

## Project Data Summary Sheet

Project Number	LAND19 Phase 7B
Project Name	SHORT RANGE GROUND BASED AIR DEFENCE
First Year Reported in the MPR	2020-21
Capability Type	Replacement
Capability Manager	Chief of Army
Government 1st Pass Approval	Feb 17
Government 2nd Pass Approval	Feb 19
Budget at 2nd Pass Approval	\$1,274.3m
Total Approved Budget (Current)	\$1,245.7m
2024–25 In-year Budget	\$26.8m
Complexity	ACAT II



### Section 1 – Project Summary

#### 1.1 Project Description

LAND19 Phase 7B Short Range Ground-Based Air Defence (SRGBAD) Project will introduce into service the Army-operated component of the Integrated Air and Missile Defence (IAMD) capability to achieve an enhanced ground-based force protection system.

The primary objective of the project is to deliver a scalable SRGBAD capability that can sense, warn, and counter weapons and sensor effects of fixed and rotary wing platforms, un-crewed aerial systems, stand-off weapons, rockets, artillery, mortars and missiles within the required environments.

The capability being acquired is an enhanced version of the jointly developed Raytheon-Kongsberg National Advanced Surface to Air Missile System (NASAMS), which is currently in service with a number of nations. The capability is being acquired through a contract with Raytheon Australia Pty Ltd. The sensors being acquired to support the capability are being provided by CEA Technologies Pty Ltd through an acquisition contract.

Two NASAMS Batteries are being acquired, each consisting of three Fire Units, with additional sub-systems for training purposes. A single Fire Unit consists of missile launchers, sensors, and a command and control centre; and is capable of protecting a specified area from a range of airborne threats. A single battery is capable of meeting the operational requirements, with the second battery being used for training purposes.

#### 1.2 Current Status

##### Cost Performance

###### In-year

As at 30 June 2025, Financial Year (FY) 2024-25 expenditure was \$27.7m against FY 2024-25 budget of \$26.8m. The project year-end overachievement is due to more than expected disbursement for the Advanced Medium Range Air-to-Air Missile (AMRAAM) Foreign Military Sale (FMS) case, which is partially offset by lower than expected escalation costs.

###### Project Financial Assurance Statement

As at 30 June 2025, LAND19 Phase 7B has reviewed the project's approved scope and budget for those elements required to be delivered by Defence. Having reviewed the current financial and contractual obligations of Defence for this 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 applied for contingency in FY 2024-25 primarily for the treatment of certification issue Risk 1 and 2 respectively in Section 5 – Major Risks and Issues. This contingency application was not approved, as it was agreed that these risks would be treated through the release of project's quarantined funds for AMRAAM FMS case.

As a result, the project has not spent contingency in FY 2024-25.

##### Schedule Performance

The project progresses towards Final Materiel Release (FMR) and Final Operational Capability (FOC) in accordance with the scheduled milestones detailed in the Materiel Acquisition Agreement.

The Raytheon Australia Pty Ltd acquisition contract is largely on schedule with all seven Fire Units accepted by the project, and the outstanding remediation work required post 30 June 2024 is now complete. Raytheon Australia Pty Ltd has completed delivery of the final introduction into service training package. The Raytheon Australia Pty Ltd Final Acceptance milestone was achieved June 2025.

CEA Technologies Pty Ltd is contracted to deliver a total of three CEA Technologies Pty Ltd Operational (CEAOPS) radars and eight CEA Technologies Pty Ltd Tactical (CEATAC) radars. CEA Technologies Pty Ltd delivered the final CEAOPS and CEATAC in November 2024 and June 2025 respectively. CEA Technologies Pty Ltd Final Acceptance milestone was achieved in June 2025.

