by Home Affairs and the requirement has remained a contractual obligation. In September 2009, the then contract manager raised the issues of reserve missions with Surveillance Australia, as they were one of the contract requirements that was not being fulfilled. Although reserve missions were being planned and included within the agreed monthly deployment plans (MDP) all planned reserve missions had been cancelled. This resulted in a reduction in planning capability for Home Affairs.

4.25 Surveillance Australia advised Home Affairs in October 2009:

...Our ability to provide Reserve Missions is directly affected by a combination of aircraft and aircrew availability at each base...The 2008 increase in the Dash 8 RoE to 15,000 hours coupled a reduction in airframe availability due to SIM commitments has increased the average aircraft utilisation rate from 1,361 hours to 1,667 hours per year... The recent addition of [Reims F406] (CCP 024) and the westward redistribution of the Dash 8 RoE (CCP 023) has temporarily impacted

aircrew availability...Each of our bases currently have three distinctly different resource limitations that have been driven by the introduction of the additional F406 RoE, the westward distribution of the Dash–8 RoE and SIM training...

4.26 ANAO analysis of Home Affairs data systems identified a total of 461 records for reserve missions. Of these 461 records:

- 271 were cancelled by Maritime Border Command (MBC);
- 184 were cancelled by Surveillance Australia;
- four mission status records were blank; and
- two were completed as briefed.

4.27 Of the 184 reserve missions cancelled by Surveillance Australia, 143 (78 per cent) were due to crew unavailability or crew illness (a result of the shortfalls in the provision of the full contingent of qualified aircrew). Since May 2011, only three reserve missions have been planned (all in June 2012) each of which was cancelled due to crew being unavailable. No further reserve missions have been planned since June 2012.

Have the aircrew requirements been met?

The full complement of qualified aircrew required under the contract has never been provided. On average over the life of the contract to 31 December 2020, the number of qualified aircrew has been 33 per cent below that contracted. The lack of aircrew has been a key contributing factor to shortfalls in the number of surveillance hours and missions flown.

4.28 Under the contract, Surveillance Australia agreed to provide 26⁸² qualified aircrew to meet the RoE of 13,613 flying hours at commencement of the contract. Any increases to RoE were to result in an increase in qualified aircrew numbers.

4.29 The minimum qualified aircrew complement per surveillance asset for the Dash–8 202 and Dash–8 315⁸³ is–one pilot in command (captain of the aircraft), one co-pilot (captain or first officer), one mission coordinator, and one observer. For the Reims F406, the minimum aircrew complement is one pilot in command (captain of the aircraft), one co-pilot (captain or first officer), and one observer.

4.30 The Reims F406 aircraft was engaged to provide an additional 2000 hours flying hours from July 2009 to June 2015. As part of these additional flying hours, there was meant to be an additional two crews, taking the total of qualified aircrews to at least 30 for Dash–8 and Reims F406 for this timeframe.

4.31 Table 4.3 below provides an outline of the specifications in the contract relating to aircrew numbers and RoE.

⁸² This number was increased from 24 in contract negotiations, so that Surveillance Australia could provide additional contingency to cover illness, leave and operational surge.

⁸³ The contract also provides for an 'augmented crew' of three pilots, one of whom is the pilot, and three observers, one of whom is the mission coordinator, for the purpose of conducting missions of longer endurance (up to 13 hours).

Parameter	RoE (flying hours)				
Flight hours per annum	13,613–14,500	14,501–15,000	15,001–16,500	16,501–18,000	18,001–19,500
Number of qualified aircrew	26	28	30	33	36
Surveillance assets required	10	10	11	12	13

Table 4.3: Aircrew numbers to meet contractual RoE

Source: ANAO analysis of Home Affairs records.

4.32 As discussed in Chapter 3, at paragraphs 3.19 and 3.21, at the commencement of services on 1 January 2008, the full contingent of aircrew was not provided, with only 17 qualified aircrew out of the required total of 26, a shortfall of 35 per cent.⁸⁴ As illustrated in Table 4.3 above the specified number of qualified aircrew has varied to reflect changes to the contracted annual RoE, which since the contract was varied in October 2008, increased the annual RoE to 15,000 hours. This increase in RoE also required an additional two crew to be provided taking the contract requirement to a total of 28 qualified aircrew.

4.33 The contracted number of qualified aircrew has at no stage been provided to meet the RoE over the life of the contract. Despite this, reflecting the contractual arrangements put in place, Home Affairs has paid the full fixed component of the monthly service charge of which an estimated 37 per cent is related to aircrew costs, regardless of the number of aircrews provided. ⁸⁵

4.34 As discussed above at paragraph 4.29, the full complement of qualified aircrew per surveillance asset for the Dash–8 202 and Dash–8 315⁸⁶ is four members – two pilots and two observers. The aircrew can be made up of the following: one pilot in command (captain of the aircraft), one co-pilot (captain or first officer⁸⁷), two observers (one mission coordinator, and one observer). Figure 4.7 below illustrates the total number of aircrew by category for the period January 2016 to December 2020.

Auditor-General Report No.6 2021–22 Management of the Civil Maritime Surveillance Services Contract

⁸⁴ As part of contract negotiations, Surveillance Australia agreed with Home Affairs to increase the number of tendered aircrews from 24 to 26, providing a greater level of contingency to cover crew illness and additional surges in operational tempo.

⁸⁵ By way of comparison, Auditor-General Report No.27 2020–21 *Management of the Search and Rescue Aircraft Contract* found that AMSA reduced the standing charge until crewing shortfalls were addressed (paragraph 3.4).

⁸⁶ The contract also provides for an 'augmented crew' of three pilots, one of whom is the captain, and three observers, one of whom is the mission coordinator, for the purpose of conducting missions of longer endurance (up to 13 hours).

⁸⁷ Where Surveillance Australia has excess captains and less First Officers, Captains can act as both pilot and co-pilot, but First Officers cannot be the pilot in command.

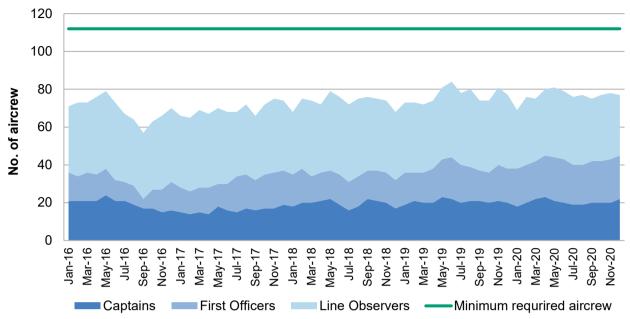


Figure 4.7: Aircrew by category January 2016 to December 2020

Source: ANAO analysis of Home Affairs.

4.35 As illustrated above in Figure 4.7, the most significant shortfall was during September 2016 when the number of captains, first officers and observers dropped to 17, 5 and 35 respectively.⁸⁸ Figure 4.7, also illustrates that the total minimum required aircrew number of 112 to meet the required 28 total aircrews has not been met. The aircrew shortfall by category has shifted over time. In January 2016 the number of full aircrews were limited by the shortfall in the number of pilots (captains and first officers). In December 2020 while the number of pilots available improved, the shortfall shifted to the number of observers, which limited the ability to achieve the full complement of aircrew.

4.36 Table 4.4 and Figure 4.8 below illustrate the average shortfall of the aircrew in line with the increases to RoE. Based on this shortfall, it is estimated that Home Affairs may have paid in excess of \$87 million (based on crew costings provided to support CCP015) over the life of the contract in monthly service charges for crew numbers that it did not receive. The crew shortfall has increased in recent years, with a gap of more than 39 per cent since July 2015.

Period	Minimum required aircrew	Average amount of aircrew	Gap	(%)
Jan 2008 to Sep 2008	26	18.25	7.75	29.81
Oct 2008 to Jun 2009	28	19.92	8.08	28.86
Jul 2009 to Jun 2015	30	19.28	10.72	35.73
Jul 2015 to Mar 2021	28	16.96	11.04	39.43
Average			9.40	33.46

Source: ANAO analysis of Home Affairs records.

88 To comply with the contractually required amount of full aircrew, Surveillance Australia would need to provide 28 captains, 28 first officers and 56 observers.

