Project Data Summary Sheet[147]

Project Number	**AIR 9000 Phase 5C**
Project Name	**ADDITIONAL MEDIUM LIFT HELICOPTERS**
First Year Reported in the MPR	2010-11
Capability Type	Replacement
Acquisition Type	MOTS
Capability Manager	**Chief of Army**
Government 1st Pass Approval	Sep 07
Government 2nd Pass Approval	Feb 10
Total Approved Budget (Current)	**$637.8m**
2016-17 Budget	**$33.6m**
Project Stage	Final Materiel Release
Complexity	ACAT III

Section 1 – Project Summary

1.1 Project Description

This project **has replaced** the extant Australian Defence Force (ADF) Medium Lift Helicopter capability of CH-47D Chinook helicopters with seven new modernised CH-47F Chinook helicopters, two Transportable Flight Proficiency Simulators (TFPS) and associated supporting systems.

1.2 Current Status

Cost Performance

In-year

The $11.9m underspend is due to FMS quarterly payments being less than forecast, Ballistic Protection delayed due to prolonged Tender Evaluation activity and technical compliance review and expenditure for Workforce Supplementation was less than expected.

Project Financial Assurance Statement

As at 30 June 2017, Project AIR 9000 Phase 5C 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 has applied contingency in the financial year to fund the **upgrade of Building C43 at Swartz Barracks, Oakey. This building will house CH-47 training. The project also applied contingency in the financial year to fund Foreign Military Sales Case number AT-B-UGB with the United States Army. This was to extend the services provided under this Case and include the procurement of Common Missile Warning System Generation 3, Improved Vibration Control System, and Improved Troop Seat.**

147 Notice to reader

Forecast dates and Sections: 1.2 (Materiel Capability Delivery Performance), 1.3 (Major Risks and Issues), 4.1 (Measures of Materiel Capability Delivery Performance), and 5 (Major Risks and Issues) are excluded from the scope of the ANAO's review of this Project Data Summary Sheet. Information on the scope of the review is provided in the *Independent Assurance Report* by the Auditor-General in **Part 3** of this report.

Schedule Performance

The project accepted the first TFPS from the US Army in April 2014, with the second TFPS arriving in February 2015. On delivery, both devices were installed in temporary facilities and in January 2016, they were moved to their permanent facilities. Both devices received Synthetic Training Device Installation Operation Permits in April 2016.

All seven aircraft were delivered to Australia between April and August 2015, with the final aircraft placed on the Defence Register on 3 September 2015.

The Australian Military Type Certificate and Service Release (SR) were issued for the aircraft on 17 December 2015, with two limitations. The first limitation was a restriction on use of the rotor brake system pending the receipt of outstanding rotor brake certification documentation. This limitation was lifted by the Operational Airworthiness Authority on 1 July 2016. The second limitation relates to embarkation of the aircraft aboard amphibious landing platforms. The first of class flight trials (FOCFT) provided the basis for lifting this remaining limitation. The FOCFT report was accepted on 15 December 2016. This limitation was lifted in May 2017.

IMR was declared by Capability Acquisition and Sustainment Group (CASG) on 1 July 2015 and the IOC declaration by Chief of Army on 22 April 2016.

The combined Materiel Release 2 (MR2) OC2 submission was signed by Chief of Army with caveats on 20 July 2016 (see section 3.3 note 3).

A data pack supporting declaration of FMR was submitted to Army in April 2017 for sign off.

The CH-47D aircraft were withdrawn from service in July 2016.

Materiel Capability Delivery Performance

The CH-47F Chinook helicopter acquired is a Military-Off-The-Shelf (MOTS) procurement of a US specification CH-47F Chinook, with only minimal essential ADF unique modifications. The CH-47F Chinook has been employed operationally by the US Army for over nine years and the capability has achieved outstanding operational results. The ADF has to date taken delivery of all seven aircraft identified in this Project; and there are currently no impediments to the Project achieving the materiel capability performance requirements.

Note

Forecast dates and capability assessments are excluded from the scope of the review.