<p>Certification activities has been delayed by six months, however certification is still expected to be achieved for FOC.</p> <p>Government Furnished Material (GFM) delays has resulted in the transfer of technical risk to later in the project; with some certification and integration work at risk of not being achieved until FOC. Certification and introduction into service were the primary focus for the project throughout FY 2024-25.</p>
<p><b>Materiel Capability/Scope Delivery Performance</b></p> <p>The project is on track to deliver against all agreed capability outcomes for FOC. There are some risks which can impact FOC scope if realised. These risks are detailed in Section 5 – Major Risks and Issues.</p>

### 1.3 Project Context

<p><b>Background</b></p> <p>LAND19 Phase 7B was one of the first projects to be considered under the new Capability Life Cycle and under the developmental Smart Buyer framework. The project participated in a pilot Smart Buyer workshop where the financial, capability requirements, integration and schedule risk elements were considered within the project's acquisition strategy, and addressed as part of the Risk Mitigation Activity (RMA) conducted between Government First Pass and Second Pass Approvals.</p> <p>Government First Pass Approval was provided in February 2017 that enabled the release of a Single Supplier Limited Tender to Raytheon Australia Pty Ltd as Prime Systems Integrator (PSI) for the acquisition and sustainment of the SRGBAD capability. First Pass Approval also endorsed the conduct of a RMA between First Pass Approval and Second Pass Approval to reduce technical risks associated with system integration and assess the environmental durability of key sub-systems. Additionally, First Pass Approval enabled a review of the Canberra-based company CEA Technologies Pty Ltd sensors for use in a ground-based air defence environment between First Pass and Second Pass Approval.</p> <p>Government in February 2019 provided Second Pass Approval for the preferred capability option presented, which was based on the NASAMS baseline but provides an enhanced capability, addressed obsolescence risks and utilised greater Australian Industry Capability (AIC).</p> <p>Significant procurement activities to date include:</p> <ul style="list-style-type: none"> <li>Contract signature achieved with Raytheon Australia Pty Ltd as PSI in June 2019.</li> <li>Contract signature achieved with CEA Technologies Pty Ltd for the provision of operational and tactical radars in November 2019.</li> <li>FMS offer for the purchase of missiles accepted by the Commonwealth of Australia in March 2020.</li> <li>Contract signature achieved with Raytheon Australia Pty Ltd as the Support Contractor in December 2020.</li> <li>Contract signature achieved with CEA Technologies Pty Ltd as the Support Contractor for the operational and tactical radars in May 2023.</li> </ul>
<p><b>Uniqueness</b></p> <p>NASAMS is an established and mature ground-based air defence capability; however, under LAND19 Phase 7B, Defence is undertaking a number of enhancements that make it unique. The most significant of these is replacing the standard NASAMS radar with radars from Australian company CEA Technologies Pty Ltd. Other modifications, which are not common across the international user base, include integration with Army in-service vehicles and radios, and interfacing with existing Land and Joint information networks.</p>
<p><b>Major Risks, Emergent Risks and Issues</b></p> <p>The project is not tracking any major risks rating of High/Very High.</p> <p>The project currently has two emergent major risks relating to integration and supply, which are being actively managed to reduce potential impact on FOC.</p> <p>The project is tracking one major issue relating to supply delays with a High/Very High rating, which will affect FMR milestone.</p>
<p><b>Other Current Related Projects/Phases</b></p> <p><b>LAND121 Phase 4 - Protected Mobility Vehicle - Light (Hawkei).</b> This project will acquire and deliver, Protected Mobility Vehicles – Light and companion trailers for command, liaison, reconnaissance and utility roles, and the associated training and support systems. Elements of LAND19 Phase 7B tactical radar and high mobility launcher system will be integrated onto the Hawkei mission system.</p> <p><b>AIR6500 Phase 1 – Integrated Air and Missile Defence Command and Control (IAMD).</b> This project will deliver a Joint Air Battle Management System comprised of a foundational systems architecture for the Australian Defence Force's IAMD Program, command and control systems, and sensors that will be employed to develop situational awareness in the air and space domains, manage the joint air domain, coordinate fires, control air and ground-based air defence assets. LAND19 Phase 7B is required to share air picture information with AIR6500 Phase 1 as part of the Joint IAMD. The project has achieved integration with AIR6500 Phase 1 via the Link 16 Tactical Data Link.</p> <p><b>LAND200 Tranche 2 - Battlefield Command Systems.</b> This project seeks to expand and evolve the Battle Management System – Command and Control (BMS-C2) and supporting Tactical Communications Network from Battle Group to Brigade Headquarters. LAND200 Tranche 2 also enhances data interoperability and information exchange with other government agencies and Coalition partners by integrating the BMS-C2 onto the Mission Partner Environment. LAND19 Phase 7B is required to share indirect fire threat and friendly positional information with LAND200. The project has achieved integration with LAND200 Tranche 2 via the Variable Message Format Tactical Data Link.</p>