Auditor-General Report No.6 2021–22 Management of the Civil Maritime Surveillance Services Contract

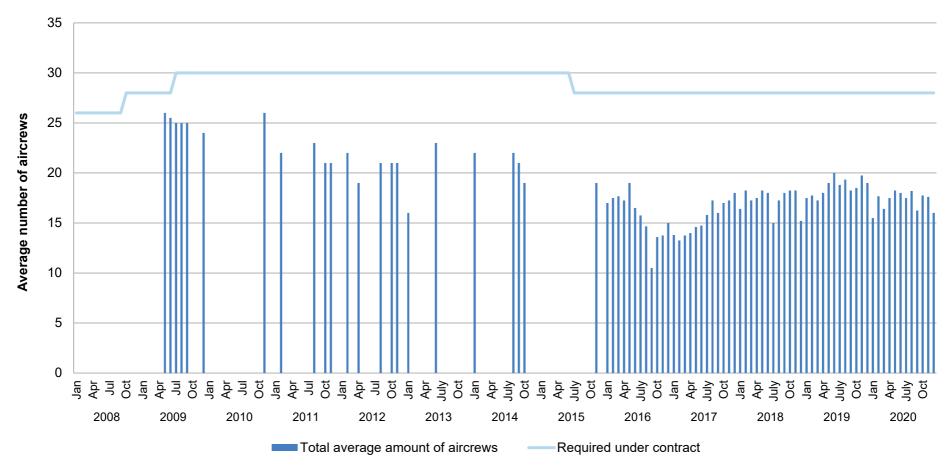
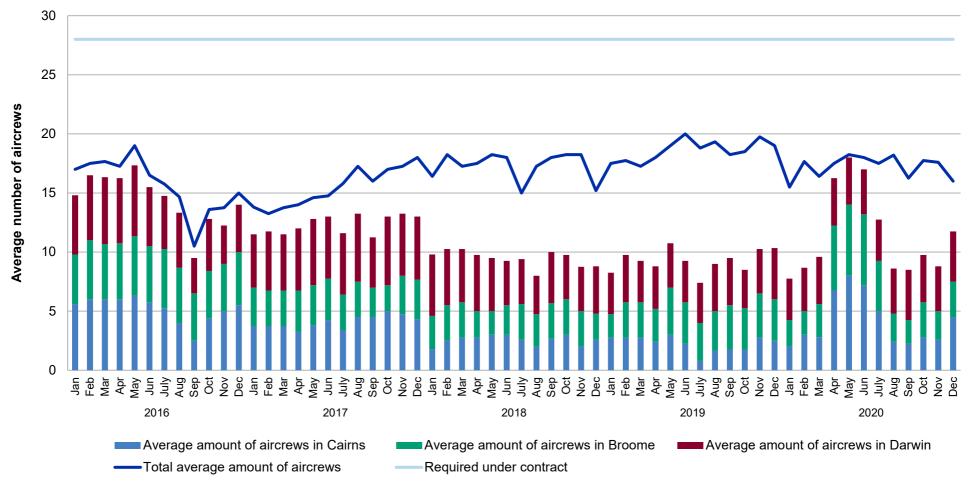


Figure 4.8: Average number of qualified aircrews provided over the life of the contract against the number required under the contract to meet RoE

Note: The ANAO used qualified aircrew lists for the above analysis. Home Affairs provided aircrew lists from 2016 to 2021. Qualified aircrew lists have been provided in various formats and frequency since 2008. ANAO located additional lists, but a total of 73 months were missing over the life of the contract. Source: ANAO analysis of Home Affairs records.





Note: The difference between the total average amount of aircrew and average aircrews by home base has been identified to be filled by 'fly-in-fly-out' captains. Source: ANAO analysis of Home Affairs records.

4.37 Figure 4.9 above illustrates the number of aircrew by home base between January 2016 and December 2020 (the period for the department has retained adequate records). For the period of January 2018 to December 2020, the difference between the total average amount of aircrew and average aircrews by home base was identified in Home Affairs records as to be filled by 'fly-in-fly-out' captains.

4.38 Changes to the aircrew requirements agreed to under the original contract have also occurred, including:

- January 2008—agreement to 30 June 2008 for security clearance waiver to allow uncleared aircrew to fly missions under the contract;
- May 2008—letter of agreement to restructure pilot qualifications with the intent of increasing the 'pool' of pilots to recruit (as part of CCP019 and CCP044);
- a pilot guarantee (as part of CCP24⁸⁹) four payments of \$1 million every six months for a two year period (dependent on achieving 75 per cent of planned missions, which was not a high target having regard to performance over the life of the contract see paragraph 4.14);
- the leasing of three Broome properties belong to Home Affairs to assist Surveillance Australia to retain qualified aircrew stationed at the Broome base; and
- 'fly-in-fly-out' arrangements.

4.39 Home Affairs has continued to pay the full fixed component of the service charge, in effect, paying for aircrew that have not been provided. A significant limitation in the operation of the contract is that the number of aircrew is not linked to the Performance Measurement System (PMS). Coupled with this, Home Affairs has been planning missions to fit Surveillance Australia's capability, rather than planning to meet the desired operational outcomes. This ongoing failure to provide the required level of qualified aircrew, means that there has been limited contingency to manage aircrew illness and duty limitations and limited ability to handle periods of increased (surge) flying, and limiting the ability to provide all services required under the contract.

Reims F406

4.40 As outlined above in paragraph 4.32, two Reims F406 aircraft were contracted to undertake an additional 2000 flying hours, requiring an additional two aircrew, increasing the total number of qualified aircrew to 30, for the period of 1 July 2009 to 30 June 2015⁹⁰.

Auditor-General Report No.6 2021–22 Management of the Civil Maritime Surveillance Services Contract

⁸⁹ CCP24 was executed on 29 June 2009 and established additional surveillance services (2000 hours and two additional crews) to be provided by the Reims F406.

⁹⁰ Additional Measures to Counter People Smuggling Activities submission to Cabinet in April 2009. This was for the period July 2009 to 30 June 2015.

4.41 The initial 18 months of the Reims F406 service allowed for four \$1 million pilot guarantee payments. The first payment was unconditional being intended to support the start-up of the service.⁹¹ Home Affairs invoice records confirmed that pilot guarantee payments were made, although there is no evidence to suggest the two extra crew were provided. ANAO identified evidence stating:

F406 aircraft related contract changes provides the opportunity for some efficiencies as Cobham [Surveillance Australia] is able to use the existing Dash–8 aircrew pool as a source of F406 pilots and observers.

4.42 As illustrated above in Figure 4.8, the number of qualified aircrew required to meet the RoE and additional two crew has never been provided under the contract.

Recommendation no. 2

4.43 In developing and managing the next surveillance services contract, where it sets requirements for the provision of aircrew the Department of Home Affairs adopt an approach which links the contractual requirements to the performance measurement system.

Department of Home Affairs response: Agreed.

Has overall performance met the contracted minimum threshold?

Contracted minimum overall performance thresholds have been calculated to have been met in the significant majority of months:

- overall performance has been calculated to meet the contracted 90 per cent OCP metric for the Dash–8 aircraft for 92 per cent of the period to 31 December 2020; and
- for the Reims F406 aircraft, overall performance was calculated to meet the contracted 80 per cent OCP metric for 85 per cent of the four year period to June 2015 that this requirement was in place.

4.44 Surveillance Australia's performance is measured and assessed through a PMS established in the contract. The Dash–8 and Reims F406 have separate PMSs that are similar, but with some key differences namely:

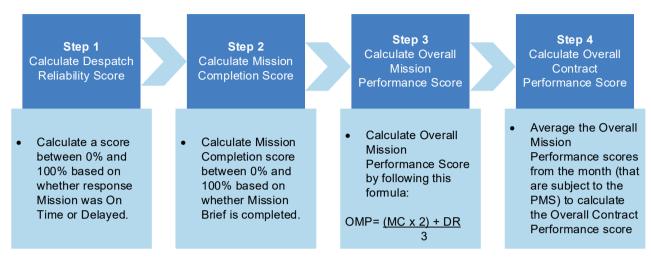
- a lower minimum OCP threshold to receive the full monthly service charge from 90 per cent for the Dash–8 to 80 per cent for the Reims F406;
- the use of track miles for the Reims F406 instead of square nautical miles as the unit of measurement for mission completion; and
- the removal of rescheduled mission type and alleviations for reprogrammed missions.

4.45 The Dash–8 PMS has been in place since the commencement of services and the Reims F406 PMS was implemented through CCP036, two years after the commencement of the Reims F406 service. Both use the same core framework with each mission assessed against two key performance measures; Dispatch Reliability (DR) and Mission Completion (MC). These performance

⁹¹ Even if the 75% threshold was not met, a pro rata payment applied.

measures are then used to calculate the Overall Mission Performance score (OMP) for each mission. At the end of each month, the OMP scores are used to calculate the OCP. Figure 4.10 below illustrates the process for calculating the OCP.





Source: ANAO analysis of Home Affairs records.

4.46 At the end of each month the OMP scores are averaged to calculate the OCP. The contract requires a minimum OCP score of 90 to be achieved in order to be paid the full monthly service charge. If the OCP score falls below the minimum threshold, a performance deduction will apply.

4.47 As illustrated by Figure 4.11, over the life of the contract to 31 December 2020, overall performance has been calculated to meet the contracted 90 per cent OCP metric for the significant majority of months (92 per cent). In this respect:

- the Dash–8 service OCP score fell below the minimum 90 per cent threshold for only 13 months (8 per cent) of the period analysed, including the first six months of the contract when performance deductions did not apply. It has been calculated to be above 90 per cent each month since March 2018; and
- for the Reims F406 aircraft, the PMS applied from July 2011, with an initial six month grace period on performance deductions (during the refurbishment program) with the 80 per cent threshold met over the period July 2011 to June 2015 apart from seven months where the OCP score fell below the 80 per cent minimum threshold. The calculated score was above 80 per cent each month from August 2012 to June 2015.