1.3 Project Context

Background

Support to the extant ADF CH-47D Chinook fleet was heavily leveraged off the US Army and supporting US industrial base. The US Army is currently several years into a program to replace its entire CH-47D fleet with the modernised CH-47F Chinook helicopter. Beyond 2017, adequate in service logistics and training support from the US Army for the ADF CH-47D will no longer be available. Procurement of the CH-47F will ensure the ongoing viability of a Medium Lift Helicopter capability to the ADF.

The ADF CH-47D fleet was small and loss or severe damage of a single aircraft would have resulted in a significant capability loss. The growth in fleet size (to ten, including three LAND 4502 Phase 1 aircraft) will improve the robustness of the ADF Medium Lift Helicopter capability.

A MOTS procurement strategy, via the government-to-government FMS program, was selected for the CH-47F acquisition as it offered the lowest risk capability solution in terms of project cost and schedule.

Following Government Second Pass in February 2010, the Commonwealth signed a FMS case with the US Government in March 2010. The US Army has finalised its contracts with suppliers for the provision of the aircraft and all other supporting systems specified in the FMS case. Boeing is the principal Original Equipment Manufacturer (OEM) for the CH-47F Chinook.

Uniqueness

The CH-47F aircraft acquired by the Project is a MOTS US Army specification CH-47F Chinook helicopter. The only production configuration difference with the ADF aircraft is the inclusion of a rotor brake to allow for embarked amphibious operations. The rotor brake is a mature design that has been previously certified on other US Army and international variants of the Chinook.

A minimal number of ADF unique modifications will be installed on the aircraft following delivery. All of these modifications are mature designs with the majority having previously been integrated and certified on the ADF CH-47D Chinook. Integration of these ADF modifications carries very low technical risk due to the high degree of commonality between the CH-47D and CH-47F aircraft. Nonetheless, delays related to Operational Test and Evaluation efforts in support of the M134D mini-gun installation into the CH-47F have resulted in a significant amount of work in excess of what was originally anticipated. These issues delayed the declaration of the MR2 milestone which was achieved on 20 July 2016.

The CH-47F is a modern digital aircraft. The Common Avionics Architecture System and Digital Automatic Flight Control System are the two most significant upgrades included on the CH-47F Chinook over its predecessor. These systems have been certified by the US Army and Boeing and are currently in service.

The Project included delivery of two TFPSs to provide an organic ADF CH-47F simulator capability. Previous simulator training support for the CH-47D was provided by the US Army.

The Cargo Helicopter Management Unit (CHMU) is the organisation responsible for acquiring the CH-47F capability. The CHMU was also responsible for the in-service support of the CH-47D capability and is currently supporting the CH-47F model in service. Having the CHMU as the single acquisition and sustainment organisation provides synergies due to the high degree of commonality between the CH-47D and CH-47F aircraft. It also allows staff to be prioritised between sustainment and acquisition as needed.

Major Risks and Issues

The ADF CH-47D Chinook fleet completed operations in Afghanistan on Operation SLIPPER in 2013 reducing some risk involved with the challenges of fielding a replacement CH-47F Chinook fleet in parallel with an operational deployment. There were resource challenges and associated risk whilst the CH-47D and CH-47F fleets were sustained concurrently, however the CH-47D fleet has been withdrawn from service since July 2016, thus this risk has passed.

As a result of emergent issues with the planned overseas maintenance technician training solution, the development and delivery of a comprehensive domestic maintenance technician training solution is in progress within the current project scope and on schedule for delivery by early 2018. CHMU is now in contract for delivery of a suite of training devices and associated courseware for the Rotary-wing Aircraft Maintenance School, based at Swartz Barracks, Oakey.

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 CH-47F training system.

LAND 4502 Phase 1 proposed to expand the CH-47F fleet from seven to ten aircraft in the same configuration as those provided by this project. LAND 4502 Phase 1 was approved by Government on 1 March 2016. All three aircraft under this project were delivered ahead of schedule with the last aircraft arriving in Australia on 23 June 2016.

Note

Major risks and issues are excluded from the scope of the review.

