Project Data Summary Sheet²²⁸

| Project Number | AIR 87 Phase 2 | |
|------------------------|-------------------------|--|
| Project Name | ARMED RECONNAISSANCE | |
| | HELICOPTER | |
| First Year Reported in | 2007-08 | |
| the MPR | | |
| Capability Type | New | |
| Acquisition Type | Australianised MOTS | |
| Service | Australian Army | |
| Government 1st Pass | N/A | |
| Approval | | |
| Government 2nd | Mar 99 | |
| Pass Approval | | |
| Total Approved | \$2,032.7m | |
| Budget (Current) | | |
| 2014–15 Budget | \$1.2m | |
| Project Stage | Acceptance Into Service | |
| Complexity | ACAT II | |



Section 1 – Project Summary

1.1 Project Description

This project was approved to provide a reconnaissance and fire support capability for the Australian Defence Force (ADF). The project has **delivered** 22 aircraft including an instrumented aircraft (permanently fitted with in-flight test instrumentation), a Full Flight and Mission Simulator, two Cockpit Procedures Trainers, Groundcrew Training Devices, Electronic Warfare Mission Support System, Ground Mission Equipment, with supporting stores, facilities and ammunition.

1.2 Current Status

Cost Performance

In-year

As at **30 June 2015**, Final Plan estimate of **\$1.2m was achieved. Variance from PAES is attributable to discounts on upgrades to Ground Mission Equipment received as Liquidated Damages.**

Project Financial Assurance Statement

As at 30 June 2015, project AIR 87 Phase 2 has reviewed the approved scope and budget for those elements required to be delivered by the project. Having reviewed the current financial and contractual obligations of the project, current known risks and estimated future expenditure, Defence considers, as at the reporting date, there is sufficient budget remaining for the project to complete against the agreed scope.

Contingency Statement

The project incorrectly advised no application of contingency in Financial Year 2013-14 when it had applied contingency in support of the Deployable Aircraft Maintenance Rig capability. The project has also applied contingency in financial year 2014-15 for discounts on upgrades to Ground Mission

228 Notice to reader

Future dates and Sections: 1.3 (Major Risks and Issues), 4.1 (Measures of Materiel Capability Delivery Performance), 5.1 (Major Project Risks) and 5.2 (Major Project Issues) are out of scope for the ANAO's review of this Project Data Summary Sheet. Information on the scope of the review is provided in the *Independent Review Report by the Auditor-General* in **Part 3** of this report.

Equipment received as Liquidated Damages.

Schedule Performance

The Final Materiel Release (FMR) Approval Certificate was signed by all stakeholders on 19 March 2014, with Army caveats, **(20 months behind schedule)**.

Project Closure activities are in progress, with Final Operational Capability (FOC) planned to be achieved by January 2016 (79 months behind schedule).

Materiel Capability Delivery Performance

As at 30 June **2015**, all 22 Armed Reconnaissance Helicopter (ARH) have been accepted by the Commonwealth in the Initial Operational Test and Evaluation Readiness configuration; six are being used for training, one of which is also being used to support test activities; and 16 are being used to raise, train and sustain the operational squadrons in Darwin in order to maintain directed levels of capability and to continue capability growth to achieve FOC. All three simulators have been accepted and are being used for aircrew training in Oakey and Darwin.

The rebaselined schedule included all planned engineering activities required to deliver a fully compliant ARH System. Full compliance or Service Release of all Engineering Change Proposals was achieved in May 2013.

Operational readiness of the delivered ARH capability is being progressed by Army. The Operational Capability (OC) 2 milestone, a deployable squadron, was granted by the Chief of Army on 11 July 2013. The OC3 milestone, a deployable squadron plus troop by land into a non-permissive environment, was granted by the Chief of Army on 2 December 2014. The delivery of the remaining items are being managed by the Tiger sustainment organisation and is expected to have minimal impact on the overall ARH capability, noting that the deficiency in the Electronic Warfare System will be corrected in aircraft available to the Capability Manager required to meet FOC.

Note

The capability assessments and forecasts by the project are not subject to the ANAO's assurance review.

1.3 Project Context

Background

The project received Government approval in March 1999 to replace the Army's aerial reconnaissance and fire support capability, which was based on the 1960s technology Bell Kiowa and Iroquois helicopters. The project's acquisition strategy specified substantial Australian Industry Involvement, and in December 2001 the Commonwealth entered into separate contracts with Australian Aerospace for the Acquisition and Through Life Support (TLS) programs.

The first four aircraft were manufactured and assembled in France and the remaining 18 aircraft were manufactured in France and assembled in Brisbane. One ARH is fitted with flight test instruments to assist the test and evaluation of ARH capability upgrades.

