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Airframes / Aero Engines R&O Division / Division de la réparation de la révision des cellules et des moteurs
11 Laurier St. / 11, rue Laurier
8C1, Place du Portage
Attentio John White
Gatineau
Québec
K1A 0S5

SOLICITATION AMENDMENT
MODIFICATION DE L'INVITATION

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

Comments - Commentaires

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Gatineau
Québec
K1A 0S5

Title - Sujet AMSE R&O Services	
Solicitation No. - N° de l'invitation W8485-19SJ01/A	**Amendment No. - N° modif.** 001
Client Reference No. - N° de référence du client W8485-19SJ01	**Date** 2018-10-12
GETS Reference No. - N° de référence de SEAG PW-$$BF-126-26897	
File No. - N° de dossier 126bf.W8485-19SJ01	**CCC No./N° CCC - FMS No./N° VME**
Solicitation Closes - L'invitation prend fin **at - à 02:00 PM** **on - le 2018-10-31**	**Time Zone** **Fuseau horaire** Eastern Daylight Saving Time EDT
F.O.B. - F.A.B. **Plant-Usine:** ☐ **Destination:** ☐ **Other-Autre:** ☐	
Address Enquiries to: - Adresser toutes questions à: White(bf div.), John	**Buyer Id - Id de l'acheteur** 126bf
Telephone No. - N° de téléphone (819) 420-1749 ( )	**FAX No. - N° de FAX** ( ) -
Destination - of Goods, Services, and Construction: **Destination - des biens, services et construction:**	

Instructions: See Herein

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Canada

Respect ◆ Integrity ◆ Excellence ◆ Leadership

Serving GOVERNMENT, Serving CANADIANS.

Aircraft Maintenance Support Equipment (AMSE) Sustainment Requirement

Program Background, Sustainment Requirements & Proposed Direction(s)

28-29 August, 2018

Agenda

0900 – General Information

0905 – Introductions

0915 – Sustainment Initiative (SI)/SBCA Overview

0920 – Purpose

0930 – AMSE Background and Requirements

0950 – Introduction to Industrial and Technology Benefits/Value Proposition

1000 – Health Break

1020 – Initial Option Analysis

1030 – Schedule

1035 – Questions & Answer Session

1055 – One-on-one Session Overview

1100 – Closing Remarks and Meeting Adjournment

1300 – Begin one-on-one sessions

General Information - Security

- This is a secure building; you are required to display your assigned building pass at all times.

- Visitors must be escorted at all times while in the building.

General Information - Administration

- Familiarize yourself with the exits
- Washrooms are off the hallway
- Smoking is only permitted outside of Government of Canada buildings, in designated smoking areas
- Cafeteria is located on ground floor (escort required)

General Information: Rules of Engagement (1/2)

- All comments, queries, questions, concerns or recommendations shall be directed in writing to the Contracting Authority at Public Services and Procurement Canada (PSPC): John White (John.H.White@tpsgc-pwgsc.gc.ca).

- All information and presentations communicated in reference to this Industry Day are UNCLASSIFIED.

General Information: Rules of Engagement (2/2)

- Hard copies of the presentations are provided to support the Question & Answer (Q&A) session.
- Please refrain from asking questions until the Q&A session begins.

Introduction: Panel members (1/2)

Public Services and Procurement Canada (PSPC):

- **John White**: Contracting Authority, Transport & Helicopters Division
- **Hafsa Asad**: PSPC Student, Transport & Helicopters Division

Department of National Defence (DND):

- **Capt Rick Quickfall**: Technical Authority, DAEPM(FT)6-3-4
- **MWO Chris Rozee**: Deputy Technical Authority, DAEPM(FT)6-3-4-2

Introduction: Panel members (2/2)

Department of National Defence (DND), cont'd:

- **Martin Kellen**: Life Cycle Material Manager (LCMM), DAEPM(FT)6-3-4-4
- **Luke Marshe**: Procurement Manager, Director of Aerospace Procurement (DAP)
- **Weihong (Daisy) Jin**: Procurement Authority, DAP

Industry, Science, Economic Development Canada (ISEDC):

- **Jennifer Naddaf**: Industrial and Technological Benefits (ITB) Officer

Introduction: Fairness Monitor
Sarah-Anaïs Julien-Matte

- A third-party contractor who will observe and provide impartial opinion over the engagement process and any future solicitations and/or evaluation processes.

- Will participate in one-on-one meetings, document reviews (including LOIs, RFPs, etc.) and future RFP evaluations.

- Refer to http//www.tpsgc-pwgsc.gc.ca/se-fm/index.html for more information.

Stakeholders and Observers

Department of National Defence (DND):

- **LCol Craig Fowler**: Weapon System Manager (WSM), Directorate of Aerospace Equipment Program Management, Fighters and Trainers (DAEPM(FT)5/6)
- **Maj Darren Moser**: Senior Equipment Engineering Officer and Senior Design Engineer, DAEPM(FT)6-3
- **Randy Cook**: Centre of Expertise, Air

Public Services and Procurement Canada (PSPC):

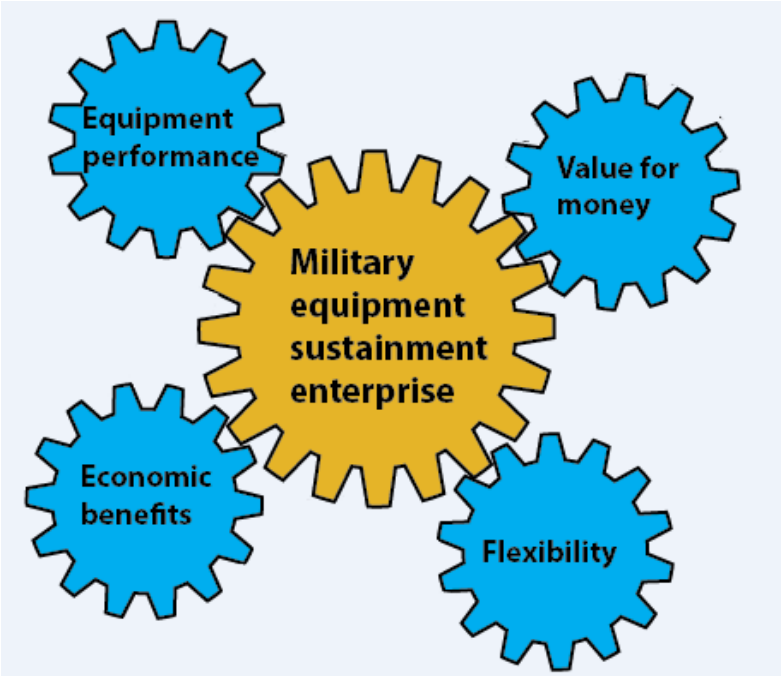
- **Nick York**: Manager, Transport & Helicopters Division
- **Randy Cumming**: Supply Team Leader, Transport & Helicopters Division