Section 2 – Financial Performance

2.1 Project Budget (out-turned) and Expenditure History

Date	Description	$m	$m	Notes
	Project Budget			
Sep 07	Original Approved		3.4	1
Feb 10	**Government Second Pass Approval**	634.2		
			634.2	
Jul 10	Price Indexation		46.9	2
Jun 17	Exchange Variation		(46.7)	
Jun 17	**Total Budget**		637.8	
	Project Expenditure			
Prior to Jul 16	Contract Expenditure – US Government (AT-B-UDK)	(323.2)		3
	Contract Expenditure – US Government (AT-B-BAH)	(35.7)		3
	Contract Expenditure – US Government (AT-B-UGB)	(13.7)		3
	Contract Expenditure – Boeing Defence Australia Ltd (CH-47F Avionics Training Devices)	(12.5)		3
	Other Contract Payments / Internal Expenses	(41.4)		
			(426.5)	
FY to Jun 17	Contract Expenditure – Boeing Defence Australia Ltd (CH-47F Avionics Training Devices)	(3.0)		3
				3
	Contract Expenditure – US Government (AT-B-UGB)	(0.2)		
	Other Contract Payments / Internal Expenses	(18.5)		4
			(21.7)	
Jun 17	**Total Expenditure**		(448.2)	
Jun 17	**Remaining Budget**		189.6	

Notes

1	This project's original DMO budget amount is that prior to achieving Second Pass Government Approval.
2	Up until July 2010, indexation was applied to project budgets on a periodic basis. The cumulative impact of this approach was $16.3m. In addition to this amount, the impact on the project budget as a result of out-turning was a further $30.6m having been applied to the remaining life of the project.

3	The scope of this contract is explained further in Section 2.3 – Details of Project Major Contracts.
4	Major items of expenditure include **Workforce Supplementation $3.8m, Pilot seats and aircraft modification kits $3.3m, Minor deliverables $3m, Aircraft equipment $2.4m, Combining Transmission Assembly $1.9m, Chinook Airframe (Hull) $1.2m, Training Services $1.2m, Fall Protection $0.5m, Technical Advice and Data $0.5m, Travel/Freight $0.5m, TFPS support $0.2m.**

2.2A In-year Budget Estimate Variance

Estimate PBS $m	Estimate PAES $m	Estimate Final Plan $m	Explanation of Material Movements
31.3	32.0	33.6	**PBS-PAES variation is the net effect of minor activity changes which have slipped from Financial Year 2015-16 to Financial Year 2016-17. PAES-Final Plan Estimate variation from BE2017-18 namely extension to the Capability Alignment Program (CAP) FMS case and minor purchases brought forward with an offset of training device slippage.**
Variance $m	0.7	1.6	Total Variance ($m): 2.2
Variance %	2.2	4.9	Total Variance (%): 7.2

2.2B In-year Budget/Expenditure Variance

Estimate Final Plan $m	Actual $m	Variance $m	Variance Factor	Explanation
		(4.1)	Australian Industry	**Variance is due to: FMS quarterly payments less than forecast; Ballistic Protection delayed due to prolonged Tender Evaluation and technical compliance review; and expenditure for Workforce Supplementation less than expected.**
			Foreign Industry	
			Early Processes	
			Defence Processes	
		(7.8)	Foreign Government Negotiations/Payments	
			Cost Saving	
			Effort in Support of Operations	
			Additional Government Approvals	
33.6	21.7	(11.9)	**Total Variance**	
		(35.3)	**% Variance**	

2.3 Details of Project Major Contracts

Contractor	Signature Date	Price at Signature $m	Price at 30 Jun 17 $m	Type (Price Basis)	Form of Contract	Notes
US Government (AT-B-UDK)	Mar 10	513.5	354.0	Reimbursement	FMS	1, 2, 5
US Government (AT-B-UGB)	Dec 11	18.0	22.1	Reimbursement	FMS	1, 3, 5
US Government (AT-B-BAH)	Jun 13	41.6	52.9	Reimbursement	FMS	1, 4, 5
Boeing Defence Australia Ltd	May 16	16.5	16.1	Firm	ASDEFCON	1,5

Notes

1	The scope of this contract is explained further below.
2	FMS Case AT-B-UDK, Amendment 6, signed on 30 March 2016, has further reduced the overall case value due to firm pricing data for aircraft procurement post definitization of the US Army – Boeing aircraft production contract
3	FMS Case AT-B-UGB was created to allow greater management of the aircraft production retrofit activities required to ensure all aircraft are delivered at the same configuration as the final aircraft.
4	FMS Case AT-B-BAH was created through the removal of the spares package from FMS Case AT-B-UDK. The creation of this case provides Defence with greater control over the procurement of spares required for the project.
5	Contract value as at 30 June 2017 is based on actual expenditure to 30 June 2017 and remaining commitment at current exchange rates, and includes adjustments for indexation (where applicable).