Section 2 – Financial Performance<sup>1</sup>

2.1 Project Budget (out-turned) and Expenditure History

Date	Description	\$m	Notes
	<b>Project Budget</b>		
May 17	Original Approval (Government First Pass Approval)	25.9	
Jun 19	Government Second Pass Approval	1,248.4	
	<b>Total at Second Pass Approval</b>	<b>1,274.3</b>	
Jan 25	Real Variation - Transfer	0.6	1
Jun 25	Exchange Variation	(29.2)	
Jun 25	<b>Total Budget</b>	<b>1,245.7</b>	
	<b>Project Expenditure</b>		
Prior to Jul 24	Contract Expenditure – Raytheon Australia Pty Ltd	(790.2)	2, 3 3
	Contract Expenditure – CEA Technologies Pty Ltd	(171.0)	
	Contract Expenditure – US Government FMS Case AT-D-YAI	-	
	Other Contract Payments/Internal Expenses	(61.6)	
		(1,022.8)	
FY to Jun 25	Contract Expenditure – Raytheon Australia Pty Ltd	(6.4)	2, 3 3
	Contract Expenditure – CEA Technologies Pty Ltd	(2.3)	
	Contract Expenditure – US Government FMS Case AT-D-YAI	-	
	Other Contract Payments/Internal Expenses	(19.0)	
		(27.7)	
Jun 25	<b>Total Expenditure</b>	<b>(1,050.5)</b>	
Jun 25	<b>Remaining Budget</b>	<b>195.2</b>	
<b>Notes</b>			
1	Defence Science and Technology Group Project closures and the transfer to Military Equipment Acquisition Projects.		
2	Price and expenditure related to missile procurement is classified. This expenditure has been reported as part of Other Contract Payments/Internal Expenses.		
3	Other Contracts Payments/Internal Expenses comprises of: RMAs, operating expenditure, contractors, consultants, and other capital expenditure not attributable to the aforementioned contracts.		

2.2A In-year Budget Estimate Variance

Estimate PBS \$m	Estimate PAES \$m	In-year Budget \$m	Explanation of Material Movements
124.2	26.3	26.8	<b>Portfolio Budget Statements (PBS) to Portfolio Additional Estimates Statements (PAES):</b> The variation is primarily due to a number of minor procurement activities, operating cost and foreign exchange movements. <b>PAES to In-year Budget:</b> The variation is due to more than expected disbursements for the AMRAAM FMS case, partially offset by lower than expected escalations.
Variance \$m	(97.9)	0.5	Total Variance (\$m): (97.4)
Variance %	(78.9)	2.0	Total Variance (%): (78.4)

2.2B In-year Budget/Expenditure Variance

In-year Budget \$m	Actual \$m	Variance \$m	Variance Factor	Explanation
		(0.9)	Australian Industry	The project year-end overachievement is due to higher FMS Case disbursements offset by underspend in prime contract and escalation expenditures and other contract payments.
		-	Foreign Industry	
		-	Early Processes	
		-	Defence Processes	
		1.9	Foreign Government Negotiations/Payments	
		-	Cost Saving	
		-	Effort in Support of Operations	

<sup>1</sup>Notice to reader  
As per the JCPAA MPR Guidelines, financial figures in the PDSS have been rounded to one decimal point. Section 2 financial tables may include totals and percentages that are impacted due to the rounding of the original financial data.

		-	Additional Government Approvals	
26.8	27.7	1.0	Total Variance	
		3.6	% Variance	

### 2.3A Details of Project Major Contracts – Price

Contractor	Signature Date	Price at		Type (Price Basis)	Form of Contract	Notes
		Signature \$m	30 Jun 25 \$m			
Raytheon Australia Pty Ltd	Jun 19	680.1	804.8	Firm or Fixed	Standard Defence Contract	1
CEA Technologies Pty Ltd	Nov 19	137.1	173.6	Firm or Fixed	Standard Defence Contract	2
US Government FMS Case AT-D-YAI	Mar 20	-	-	Reimbursement (for FMS)	FMS	3
<b>Notes</b>						
1	Raytheon Australia Pty Ltd contract value as at 30 June 2025, is based on actual expenditure and remaining commitment, and includes adjustments for indexation (where applicable). The price increase since contract signature is primarily due to indexation and foreign exchange rate variation, the inclusion of spares into the contract and an increase due to COVID19 project delays, as noted in Section 3.2.					
2	CEA Technologies Pty Ltd contract value as at 30 June 2025, is based on actual expenditure and remaining commitment, and includes adjustments for indexation (where applicable). The price increase since contract signature is primarily due to indexation and foreign exchange rate variation (as per contract terms), plus the inclusion of spares into the contract.					
3	Pricing related to missile procurement is classified.					