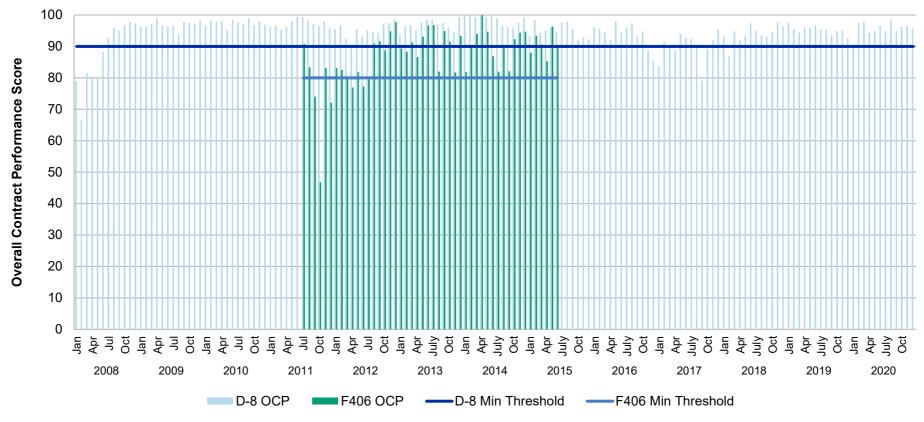


Figure 4.11: OCP scores over the life of the contract for all surveillance assets

Source: ANAO analysis of Home Affairs records.

Up scoring and adjustments

4.48 There are a number of ways for the calculated OCP score to be increased. Some of the ways were part of the original contract and some have been added as part of ongoing negotiations through contract changes or differing interpretations of contractual terms. These include:

- adjustments and overrides at the missions scoring level to DR and MC scores;
- a cap that limits the number of missions that the PMS can be applied to (introduced as part of CCP018); and
- adjustments and alleviations outside of GROC.

4.49 The contract allows for the DR and MC to be 'up scored' when the mission is not completed as briefed if the reason is considered to be out of the service provider's control.⁹² ANAO analysis of GROC data found that 10,512 of a total 22,203 (47 per cent) missions planned for the Dash–8 that were subject to the PMS had the MC score increased by override.⁹³ Table 4.5 below summaries the reasons for the MC up scoring.

MC override reason	Number of missions
Adverse sea state conditions	30
Adverse weather conditions	520
Airspace restrictions caused diversion	48
Coverage > 95 per cent — surveillance mission completion of 95 per cent or greater equals up score to 100 per cent	4426
Fuel uplift limitations — not enough fuel available for the mission duration	381
Other — free text input inclusive of other reasons, but classified as 'other'	2010
Prudent Limit of Endurance — the time during which an aircraft can remain airborne and still retain a given safety margin of fuel	2133
Released for SAR — mission commenced but has been released for search and rescue	86
Re-tasked	536
Target density variation — when target density varies from the planned surveillance target points	331
Target distribution variation — when the distance between targets is different to the planned distance	11

Table 4.5: Reasons for MC up scoring

Source: ANAO analysis of Home Affairs records.

4.50 The PMS cap was introduced as part of CCP018 in March 2008 and subsequently amended in line with the RoE increases. The PMS cap applies to 'planned' missions above the monthly cap of 208 missions or 1250 hours. To calculate the amount of missions to be excluded from the OCP

Auditor-General Report No.6 2021-22

Management of the Civil Maritime Surveillance Services Contract

⁹² Refer to Appendix 4 for more information.

⁹³ Population was from Jul 2011 to Dec 2020 for all mission types that were subject to the PMS and were not alleviated.

calculation, the amount of hours over the cap is divided by the average planned mission length for that month. For example, if the planned hours (not required to be achieved) are 60 hours over the cap and the average planned mission length is 6 hours, then 10 missions with the lowest OMP scores are excluded from the OCP calculation.

4.51 At the end of the month, a report is generated using GROC data for all missions tasked over the month with the DR, MC and OMP scores for each mission. The scores for the month are used to calculate the OCP score (as discussed above at paragraph 4.44) which is then communicated to Surveillance Australia for review. The process used for calculating the OCP scores is conducted outside of the GROC system in a local spreadsheet. This means that there is a lack of version control and transparency regarding the calculation of the OCP scores, with limited supporting evidence to explain changes and omissions when calculating the OCP score.

4.52 The Phoenix system that Surveillance Australia uses to collect and calculate missions scores has provided additional avenues for negotiations when there are instances where data does not align. The ANAO's analysis of Home Affairs records identified occasions where mission scores have been negotiated due to a difference between the two systems. This approach is in contrast to the AMSA contract where both the service provider and AMSA use one system for recording and calculating mission performance. In particular, status reports from each AMSA base detailing aircraft location and availability are uploaded and visible in the search and rescue incident management system with aircraft detail information directly fed from the contractor's internal system, which includes crewing and maintenance data.⁹⁴

4.53 In June 2021, Home Affairs advised the ANAO that:

AMSA also had the benefit of engaging with and drawing from the Department's learnings in the development and design of their contract, allowing them to build on our lessons in developing the AMSA contract framework. In turn, the Department has also benefited from the ANAO audit of AMSA and will continue to work closely with AMSA to ensure these mutual learnings are leveraged in any future procurement processes.

Recommendation no. 3

4.54 When developing and managing the next surveillance services contract, the Department of Home Affairs develop and use appropriate systems and processes that links data on operational activities with contractual performance requirements, including opportunities to apply technology solutions to increase automation thereby increasing transparency and reducing reliance on external processes. The Department should seek to leverage off the approach that the Australian Maritime Safety Authority developed to manage its search and rescue aircraft contract.

⁹⁴ Auditor-General Report No.27 2020–21 Management of the Search and Rescue Aircraft Contract (p.14).

Department of Home Affairs response: Agreed.

4.55 The application of any technological solutions will be reliant on available funding and resources. In leveraging off the approach of the Australian Maritime Safety Authority (AMSA), Home Affairs understands this as giving due consideration to the approach AMSA has taken, where this approach is compatible with the Home Affairs approach to contract development and consideration, especially around the need to incorporate the High Risk High Value process.

How has the department managed any performance shortfalls?

Home Affairs has not effectively managed performance shortfalls and has continued to pay the full amount for services and aircrew it has not received. Home Affairs has applied \$2.3 million in performance deductions. Appropriate arrangements are not in place to provide assurance over contractor performance in undertaking missions.

4.56 Home Affairs has not actively managed the performance shortfalls over the life of the contract. Home Affairs set expectations low, by accepting and paying for lesser capability and lesser performance from the commencement of the contract in 2008. This is in contrast to AMSA's approach, where performance was measured against the key performance indicators and by applying the contractual framework to adjust the amounts it paid for reduced capability or services not received. Home Affairs has not adjusted the amount it has paid for surveillance services it has not received.

Surveillance services not provided

4.57 As discussed above at paragraph 4.5 to 4.27, Surveillance Australia was required to provide a quantum of services under the contract in terms of an annual RoE. The contract provides for an annual review of the annual RoE (discussed previously Chapter 2, paragraph 2.19). The RoE was increased by CCP015 and extended by CCP023, and the fixed component of the service charge was increased to reflect the increased RoE above a threshold of 14,500 hours. Despite the annual RoE consistently falling below 14,500 hours, it is unclear whether Home Affairs undertook the annual reviews and continued to pay the full service charge based on a RoE of 15,000 hours notwithstanding that it has not received 15,000 hours of surveillance services in any year.

4.58 Home Affairs has not taken action to remedy the lesser capability and services provided, while continuing to pay the full monthly service charges. ⁹⁵ For example:

- late night missions—Home Affairs has not planned at the 20 per cent rate Surveillance Australia is required to provide capability for and only two late night missions have been undertaken since September 2018;
- long-range missions—has never been realised and Home Affairs has paid approximately \$64 million in additional costs for services not received; and

⁹⁵ By way of comparison, Auditor-General Report No.27 2020–21 *Management of the Search and Rescue Aircraft Contract* found that the monthly standing charges that were paid were reduced to reflect the reduced capability provided at the commencement of services until contractual non-compliances and deficiencies were remediated to AMSA's satisfaction (see pages 27 and 28 of that audit report).

• reserve missions—none have been planned since 2012.

Shortfalls in meeting aircrew requirements

4.59 A key learning of good practice identified in Auditor-General Report No.27 2020–21 *Management of the Search and Rescue Aircraft Contract* (page 10) was that employing those contractual provisions from the commencement of the contract along with effective channels of communication with the contractor establishes clear performance expectations; as does maintaining a firm posture as delivery of the contract proceeds. Another key learning of good practice identified in Auditor-General Report No.27 2020–21 was that employing those contractual provisions from the commencement of the contract along with effective channels of communication with the contractor establishes clear performance expectations; as does maintaining a firm posture as delivery of the contract proceeds.