Industry, Science, Economic Development Canada (ISEDC):

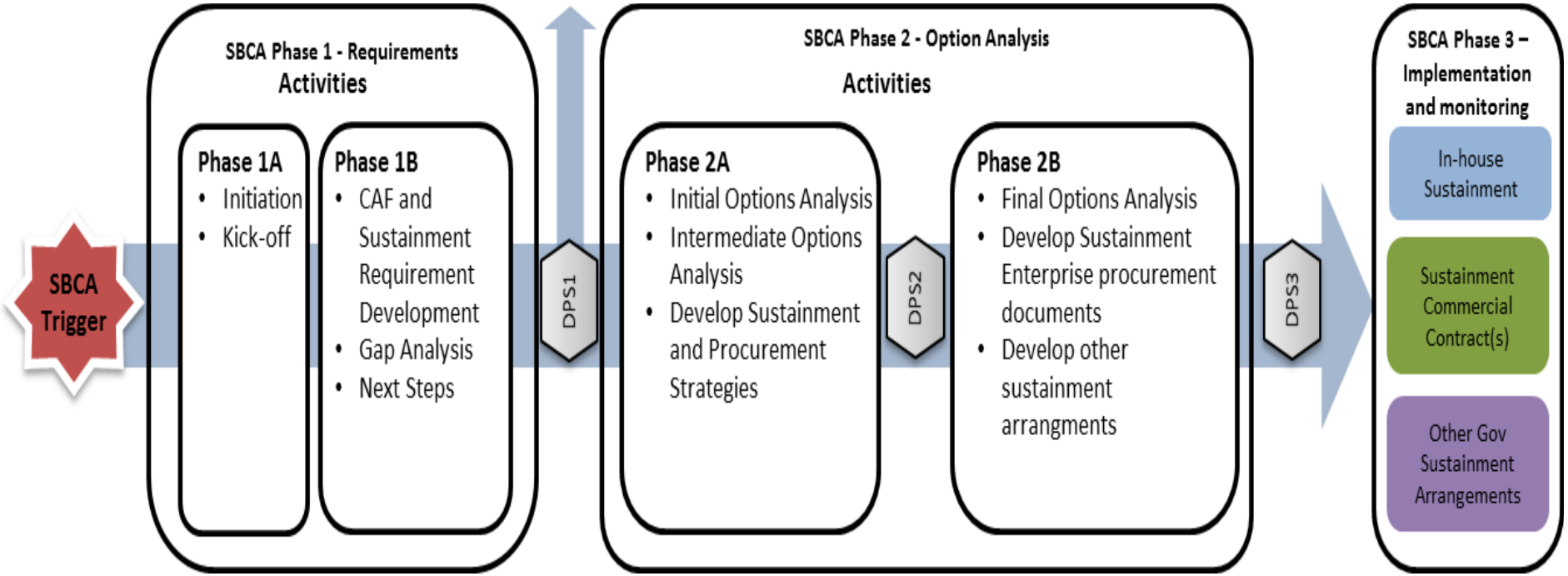
- **Rick Santos**: Manager, ITB
- **Seana Biggs**: ITB Officer

What is the Sustainment Initiative (SI)?

- **An interdepartmental (PSPC, DND, ISEDC)** approach to **tailoring** the best strategies for support services of defence equipment.
- Achieved by optimization of **equipment performance**, **value for money**, **economic benefits**, and **flexibility.**
- Guidance is provided by Centres of Expertise (Air, Land, Maritime).



Sustainment Business Case Analysis



Purpose

The Purpose of this Industry Engagement is to:

1. Present AMSE Sustainment Program Background

2. Present AMSE Sustainment Requirement

3. Present results of Options Analysis for feedback and critique by Industry

Background (1/2)

- Aircraft Maintenance Support Equipment (AMSE) is used by the RCAF to service and maintain aircraft fleets.

- AMSE comprises numerous hydraulic, electrical and mechanical systems, which are held and used at Canadian Forces Bases and Wings across Canada, at contractor facilities and on deployments and operations.

- AMSE has historically been procured without provision for in-service support beyond the scope of any applicable warranties.

Background (2/2)

- Canada has and continues to develop the resources and personnel to perform first and second level maintenance at the unit level so that when AMSE equipment is deployed, the CAF is able to maintain its equipment.

- Third-level (R&O) work has been performed through contracts with Industry.

- Many items have never had R&O sustainment.

Requirements (1/4)

- To establish Repair and Overhaul (R&O) sustainment for AMSE.
- AMSE items that have been identified as fleet-specific are excluded from this effort.

Requirements (2/4)