The training system relies heavily on simulation devices using the Full Flight and Mission Simulator and Cockpit Procedures Trainers which were built in France, then shipped to Australia. The Full Flight and Mission Simulator and one Cockpit Procedures Trainer are installed at Oakey (Queensland); the second Cockpit Procedures Trainer is installed at Darwin (Northern Territory).

The project experienced delays in achieving the Initial Operational Capability (IOC) critical contractual milestone, which was originally contracted for June 2007, resulting in the Commonwealth exercising its contractual right to stop all payments on the Acquisition Contract while maintaining payments on the TLS Contract.

Delays resulted in insufficient numbers of aircraft, training devices and logistics support in service to enable the required training outcomes.

Airbus Group Australia Pacific (formerly Australian Aerospace) served a notice of dispute in October 2007 and the parties entered into a formal Dispute Resolution process over issues affecting both the Acquisition and TLS contracts. The dispute resolution process resulted in both parties signing a Deed of Agreement in April 2008 which established a revised Acquisition Contract Price and Delivery Schedule, a revised TLS Contract pricing structure that transitioned it to a Performance Based Contract, and established networks for work done by third-party support subcontractors. The re-plan included integration of a program necessary to retrofit all ARH to the final configuration where all mission systems are certified for employment by Army crews (known as the retrofit program). Partial payments to Airbus Group Australia Pacific on the

Part 3. Project Data Summary Sheets

ARH Acquisition Contract were recommenced in April 2008, with full payment due on signing of the Contract Change Proposals (CCP).

Changes to the Acquisition Contract arising from the signing of the Deed of Agreement were agreed between the parties in February 2009, with full payment recommencing from this date.

The commensurate major documentation amendment through a CCP was approved in May 2009, and the Contract Amendment was issued in June 2009.

Uniqueness

The Australian Tiger ARH design is based on the Eurocopter French and German Armies Tiger helicopters. The ARH design varies from the French and German designs through changes made to the following systems:

- Secure radio communication systems;
- Digital Map System;
- Integration of the Hellfire Missile weapon system;
- 70mm rocket modifications;
- Storage Bay and Digital Video Recorder;
- Roof Mounted Sight multi-target tracking system; and
- Helmet Mounted Sight and Displays in both cockpits.

The ADF's Airworthiness certification of the ARH Tiger aircraft relies on the French Airworthiness certification process undertaken by the French acquisition agency (Direction Générale de l'Armement). The ADF's Director General Technical Airworthiness recognises the French acquisition agency as a competent certification agency, and subsequently accepts the French acquisition agency certification of common Tiger systems used in the Australian ARH Tiger. In doing so, the French acquisition agency certification of the French aircraft became an integral part of the ADF's ARH certification plan. Consequently, delays in the French program flowed through to the ADF's ARH program and delivery of operational capability to the Army. This caused schedule slip in the aircraft and system certification, simulator development and aircrew training. The delays in the program resulted in the contractor failing to achieve the original contracted IOC critical milestone.

Major Risks and Issues

All major risks identified in the **2013-14** Major Projects Report have been retired from an Acquisition perspective and AIR 87 Phase 2 project closure activities are in progress.

The Final Materiel Release (FMR) Approval Certificate, signed by all stakeholders on 19 March 2014, was caveated by the Capability Manager. The caveats to FMR relate to Rate of Effort generation, suitability of the Groundcrew Training Device. Electronic Warfare Self Protection performance, and high cost of ownership. These issues, other than the Groundcrew Training Device suitability which was delivered to the contracted requirements, are being managed by the Tiger sustainment organisation and stem from the less than expected maturity level of Airbus Helicopter's Tiger program at the time of Acquisition. Their effect, however, is being realised as poor performance in the Tiger Sustainment System. The Tiger sustainment organisation is actively working with Airbus Group Australia Pacific, and their parent, Airbus Helicopters, to address these issues through the Tiger Sustainment System, noting that the Rate of Effort and cost of ownership issues in particular are significant, complex and are unlikely to be resolved in the short term. The Capability Manager has also reassessed the Rate of Effort required to raise, train and sustain the ARH Capability and has reduced the annual planning targets from 7.147 hours to 6.227 hours. Industry has agreed to rectify the Electronic Warfare System performance issue at no cost to the Commonwealth with all modifications planned to be completed by end of March 2016. A Viability Review Deed of Agreement was signed between Airbus Group Australia Pacific and the Commonwealth in December 2014 that will see the implementation of a more rigorous performance based contract and up to a 50 per cent reduction in the cost per flying hour by Financial Year 2016-17 when the mature Rate of Effort that is planned to be flown is achieved.

Other Current Sub-Projects

AIR 9000 Phase 7 Helicopter Aircrew Training System (HATS): HATS will be an important link in the training continuum for inductees to the ARH training system.