4.60 For the civil maritime surveillance contract, Home Affairs has not actively managed the shortfalls in provision of the contractually required number of qualified aircrews over the life of the contract. Performance expectations were not clearly established, which has had negative impacts across planning to meet operational outcomes and for receiving the quantum of services to be provided under the contract, as discussed above.⁹⁶ Turnover of contract managers and lack of corporate knowledge of the workings of the contract (previously discussed in Chapter 2, paragraph 2.22) has exacerbated attempts to address the shortfalls of aircrew. The ANAO estimates that Home Affairs may have paid in excess of \$87 million for aircrew it has not received, and an additional \$4 million for pilot guarantee payments associated with the Reims F406 service.

4.61 In 2016, eight years after commencement of services, Home Affairs sought legal advice due to increased poor performance caused by the shortfall of aircrew.⁹⁷ Home Affairs issued a formal breach notice in January 2017 requiring Surveillance Australia to remedy the shortfall of aircrew and provide the required 28 aircrew under the contract. Surveillance Australia commenced a 'pilot recovery program'⁹⁸ where it forecast that approximately 58 pilots would be available by February 2018. ANAO analysis of Home Affairs records (illustrated by Figure 4.8) indicates that the required level of aircrew was not recovered. Only 38 pilots were available by February 2018, a shortfall of 35 per cent compared to the projected 58 pilots.

4.62 Since October 2020, Home Affairs has sought to understand how aircrew numbers are generated, obtain qualified aircrew lists, and discussed the shortage of observers in meetings with Surveillance Australia. In March 2021, the department again sought legal advice to determine how it could remedy the shortfall of aircrew under the contract.

4.63 In July 2021 Home Affairs advised the ANAO that it has 'continued to put pressure on [Surveillance Australia] to increase aircrew numbers while continuing to engage with our internal ESC [Employment Suitability Clearance] team to escalate and prioritise clearance processes for

⁹⁶ Appendix 5 details concessions made by Home Affairs between January 2008 and September 2009 regarding the shortfall of qualified aircrew.

⁹⁷ For example, Figure 4.8 above shows that in September 2016, aircrew numbers fell as low as 11 aircrew.

⁹⁸ In 2007, prior to commencement of surveillance services, a pilot recovery program was underway. This was not successful in recovering the full aircrew numbers, with only 17 aircrew available at commencement of services (refer to Chapter 3, paragraph 3.19).

[Surveillance Australia] aircrew, noting [Surveillance Australia's] concerns that the timeframe for clearance was impacting recruitment of crew numbers.'

Shortfalls in performance

4.64 The contractual framework allows for deductions to be made when the services fall below the minimum performance threshold. Home Affairs has applied deductions for both the Dash–8 and Reims F406 aircraft in 10 instances, totalling \$2.3 million over the life of the contract. Performance shortfalls and deductions made over the life of the contract for both types of aircraft are detailed at Appendix 6.

4.65 Home Affairs has managed the shortfall in performance by:

- instead of tasking missions to meet operational requirements, mission tasking factors in Surveillance Australia's reduced capacity (due to identified shortfalls discussed above). As recently as March 2021, in accepting requested changes to the MDP, the department stated it was 'another example of the compromises we make continually in planning to accommodate shortages of crew duty';
- supplemented the poor performance of the Reims F406 aircraft with Dash–8 aircraft; and
- applied adjustments to mission scores (as discussed in paragraphs 4.48 to 4.50).

Liquidated damages applied

4.66 Under the contract liquidated damages can apply when equipment other than mission critical equipment⁹⁹ fails before the aircraft departs. The ANAO has identified records retained by Home Affairs where \$66,181 was recovered, across 18 months. The ANAO has also identified instances where Home Affairs could have applied liquidated damages totalling \$102,902 across 45 months.

Maritime Aviation Specialist Officers (MASSOs)

4.67 As provided by the terms of the contract, Home Affairs employ MASSOs to provide a level of assurance over the operational competency of Surveillance Australia.¹⁰⁰ The request for tender documentation issued in 2004 that led to the Surveillance Australia contract being awarded outlined that MASSOs would act as supplementary crew on surveillance missions to assess aspects such as mission planning, crew performance, systems and equipment performance and post mission evaluation.

4.68 The request for tender documentation outlined that up to 15 per cent of missions may be subject to operational assessment. This target is longstanding, existing under the earlier Coastwatch arrangement¹⁰¹ and has been consistently referenced by the MASSOs in internal reporting relating to the Surveillance Australia contract.

4.69 The low number of MASSOs employed (only 1 since August 2019) has reduced the effectiveness of this assurance mechanism. For example, the average number of missions

⁹⁹ If mission critical equipment fails prior to the aircraft departs, a mission may be cancelled or Home Affairs can elect for the mission to continue.

¹⁰⁰ MASSOs were previously known as Competency Assessment and Training Officers (CATOs) (in relation to the Dash–8 aircraft) and Mission Coordination Officers (MCOs) (in relation to the Reims F406 aircraft).

¹⁰¹ See Auditor-General Report No.38 1999–2000 Coastwatch (para 3.57).

Management of the Civil Maritime Surveillance Services Contract

monitored has decreased from 10.6 per cent¹⁰² in 2014–15 to 2.3 per cent in 2020–21. Refer to Appendix 7 for further information regarding MASSO missions monitored from 2014–15 to 2020–21.

4.70 MASSOs have the ability to issue rectification notices to crew and apply deductions to the mission completion score. The ANAO's analysis of Home Affairs records indicates that since July 2011 (that is, since the implementation of GROC), there has been three instances of MASSO penalties being applied, from a total of 20,762 missions flown that were subject to the PMS.¹⁰³The current rate of monitoring of missions and the number of MASSOs employed (1 based in Darwin) does not provide a reasonable degree of assurance to the department.

Recommendation no. 4

4.71 The Department of Home Affairs implement stronger assurance arrangements for monitoring of mission performance.

Department of Home Affairs response: Agreed.

4.72 The Department acknowledges the benefits of implementing stronger assurance arrangements for monitoring aerial surveillance mission performance. While the majority of performance concerns raised in the report relate to the early years of the Contract, the department recognises the need to continually drive mission performance and seeks to achieve this through a range of measures that are already in place including: 24/7 engagement and monitoring of all aerial surveillance missions by Australian Border Force, Maritime Border Command, pro-active contract management of performance issues; conduct of operational assessments on-board by Maritime Aviation Specialist Officers (MASSOs), noting an additional MASSO has recently been engaged to commence shortly which will strengthen this aspect; financial reporting, and strong governance arrangements.

. I Heh

Grant Hehir Auditor-General

Canberra ACT 11 October 2021

¹⁰² Home Affairs has not retained all records relating to MASSO activity and coverage. ANAO analysis is limited to documentation that Home Affairs has retained and provided.

¹⁰³ ANAO Analysis of Home Affairs records did not identify any occasions of MASSO penalties being applied to Reims F406 aircraft.

Appendices

Appendix 1 Entity responses



Australian Government

Department of Home Affairs

Grant Hehir Auditor-General Australian National Audit Office GPO Box 707 Canberra ACT 2601

Dear Mr Hehir

Thank you for the opportunity to provide comments on the Australian National Audit Office's (ANAO) report on the Management of the Civil Maritime Surveillance Services Contract.

The Department of Home Affairs (the Department) welcomes this ANAO performance audit and acknowledges the valuable role the ANAO plays in providing independent insights into potential areas of further improvement.

The aerial surveillance services provided to the Department under the *Civil Maritime Surveillance Services Contract* (the Contract) by *Surveillance Australia Pty Ltd* (*Surveillance Australia*) since its commencement in January 2008 have been an essential element of Australia's border protection surveillance capability.

This long running Contract has continued to adapt in response to unprecedented operational challenges, supporting the Department and other Commonwealth agencies respond to a broad range of maritime threats. It is not unusual to expect changes over the life of a Contract of this length, complexity, and operational nature.

The Department has continued to mature its approach to contract management in the years since this contract was established, and will continue to build on those lessons and experiences moving into the development of future contracts.

In response to key findings raised in the report, the Department provides the following additional context for consideration, which is essential to understanding the operational pressures.

Operational and Organisational Context

Australia's national objective for civil maritime security is to detect, deter, respond to and prevent illegal activity from occurring in Australia's maritime jurisdiction. In terms of tonnes of cargo shipped and kilometres travelled, Australia is the world's fifth largest shipping nation. Australia therefore has strong economic and national interests in maintaining civil maritime security within and beyond Australian waters. It is a complex and dynamic environment where aerial surveillance services are critical and required to be flexible.

The Contract with *Surveillance Australia* was signed on 3 March 2006, and was developed primarily to meet the operational needs of the then Australian Customs and Border Protection Service. Since then, the aerial surveillance functions have been subject to two Machinery of Government changes, with the functions and operating remit of the Department now different to when the Contract was initiated. Operational pressures from the changing nature of maritime threats in the north and north-west of Australia, led to a stronger focus on deployment of surveillance assets in Australia's Exclusive Economic Zone (EEZ).