Contractor	Quantities as at Signature	Quantities as at 30 Jun 17	Scope	Notes
US Government (AT-B-UDK)	7	7	CH-47F aircraft	1
US Government (AT-B-UGB)	N/A	N/A	CH-47F aircraft production retrofit kits	
US Government (AT-B-BAH)	N/A	N/A	Spare parts package	
Boeing Defence Australia Ltd	1	1	CH-47F Avionics System Trainer (training device)	

Major equipment received and quantities to 30 Jun 17	
All seven aircraft and two Transportable Flight Proficiency Simulators, a quantity of Repairable Items and Spare Parts.	
Notes	
1	The final aircraft was delivered to Townsville in August 2015.

Section 3 – Schedule Performance

3.1 Design Review Progress

Review	Major System/Platform Variant	Original Planned	Current Planned	Achieved /Forecast	Variance (Months)	Notes
System Requirements	CH-47F Chinook helicopter	N/A	N/A	N/A	N/A	1
	Rotor Brake	Feb 12	N/A	Apr 12	2	2
	ADF Unique Modifications	Jul 11	N/A	Jul 12	12	3,4
Preliminary Design	CH-47F Chinook helicopter	N/A	N/A	N/A	N/A	1
	Rotor Brake	Sep 12	N/A	Feb 13	5	2
	ADF Unique Modification	May 13	N/A	Aug 15	18	3,4
Critical Design	CH-47F Chinook helicopter	N/A	N/A	N/A	N/A	1
	Rotor Brake	Mar 13	N/A	Jun 13	3	2
	ADF Unique Modifications	Apr 14	N/A	Jan 16	18	3,4

Notes	
1	CH-47F Chinook helicopter system requirements and design reviews not required as it is a MOTS aircraft.
2	Rotor brake design has been contracted to Boeing by the US Army. Rotor brake design is a mature design that has been previously certified on other US Army and international Chinook variants. Variance from previous report is associated with changes to aircraft production schedule.
3	The dates provided for ADF Unique Modifications relate to the three most significant modifications, namely the M134D Minigun, Crashworthy Pilot Seats (CWPS) and cockpit/cabin ballistic protection. These three key modifications, and a range of other minor modifications incorporated during each rebuild, **enabled** the project to achieve the materiel pre-requisites for Materiel Release 2 (MR2). All ADF unique modifications except CWPS are mature designs that have been previously certified on the ADF CH-47D Chinook. A Boeing modification has been developed and the installation kits and cockpit seat ship-sets are currently being delivered, with the first two aircraft installations completed in February and June 2016 respectively.
4	A blade fold solution was initially considered in scope for this project; however a commercially available solution does not currently exist.

3.2 Contractor Test and Evaluation Progress

Test and Evaluation	Major System /Platform Variant	Original Planned	Current Planned	Achieved /Forecast	Variance (Months)	Notes
System Integration	Rotor Brake	Nov 11 – Feb 14	N/A	Jul 14 – Oct 14	8	1
	ADF Unique Modifications	Dec 15	N/A	**Sep 16**	**9**	3
Acceptance	CH-47F Chinook helicopter	Mar 14 – Nov 15	N/A	Mar 15 – Aug 15	(3)	2
	Rotor Brake	Apr 14	N/A	Jul 16	27	1
	ADF Unique Modifications	Jan 16	N/A	**Sep 16**	**8**	3

Notes	
1	Rotor brake acceptance dates **were** dependent upon Boeing and the US Government releasing a Statement of Airworthiness Qualification and Substantiation Report. This report was received in March 2016. The rotor brake was installed on the production line. There **was** a limitation preventing use of the rotor brake until it has met Australian Technical Airworthiness requirements, **was lifted** in July 2016. The variance is aligned with the initial aircraft deliveries.
2	ADF acceptance dates provided by US Army. In September 2012 the US Army advised of a change to the aircraft acceptance dates that delayed early deliveries but brought forward later deliveries. US Army acceptance activities with Boeing will occur in the month prior to acceptance.
3	The ADF Unique Modifications **achieved** Design Acceptance in **September** 2016.