Section 2 – Financial Performance

| | | Description | \$m | | Notes |
|---------------------------------|--|--|--|---|--|
| | | Project Budget | | | |
| Mar 9 | 99 | Original Approved | | 1,584.0 | |
| Oct 0 | 2 | Real Variation – Transfer | (18.2) | | 1 |
| Dec (| 03 | Real Variation – Transfer | (59.1) | | 2 |
| Aug (| 04 | Real Variation – Budgetary Adjustments | (2.2) | | 3 |
| Sep (| | Real Variation – Transfer | (3.0) | | 4 |
| Jun 0 |)5 | Real Variation – Transfer | (4.0) | | 5 |
| Aug (| 05 | Real Variation – Budgetary Adjustments | (4.5) | | 6 |
| • | | | | (91.0) | |
| Jul 10 | 0 | Price Indexation | | 418.2 | 7 |
| Jun 1 | 5 | Exchange Variation | | 121.5 | |
| Jun 1 | 5 | Total Budget | | 2,032.7 | |
| | | | | , | |
| | | Project Expenditure | | | |
| Prior | to Jul 14 | Contract Expenditure – Airbus Group Australia | (1,710.3) | | 8 |
| 1 1101 | 10 501 14 | Pacific | | | |
| | | Other Contract Payments / Internal Expenses | (154.0) | | 9 |
| | | | | (1,864.3) | |
| | | | | | |
| | | Other Contract Payments / Internal Expenses | (1.2) | | 10 |
| | | | | (1.2) | |
| Jun 1 | 5 | Total Expenditure | | (1,865.5) | |
| lun 4 | 5 | Demoining Dudget | | 407.0 | |
| Jun 1 | 5 | Remaining Budget | | 167.2 | |
| | - | | | | |
| Notes | | | | | |
| Notes | S | to Defence Support Group (DSG) Oakey Redevelop | oment Project 1 | o develop ARH | specific |
| | S | to Defence Support Group (DSG) Oakey Redevelop | oment Project 1 | o develop ARH | specific |
| | s Transfer infrastruc | to Defence Support Group (DSG) Oakey Redevelop | - | | |
| 1 | s Transfer infrastruc Transfer | to Defence Support Group (DSG) Oakey Redevelop sture. | - | | |
| 1 2 | s Transfer infrastruc Transfer Administ | to Defence Support Group (DSG) Oakey Redevelop cture. to DSG 1 Aviation Relocation Project (Darwin) to deve | elop ARH speci | fic infrastructure | |
| 1 2 3 4 | s Transfer infrastruc Transfer Administ Transfer | to Defence Support Group (DSG) Oakey Redevelop cture. to DSG 1 Aviation Relocation Project (Darwin) to deve rative Savings harvest. to Defence Science and Technology Organisation to fi | elop ARH speci | fic infrastructure support of ARH. | · · |
| 1 2 3 | s Transfer infrastruc Transfer Administ Transfer | to Defence Support Group (DSG) Oakey Redevelop cture. to DSG 1 Aviation Relocation Project (Darwin) to deve rative Savings harvest. | elop ARH speci | fic infrastructure support of ARH. | · · |
| 1 2 3 4 | s Transfer infrastruc Transfer Administ Transfer Project. | to Defence Support Group (DSG) Oakey Redevelop cture. to DSG 1 Aviation Relocation Project (Darwin) to deve rative Savings harvest. to Defence Science and Technology Organisation to fi | elop ARH speci | fic infrastructure support of ARH. | · · |
| 1 2 3 4 5 6 | s Transfer infrastruc Transfer Administ Transfer Project. Skilling A | to Defence Support Group (DSG) Oakey Redevelop cture. to DSG 1 Aviation Relocation Project (Darwin) to deve rative Savings harvest. to Defence Science and Technology Organisation to fi to DSG to fund AIR 87 facilities constructed as pa | elop ARH speci und studies in s rt of the Darwi | fic infrastructure support of ARH. n 1 Aviation Re | elocation |
| 1 2 3 4 5 | Transfer infrastruc Transfer Administ Transfer Transfer Project. Skilling A Up until impact o | to Defence Support Group (DSG) Oakey Redevelop cture. to DSG 1 Aviation Relocation Project (Darwin) to deve rative Savings harvest. to Defence Science and Technology Organisation to fi to DSG to fund AIR 87 facilities constructed as pa sustralia's Defence Industry harvest. July 2010, indexation was applied to project budget f this approach was \$414.9m. In addition to this amou | elop ARH speci und studies in s rt of the Darwi s on a periodi unt, the impact | fic infrastructure support of ARH. n 1 Aviation Re c basis. The cu on the project b | elocation mulative udget as |
| 1 2 3 4 5 6 | Transfer infrastruc Transfer Administ Transfer Transfer Project. Skilling A Up until impact o | to Defence Support Group (DSG) Oakey Redevelop cture. to DSG 1 Aviation Relocation Project (Darwin) to deve rative Savings harvest. to Defence Science and Technology Organisation to fi to DSG to fund AIR 87 facilities constructed as pa sustralia's Defence Industry harvest. July 2010, indexation was applied to project budget | elop ARH speci und studies in s rt of the Darwi s on a periodi unt, the impact | fic infrastructure support of ARH. n 1 Aviation Re c basis. The cu on the project b | elocation |
| 1 2 3 4 5 6 | Transfer infrastruc Transfer Administ Transfer Project. Skilling A Up until impact o a result o Includes | to Defence Support Group (DSG) Oakey Redevelop cture. to DSG 1 Aviation Relocation Project (Darwin) to deve rative Savings harvest. to Defence Science and Technology Organisation to fi to DSG to fund AIR 87 facilities constructed as pa sustralia's Defence Industry harvest. July 2010, indexation was applied to project budget f this approach was \$414.9m. In addition to this amou of out-turning was a further \$3.3m having been applied first five years support costs of the TLS Contract (two | elop ARH speci und studies in s rt of the Darwi is on a periodi int, the impact I to the remainin years Pre-Imp | fic infrastructure support of ARH. n 1 Aviation Re c basis. The cu on the project b ng life of the proj lementation and | elocation mulative udget as ect. I the first |
| 1 2 3 4 5 6 7 | Transfer infrastruc Transfer Administ Transfer Project. Skilling A Up until impact o a result o Includes three Co | to Defence Support Group (DSG) Oakey Redevelop cture. to DSG 1 Aviation Relocation Project (Darwin) to deve rative Savings harvest. to Defence Science and Technology Organisation to fe to DSG to fund AIR 87 facilities constructed as pa sustralia's Defence Industry harvest. July 2010, indexation was applied to project budget f this approach was \$414.9m. In addition to this amou of out-turning was a further \$3.3m having been applied first five years support costs of the TLS Contract (two ntract Years), Preliminary Engineering Proposals and | elop ARH speci und studies in s rt of the Darwi is on a periodi int, the impact I to the remainin years Pre-Imp | fic infrastructure support of ARH. n 1 Aviation Re c basis. The cu on the project b ng life of the proj lementation and | elocation mulative udget as ect. I the first |
| 1 2 3 4 5 6 7 | Transfer infrastruc Transfer Administ Transfer Project. Skilling A Up until impact o a result o Includes three Co Acquisitio | to Defence Support Group (DSG) Oakey Redevelop cture. to DSG 1 Aviation Relocation Project (Darwin) to deve rative Savings harvest. to Defence Science and Technology Organisation to fe to DSG to fund AIR 87 facilities constructed as pa sustralia's Defence Industry harvest. July 2010, indexation was applied to project budget f this approach was \$414.9m. In addition to this amou of out-turning was a further \$3.3m having been applied first five years support costs of the TLS Contract (two ntract Years), Preliminary Engineering Proposals and | elop ARH speci und studies in s rt of the Darwi s on a periodi unt, the impact to the remainin years Pre-Imp d Indefinite Qua | tic infrastructure support of ARH. n 1 Aviation Re c basis. The cu on the project b ng life of the proj lementation and antity tasks perfe | elocation mulative udget as ect. I the first prmed in |