Of particular note, the establishment of 'Operation Sovereign Borders' in 2013 required the Department to respond to the operational challenges of a significant number of illegal maritime arrivals, which drove the need for increased and continuous surveillance capability across a marine area of around 10 million square metres.

As a result, it was necessary for the Department to negotiate in real time, under extreme pressure, to respond to emerging maritime threats while maintaining effective day to day surveillance. This could not have been anticipated in advance of signing the Contract, and as a result, over the last 14 years the Contract scope and costs have adapted as required to meet these demands.

4 National Circuit Barton ACT 2600 PO Box 25 Belconnen ACT 2616 • Telephone: 02 6264 1111 • www.homeaffairs.gov.au

Auditor-General Report No.6 2021–22 Management of the Civil Maritime Surveillance Services Contract Operation Sovereign Borders has been incredibly successful in detecting, intercepting and deterring people smuggling ventures. Aerial surveillance conducted by *Surveillance Australia* has been a key contributor to this success.

The Contract has continued to deliver an adaptable and essential element of the Department's broader maritime surveillance capability and *Surveillance Australia* have achieved above the 90% performance threshold for Overall Contract Performance for the majority of the Contract term.

Australian Maritime Safety Authority (AMSA) Comparison

The Department has a close working relationship with the AMSA and shares mutual learnings to enhance the management of contracts and leverage lessons learned in any future procurement processes.

While the Department notes the potential benefit of seeking to compare and contrast contract management between government agencies to provide valuable learnings, it also notes that there are significant differences between the Department's contract and the AMSA Search and Rescue Contract. Both contracts are at different stages of their lifecycle, the scale of operations are vastly different, were established under a different financial and procurement regulatory environment, and seek to achieve very different operational outcomes.

Global Pilot Shortages and Crewing

While the Department acknowledges *Surveillance Australia* has not delivered the contracted crew numbers, the Contract is outcome focused (delivery of surveillance), and where low aircrew numbers have adversely impacted delivery of surveillance missions, this has been managed through abatements under the Performance Measurement System.

A number of factors impacted qualified aircrew recruitment during the life of the Contract. Given the critical civil maritime surveillance services provided, early in the Contract the Department and *Surveillance Australia* reached agreement on measures to alleviate some of the operational impact. Compromising civil maritime surveillance services was not an option, particularly in an environment where significant numbers of illegal maritime and fisheries arrivals were occurring regularly and there were repeated safety of life at sea events.

The Department has consistently engaged with *Surveillance Australia* on this issue, to ensure crewing levels remained as high as possible to meet Contract requirements. *Surveillance Australia* has continued to deliver surveillance services despite the impact of the COVID-19 pandemic on crewing.

In addition, the number of qualified aircrews required under the Contract refers to a team of four individual aircrew (Pilot, Co-pilot, Mission Coordinator, and Observer) essential to operate the aircraft during each mission. *Surveillance Australia* engage a pool of qualified aircrew across these four roles.

Annual Planned Rate of Effort and Annual Maximum Number of Missions

The Department notes ANAO's concerns regarding achievement of the contracted Annual Planned Rate of Effort (RoE) (up to 15,000 flying hours per annum), and the Annual Maximum Number of Missions (2,500 per annum). For clarity, these annual upper limits are used for the Department's operational planning purposes, and are distributed across the year on a monthly pro-rata basis.

However, the actual Rate of Effort for the Surveillance Service to be provided in any month relates to a Monthly Rate of Effort Ranges. From 1 July 2010, this equates to five percent (5%) above or ten percent (10%) below that Monthly Planned Rate of Effort. The Contract also includes a minimum planning RoE of 13,500 hours per annum (this equates to 90% of the specified maximum planning rate of 15,000 hours per annum).

In this dynamic environment there are many factors which may affect the final rate of effort or number of missions flown for any twelve month period, such as budget, adverse weather conditions (especially during tropical wet season), increased planning or decreased planning by the Australian Border Force (ABF) in response to the changing nature of maritime threat levels, airspace restrictions and diversions, and collaborative operations with other agencies.

It is not a shortfall if the Annual Planned Rate of Effort or the Annual Maximum Number of Missions in the Contract is not reached as the Contract is designed to provide an upper limit and level of certainty for *Surveillance Australia* to plan resourcing for the coming twelve months.

4 National Circuit Barton ACT 2600 PO Box 25 Belconnen ACT 2616 • Telephone: 02 6264 1111 • www.homeaffairs.gov.au In regard to the conduct of night aerial surveillance missions, these are scheduled as part of the monthly mission planning process, with the timing and location of night missions being managed as an operational issue that is intelligence led and risk based.

Financial Management

The Department wishes to note that all expenditure and transactional information in relation to the Contract has been captured in either the former Custom's Financial Management Information System (FMIS) or the Department's FMIS.

The Department acknowledges that authorisations were not recorded for a proportion of transactions prior to 2017. The Department implemented enhanced payment policy approval requirements from 24 February 2017 and the Accountable Authority Instructions were provided to the ANAO. Consistent with the enhanced requirements, the Department located and provided approvals for all relevant invoices from 2017-18, demonstrating a clear improvement trend and evidence that enhanced policies were effective.

The Contract includes mechanisms for variations, and given this is a long term Contract and the operational context referred to above, it is reasonable to expect a large number of variations. Future changes leading to additional financial commitments could not always be anticipated, however, the Department has controls in place to ensure that variations are appropriately authorised.

Improvement initiatives

The Department acknowledges that there have been legacy issues primarily resulting from organisational and operational changes during the life of the Contract. However, there have been significant improvements in contract management tools and processes, record keeping, governance, and the recruitment of suitably qualified staff within the Air and Marine Capability Branch and across the Department. The Department welcomes ANAO's acknowledgement of the skills and experience of the Branch and the improvements that have been implemented.

Since the ANAO audit report Offshore Processing Centres in Nauru and Papua New Guinea: Procurement of Garrison Support and Welfare Services in 2016, the Department has taken actions to improve the professionalisation of its contract managers with initiatives including the development of a contract management framework, supported professional development pathways and training, and policy and procedure materials. The Certificate IV in Procurement and Contracting is now a mandatory requirement for Contract Management Officers, and business areas are also encouraged to seek out additional relevant industry training for their team members such as the Diploma, and Advanced Diploma in Procurement and Contracting training.

From 2016 to 2020, the Department also implemented an action plan to uplift the maturity of its record keeping practices. These improvements were recognised in Auditor-General Report No. 37 of 2019–20 Procurement of Garrison Support and Welfare Services.

Planning for the Future of Aerial Surveillance

Since early 2019, the Department has been working on implementing an appropriate arrangement with *Surveillance Australia* to ensure there is no gap in aerial surveillance capability between the expiry of the Contract and the implementation of the Department's Future Maritime Surveillance Capability (FMSC) Project.

The Department has assessed that no other provider is in a position to deliver the required services in the required timeframe, and following consideration of the options, as advised by the Secretary at the Senate Estimates hearing on 25 May 2021, approval was given to negotiate an extension with *Surveillance Australia*. These negotiations are well progressed, however, further detail is not yet available to ensure compliance with probity requirements.

Recommendations

The Department agrees with the ANAO recommendations and will ensure this feedback is considered in the development of the next aerial surveillance procurement process and contract framework design. The lessons learned through the life of the existing Contract, AMSA's experience, and the ANAO feedback is extremely valuable in our future surveillance capability planning.

4 National Circuit Barton ACT 2600 PO Box 25 Belconnen ACT 2616 • Telephone: 02 6264 1111 • www.homeaffairs.gov.au The Department would like to thank ANAO for their collaborative approach throughout the audit process, including sharing their insights and data with our contract management team.

The Department would like to take this opportunity to thank our staff, and *Surveillance Australia* personnel for their commitment in maintaining consistent mainland and offshore aerial surveillance during the operational pressures referred to above.

I would particularly like to acknowledge the dedication shown by everyone involved during the past 18 months given the huge personnel impacts felt as a result of the global COVID-19 pandemic.

Yours sincerely

Ben Wright Chief Audit Executive 30 September 2021

4 National Circuit Barton ACT 2600 PO Box 25 Belconnen ACT 2616 • Telephone: 02 6264 1111 • www.homeaffairs.gov.au



Cobham Aviation Services Australia Special Mission National Drive, Adelaide Airport, South Australia, 5950, Australia

23rd September 2021

Mr Grant Hehir Auditor-General for Australia Australian National Audit Office Canberra ACT 2609

Dear Mr Hehir

RE: ANAO Audit of the Management of the Civil Maritime Surveillance Services Contract

We are disappointed that the ANAO has not afforded Cobham the opportunity to provide a more detailed response to the draft report.[®]Notwithstanding, this letter constitutes Cobham's formal comments for inclusion in the audit report as offered.