List of Repairable Equipment

Sparing WUC/SC Group	NSN	Description	TA	Group Manag	Type	SI	Acc Co	Rep Co	IM Co	Shelf Life (mor	Unit of Issu	Current Serv Stock (SS	Current SS at Dep
001244336	6685-00-124-4336	TIRE INFLATOR ASSEM	A54W	No	Common	54B	X	B	1R	0	KT	182	
003031088	4320-00-303-1088	PUMP,HYDRAULIC RAM,H	AB26	Yes	Unique No ERNs	54B	A	F	4N	0	EA	33	16
219064041	1730-21-906-4041	LADDER,AIRCRAFT BOA	AB26	Yes	Common	54B	A	F	4N	0	EA	137	18
218051524	1730-21-805-1524	MAINTENANCE PLATFOR	AB26	Yes	Common	54B	A	F	4N	0	EA	272	16
218934926	1730-21-893-4926	JACK,HYDRAULIC,TRIPO	AB26	Yes	Unique No ERNs	54B	A	F	4N	0	EA	95	12
009123998	1730-00-912-3998	JACK,HYDRAULIC,TRIPO	AB26	Yes	Unique No ERNs	54B	A	F	4N	0	EA	102	0
219211378	1650-21-921-1378	CYLINDER ASSEMBLY,A	AB26	Yes	Unique No ERNs	54B	A	B	4N	0	EA	6	5
	4440-01-273-2564	DEHUMIDIFIER,DESICCAN	AB28	No		54B	A	F	1R	0	EA	20	9
014086110	4930-01-408-6110	DISPENSING PUMP,HAND	AB05	Yes	Unique No ERNs	54B	A	F	4N	0	EA	45	4
218147801	1730-21-814-7801	JACK,HYDRAULIC,TRIPO	AB26	Yes	Common	54B	A	F	4J	0	EA	12	8
005091388	1730-00-509-1388	JACK,HYDRAULIC,TRIPO	AB26	Yes	Unique No ERNs	54B	A	F	4N	0	EA	158	43
218934488	1730-21-893-4488	JACK,AIRCRAFT LANDIN	AB26	Yes	Common	54B	A	F	4N	0	EA	42	2
011266239	1730-01-126-6239	TRAILER,LIFT,GROUND H	AB26	Yes	Unique No ERNs	54B	A	F	4N	0	EA	26	0
014086115	4930-01-408-6115	DISPENSING PUMP,HAND	AB05	Yes	Unique No ERNs	54B	A	F	4N	0	EA	66	2
219015921	1730-21-901-5921	LADDER ASSEMBLY,MA	AB26	Yes	Unique No ERNs	54B	A	F	4N	0	EA	8	5
002034697	1730-00-203-4697	JACK,AIRCRAFT LANDIN	AB26	Yes	Common	54B	A	F	4J	0	EA	22	0
218953572	1730-21-895-3572	MULTI-PURPOSE DOLLY	AB26	Yes	Unique No ERNs	54B	A	F	4J	0	EA	44	0
014716704	1730-01-471-6704	SLING,AIRCRAFT MAINTE	AB26	Yes	Common	54B	X	F	4N	0	EA	9	
003917932	1730-00-391-7932	JACK,HYDRAULIC,TRIPO	AB26	Yes	Common	54B	A	F	4J	0	EA	22	4
005162017	1730-00-516-2017	JACK,HYDRAULIC,TRIPO	AB26	Yes	Common	54B	A	F	4N	0	EA	40	1
218051532	1730-21-805-1532	JACK,HYDRAULIC,TRIPO	AB26	Yes	Common	54B	A	F	4N	0	EA	43	0
218457290	1730-21-845-7290	JACK,HYDRAULIC,TRIPO	AB26	Yes	Common	54B	A	F	4N	0	EA	9	1
000138813	1730-00-013-8813	JACK,AIRCRAFT LANDIN	AB26	Yes	Unique No ERNs	54B	A	F	4N	0	EA	14	0
013530762	1730-01-353-0762	TOWBAR,AIRCRAFT	AB26	Yes	Unique No ERNs	54B	A	F	4N	0	EA	47	0
005545439	1730-00-554-5439	TOWBAR,AIRCRAFT	AB26	Yes	Common	54B	A	F	4N	0	EA	19	9
011266143	1730-01-126-6143	ADAPTER,ENGINE INST	AB26	Yes	Unique No ERNs	54B	A	F	4N	0	EA	26	0
218914553	1730-21-891-4553	VALVE,BLOCK ASSEMB	AB26	Yes	Unique No ERNs	54B	A	B	4A	120	EA	3	3
015110085	1730-01-511-0085	SLING,AIRCRAFT MAINTE	AB26	Yes	Common	54B	A	F	4N	0	EA	13	0
218012204	4320-21-801-2204	PUMP,HYDRAULIC RAM,H	AB26	Yes	Unique No ERNs	54B	A	F	4N	0	EA	6	5
218102154	1740-21-810-2154	TRAILER,GROUND HAND	AB26	Yes	Common	54B	A	F	4N	0	EA	32	2
002943031	1730-00-294-3031	TOWBAR,AIRCRAFT	AB26	Yes	Common	54B	A	F	4N	0	EA	46	13

- There are approximately 330 unique AMSE items requiring sustainment.
- This is included in the Information Package.

Requirements (3/4)

The potential scope of contracted activities required to sustain AMSE includes:

- Maintenance Support;
- Engineering Support, including Configuration Management;
- Materiel Support;

Requirements (4/4)

The potential scope of contracted activities required to sustain AMSE includes (cont'd):

- Training/Technical Proficiency Support;
- Obsolescence Management;
- Technical Data Support; and,
- Information Management/Technology Support.

Introduction to ITB/Value Proposition

Industrial and Technological Benefits/Value Proposition

Jennifer Naddaf, ISEDC

Health Break

Options Analysis (OA)

Options have not been finalized; they are being presented here for feedback and critique from Industry.

Canada reserves the right to change any of these options based on further analysis/new information.

This LOI will remain open until 31 October, 2018. Feedback submitted up until this date will be considered.

Options Analysis: Division of Scope

WBS Levels						CANADA			Third Line R+O Contractor
Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	First Line	Second Line	NCR/ 1 CAD	
4.0 - Enterprise Materiel (Defence Supply Chain (DSC) - formerly known as CFSS)									
	4.1 - FAA Compliance Documentation								
		4.1.1 - Spending Authorization Form (SAF)							
			4.1.1.1 - DAP obtains SAF from RC Manager						
			4.1.1.2 - DAP keeps SAF on file						
		4.1.2 - Procurement Initiation Request Form (PIRF)							
			4.1.2.1 - DAP obtains PIRF from responsible Resource Manager						
			4.1.2.2 - DAP specifies materiel and quantities to be purchased						
			4.1.2.3 - DAP keeps PIRF on file						
		4.1.4 - Financial Blanket Approval Form (FBAF)							
			4.1.4.1 - DAP obtains FBAF from RC Manager						
			4.1.4.2 - DAP keeps FBAF on file						
	4.2 - Planning								
		4.2.1 - Forecasting - Current Activities							
		4.2.2 - Forecasting - Future Activities							
			4.2.2.1 - Identify removal for scheduled maintenance (service intervals)						
			4.2.2.2 - Forecast unscheduled removals						
			4.2.2.3 - Identify Bill of Materiel to support scheduled removals and unscheduled removals						
			4.2.2.4 - Calculate annual materiel requirements to support sum of BOMs						
			4.2.2.5 - Calculate adequate sparing levels						
			4.2.2.5 - Verify holdings of materiel						
			4.2.2.6 - Procure required inventory based on sparing level						
		4.2.3 - Financial Review, Support and Oversight							

- This is included in the Information Package.