2.1 Project Budget (out-turned) and Expenditure History

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| F | | aforementioned contract and minor contract expenditure. | | | |
|---|----|---|--|--|--|
| | 10 | Other expenditure includes discounts on upgrades to Ground Mission Equipment received as Liquidated Damages and to Nova Aerospace for engineering support. | | | |

2.2A In-year Budget Estimate Variance

| Estimate PBS \$m | Estimate PAES \$m | Estimate Final Plan \$m | Explanation of Material Movements |
|---------------------|----------------------|----------------------------|---|
| 3.8 | 0.2 | 1.2 | PBS to PAES: Return of \$2.5m to Contingency and the re-phasing of the Deployable Aircraft Maintenance Rig milestone payments in accordance with the signed Contract. PAES to Final Plan: Variance is attributable to discounts on upgrades to Ground Mission Equipment received as Liquidated Damages. |
| Variance \$m | (3.6) | 1.0 | Total Variance (\$m): (2.6) |
| Variance % | (94.7) | 500.0 | Total Variance (%): (68.4) |

2.2B In-year Budget/Expenditure Variance

| 2.28 m-year Budget/Expenditure variance | | | | | | |
|---|--------|----------|-----------------------|-------------|--|--|
| Estimate | Actual | Variance | Variance Factor | Explanation | | |
| Final Plan | \$m | \$m | | | | |
| \$m | | | | | | |
| | | | FMS | N/A | | |
| | | | Overseas Industry | | | |
| | | | Local Industry | | | |
| | | | Brought Forward | | | |
| | | | Cost Savings | | | |
| | | | FOREX Variation | | | |
| | | | Commonwealth Delays | | | |
| | | | Additional Government | | | |
| | | | Approvals | | | |
| 1.2 | 1.2 | 0.0 | Total Variance |] | | |
| | | 0.0 | % Variance | | | |