- Cobham notes the ANAO's audit-in-brief advice that its audit is confined to the management of the Sentinel contract by ABF and is not an audit of Cobham or Cobham's contract performance.
- Cobham notes that ANAO staff sought no input from Cobham during the conduct of the audit other than the in-brief information provided by Cobham as a courtesy, and the provision of a copy of the draft report after the audit was finalised.^(b)
- Cobham maintains that there are a range of errors, omissions and misinterpretations within the audit report, and contextual information that contributed to many of the adverse findings has been ignored.
- Cobham stands by its record of providing and operating the ABF's Border Surveillance service that has delivered 98% of tasked surveillance missions over the course of the Sentinel contract of 13+ years, and maintained an average contract performance score of 95% against a 90% contractual threshold.⁽¹⁾

Regards,

)oof

John Boag Chief Executive Officer Cobham Aviation Services

ANAO comments on Cobham Aviation Services response

- (a) Consistent with section 19 of the Auditor-General Act, Surveillance Australia was provided with 28 days to provide written comments on the proposed report of this audit. A two day extension was granted to enable a response to be provided and included in the final report for publication.
- (b) The ANAO audit team met with representatives of Surveillance Australia as part of audit fieldwork for this audit, as well as the audit on the Management of the Search and Rescue Aircraft Contract (Auditor-General Report 27 2020–21).
- (c) As acknowledged by Cobham, the audit was of the management of the contract. It was conducted under section 17 of the Auditor-General Act, of the Department of Home Affairs. While section 18B of the Auditor-General Act enables the Auditor-General to audit the performance of Commonwealth partners such as Surveillance Australia (Cobham Aviation Services), this audit did not employ that power.
- (d) Detailed comments provided to the ANAO by Cobham asserting errors, omissions and misinterpretations were considered and responded to by the ANAO prior to the audit report being finalised and tabled.

Appendix 2 Improvements observed by the ANAO

1. The existence of independent external audit, and the accompanying potential for scrutiny improves performance. Improvements in administrative and management practices usually occur: in anticipation of ANAO audit activity; during an audit engagement; as interim findings are made; and/or after the audit has been completed and formal findings are communicated.

2. The Joint Committee of Public Accounts and Audit (JCPAA) has encouraged the ANAO to consider ways in which the ANAO could capture and describe some of these impacts. The ANAO's 2021–22 Corporate Plan states that the ANAO' s annual performance statements will provide a narrative that will consider, amongst other matters, analysis of key improvements made by entities during a performance audit process based on information included in tabled performance audit reports.

3. Performance audits involve close engagement between the ANAO and the audited entity as well as other stakeholders involved in the program or activity being audited. Throughout the audit engagement, the ANAO outlines to the entity the preliminary audit findings, conclusions and potential audit recommendations. This ensures that final recommendations are appropriately targeted and encourages entities to take early remedial action on any identified matters during the course of an audit. Remedial actions entities may take during the audit include:

- strengthening governance arrangements;
- introducing or revising policies, strategies, guidelines or administrative processes; and
- initiating reviews or investigations.

4. In this context, the below actions were observed by the ANAO during the course of the audit. It is not clear whether these actions and/or the timing of these actions were planned in response to proposed or actual audit activity. The ANAO has not sought to obtain assurance over the source of these actions or whether they have been appropriately implemented.

- A change in senior executive level staff in the relevant division in late 2017, and in response to the ANAO flagging a potential audit of management of the Surveillance Australia contract, led to the engagement of consultants to undertake remediation work across a range of contracts. This included assisting with the development of key contract documentation (finding and saving in the records a complete consolidated version of the Surveillance Australia contract, developing a contract management plan and other key documentation that was either out of date or missing) and improved contract management processes.
- The ANAO also observed that the department adopted a more streamlined process for managing invoices, sourcing of missing documentation, and improved electronic records management.
- Home Affairs has not performed quality assurance checks over the base data contained in the Geospatial Data Mart (GDM) Reporting and Operations Command (GROC) system. ANAO identified and raised some data quality concerns with Home Affairs throughout the audit over the data contained in the GROC system. As a result, Home Affairs corrected the base data records.

Appendix 3 Key contract variations

CCP No.	Date of execution	Summary and effect of variation	Cost	Scope	Timeframe
CCP005	23 Dec 06	Provision of surveillance information management system (SIM), involving:	Yes	Yes	Yes
		 a new delivery schedule for the transition-in period, including amendment of the full service delivery date of 1 July 2008 to the scheduled SIM delivery date of 7 June 2010, 23 months later than originally planned; and 			
		• amendments to the service charges; the cost was greater than originally planned; on 12 December 2006 the Finance Minister provided authorisation to increase the value of the contract by \$10 million to cover additional costs related to the SIM contract change proposal (CCP005).			
CCP015	8 Sep 08	Increase in rate of effort (RoE) to 15,000 hours from 1 October 2008 to 30 June 2010, at an estimated cost of \$5,990,463. Ministerial authorisation was not sought prior to entering into the contract variation, which increased the value of the contract beyond the approved limit. Home Affairs did not conduct a value for money assessment to inform the decision to enter into the CCP. In executing the CCP, the parties recognised 'that due to a lack of hard data the impacts of this CCP cannot be fully anticipated'. ^a	Yes	Yes	No
CCP023	2 Jul 09	Reallocation of RoE Westward, involving transfer of aircraft and resources from Cairns to Darwin and Broome; extension of the increased RoE hours contracted under CCP015 for the remaining term of the contract; continued application of the increase in the Annual Fixed Charge in CCP015 discounted by \$92,680 from 1 July 2009, for a total estimated cost of \$57.2 million. The Finance Minister's authorisation was not sought prior to entering into the contract variation, which increased the value of the contract beyond the approved limit.	Yes	Yes	No

Table A.1:Key contract variations

CCP No.	Date of execution	Summary and effect of variation	Cost	Scope	Timeframe
CCP024	2 Jul 09	Additional surveillance services using Reims F406 aircraft from 1 July 2009 to 30 June 2011 including an annual RoE of 2,000 hours from the Cairns base.	Yes	Yes	No
		The Finance Minister's authorisation was not sought prior to entering into the contract variation, which increased the value of the contract beyond the approved limit. The total estimated cost of the variation was \$16.5 million. Payments include:			
		 a Total Monthly Payment – F406, made up of the Monthly Service Charge (comprised of the Monthly Fixed Charge and Monthly Hourly Charge), plus Monthly Reimbursable Expenses (which include Landing and Navigation Charges, and accommodation and meal allowances at the agreed Travel Rate); and 			
		• four Pilot Guarantee payments totalling \$4m.			
CCP028	29 Apr 10	Broome RoE, Weipa Engineers & One-off Payment Rescheduling 2010, involving base specific arrangements: <i>Weipa</i>	Yes	No	No
		 Increase to Annual Fixed Charge of \$795,980 (indexed) from 1 October 2009 to 30 June 2011 for provision of two additional engineers to support deployments. 			
		Broome			
		 Increase to the Annual Fixed Charge of \$222,000 (indexed) per annum from 1 September 2009 (replaces the 'Fly In, Fly Out' Broome Base payment of \$244,000 agreed under CCP023), to support the 500 additional flight hours per year and missions allocated to the Broome Base. 			
CCP029	7 Dec 10	SIM Service B Supplementary Support Increase to the annual fixed charge by \$121,746 (indexed) from 1 September to 30 June 2019 for Service Provider assistance to the Service B provider with ongoing support of the SIM-A Service B system.	Yes	Yes	No

CCP No.	Date of execution	Summary and effect of variation	Cost	Scope	Timeframe
CCP030	7 Dec 10	 Service Provider assistance to the service B provider with ongoing support of the service B satellite communications system, and including the cost of capital expenditure for the purchase of the service B satellite communications system, and increases in the annual fixed charge (indexed) of: 1 September 2010 to 30 June 2011 of \$48,893.28; 1 July 2011 to 30 June 2012 of \$50,756.64; and 1 July 2012 to 30 June 2019 of \$52,616.00. 	Yes	Yes	No
CCP036	30 Jun 11	Extension of the surveillance services – Reims F406 for a period of two years from 1 July 2011 to 30 June 2013, including refurbishment of the F406 aircraft and continued engineering support.	Yes	Yes	No
CCP040	28 Jun 13	Following expiry of the satellite communications services supplied to Home Affairs by another provider, Surveillance Australia to contract directly with the provider on the same basis. The Annual Fixed Charge increased by \$50,000 (indexed) from 1 July 2013 to 31 December 2021.The monthly charges include an element for engineering support for the satellite service.	Yes	Yes	No
CCP041	25 Oct 12	Home Affairs exercised the option to extend the contract for two years. While the option available in the contract included a reduction in the unindexed portion of the Annual Fixed Charge of \$10,301,200 per annum, Surveillance Australia advised Home Affairs that the full savings outlined in the contract were no longer available due to increased pilot costs over the life of the contract exceeding the contract indexation provisions. Surveillance Australia proposed a \$5.4 million reduction in the unindexed portion of the Annual Fixed Charge. Home Affairs engaged a consultant to undertake a financial and technical review of the impact the extension would have on the service provider's operations. The review determined that Home Affairs could seek \$8 million in savings in each of the extension years, whilst maintaining a modest profit for Surveillance Australia which was achieved.	Yes	No	Yes
CCP042	29 Jun 14	First Response Drop Capability, involving upfront mobilisation payments to modify five Dash–8 aircraft with Air Operable Doors and set up the initial First Response Drop capability for Christmas Island deployments.	Yes	Yes	No