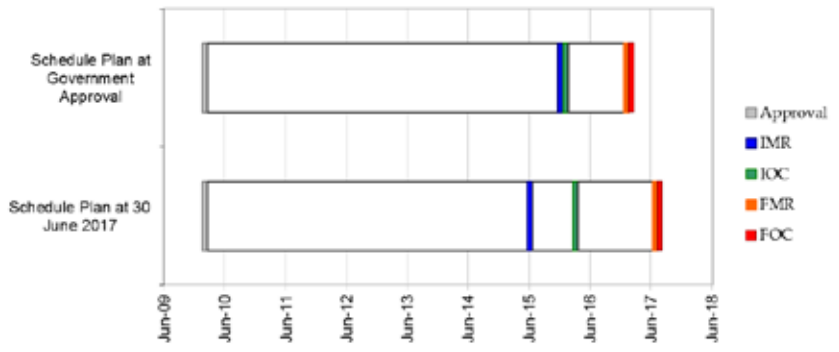
3.3 Progress Toward Materiel Release and Operational Capability Milestones

Item	Original Planned	Achieved /Forecast	Variance (Months)	Notes
Initial Materiel Release (IMR)	Jan 16	Jul 15	(6)	1

Initial Operational Capability (IOC)	Jan 16	Apr 16	3	2
Materiel Release 2 (MR2)	Feb 16	Jul 16	5	3
Final Materiel Release (FMR)	Jan 17	**Jul 17**	**6**	**4**
Final Operational Capability (FOC)	Jan 17	**Jul 17**	**6**	**4**

Notes	
1	Variance against IMR is due to redefining the IMR milestone in the latest Materiel Acquisition Agreement with Army V2.3 to better meet project requirements (i.e. aircraft ready to fly in support of New Equipment Training (NET)). Completion of the requirements in the old Materiel Acquisition Agreement will be completed in the same timeframe as originally planned. All of the elements of the IMR were in place by 30 June 2015 and IMR was declared by CASG on 1 July 2015. Endorsement of IMR by the Capability Manager was achieved on 31 July 2015.
2	IOC is the declaration that one CH-47F troop is available for land deployment in a low threat environment. Due to concurrent requirements in late 2015 to support a short notice CH-47D First of Class Flight Trial and completion of CH-47F NET, IOC was declared on 22 April 2016.
3	MR2 provides an interim milestone to support the delivery to Army of an incremental CH-47F materiel subset (in addition to IMR) that has completed acceptance testing, has achieved appropriate certification and is suitable for the conduct of operational testing. The delay is the result of: unexpected adverse flight test results of the design which required minor redesign; and difficulty in scheduling live fire range activity for stores clearance testing (which is dependent upon resources outside of CASG control). MR2 **was** declared by CASG and formally approved by Chief of Army **on 20** July 2016 **with the following caveats - Number of support personnel; Communications Systems training (resolved Feb 2017); Pilot seat and Minigun certification (M134D) (resolved Apr 17); Battle Damage repair course availability.**
4	**A delay in achieving FMR and FOC is due to a delay in delivery of ASE training and certification of CWPS.**

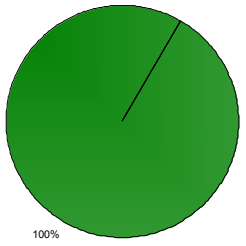
Schedule Status at 30 June 2017



Note
Forecast dates in Section 3 are excluded from the scope of the review.