Options Analysis: Outcomes

WBS Levels						CANADA			Third Line R+O Contractor	Outcomes
Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	First Line	Second Line	NCR/ 1 CAD		
	4.2 - Planning									
		4.2.1 - Forecasting - Current Activities								
		4.2.2 - Forecasting - Future Activities								
			4.2.2.1 - Identify removal for scheduled maintenance (service intervals)							
			4.2.2.2 - Forecast unscheduled removals							
			4.2.2.3 - Identify Bill of Materiel to support scheduled removals and unscheduled removals							Contractor to provide BOM to WSM
			4.2.2.4 - Calculate annual materiel requirements to support sum of BOMs							
			4.2.2.5 - Calculate adequate sparing levels							
			4.2.2.5 - Verify holdings of materiel							
			4.2.2.6 - Procure required inventory based on sparing level							
		4.2.3 - Financial Review, Support and Oversight								
	4.3 - Procurement Approach - Inventory Types									
		4.3.1 - Parts w/ NSN - CIS (Contract-Issued Spares) Included								
			4.3.1.1 - Review priority demands which cannot be satisfied from existing stock							
			4.3.1.2 - Receive Recommended Order Buys (ROB) reports and establish reorder priorities							

- This is included in the Information Package.

Options Analysis: Approach to Solicitation

- Award Sole Source contracts based on IP rights; hold open competition for all equipment without IP considerations.

- Hold open competition to award contract(s).

Options Analysis: Contracted Services Groupings (1/2)

– Develop one contract comprising all AMSE.

– Develop several contracts divided/awarded on basis of Intellectual Property or licencing arrangements.

Options Analysis: Contracted Services Groupings (2/2)

– Develop several contracts divided on basis of nature of equipment (i.e. hydraulic, mechanical, electrical).

Options Analysis: Nature of Contract

– Performance/incentive-based contract(s)

– Transactional contract(s)

AMSE SBCA Schedule

Procurement Milestones	Target Date / Timeframe
Drafting/Posting of Letter of Interest (LOI)	July 2018
Industry Engagement/One-on-one Sessions	August 28-29, 2018
Finalize Sustainment Strategy	October 2018
Procurement Strategy	February 2019
RFP Posted, Responses evaluated and recommendation to award	September – October, 2019
Contract Award	November – December, 2019

Questions & Answer Session

One-on-one Session Overview

- When arriving for one-on-one sessions, registered participants are to arrive approximately 5 mins prior to their start time and wait in the area near security.
- Please refer to your signed Rules of Engagement Agreement to ensure a fair consultation process.
- Participants must indicate information that is proprietary at the time of disclosure.

Closing Remarks

- Thanks to all those who attended this event.
- Next steps for ongoing Industry Engagement will be published on BuyandSell.gc.ca
- For additional information, please contact PSPC Contracting Authority, John White via email at: John.H.White@tpsgc-pwgsc.gc.ca

Aircraft Maintenance Support Equipment (AMSE) Project

Industry Engagement – August 2018

Innovation, Science and Economic Development Canada
Innovation, Sciences et Développement économique Canada

Canada

Outline

- Industry Engagement Objective
- Industrial and Technological Benefits Policy including Value Proposition
- Transactions and Canadian Content Value (CCV)
- How the ITB Policy Benefits Canada
- Market Analysis
- Value Proposition Strategic Objective
- Next Steps

Industry Engagement – Objective

- The Government of Canada is consulting with industry in order to understand the economic leveraging opportunities for AMSE project:
  - Present highlights of market analysis
  - Seek industry feedback on LOI questions posted on July 5, 2018
  - Feedback from industry this engagement process, along with research and analysis, will be used to inform the development of a Value Proposition and Strategic Objective.

Industrial and Technological Benefits Policy

Requires companies awarded defence procurement contracts to undertake business activity in Canada equal to the value of the contracts

General Aspects of the Policy

- Potential **minimum values of Canadian work** directly on a procurement
- Includes plans for regional distribution of **work for Canadian companies**
- Investments in **small and medium-sized businesses** from across Canada
- **Motivate work in areas of strategic importance** identified through analysis and industry engagement

When Does it Apply?

- All eligible defence and Canadian Coast Guard procurements **over $100 million** and for which the National Security Exception applies
- All eligible defence procurements with contract values between **$20–100 million** will be reviewed for the application of the ITB Policy

Industrial and Technological Benefits Policy
The Value Proposition

WHAT IS THE VP?

A bidder's **economic proposal to Canada**

Designed through **market analysis, industry engagement** and **third party consultation.**

The **rated and weighted element** of the contractor selection along with technical and cost elements

OBJECTIVES OF THE VP

1. Support the **long-term sustainability** and **growth** of **Canada's defence/space sector.**
2. Support the **growth of prime contractors and suppliers in Canada**, including small and medium-sized business in all regions of the country
3. **Enhance innovation** through R&D in Canada
4. **Increase the export potential** of Canadian-based firms
5. Encourage **skills development and training opportunities** in Canada

Recent ITB Policy Enhancements

Key Industrial Capabilities (KIC)

A strategic approach to leveraging economic outcomes through upcoming National Defence and major Canadian Coast Guard procurements with a continued focus on innovation, supplier development, exports, and economic growth for the defence industry and associated commercial applications

Skills Development and Training Pillar

On a procurement-by-procurement basis bidders will be encouraged to identify skills development and training opportunities for Canadians. This pillar may also consider under-represented groups (e.g. women, Indigenous Canadians) in the defence industry and other economic sectors

Gender and Diversity Plans

A non-rated addition to the required ITB planning documents that describes the prime contractor's approach to achieving gender balance and increasing diversity within Canadian corporate structures and broader supply chains in Canada