CCP No.	Date of execution	Summary and effect of variation	Cost	Scope	Timeframe
CCP045	23 Oct 14	Satellite Services – Provision of Data, involving an expansion of the requirements provided by Surveillance Australia under CCP040 commencing 1 September 2013 (prior to execution of the CCP) until 30 June 2016 with costs for the service to be passed on to Home Affairs and paid as a Monthly Reimbursable Expense. The service was to be reviewed by both parties prior to 30 June 2016 to decide if the service was to continue past this date. This review did not occur and Home Affairs continued to pay the invoices provided by Surveillance Australia following the expiry date of 30 June 2016. On 28 November 2018, Home Affairs wrote to Surveillance Australia to formally acknowledge the continuing requirement of the services provided by Surveillance Australia. The total expenditure approved by the delegate for CCP045 was \$4.2 million. Expenditure exceeded this amount by \$1,105,700 and \$3,188,964 has been expended to date since the service was originally to be reviewed or cease on 30 June 2016.	Yes	Yes	No
CCP047	2 Jun 14	Extension of the Surveillance Services – F406 for a period of one year from 1 July 2014 to 30 June 2015, including engineering support at the Horn Island Resourced Deployment Base for the term of the CCP, with the cost incorporated in the Annual Fixed Charge – F406.	Yes	Yes	No
CCP048	20 Jun 16	SIM-G Disaster Recovery Capability, involving installation of an additional SIM-G node at a remote site with an increase to the Annual Fixed Charge of \$78,267 (indexed) per annum. The total expenditure approved for the variation was \$1,680,250. Home Affairs paid a deposit of \$445,000 on 8 July 2014, 23 months prior to execution of the CCP, and another sum of \$406,612.80 on 23 June 2016 for the completion of development, supply of hardware and security re-accreditation. Home Affairs failed to provide its prerequisite conditions of the proposal and as a result Surveillance Australia was unable to complete the commissioning of the system. Surveillance Australia had sought direction from the department on the commissioning of the system since the execution of the CCP and sought payment of the installation and annual support costs. In September 2018, Home Affairs agreed to pay the installation and support costs.	Yes	Νο	No

CCP No.	Date of execution	Summary and effect of variation	Cost	Scope	Timeframe
CCP052	16 Mar 18	Rebranding Contract Aircraft to reflect change to "Australian Border Force" ^b , involving removal of old livery and paintwork and completion of the rebranding of the aircraft, including the supply, preparation and application of new badging, lettering and paint to each contracted aircraft, by 18 December 2015, at a cost of \$320, 034 The CCP was drafted in July 2015 and the contents agreed but not executed.	Yes	Yes	No

Note a: The costings were to be subject to open book examination following the execution of the CCP. Home Affairs agreed to pay 80 per cent of the value of the invoice total pending outcomes of review of the disputed portion of the service charge.

Source: ANAO analysis of Home Affairs records

Note b: The CCP states that its content, including the contract variation, was drafted in July 2015 and agreed and understood by both parties but not executed. The executed CCP050 documents the variation.

Appendix 4 Performance framework

Dash-8

1. Dispatch Reliability (DR) is primarily a measure of Surveillance Australia's ability to arrive at the on surveillance point at the planned time. A score of 100 per cent is allocated if the surveillance asset arrives at the on surveillance point within 30 minutes of the planned on surveillance time. A sliding scale calculation for delays past 30 minutes is then applied up to a 180 minute delay which would result in a zero DR score (see Figure A.1).

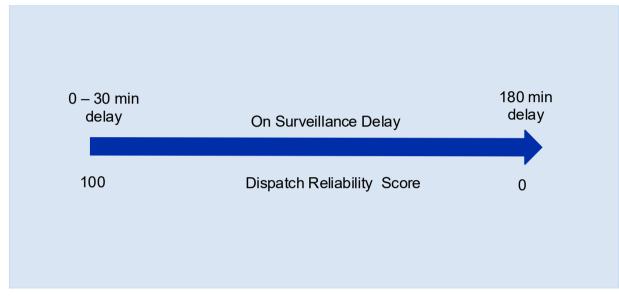


Figure A.1: Dispatch reliability score

Source: ANAO analysis of Home Affairs records.

2. Mission Completion (MC) is primarily a measure of the Surveillance Australia's ability to conduct and achieve the planned area of surveillance. The MC score is calculated by dividing the actual area of effective surveillance completed by the planned area of effective surveillance times by 100.

3. Both the DR and MC scores can have deductions and adjustments applied to them for various reasons. A breakdown of these adjustments are outlined below in the Table A.2.

Table A.2: DR and MC adjustments

	Dispatch reliability	Mission completion
Possible deductions	• DR score forced to zero if the mission has less than the full complement of qualified aircrew and customs selects to proceed with the mission.	• Evaluation Adjustment (EA) of five per cent may be made for incomplete, inaccurate or untimely reports and/or due to a Maritime Aviation Specialist Surveillance Officers (MASSO) assessment.

	Dispatch reliability	Mission completion
Possible adjustments/up scoring/overrides	• Reduction of the delay equal to the duration of delay that is caused by events beyond the control of the contractor.	• A Mission Coverage Adjustment of up to 100 per cent may be made to reflect the square nautical miles not covered as a result outside of the contractor's control.
		• If the MC score is greater than 95 per cent then the MC score will be upscored to 100 per cent.

Note: The reasons for up scoring are discussed in Chapter 4,Table 4.5. Source: ANAO analysis of Home Affairs records.

4. There are 10 mission types that the Dash–8 aircraft can perform. The mission type determines various factors such as Performance Measurement System (PMS) applicability and special conditions for Overall Mission Performance (OMP). Table A.3 breaks down the mission types.

Mission Type	PMS applicable	Special PMS conditions
Standard –Wide Area–Routine — A mission over a designated area that is conducted in accordance with a pre- determined programme. These missions can be rescheduled or reprogrammed.	\checkmark	×
Standard–Wide Area–Time Critical — A mission over a designated area that is conducted in accordance with a pre- determined programme that must occur at a specific time. These missions can only be rescheduled at the discretion of Home Affairs.	\checkmark	×
Standard–Targeted–Time Critical — A mission with a specific target, prompted by specific information or intelligence that must occur at a specific time. These missions can only be rescheduled at the discretion of Home Affairs.	✓	×
Rescheduled–Routine — A mission that has replaced a delayed mission in the previous 24 hours. Rescheduled missions must have similar mission parameters as the original and have no impact on the Monthly Deployment Plan (MDP).	\checkmark	DR score forced to zero, original mission alleviated ^a
Reprogrammed–Wide Area–Routine — A mission that has replaced a delayed mission in the same month. Reprogrammed missions must have similar mission parameters as the original and have no impact on the MDP.	\checkmark	Full score available, final score is averaged with original mission given zero OMP
Rescheduled–Time Critical — A mission that has replaced a delayed time critical mission in the previous 24 hours. Rescheduled time critical missions must have similar mission parameters as the original, have no impact on the MDP and the original mission must not have been delayed by more than 180 minutes.	\checkmark	Pro rata original mission DR score

Mission Type	PMS applicable	Special PMS conditions
Supplementary — A mission where the service provider has capacity to undertake extra missions on any day at any base. These missions are in addition to missions outlined an agreed in the MDP.	×	N/A
Reserve — Missions planned at the discretion of Home Affairs each day during hours of otherwise low activity, in response to unforeseen operational requirements.	\checkmark	×
Other Services – Other — Missions of ad hoc nature that can include ferry flights, training missions and services that are not business as usual.	Case by Case	Case by Case
Other Services – SAR — Search and rescue missions.	×	N/A

Note a: Alleviated means the mission is excluded from the overall contract performance calculation. Source: ANAO analysis of Home Affairs records.

Geospatial Data Mart (GDM) Reporting and Operations Command (GROC)

5. Since July 2011, the recording of data required for the DR and MC scores is handled through the on-board Surveillance Information Management system (SIM) which feeds data into a ground based SIM node which is then passed into the GROC system for calculation. Planning, scheduling and mission tasking is handled through a different system called Surveillance Management and Response Tasking System (SMARTS).¹⁰⁴ GROC is the primary system used by Maritime Border Command to monitor and manage surveillance mission data passed through from the surveillance assets.¹⁰⁵ It holds both operational and contract management data.