2.3 Details of Project Major Contracts

| | | | | e at | | | |
|--|---|-------------------|------------------|------------------|---|--------------------|--------|
| Cont | ractor | Signature Date | Signature \$m | 30 Jun 15 \$m | Type (Price Basis) | Form of Contract | Notes |
| | us Group ralia Pacific | Dec 01 | 1,139.9 | 1,710.3 | Variable | SMART 2000 | 1, 2 |
| Note | Notes | | | | | | |
| 1 | Increase in price is due to updates for Price and Exchange over the life of the project as well as the approval of Contract Change Proposals. A Deed of Closure to the Airbus Group Australia Pacific Prime Contract was signed on 28 May 2013. | | | | | | |
| 2 | | | | | ctual expenditure to 30 s adjustments for index | | 0 |
| Cont | ractor | Q | uantities as | at | Coone | | Notes |
| Com | Tactor | Signatu | re 30 | 0 Jun 15 | - Scope No | | |
| Airbus Group Australia Pacific | | 22 | | 22 | Tiger Armed Reconnaissance Helicopter | | |
| Major equipment received and quantities to 30 Jun 15 | | | | | | | |
| | aircraft have be olished. | een accepte | d by the C | commonweal | th. Engineering and r | maintenance arrang | ements |

Section 3 – Schedule Performance

| Review | Major System/Platform Variant | Original Planned | Current Planned | Achieved /Forecast | Variance (Months) | Notes |
|---|---|---|---|---|---|---|
| System | ARH System | Mar 02 | N/A | Feb 03 | 11 | 1 |
| Requirements | Aircrew Training Devices | Jun 02 | N/A | Feb 03 | 8 | 2 |
| System Design | ARH System | Jun 02 | N/A | Feb 03 | 8 | 1 |
| | ARH System - Delta System Design Review | Mar 03 | N/A | Apr 03 | 1 | 1 |
| | Aircrew Training Devices | Apr 03 | N/A | Jul 03 | 3 | 2 |
| Preliminary | ARH Tiger | Oct 02 | N/A | May 03 | 7 | 3 |
| Design | Aircrew Training Devices | Mar 03 | N/A | Oct 04 | 19 | 2 |
| Critical Design | ARH Tiger | Mar 03 | N/A | Jul 04 | 16 | 4 |
| | Aircrew Training Devices | Sep 03 | N/A | Jun 05 | 21 | 2 |
| and accep impacted b expected. | on the certification of the Fren tance program. The project's because the French program I | ability to lev nad not achie | verage from eved design | the French pro approval outco | ogram was a mes in the ti | dversely meframe |
| Reliance of and accep impacted t expected. The Full Fi systems fo proposed s to the efficiency | tance program. The project's | ability to lev nad not achie quired custor order to acco se of the dela provided fro | verage from eved design nisation to be unt for capat ay in deliverin | the French pro approval outco oth the visual sp ility deficiencien ng training devi | ogram was a mes in the ti ystem and th is associated ices can be a | e motion with the |
| Reliance of and accep impacted t expected. The Full Fi systems for proposed s to the effici being man As the ARI Authority p (Direction | tance program. The project's because the French program I ight and Mission Simulator red illowing contract signature in c simulator design. A major cause cacy with which the software | ability to lev nad not achie quired custor order to acco se of the dela provided fro simulator. d German Ti ertification w Delays ex | verage from eved design nisation to be unt for capab ay in deliverin m the aircra ger helicopte ork undertak perienced of | the French pro approval outco oth the visual s bility deficiencie ng training devi ft manufacture ers, the ADF Te en by the Fren- lirectly impact | ogram was a mes in the ti ystem and th s associated ices can be a r's test prog chnical Airwo ch acquisition | e motion with the attributed ram was |