Key Industrial Capabilities

EMERGING TECHNOLOGIES

- Advanced Materials
- Cyber Resilience
- Remotely-piloted Systems and Autonomous Technologies
- Artificial Intelligence
- Space Systems

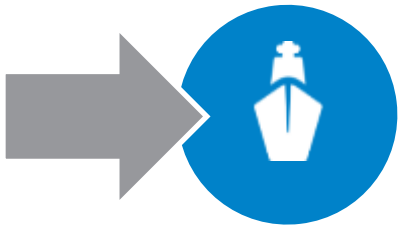
LEADING COMPETENCIES & CRITICAL INDUSTRIAL SERVICES

- Aerospace Systems & Components
- Defence Systems Integration
- Ground Vehicle Solutions
- Marine Ship-Borne Mission and Platform Systems
- Shipbuilding, Design and Engineering Services
- Training & Simulation
- Armour
- Electro Optical / Infrared Systems
- In- Service Support
- Munitions
- Sonar & Acoustic Systems

Transactions: DIRECT & INDIRECT

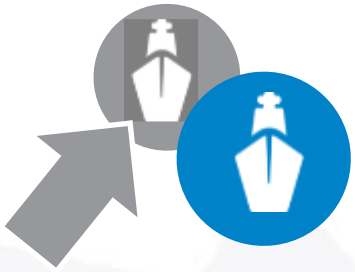
Transactions are business activities undertaken to fulfill an ITB obligation, **designed to be flexible** within the VP framework; Measured in **Canadian Content Value (CCV)**

DIRECT



A business activity directly related to the equipment or services being procured, e.g. platform components and systems, and sustainment activities

INDIRECT



Strategic investments or business activities in other areas, e.g. Research & development, capacity and skills improvement, commercial sector work, etc.

Transactions: Eligibility Criteria

ELIGIBILITY CRITERIA
Causality All business activities must be the result of the ITB obligation
Incrementality If the proposed transaction does not represent new work, then contractors may claim the incremental growth over a 3 year baseline of ongoing work undertaken due to the ITB obligation
Timing All business activities must occur within the ITB achievement period
Eligible Donor All transactions must involve Eligible Donors that meet the definition specified in the contract
Minimum CCV* (Applies only to indirect) Must have a minimum CCV of 30%
Minimum Technology Level* (Applies only to indirect) Must a similar or higher level of technology than the project

CANADIAN CONTENT VALUE

CCV is **measured in Canadian dollars** and is the portion of the product or service (transaction) that includes **Canadian costs**

INCLUDES

- Components of Canadian origin
- Wages paid to Canadians or permanent residents
- Profit taxable in Canada
- Utilities, maintenance, and rent paid in Canada

EXCLUDES

- Parts imported into Canada
- Wages, royalty and license fees paid to non-Canadians
- Bid preparation costs
- Taxes, duties, and lobbyist fees

EXAMPLE

Transaction:	Tank Drive Sprockets
CCV:	67%
Transaction Value:	$3,700,000
Credited Value (CCV):	$2,479,000

HOW DOES THE ITB POLICY BENEFIT CANADA?

Leverages high value investments

- Weighted and rated factor in selection
- Criteria tailored to each project
- Streamlined Policy features and processes
- Supports leading Canadian industrial capabilities and emerging technology areas

Reinforces Government Policies

- Reinforces government policies such as *Canada's Innovation and Skills Plan*, and *Strong, Secure, Engaged: Canada's Defence Policy*

Results have included defence sector growth and major spill- Over benefits to the broader economy

ITB PORTFOLIO *at a glance* 1986 – 2017	144 Contracts	$43.8 B in Obligations	$31.8 B Completed	$8.8 B Activities in Progress	$3.2 B Future work opportunities

THE VALUE PROPOSITION IS WORKING

- **Accountability and transparency** are encouraging effective participation by Canadian firms and early achievement by contractors
- **Earlier supply chain partnerships:** Defence companies are **capitalizing on the banking feature** by making early investments in defence procurements
- **Supporting Canada's military fleets**, with $1.3B in 2015 (over half of ITB activities)
- **Scaling up SMEs with** commitments of 15 percent of contract value (up from 12 percent from 2011-2015)
- **Commitments of $1.9B in export sales**, expanding opportunities for Canadian firms to be embedded in global supply chains
- Canada is attracting **early commitments to R&D investment** partnerships with post-secondary institutions and SMEs

ITB PORTFOLIO *Since* 2014

15	9	6	ITBs Incorporated into several contract extensions
New Contracts	Competitive Contracts	Sole Source Contracts	

Market Research and Analysis

Market research and analysis is conducted to better understand domestic industrial capabilities and global market in relation the AMSE Project.

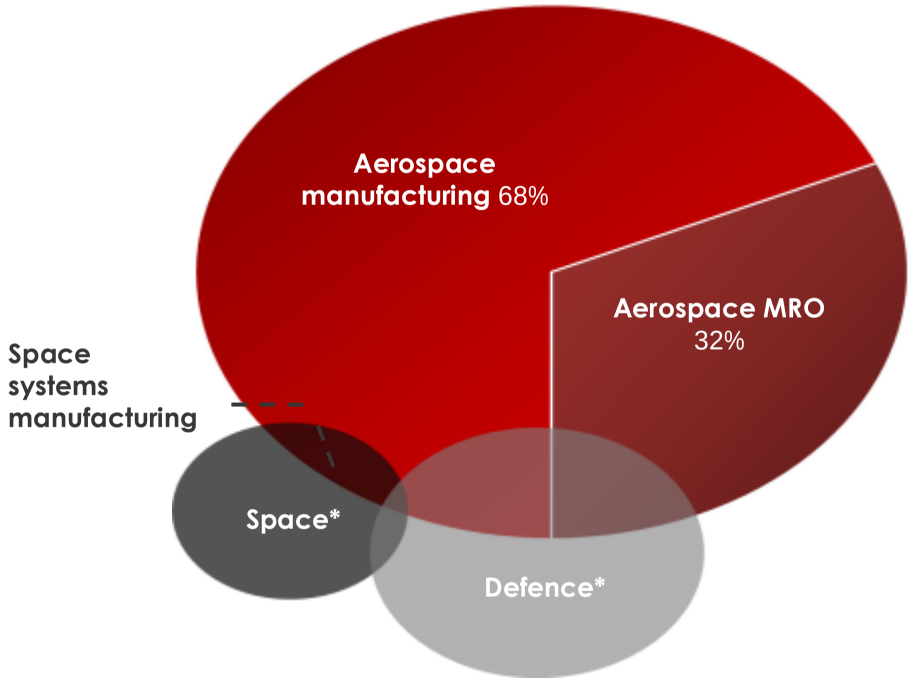
Findings provide information on leveraging opportunities and inform the development of Value Proposition framework.