Section 4 – Materiel Capability Delivery Performance

4.1 Measures of Materiel Capability Delivery Performance

Pie Chart: Percentage Breakdown of Materiel Capability Delivery Performance	
	**Green:** The Project expects to meet capability materiel requirements, as expressed in the Materiel Acquisition Agreement, and in accordance with the requirements of the relevant Technical Regulatory Authorities.
	Amber: N/A
	Red: N/A

Note
This Pie Chart represents Defence's expected capability delivery. Capability assessments and forecast dates are excluded from the scope of the review.

4.2 Constitution of Initial Materiel Release and Final Materiel Release

Item	Explanation	Achievement
Initial Materiel Release (IMR)	Delivery to Army of an initial CH-47F materiel subset that has completed acceptance testing, has achieved appropriate certification in accordance with ADF Regulations and is suitable for the conduct of both: CH-47D to CH-47F transition training, and initial operational testing. Key completion criteria are: 3 x CH-47F aircraft at US Army production configuration in-service, 2 x TFPS configured to support transition training in-service, and a CH-47F Special Flight Permit issued.	Achieved.
Final Materiel Release (FMR)	Delivery to Army of the final CH-47F materiel subset (additional to MR2) that has completed acceptance testing, has achieved appropriate certification in accordance with ADF Regulations and is suitable for the conduct of operational testing. At FMR the entire CH-47F materiel system will have been delivered and upgraded or modified to the final Australian configuration where necessary. All supplies will be delivered as per the Materiel Acquisition Agreement. Key completion criteria are: 7 x CH-47F at final approved configuration in-service, CH-47F final approved configuration training complete, and support arrangements in place to satisfy the Materiel Sustainment Agreement.	Not yet achieved.

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 ongoing support of the ADF CH-47F will be affected by timely transfer of technology and information leading to an impact on supportability/capability.	Previous risk treatments are complete. The establishment of a US Army Aircraft Engineering Directorate employed liaison engineer has increased the efficiency and level of technical exchange requests. **As technical support contracts with the major OEMs are in place this risk was retired.**
There is a chance that the project workforce and resourcing will be inadequate leading to an impact on schedule, cost and reputation/compliance.	Development of a fully resourced schedule to identify true workforce requirements is ongoing. The Project will continue to push for critical Australian Public Service recruitments, the filling of military vacancies and established a contracted workforce as required to execute the Project. The sourcing and employment of contracted support has been an effective method of risk mitigation in the past year. **On submission of the FMR declaration pack this risk was retired.**
The delivery of Aircraft Survivability Equipment support systems (In-Country Reprogramming (ICR)) may be affected by delivery delays in leading to an impact on the scheduled FMR.	US Army is in contract for the antenna redesign for the APR 39 ICR and **was delivered November 2016. The final component of the APR 39 ICR being the Mission Data Set Generator software and its associated training was delivered in March 2017.** The Common Missile Warning System ICR is now the subject of an upgrade to maintain alignment with the US Army configuration and is planned to be transferred to Project Land 4502 Phase 1 as an FMR deliverable under that MAA. **On submission of the FMR declaration pack this risk was transferred to sustainment.**
The provision of crashworthy passenger seating will be affected by delays in both the Main Cabin Upgrade (MCU) and US Army Crash Resistant Troop Seat (CRTS) programs leading to an impact on cost or schedule.	With no product on the market, a crashworthy passenger seating solution was commissioned for the CH-47D model but failed due to manufacturing delays. The plan was to have a mature product developed and tested in the CH-47D before it was withdrawn from service. This seating would have been modified to fit the CH-47F model under this project **(C-CASS)** but the remaining development has also transferred to the project. The continuing development of the crashworthy passenger seating will leverage off the design work already completed and funded from AIR9000 Phase 5C. **The US Army CRTS, renamed Improved Troop Seats (ITS), is now under development. CHUSPO intent is to procure ten ship sets with proposed delivery Financial Year 2018-19. ITS is being procured as a risk mitigator against further**