6. Mission data that is pushed through from SIM to GROC is received and assessed by operational staff in both real time and post mission to check for any mission record errors such as incorrect IDs logged, blurry or unusable images, which can then result in Mission Record Assessment (MRA) penalties being applied. Once the operational assessment is completed the mission is then assessed against the PMS. If the mission data has successfully been pushed from SIM to GROC the DR, MC and OMP scores will be automatically calculated.¹⁰⁶ At this stage it is possible for adjustments, overrides and alleviations to be applied.

Auditor-General Report No.6 2021–22

Management of the Civil Maritime Surveillance Services Contract

¹⁰⁴ Prior to GROC and SMARTS being implemented, a single system called Coastwatch Command and Support System (CWCSS) was used to coordinate mission tasking and performance measurement.

¹⁰⁵ Surveillance Australia maintains its own mission database, Phoenix that calculates DR, MC, OMP and OCP scores based on data they collect.

¹⁰⁶ Home Affairs advised that due to the multiple steps and transfer between different systems, data is not always successfully pushed through into GROC.

Appendix 5 Concessions on aircrew requirements and additional payments

1. Instead of addressing the ongoing aircrew shortfalls, Home Affairs made a number of concessions and further changes to contract requirements with respect to aircrew requirements. Table A.4 illustrates these concessions.

Table A.4:	Concessions made to Surveillance Australia for qualified aircrew shortages
	Concessione made to carrenance Australia for quannea anorem enertageo

Date	Key change
1 January 2008	Security clearance waiver Home Affairs agreed to allow Surveillance Australia to use pilots not trained for the purposes of this contract and uncleared aircrew to help crew missions. A security clearance waiver was agreed, to cease on 30 June 2008, which allowed aircrew to fly without security clearances.
5 May 2008	Letter of agreement to restructure pilot qualifications. Morphs into CCP19 and CCP044
1 July 2009	 Agreement to CCP024 – Pilot Guarantee. In addition to the monthly payments for the Reims F406, Home Affairs agreed to pay Surveillance Australia four pilot guarantee payments: a) \$1 million on 1 July 2009 to support the start-up of surveillance services – Reims F406; b) \$1 million on 31 December 2009; c) \$1 million on 30 June 2010; and d) \$1 million on 31 December 2010. The pilot guarantee was a retention bonus that was provided to pilots to encourage them to remain working with ABF rather than moving to work with commercial airlines.
23 September 2009	 CCP026 Broome Housing Home Affairs agreed to lease three of its residential properties in Broome to Surveillance Australia from 1 July 2009 to assist with attracting aircrew to Broome in order to complete the services required under the contract. The rent payable for each of the properties was: up to 28 October 2009: \$34 per week; and from 29 October 2009: \$35 per week. The properties were returned to Home Affairs on 14 October 2016. Surveillance Australia has also provided significant remuneration incentives to Broome crews as well as offering Fly-in Fly-out (FIFO).

Source: ANAO analysis of Home Affairs records.

2. As illustrated above, Home Affairs has paid Surveillance Australia in addition to the full monthly service charge, the above payments and concessions without meeting the contract requirements, reducing planning flexibility for operational outcomes; or providing any additional benefits to the department.

Appendix 6 Performance shortfalls

Period	Asset	OCP Score	Amount deducted (\$)		
January 2008	Dash–8	78.99	PMS deductions not applicable		
February 2008	Dash–8	66.75	PMS deductions not applicable		
March 2008	Dash–8	81.54	PMS deductions not applicable		
April 2008	Dash–8	80.18	PMS deductions not applicable		
May 2008	Dash–8	80.13	PMS deductions not applicable		
June 2008	Dash–8	88.25	PMS deductions not applicable		
September 2011	F406	74.04	PMS deductions not applicable		
October 2011	F406	46.82	PMS deductions not applicable		
December 2011	F406	72.09	PMS deductions not applicable		
March 2012	F406	79.70	1,245.51		
April 2012	F406	76.94	12,746.97		
June 2012	F406	77.25	11,455.60		
July 2012	F406	79.52	Records not retained		
November 2016	Dash–8	88.69	110,653.97		
December 2016	Dash–8	85.66	359,609.71		
January 2017	Dash–8	83.87	498,034.67		
April 2017	Dash–8	88.88	94,344.54		
September 2017	Dash–8	79.13	886,226.06		
October 2017	Dash–8	89.11	75,592.58		
February 2018	Dash–8	87.04	245,100.60		
Total	•	2,295,010.20			

Table A.5: Performance shortfalls

Source: ANAO analysis of Home Affairs records.

Appendix 7 Maritime Aviation Specialist Officers

1. As provided by the terms of the contract, Home Affairs employ Maritime Aviation Specialist Surveillance Officers (MASSOs) to provide a level of assurance over the operational competency of Surveillance Australia.¹⁰⁷ A January 2018 review of the Border Force Capability Division commissioned by the department from a consultant identified this compliance work as a 'key input into the evaluation of contract performance'. However, the low number of MASSOs employed has reduced the effectiveness of this assurance mechanism.

- 2. The MASSOs are employed to undertake three key roles to:
- monitor and report on Surveillance Australia's operational performance and compliance with the contractual service delivery requirements of all activities associated with missions, including pre-mission, in-mission and post-mission activities¹⁰⁸;
- contribute to, and report on the development, delivery and assessment of operational surveillance training by Surveillance Australia; and
- work with Surveillance Australia to improve the overall operational effectiveness and efficiency of surveillance operations.

3. MASSOs have an internal target to undertake monitoring activities of at least 15 per cent of all missions flown across the bases. Table A.6 below highlights the decreasing level of missions flown by the MASSOs between 2014–15 and 2020–21. In 2014–15, the average number of missions monitored as a percentage was 10.6 per cent.¹⁰⁹ This percentage has decreased in the last six years to only 2.3 per cent in 2020–21.

4. The number of MASSOs employed has significantly impacted Home Affairs ability to meet the target of 15 per cent of all missions monitored. Under the previous civil maritime surveillance contract, between 2002 and 2008, there were ten full-time MASSOs employed by Home Affairs. Comparatively, Table A.6 below shows that the total number of MASSOs employed by Home Affairs has decreased from 6 in 2014–15 to 1 in 2020–21. Monitoring activities have largely been limited to Darwin (1.9 per cent of all missions) operations since August 2019 while only one MASSO has been employed. Monitoring rates have been significantly lower in Cairns (0.3 per cent) and Broome (0.1 per cent). Missions have only been monitored in Darwin since April 2020 as a result of travel restrictions caused by the COVID-19 pandemic.¹¹⁰

5. The January 2018 consultants' report identified that Home Affairs was achieving coverage of two to three per cent due to only one MASSO being employed, and this situation has not improved subsequently. As identified in an internal report the current number of MASSOs employed (1 based in Darwin):

¹⁰⁷ MASSOs were previously known as Competency Assessment and Training Officers (CATOs) (in relation to the Dash–8 aircraft) and Mission Coordination Officers (MCOs) (in relation to the Reims F406 aircraft).

¹⁰⁸ These activities include producing an end-of-mission report, which includes an assessment of aircrew performance which identifies whether each aircrew member has met mission requirements.

¹⁰⁹ Home Affairs has not retained records relating to MASSO activity and coverage. ANAO analysis is limited to documentation that Home Affairs has retained and provided.

¹¹⁰ By way of comparison, in Auditor-General Report No.38 1999–2000 *Coastwatch*, it was identified that the CATO system had 'considerable merit', and that all CATOs travel to centres of Coastwatch air operations to evaluate contractor aircrews, so that no single CATO can be perceived to be building an unhealthy relationship with individual aircrews (page 83).

in terms of providing a reasonable degree of assurance to the Commonwealth Government that the...service providers are performing at satisfactory level (in terms of investigation and reporting procedures), this must surely be considered unacceptable.

6. The department advised the ANAO in March 2021, that they had commenced recruitment activities to employ a second MASSO to operate out of the Cairns base, to commence late-2021. In July 2021, Home Affairs advised the ANAO that it has finalised recruitment for a new MASSO, taking the number of MASSOs to two and that the new MASSO commences on 23 August 2021, and is expected to complete training by February 2022, (which is two months after the current contract ceases).

	2014–15	2015–16	2016–17	2017–18	2018–19	2019–20	2020–21
Total number of missions	2625	2293	2209	2182	2297	2248	2336
Total number of monitored missions	Not available	Not available	Not available	142	132	62	49
Total number of monitored mission as a percentage	10.6%ª	12.9%ª	Not available	6.5%	5.7%	2.8%	2.1%
Target rate	15%	15%	15%	15%	15%	15%	15%
Shortfall against the target rate	29%	14%	Not available	57%	62%	81%	86%
Average number of MASSOs	6	5	Not available	2	2	1	1

Table A.6: MASSO monitored missions 2014–15 to 2020–21

Note a: The percentage of missions monitored for these years is an average based on six months of available records retained by Home Affairs. The ANAO could not determine the total number of missions monitored for these years as Home Affairs has not retained all relevant records.

Source: ANAO Analysis of Home Affairs records.