### 2.3B Details of Project Major Contracts – Contracted Quantities and Scope

Contractor	Contracted Quantities as at		Scope	Notes
	Signature	30 Jun 25		
Raytheon Australia Pty Ltd	7	7	NASAMS Fire Units plus training equipment.	-
CEA Technologies Pty Ltd	Tactical Radars Operational Radars	Tactical Radars Operational Radars	Radars plus training and support equipment.	-
US Government FMS Case AT-D-YAI	Classified	Classified	Missiles.	-
<b>Major equipment accepted and quantities to 30 Jun 25</b>				
3 x Operational Radars 2 x NASAMS Classroom Trainers 8 x Tactical Radars 7 x NASAMS Fire Units				
<b>Notes</b>				
N/A	N/A			

### 2.4 Australian Industry Capability

<b>Summary</b>
The project has contracted AIC Plans based on opportunities to maximise internationally competitive Australian industry involvement which is captured in Raytheon Australia Pty Ltd and CEA Technologies Pty Ltd's AIC Plans in support of their manufacturing, integration, assembling, test and certification of the capability and support services activities.
The project has no contracted AIC Plan for its US Government FMS acquisition as the US Foreign Government arrangement does not include the contractual provision or obligations for Australian Industry Capability.
<b>Note</b>
AIC Plans for contracts worth more than \$20 million are published on Defence's website.

## Section 3 – Schedule Performance

### 3.1 Design Review Progress

Review	Major System/Platform Variant	Original Planned	Current Contracted	Achieved/ Forecast	Variance (Months)	Notes
System Requirements	NASAMS	Oct 19	N/A	Oct 19	0	-
	CEA Technologies Pty Ltd Radars	Apr 20	N/A	Apr 20	0	-
Preliminary Design	NASAMS	May 20	N/A	May 20	0	1
Detail Design	NASAMS	Dec 20	N/A	Dec 20	0	-
	CEA Technologies Pty Ltd Radars	Jul 21	N/A	Aug 21	1	-

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Notes	
1	Preliminary Design aspects for CEA Technologies Pty Ltd Radars were covered in the NASAMS Preliminary Design Review.

### 3.2 Contractor Test and Evaluation Progress

Test and Evaluation	Major System/Platform Variant	Original Planned	Current Contracted	Achieved/Forecast	Variance (Months)	Notes
System Integration	First of Type (FoT) Canister Launcher FAT	Jan 22	Nov 21	Nov 21	(2)	1
	FoT Fire Distribution Centre FAT	Apr 22	Aug 22	Nov 22	7	2
	Flight Trial	Jun 22	Apr 23	Apr 23	10	2
Acceptance (NASAMS Fire Units)	Fire Unit 1 (First)	Mar 23	Oct 23	Sep 23	6	2, 3
	Fire Unit 7 (Final)	May 24	N/A	Jun 24	1	-
Acceptance (CEA Technologies Pty Ltd Radars)	Tactical Radar (First)	Mar 23	N/A	Sep 23	6	-
	Tactical Radar (Final)	Jun 24	Nov 24	Jun 25	12	4
	Operational Radar (First)	Mar 23	N/A	Dec 23	9	-
	Operational Radar (Final)	Apr 24	Sep 24	Nov 24	7	4