Key Sources of Information

- Internal research and analysis
- Regional Development Agencies and Other Government Departments' industry capability analysis
- Third Party consultation and analysis of market trends
- Industry engagement

Canadian aerospace industry ecosystem is interlinked with the defence and space industries

Share of GDP by Canadian aerospace industry segment
2017



- Military MRO activities represented a quarter of Canada's aerospace MRO activities
- Among overall defence activities*, aerospace captured more than 30% of sales and close to 50% of research and development (R&D)**

* Based on the latest (2016) available information
** ISED adjusted estimate based on the data of firms that fully responded to the R&D questions and specified their R&D activity
Source: ISED's economic model estimates based on latest revised data from Statistics Canada, the Canada Revenue Agency, the Canadian Space Agency and enterprise-level observations, 2018; Canadian Defence, Aerospace and Marine Industries Survey (2016), 2018

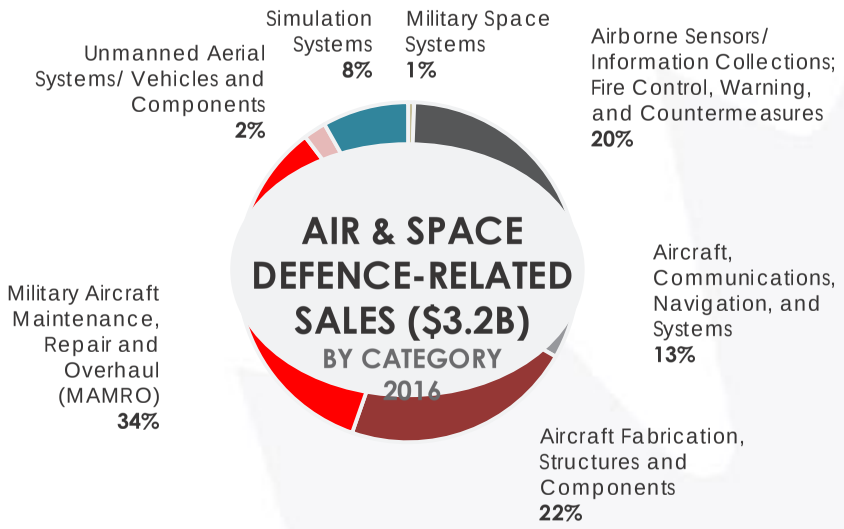
The Canadian Aerospace Industry is National

- Most aerospace manufacturing activity takes place in Central Canada
- Military aircraft MRO is the second largest defence related activities in Western and Atlantic Canada
- Aerospace defence activities are present across Canada

Source: ISED's economic model estimates based on latest revised data from Statistics Canada, the Canada Revenue Agency and enterprise-level observations, 2018; Canadian Defence, Aerospace and Marine Industries Survey (2016), 2018

Canadian Aerospace Sustainment Capabilities

- **Military aircraft MRO (MAMRO)*** accounted for **34%** of air and space defence sales
- **Close to 70 firms** are active in the MAMRO domain
  - The **top 4 firms** collectively accounted for **76%** of MAMRO's total sales
- **Airborne mission systems** represented **33%** of air and space defence sales
- **Strong exports, with over 40%** of defence-related sustainment activity exported



* Based on Statistics Canada's definition, Military Aircraft Maintenance, Repair and Overhaul Services (MAMRO) includes sales relating to maintenance, repair and overhaul activities (carried out under contract) in relation to military aircraft, engines and accessories; as well as for related training activities

Source: Statistics Canada's Canadian Defence, Aerospace and Marine Industries Survey (2014, 2016), 2016 survey released in 2018

Key Findings

- The **aerospace defence industry** accounted for **over 30%** of the Canadian defence industry's total **sales**, **employment**, and **exports** in 2016
- The **aerospace defence industry** represented **close to half** of Canada defence industry's total **R&D** investments in 2016
- **With close to 70 enterprises**, **military aircraft MRO activities** represented **34%** of the air and space defence sales
- Aerospace defence industry activities are present **across Canada**

Value Proposition
Strategic Objective - DRAFT

To Maintain and grow current Canadian Capabilities in Maintenance Repair and Overhaul, a Key Industrial Capability under the In-Service Support category. As well as leverage opportunities for technological advancement in MRO.

Contact Information

1 Understand the ITB Policy and Value Proposition

More information on the ITB Policy is available on Innovation, Science and Economic Development Canada's website

→ ***www.canada.ca/itb***

2 Connect with the Regional Development Agencies (RDAs)

RDAs have key knowledge of their respective regions, and can assist in making connections between Canadian industry and suppliers

→information about RDAs

3 Connect with Potential Suppliers and Post-Secondary/Research Institutions

Gather additional intelligence and make contacts through trade associations, industry days, conferences and trade shows, including through CADSI and AIAC

→ https://www.defenceandsecurity.ca/

→ http://aiac.ca/

Contact Information

For more information on economic benefits contact:
Jennifer.Naddaf2@canada.ca

To get in touch with a Regional Development Agency, contact:

Atlantic Canada Opportunities Agency (ACOA)
Elyse Mistry – elyse.mistry@canada.ca

Federal Economic Development Agency for Southern Ontario (FedDev)
Craig McClelland – craig.mcclelland@canada.ca

Federal Economic Development Agency for Northern Ontario (FedNor)
Natalie Brabant - natalie.brabant@canada.ca

Western Economic Diversification Canada (WD)
Peter Hoek – peter.hoek@canada.ca

Canada Economic Development for the Quebec Region (CED-Q)
Mathieu Trudelle - mathieu.trudelle2@canada.ca

Next Steps

- ISED will review industry feedback on leveraging opportunities and continue to engage industry to further refine the Value Proposition Strategic Objective.