Р ... _

| 3.2 Contractor | Test and Evaluation Progress | _ |
|----------------|-------------------------------|---|
| Test and | Maior System/Platform Variant | |

| Test and Evaluation | Major System/Platform Variant | Original Planned | Current Planned | Achieved /Forecast | Variance (Months) | Notes | |
|------------------------|---|---------------------|--------------------|-----------------------|----------------------|-------|--|
| System Integration | Full Flight and Mission Simulator Contractor In-plant | Jul 04 | N/A | Oct 07 | 39 | 1 | |
| | Cockpit Procedures Trainer Oakey Contractor In-plant and On-Site | Jul 04 | N/A | Jun 08 | 47 | 1 | |
| | Cockpit Procedures Trainer Darwin Contractor In-plant and Army In-plant | Jul 04 | N/A | Dec 08 | 53 | 1 | |
| Acceptance | ARH | | | | | | |
| | Type Acceptance Review Special Flight Permit | Oct 04 | N/A | Jun 05 | 8 | 1 | |
| | Australian Military Type Certificate | Jun 05 | N/A | Oct 05 | 4 | 1 | |
| | Aircrew Training Devices - Final Acceptance Test and Evaluation | | | | | | |
| | Full Flight and Mission Simulator (Transition Training capability) | Feb 05 | N/A | Nov 07 | 33 | 1 | |

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| | Full Flight and Mission Simulator (Full Training capability) | Feb 05 | N/A | Nov 09 | 57 | 1 |
|-------|---|--------|-----|--------|----|------|
| | Cockpit Procedures Trainer Oakey | Feb 05 | N/A | Nov 09 | 57 | 1 |
| | Cockpit Procedures Trainer Darwin | Feb 05 | N/A | Feb 10 | 60 | 1 |
| | Acceptance | | | | | |
| | ARH #11 | Jul 06 | N/A | Apr 08 | 21 | 1 |
| | ARH #22 | Apr 08 | N/A | Nov 11 | 43 | 1, 2 |
| Notes | | | | | | |

1 The difference between the Original Planned and Achieved dates is due to contractor delays in delivering conforming supplies.

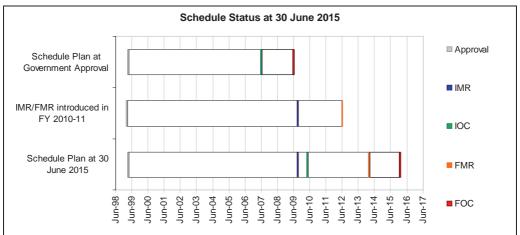
2 The acceptance of the 22nd production ARH was contracted for July 2011. The milestone was achieved on 25 November 2011.

Note: Production aircraft (#22) is the 22nd aircraft accepted by the Commonwealth which is not to be confused with the milestone for the 22nd aircraft accepted in the Initial Operational Test and Evaluation configuration under the Acquisition Contract. The 22nd aircraft accepted in the Initial Operational Test and Evaluation configuration was achieved on 14 December 2012 following the delivery of A38-002 from retrofit.

| 3 3 Prograge | Toward Materiel Releas | and Operational C | anahility Milastonas |
|--------------|------------------------|----------------------|----------------------|
| 0.011091033 | Toward materier Releas | se and operational o | |

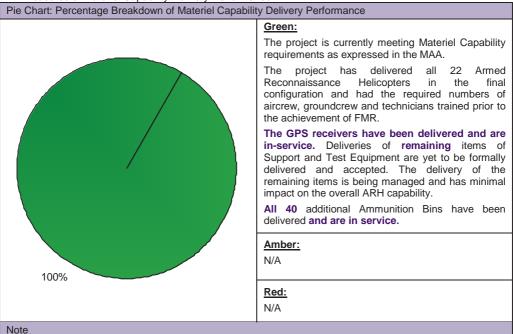
| Item | | Original Planned | Achieved /Forecast | Variance (Months) | Notes | |
|--------|--|---------------------|-----------------------|----------------------|--------------|--|
| Initia | I Materiel Release (IMR) | N/A | Sep 09 | N/A | | |
| Initia | l Operational Capability (IOC) | Jun 07 | Apr 10 | 34 | 1 | |
| Final | Materiel Release (FMR) | Jul 12 | Mar 14 | 20 | 2 | |
| Final | Operational Capability (FOC) | Jun 09 | Jan 16 | 79 | 3 | |
| Note | S | ł | | | • | |
| 1 | Operational Capability 1 (OC1) (IOC) was g primarily due to contractual delays. | ranted by Chief | of Army on 8 | April 2010 with | the variance | |
| 2 | No FMR originally identified. Current FMR is the date agreed in Amendment No. 2 to the project AIR 87 Phase 2 Materiel Acquisition Agreement. Delays in the achievement of the Final Acceptance Milestone under the contract with Airbus Group Australia Pacific, delays in the formal transition of capability components to the respective in-service management agencies and the time taken to get all stakeholders to sign off on the FMR Approval Certificate contributed to the delay in achieving FMR. The FMR Approval Certificate was signed by all stakeholders on 19 March 2014, with Army caveats that are being managed by the Tiger sustainment organisation. | | | | | |
| 3 | Previously, as a result of the reduction in flying Rate of Effort experienced by the ARH fleet, as well as a requirement to conduct amphibious operations from LHD ships, Army amended its Acceptance into Operational Service Plan, to reflect the associated training delays. Consequently, Chief of Army advised that the previously anticipated achievement date of December 2012 would not be met, and that a date of January 2016 was planned. | | | | | |
| | Chief of Army has since advised that FOC has not been delayed by a new requirement to conduct amphibious operations but that the delay was solely due to the reduced Rate of Effort of the aircraft. | | | | | |
| | The FOC milestone, full regiment (16 aircraft) by land into a medium threat, non-permissive environment, is progressing to plan with Chief of Army granting the OC2 milestone, a deployable squadron (eight aircraft), on 11 July 2013 and the OC3 milestone, a deployable squadron plus troop (11 aircraft) by land into a non-permissive environment, on 2 December 2014. FOC remains forecast to be achieved by January 2016. | | | | | |