	slippage in the C-CASS project. This risk is rated medium **post-mitigation** due to the **ongoing** development of both seating solutions.
The delivery of an acceptable sustainment training plan may be affected by availability of required training devices leading to an impact on schedule and capability.	Direction to acquire training aids in support of ongoing CH-47F Trade training was confirmed to be within scope of the project in June 2015. Cargo Helicopter Management Unit (CHMU) can now progress activities to acquire necessary equipment through US Army and/or Direct Commercial Sales (DCS). **Final delivery of training devices is expected in 2018.**
The currency of ADF's CH-47F aircraft publications may be affected by new restrictions on US Department of Defense (DoD) websites leading to an impact on capability and compliance.	The 'pull' system of US Army publication support has always been a concern; this was escalated when US DoD websites changed their restrictions denying ADF members in Australia access to see when publication updates are released in order to request the update. Limited support from US Army and ADF Supply Liaison Officer (SLO) are not sufficient mitigation. A US Army Aviation and Missile Command (AMCOM) Liaison Officer was being investigated as a permanent solution in Australia but is no longer being pursued due to lack of value for money. **New US procedures have been implemented.** CHMU will continue to ensure regular technical assistance visits are conducted. Risk **has been retired.**
Emergent Risks (risk not previously identified but has emerged during 2016-17)	
Description	Remedial Action
N/A	N/A

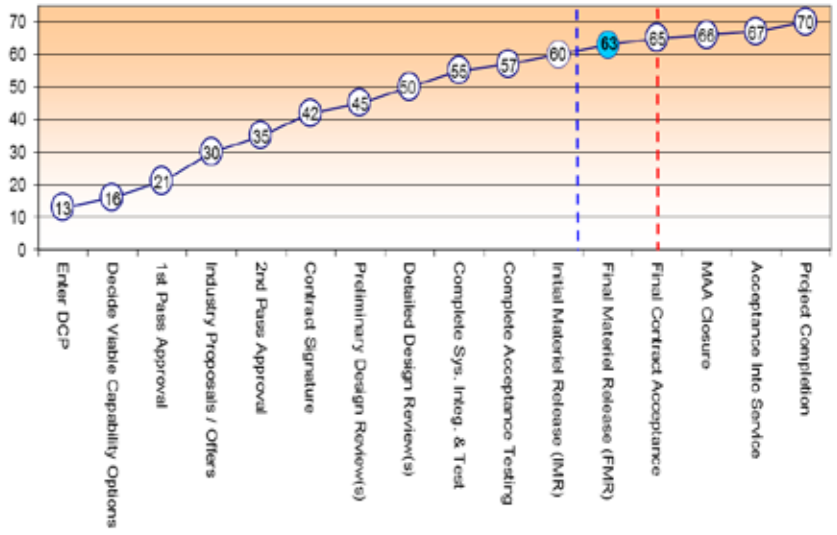
5.2 Major Project Issues

Description	Remedial Action
Inadequate performance in project management of the FMS case by the US Army is currently impacting on cost and schedule for the CH-47F Mission and Support Systems and may also impact on capability and reputation if this issue is not appropriately managed.	Continued performance monitoring of US Army project management efforts by the in country ADF Engineering Liaison Officer. Increased overseas travel to enable greater level of direct interaction between ADF and US Army. Maintain Resident Project Team, co-located with US Army implementing organisation to provide further oversight. Increased ADF oversight through monthly telecon meeting between Directors, quarterly Interim Program Reviews and establishment of specialist Integrated Product Teams has been effective. US Army team have temporary measures in place to mitigate. This issue has been further treated by the location of a Project Liaison Officer for Project Land 4502 Phase 1 in the US in addition to the Engineering Liaison Officer. **On submission of the FMR declaration pack this issue was closed.**
Delays to the commencement of the Parliamentary Standing Committee on Public Works review and approval process for the construction of maintenance facilities at 5 Aviation Regiment Townsville has resulted in an overlap between CH-47F Introduction into Service and the facilities construction phase. This issue will impact on the efficient and effective Introduction into Service of the CH-47F and may impact the schedule to IOC.	The Parliamentary Standing Committee on Public Works sat on 22 May 2014 and construction commenced in December 2014 based on a Parliamentary Expediency Motion in July 2014. Significant work between DMO, Army and Defence Support and Reform Group has developed robust decanting plans to minimise effect of construction on the operational unit and project transition activities. DMO upgrading some existing unit facilities as temporary work areas during the transition and until the facilities program is complete. The project is no longer a stakeholder in the facilities upgrade which is being managed by E&IG and Headquarters Forces Command. **This issue has been retired with IOC achieved in August 2016.**
Note	
Major risks and issues in Section 5 are excluded from the scope of the review.	