- ISED is open to questions and feedback throughout the engagement process.

- All questions regarding this RFI should be sent through the Contracting Authority.

Canada

WBS Levels						CANADA			Third Line R+O Contractor	Outcomes
Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	First Line	Second Line	NCR/ 1 CAD		
1.0 - Enterprise Program Management										
	1.1 - Program Governance									
		1.1.1 - Strategic Intent								
			1.1.1.1 - Develop framework and strategy for ongoing Contract Management							
			1.1.1.2 - Develop strategy for Contract Close-Out Plan and activities							
			1.1.1.3 - Develop framework and strategy for contract renewal/initiation							
			1.1.1.4 - Provide strategic advice and planning							
			1.1.1.4 - Develop framework and strategy for Business Continuity Plan (Disaster Recovery Plan);							
		1.1.2 - Strategic Reporting Requirements (Materiel-Based (CHI), FAA Requirements, Contractural Requirements, Environmental, AW, etc.)								
			1.1.2.1 - Formulate communications strategy							
			1.1.2.2 - Develop framework and strategy for governance (appproval/review/development) venues (e.g., executive-type, management/working-level-type, technical/SME-type, etc.)							
			1.1.2.3 - Develop framework and strategy for meetings (programmatic/contractual, technical, financial, etc.)							
			1.1.2.4 - Develop framework and strategy for reporting deliverables (e.g., agenda, minutes, records of discussion, reports, etc.)							
		1.1.3 - Resource Requirements								
		1.1.4- Intra-Governmental/Departmental Review								
		1.1.5- Planned Operational Requirements								
		1.1.6 - Planned Support Requirements								
		1.1.7 - Technical Airworthiness Management								
	1.2 - Program Planning									
		1.2.1 - Life Cycle Plan (LCP)								
		1.2.2 - Materiel Forecasting								
		1.2.3 - Ad Hoc Project Planning								
		1.2.4 - Procurement Initiation Activities (As Required)								
		1.2.5 - AMSE Business Plan								
		1.2.6 - Contract Deliverables Management								
	1.3 - Program Execution									
		1.3.1 - Distribution/Communication of Plans to Stakeholders								
		1.3.2 - Schedule Management								
		1.3.3 - Risk Management								
		1.3.4 - Activity Optimization / Prioritization Activities (Logistical and Technical Problem Resolution)								
		1.3.5 - In-Year Contract Management								
		1.3.6 - Contract Close-Out (As Required)								
		1.3.7 - Contract Deliverables Development/Implementation/Steady-State								
	1.4 - Program Monitoring									
		1.4.1 - Performance Management								
			1.4.1.1 - Review targets annually to verify relevance							
			1.4.1.2 - Analyse actual performance against targets with the aim of driving action							
			1.4.1.3 - Collect/record, validate, and analyze enterprise performance data							
			1.4.1.4 - Report contract performance							
			1.4.1.5 - Review, analyze and validate Contractor-provided performance reports							
			1.4.1.6 - Determine performance attribution							
			1.4.6.7 - Accept/approve Performance Management Report							
			1.4.1.8 - Track GOC commitments							
			1.4.1.9 - Conduct audits of contractor performance data collection and reporting system							
			1.4.1.10 - Conduct semi-annual performance reviews							
		1.4.2 - Program Outcomes Reporting								
		1.4.3 - Strategic Requirements Reporting								
	1.5 - Program Change									
		1.5.1 - Change in Planned Inputs								
		1.5.2 - Continuous Improvement								
			Analysis/Implementation							