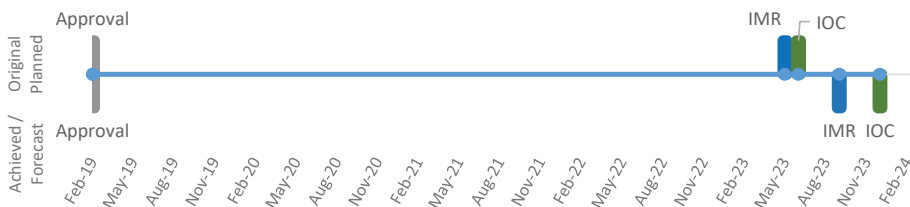
Notes	
1	This milestone was achieved early because the exit criteria was modified to allow completion in Norway, with subsequent shipment to Australia. This shipment commenced in April 2022.
2	This milestone was adjusted as a result of COVID-19 related delays, including workforce quarantine measures and travel restrictions.
3	Fire Unit composition varies per Fire Unit (i.e. number and type of launchers and other major systems).
4	Milestone was adjusted as a result of CEA Technologies Pty Ltd notification of delays.

### 3.3 Progress Toward Materiel Release and Operational Capability Milestones

Item	Original Planned	Achieved/Forecast	Variance (Months)	Notes
Initial Materiel Release (IMR)	May 23	Sep 23	4	1
Initial Operational Capability (IOC)	Jun 23	Dec 23	6	1
Final Materiel Release (FMR)	NFP	NFP	NFP	-
Final Operational Capability (FOC)	NFP	NFP	NFP	-

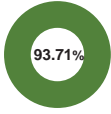
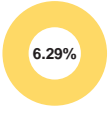

Notes	
1	COVID-19 had a significant impact on the project, including international travel restrictions, GFM delays, and workforce quarantine measures. In October 2021, the project assessed the original IMR date in light of the cumulative impact of the above delays, and determined a revised date. Both IMR and IOC were achieved.

**Schedule Status at 30 June 2025**



Section 4 – Materiel Capability/Scope Delivery Performance

4.1 Measures of Materiel Capability/Scope Delivery Performance

Traffic Light Diagram: Percentage Breakdown of Materiel Capability/Scope Delivery Performance	
	<b>Green:</b> The project is on track to deliver 93.71% against all agreed capability outcomes for FOC.
	<b>Amber:</b> The project assessed 6.29% of FOC scope is at risk, relating to two major risks concerning integration and supply delays. In-service equipment will be used to mitigate the 'at risk' scope.
	<b>Red:</b> N/A
<b>Note</b> This Traffic Light Diagram represents Defence's expected capability delivery.	

4.2 Constitution of Materiel Release and Operational Capability Milestones

Item	Explanation	Achievement
Initial Materiel Release (IMR)	<ul style="list-style-type: none"><li>• Fire Unit with Tactical Radar.</li><li>• Classroom Trainer installed.</li><li>• Basic Support Equipment.</li><li>• Initial Spares.</li><li>• Systems accepted and certified.</li><li>• Support Contract in operation.</li></ul> IMR was achieved in September 2023.	Achieved
Initial Operational Capability (IOC)	<ul style="list-style-type: none"><li>• One operationally deployable Fire Unit.</li><li>• Vehicles to support Fire Unit.</li><li>• Operator and maintainer training.</li><li>• Completion of Operational Test and Evaluation.</li></ul> IOC was achieved in December 2023.	Achieved
Final Materiel Release (FMR)	<ul style="list-style-type: none"><li>• All Fire Units.</li><li>• All Radars.</li><li>• All spares and support equipment.</li></ul> Forecast dates for FMR are NFP.	Not yet Achieved
Final Operational Capability (FOC)	<ul style="list-style-type: none"><li>• Complete mission system comprising all materiel elements defined in IMR and FMR.</li><li>• Doctrine published.</li><li>• All certification and accreditation complete.</li><li>• Facilities complete.</li></ul> Forecast dates for FOC are NFP.	Not yet Achieved

## Section 5 – Major Risks, Emergent Risks and Issues

### 5.1 Major Project Risks

Identified Risks (risk identified by standard project risk management processes)		
Ref#	Description	Remedial Action
N/A	N/A	N/A

### 5.2 Emergent Risks

Emergent Risks (risk not previously identified, or has increased in rating, which have emerged during 2024–25)		
Ref#	Description	Remedial Action
1	There is a risk of integration delay, which will have an impact FOC.	Existing in-service equipment has been rolled out across the NASAMS capability to mitigate this integration risk.
2	There is a risk of Supply delay, which will have an impact FOC.	Existing in-service equipment can be used to mitigate this risk and provide supply assurance.