Section 4 - Materiel Capability Delivery Performance

4.1 Measures of Materiel Capability Delivery Performance



This Pie Chart does not necessarily represent capability achieved. The capability assessments and forecasts by the project are not subject to the ANAO's assurance review.

| 4.2 Constitution of Initial Materiel Release and Final Materiel Release | | |
|---|--|-------------|
| Item | Explanation | Achievement |
| Initial Materiel Release (IMR) | Three ARH in the Initial Operational Test and Evaluation Readiness configuration; Aircraft Availability and Reliability parameters met; | Achieved |

Project Data Summary Sheets ANAO Report No.16 2015-16 2014-15 Major Projects Report

| ARH Tiger Helicopters |
|-----------------------|
| ets. |

| | Initial Integrated Logistic Support elements in place to support three ARH flying an annual Rate of Effort of 325 airframe hours/ARH; and Trained aircrew, groundcrew, and technicians. | |
|------------------------------|---|-----------------------|
| Final Materiel Release (FMR) | Remaining 19 ARH (22 in total) in the Initial Operational Test and Evaluation Readiness configuration delivered; Aircraft Availability and Reliability parameters met; All Initial Integrated Logistic Support elements in place to support remaining 19 ARH (22 in total) flying an average annual Rate of Effort of 325 airframe hours/ARH. Trained aircrew, groundcrew, and technicians; and Additional requirements as endorsed by Capability Development Group as being in scope of the project delivered. FMR was agreed achieved provided the following Army caveats are addressed: Rate of Effort Generation; Groundcrew Training Devices; Electronic Warfare System; and Cost of Ownership. | Achieved with caveats |

Section 5 – Major Risks and Issues

5.1 Major Project Risks

| Identified Risks (risk identified by standard project risk management processes) | |
|--|---|
| Description | Remedial Action |
| There is a chance that the FOC milestone will be affected by the inability to generate the required Rate of Effort (ROE) leading to an impact on cost | This risk has been transferred to sustainment and is being managed by the Tiger sustainment organisation. |
| and schedule. | An ARH Repairable Item Support and Cost Improvement Plan has been established by Airbus Group Australia Pacific to address shortfalls in the availability of critical Repairable Items and deficiencies in its Maintenance and Supply Support Networks. Additional Repairable Items have also been provided to the Commonwealth at no cost. Availability of Repairable Items to support maintenance activities has improved. |
| | The above mitigation activities have been initiated by the Tiger sustainment organisation to enable improved ROE. Following the declaration by Army that the ROE envisaged at project approval would never be achieved, the Capability Manager has also reassessed the ROE required to raise, train and sustain the ARH Capability and has reduced the annual planning targets from a maximum 7,147 hours to 6,227 hours. This risk is now considered to be a low risk to project AIR 87 Phase 2. |

| Emergent Risks (risk not previously identified but has emerged during 2014-15) | |
|--|-----------------|
| Description | Remedial Action |
| N/A | N/A |

| 5.2 Major Project Issues | |
|---|---|
| Description | Remedial Action |
| The Groundcrew Training Devices, delivered to the Acquisition Contract specifications, no longer meet Army's necessary training outcomes. | Investigation by Defence on appropriate options to address current system deficiencies prior to Project LAND 9000 ARH Capability Assurance Program. This issue is being managed by Capability Development Group and the Capability Manager. |
| The Electronic Warfare System fitted to the ARH is not performing to specification during specific aircraft manoeuvres. | Latent Defect claim submitted and is currently under technical assessment by industry. Industry has agreed to rectify the Electronic Warfare System performance issue at no cost to the Commonwealth with all modifications planned to be completed by end March 2016. Acceptance testing by Defence is planned for completion by October 2015, with aircraft modifications planned to be completed by end-2015, prior to FOC declaration. This issue is being managed by the Tiger sustainment organisation. |
| In Financial Year 2013-14 the estimated cost of sustaining the ARH Capability in exchange of flying hours represents very poor return on investment for Army. Army requires adjustment to the sustainment contract to ensure value for money. | A contracted Strategic Review of the Through Life Support (TLS) Contract is being undertaken between DMO and industry to review the contract price basis and once completed a contract amendment will follow. This issue is being managed by the Tiger sustainment organistion with the first Strategic Review under the TLS Contract being conducted in late 2014. A Viability Review Deed of Agreement was signed between Airbus Group Australia Pacific and the Commonwealth in December 2014 that will see the implementation of a more rigorous performance based contract and up to a 50 per cent reduction in the cost per flying hour in Financial Year 2016-17 when the mature Rate of Effort that is planned to be flown is achieved. |