Section 6 – Project Maturity

6.1 Project Maturity Score and Benchmark

Maturity Score		Attributes							Total
		Schedule	Cost	Requirement	Technical Understanding	Technical Difficulty	Commercial	Operations and Support	
Project Stage	Benchmark	10	9	9	9	9	8	9	63
Final Materiel Release	Project Status	9	9	9	10	10	9	9	65
	Explanation	• **Schedule:** Some materiel and support systems remain to be delivered, however the project FMR was achieved in July 2017. • **Technical Understanding:** Completion of New Equipment Training (NET) has ensured all personnel are qualified on the CH-47F to maintain and operate the platform. In addition the increased technical understanding is reflected in the high availability and hours flown on the aircraft since completion of NET. • **Technical Difficulty:** Conduct of maturing of systems coupled with recent CH-47F training undertaken by project staff with OEM have increased confidence in the management of technical issues that arise. • **Commercial:** Nearly all materiel required to be delivered via the Foreign Military Sales case has been shipped. US Government and Boeing have been transparent regarding pricing and delivery schedules throughout.						



2015-16 MPR Status - - - -

2016-17 MPR Status - - - -

Section 7 – Lessons Learned

7.1 Key Lessons Learned

Project Lesson	Categories of Systemic Lessons
Whilst the FMS program affords a number of advantages, it should be recognised that the transfer of a significant majority of ADF Project Management functions to the US Government implementing agency and the weak bargaining position of the Commonwealth, increases the project's exposure to risk (technical, schedule and cost). The resultant level of risk and complexity is often understated and the level of Commonwealth contract management involvement and oversight is very low in comparison to that mandated for other forms of procurement such as Direct Commercial Sale contracts. The early establishment of a robust project contract management regime between the project office and US Government implementing agency is essential to ensure an adequate level of contract management oversight.	Contract Management
A reasonable presence of project staff in the US is required for large or technically complex FMS procurements to enable the Commonwealth adequate insight, influence and progress reporting of the US Army and major OEM activities. In-country presence is required prior to Government second pass approval, particularly during FMS case development and negotiation.	Resourcing
Project Government approval schedules are independent to, and can be out of sync with military posting cycles. This can create significant extended vacancies within the Project workforce following Government Second Pass approval, including key positions such as Project Director and Project Manager.	Resourcing
The recruitment process lead times for candidates not already within the ADF or Australian Public Service can create significant extended vacancies within the Project workforce.	Resourcing
Where replacement capabilities are sought, significant synergetic benefits can be achieved through combining or co-locating the acquisition project team with the extant in-service support organisation.	Resourcing
Recognition of prior certification of MOTS equipment by other airworthiness and technical regulatory authorities should be maximised where possible in order to minimise technical and schedule risk. Early ADF regulator involvement in the formal recognition process is considered essential.	Off-the-shelf Equipment
Supporting science and technology outcome requirements will continue to evolve throughout the Project. These requirements need to be reviewed and updated regularly to ensure they remain relevant in the dynamic project environment.	Requirements Management
The application of US Government contingency is not specifically disclosed to the Commonwealth in a Letter of Offer and Acceptance, therefore project cost estimates provided to Government will typically also include Commonwealth-estimated contingency on each of the major items of supply, on top of US Government contingency. The overall result is that the Commonwealth has excess contingency to what was reasonably required to fulfil the project. For MOTS procurements via FMS, the Commonwealth internal contingency provision should be decreased in recognition that the US Army estimates already include a contingency provision.	Contract Management

Section 8 – Project Line Management

8.1 Project Line Management in 2016-17

Position	Name
Division Head	MAJGEN Andrew Mathewson
Branch Head	BRIG Anthony McWatters **(to Apr 17)** **BRIG Jeremy King (Apr 17 to current)**
Project Director	COL Jeremy King **(to Jan 17)** **COL James Allen (Jan 17 to current)**
Project Manager	LTCOL David Lynch **(to Jan 17)** **LTCOL Timothy Baker (Jan 17 to current)**