### 5.3 Major Project Issues

Ref#	Description	Remedial Action
1	Supply delays will impact FMR.	Existing in-service equipment can be used to mitigate this risk and provide supply assurance.

## Section 6 – Lessons

### 6.1 Key Lessons

In line with Defence Instructions and CASG Lessons policy, the project conducts scheduled reviews of its captured lessons information (including any observations, insights and/or lessons identified) as well as lessons information contained within the Defence Lessons Repository. The project has captured 13 lessons. The five project strategic lessons and three project level lessons (non-strategic) are listed below.	
Description	Categories of Systemic Lessons
Strategic Lesson Type – Observation. Mandated System Reviews (MSR) in large projects can cover many complex issues, over several days. They require review of large amounts of data in advance. Lead-in reviews are a great way to focus attention of relevant stakeholders on particular issues. They can be conducted months in advance of the MSR. A lead-in review is a separate meeting or workshop held to discuss a particular MSR agenda item. They can often be used to gain concurrence on a particular issue, thereby saving time in the MSR, and giving stakeholders a chance to consider. They also help focus reviewers on key issues prior to the MSR. Conduct lead-in reviews as a standard part of preparation for large MSR.	Commercial Management
Strategic Lesson Type – Observation. RMA's or Risk Reduction Activities are often completed during First Pass to Second Pass, usually to investigate technical feasibility or capability definition. Extending these activities to include formal requirements development and system definition can place the project in a much more mature state at Contract Signature. Contracts can sometimes be established with immature requirements, and requirements definition completed post effective-date may result in cost, schedule or capability adjustments post-Second Pass. By focusing on system specification refinement between First Pass to Second Pass, this risk can be mitigated. Include formal and funded system definition activities between First Pass and Second Pass.	Program, Project & Product Management
Strategic Lesson Type – Observation. Projects with Explosive Ordnance will need to conduct a Live Fire activity as part of their Verification and Validation regimen. Live Fire events also provides a proof of concept to build confidence with key stakeholders. Army successfully completed its first NASAMS Live Fire at Woomera Test Range in November 2023. This lesson provides information to projects requiring to establish a Live Fire event, including friction points identified by the project in coordinating and conducting the event.	Program, Project & Product Management
Strategic Lesson Type – Observation. Suppliers are responsible for codification and cataloguing of materiel to allow it to be brought onto the Defence Logistic Information System for asset management. This was completed late resulting in inefficiencies, uncoded items had to be quarantined and its movement and consumption had to be managed using 'downtime procedures'. The transition to Enterprise Resource Planning further exacerbated this, with cataloguing courses being discontinued, resulting in Original Equipment Manufacturer (OEM) being unable to build the required trained workforce. This lesson provides information on actions to address and reduce the impact of uncoded and uncatalogued items.	Materiel Logistics
Strategic Lesson Type – Observation. LAND19 Phase 7B and the sustainment fleet is managing the product updates (software/firmware rollouts) between two OEM. Synchronisation of updates is critical for configuration control, capability assurance and certification by external agencies. This has proven to be difficult with CEA	Engineering & Technical

Technologies Pty Ltd adopting an issued as appropriate approach to software/firmware updates whilst Raytheon Australia Pty Ltd and Kongsberg Defence and Aerospace maintains a biennial update regimen. This lesson provides information on how the acquisition contracts can be structured to synchronise software updates and regression testing across multiple OEM.	
<b>Project Level Lessons (non-strategic) Description</b>	<b>Categories of Systemic Lessons</b>
Project level lesson. Information management and record management should be intuitive and reflective of the contracts for ease of uses and comprehension. New employees should receive training to understand file structure and how it relates to contract deliverables.	Program, Project & Product Management
Project level lesson. Government Furnished Equipment integration will require OEM to have access to controlled information. OEM information requirement should be identified early to ensure Third Party Retransfers are obtained in a timely manner to ensure restricted access does not adversely impact OEM contracted activities.	Program, Project & Product Management
Project level lesson. Scheduling of acceptance tests, systems acceptance and Introduction Into Service should be conducted sequentially where time permits.	Engineering & Technical

**Section 7 – Project Structure**

7.1 Project Structure as at 30 June 2025

Unit	Name
Division	Land Systems Division
Branch	Land Manoeuvre Systems Branch