Project Data Summary Sheets ANAO Report No.16 2015–16 2014–15 Major Projects Report

Section 6 – Project Maturity

6.1 Project Maturity Score and Benchmark

| Attributes | | |
|---|---|--|
| Operations and Cost Schedule | Total | |
| Project Stage Benchmark 10 9 10 10 10 9 9 | 67 | |
| Acceptance Project Status 10 9 10 10 10 9 9 | 67 | |
| Into Service Explanation N/A | | |
| | | |
| 70 | 67 70- | |
| | | |
| 50 | | |
| 40 | | |
| 30 | | |
| | | |
| | | |
| | Pr Pr | |
| MAA Closure Final Contract Acceptance Final Materiel Release (FMR) Initial Materiel Release (IMR) Complete Acceptance Testin Complete Sys. Integ. & Test Detailed Design Review(s) Detailed Design Review(s) Contract Signature Contract Signature 2nd Pass Approval 2nd Pass Approval Industry Proposals / Offers 1st Pass Approval Decide Viable Capability Opti Enter DCP | Project Completion Acceptance Into Service | |
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| MAA Closure Final Contract Acceptance Final Materiel Release (FMR) Initial Materiel Release (IMR) Complete Acceptance Testing Complete Sys. Integ. & Test Detailed Design Review(s) Detailed Design Review(s) Contract Signature Contract Signature 2nd Pass Approval 2nd Pass Approval Industry Proposals / Offers 1st Pass Approval Cocide Viable Capability Options Enter DCP | | |
| ă și cara cara cara cara cara cara cara car | | |
| | | |
| 2013-14 MPR Status 2014-15 MPR Status | | |

Section 7 – Lessons Learned

7.1 Key Lessons Learned

| Project Lesson | Categories of Systemic Lessons |
|---|-----------------------------------|
| Aircraft still undergoing development by their parent Defence force or Original Equipment Manufacturer should not be classed as off-the-shelf. | Off-The-Shelf Equipment |
| Delays in the French program flowed through to the ADF's ARH program and delivery of operational capability to the Army. This has caused schedule slip in the aircraft and system certification, simulator development and aircrew training. The delays in the program have resulted in the contractor failing to achieve the IOC critical milestone. | Off-The-Shelf Equipment |
| Resolve or escalate minor disputes as they arise to prevent escalation to major contract dispute. | Contract Management |
| Use integrated teams with strong processes and empowered staff facilitated by appropriate contractual arrangements. | Resourcing Contract Management |

| The AIR 87 TLS Contract needs constant management by experienced contract management staff with ready access to legal support. The Commonwealth must challenge the contractor on performance and must not enter into contract change discussions with the contractor where the Commonwealth will not receive value for money for the contracted services. | Contract Management |
|---|-----------------------------------|
| In respect of the out-sourced Systems Program Office core functions, the notion that the Commonwealth can optimise resource availability by outsourcing activities needs to be challenged. This value for money hypothesis is flawed. | Resourcing Contract Management |
| Better arrangements should be put in place to ensure that appropriate consultations occur before the Commonwealth enters into similar contracts with the same contractor. AIR 9000 did not consult AIR 87 to any significant extent before signing the Multi-Role Helicopter Sustainment Contract and over time this contract has proven to be similarly flawed. | Contract Management |
| Defence needs to re-evaluate its policy in relation to the use of 'cost-plus' contracts. A cost-plus contract for the initial years of the AIR 87 TLS Contract would have ensured effective performance parameters could be set for a more robust mature-state stage of the contract. | Contract Management |
| The Commonwealth must seek adequate evidence from the Contractor that its sustainment arrangements with its suppliers/subcontractors are in place and effective and that any provisions contained in the head contract have been adequately flowed down into any subcontracts. Demonstration should be linked to sustainment contract signature or as an entry obligation to the achievement of In-Service Date. | Contract Management |

Section 8 – Project Line Management

8.1 Project Line Management in 2014-15

| Position | Name |
|------------------|--|
| General Manager | Ms Shireane McKinnie |
| Division Head | RADM Tony Dalton |
| Branch Head | BRIG Andrew Mathewson |
| Project Director | COL Anthony McWatters (Nov 13–current) |
| Project Manager | Mr Cliff Meyer |