WBS Levels						CANADA			Third Line R+O Contractor	Outcomes	Comments
Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	First Line	Second Line	NCR/ 1 CAD			
2.0 - Enterprise Maintenance, Repair & Overhaul (MR&O)											
2.1 - First Line											
2.1.1 - Servicing Tasks											
2.1.1.1 - Daily/pre-use inspections											
Record inspection results/ faults found against CF 363											
2.1.1.2 - Basic troubleshooting											
2.1.1.3 - Refuelling											
2.1.1.4 - Cleaning of equipment											
2.1.1.5 - Transport to/from 2nd Line Workshops											
2.1.1.6 - Identify and route items for calibration (TEMMIS)											
2.1.1.7 - Perform Special Inspections (SI)											
2.2 - Second Line											
2.2.1 - Corrective Maintenance											
2.2.1.1 - Receive Item											
2.2.1.2 - Receive/ create Work Order											
2.2.1.3 - Diagnose/Troubleshoot											
2.2.1.4 - Inspect/Confirm fault											
2.2.1.5 - Dismantle											
2.2.1.6 - Clean											
2.2.1.7 - Inspect/Confirm fault											
2.2.1.8 - Repair or replace components											
2.2.1.9 - Re-Assemble Component/Module											
2.2.1.10 - Perform operational/functional Check											
2.2.1.11 - Raise Technical Issues outside of maintenance program (including but not limited to PIFs, UCRs, Deviations) to WSM/TA/LCMM											
2.2.1.12 - Identify items beyond scope of 2nd Level repair											
2.2.1.13 - Prepare items for shipping and route through supply to 3rd level for repair											
2.2.2 - Preventive Maintenance											
2.2.2.1 - Receive Maintenance Plan Notification (DRMIS)											
2.2.2.2 - Review Notification											
2.2.2.3 - Receive Item											
2.2.2.4 - Create Work Order for inspection (DRMIS)											
2.2.2.5 - Perform inspection											
2.2.2.6 - Complete any adjustments, fluid changes or repairs within scope of 2nd Level workshop											
2.2.2.7 - Perform Local Surveys and Special Inspections											
2.2.2.8 - Embody Modification Instructions											
2.2.3 - Tech Data Related Activities											
2.2.3.1 - Record Corrective Maintenance and Preventive Maintenance results against WO (DRMIS and CF 363)											
2.2.3.2 - Complete any documents required for shipping (CF 942, DND 2227 (supply documents)											
2.2.3.3 - Advise EMT/WSM of discrepancies in technical publications											
2.2.4 - Materiel Related Activities											
2.2.4.1 - Provide materiel support to MRPs											
2.2.4.2 - Demand parts required for CM and PM											
2.2.4.3 - Return A and B Class items to supply											
2.2.4.3.1 - Identify and package items											
2.2.4.4 - Ensure adequate supply of consumables is available for CM and PM											
2.2.4.5 - Obtain pricing and availability information for locally procurable items											
2.2.5 - M,R&O Support to Second Level Activities											
2.2.5.1 - Receive support for AMSE (painting, welding, NDT, etc) when required											
2.2.5.2 - Arrange for tool calibration and certification											
2.2.5.3 - Practice Tool Control											
2.2.5.4 - Adhere to Quality System (AF9000)											
2.2.5.5 - Dispose of Hazmat											
2.2.6 - Program Activities											
2.2.6.1 - Identify and participate in Flight Safety investigations, quarantines, impounding, reports, etc											
2.2.6.2 - Adhere to General Safety regulations											
2.2.6.3 - Provide training for new personnel											
2.2.6.3.1 - Enter/verify TARS codes											
2.2.6.4 - Provide/receive DRMIS training											
2.2.6.5 - Provide MRP as required											
2.3 - Third Line											
2.3.1 - Repair											
2.3.1.1 - Receive item										As described	
2.3.1.2 - Review/create Work Order										As described	
2.3.1.3 - Diagnose/troubleshoot issue										Review incoming documentation (CF 942), proceed to diagnosis/troubleshooting.	
2.3.1.4 - Dismantle										As described	
2.3.1.5 - Clean										As described	
2.3.1.6 - Inspect										Identify any issues not cited on CF 942	
2.3.1.7 - Confirm repair estimate is within MRC										Compare repair estimate to MRC data (DRMIS)	
2.3.1.8 - Approve repairs above MRC										Obtain approval from PA before undertaking	
2.3.1.9 - Conduct repair										As described	
2.3.1.10 - Final Assembly										As described	
2.3.1.11 - Perform Functional Test										Confirm that item performs to standard defined in CFTO	
2.3.1.12 - Accept repair (NDQAR)											
2.3.1.13 - Prepare for Shipment										Prepare for shipping per applicable CFTO.	
2.3.1.14 - Ship										Unless otherwise directed, return to CFSD.	
2.3.2 - Overhaul											
2.3.2.1 - Receive item										As described	
2.3.2.2 - Review/create Work Order										If DRMIS terminal is not available, this may be initiated by NDQAR.	
2.3.2.3 - Dismantle										As described	
2.3.2.4 - Clean										As described	
2.3.2.5 - Inspect										As described	
2.3.2.6 - Determine serviceability of components										As described	
2.3.2.7 - Repair or obtain replacement parts										Check CFSD/DRMIS for parts required before procuring replacement parts.	
2.3.2.8 - Reassemble item										As described	
2.3.2.9 - Test item										Confirm item functions to standard defined in CFTO	
2.3.2.10 - Accept overhaul (NDQAR)											
2.3.2.11 - Prepare for Shipment										Prepare for shipping per applicable CFTO.	
2.3.2.12 - Ship										Unless otherwise directed, return to CFSD.	
2.3.3 - Modifications, Special Inspections (SIs)											
2.3.3.1 - Develop and embody Modification Instructions										Develop Modification Instructions as directed by TA/LCMM	
2.3.3.2 - Perform Local Surveys and Special Inspections										Assist in local surveys as directed by TA/LCMM	
2.3.4 - Tech Data Related Activities											
2.3.4.1 - Provide any information required to maintain Configuration and Airworthiness Management										Provide technical data at DND's request.	
2.3.4.2 - Develop Special Inspection and Modification Instructions										Develop Special Inspection and Modification Instructions as directed by TA/LCMM	
2.3.4.3 - Update DRMIS with WO information										As described. If DRMIS access is unavailable, this may be performend by NDQAR.	
2.3.4.4 - Provide technical data on components										Provide technical data at DND's request.	
2.3.4.5 - Create CFTOs										As directed by TA/LCMM	
2.3.4.6 - Identify errors/discrepancies in publications										Notify TA/LCMM when discrepancies are found.	
2.3.4.7 - Correct publication errors/discrepancies										As directed by TA/LCMM	
2.3.5 - Engineering Support Activities											
2.3.5.1 - Liaise between OEM and EMT										As described	
2.3.5.2 - Technical Investigations/Engineering Services (FS or TA directed)											
2.3.5.2.1 - Quarantine, Teardown and Inspect (Strip Report)										As directed by TA/LCMM	
2.3.5.2.2 - Flight Safety Investigations										As directed by TA/LCMM	
2.3.5.2.3 - Equipment condition surveys										As directed by TA/LCMM	
2.3.5.2.4 - Repair development (Non-standard Repairs)										As directed by TA/LCMM	
2.3.5.3 - Provide Training for new equipment and capabilities										As requested by DND	
2.3.5.4 - Raise and address Technical Issues outside of maintenance program										Notify WSM of techical issues.	
2.3.5.5 - Provide on-site support to technical and contracting authorities										At PRMs and TRMs	
2.3.6 - Mobile Repair Party (MRP)											
2.3.6.1 - Identify Requirement for MRP											
2.3.6.2 - Plan MRP logistics - Technicians, spares, travel, technical data, tooling, tools, support											
2.3.6.3- Execute MRPs										Provide MRPs as directed by TA/LCMM	
2.3.6.4 - Return from MRPs and perform close-out - maintenance data, parts and tooling, reporting										As decribed; provide report to WSM	
2.3.7 - Supply Interface, Parts Demands, Returns, Scrap											
2.3.7.1 - Return completed repairs and spare parts to Defence Supply Chain (DSC)										As described	
2.3.7.2 - Provide princing and availability information to EMT as required.										As described	
2.3.7.3 - Demand parts for repairs from DSC										As described	
2.3.7.4 - Package and Preserve AMSE for shipping and storage										As described	
2.3.7.5 - MRC increase requests (overlap with Material Management)										Request authorization from WSM before exceeding MRC	
2.3.8 - Government Owned Materiel											
2.3.8.1 - Track GOM											

2.3.8.2 - Authorize/approve loan of GOM							
2.3.8.3 - Maintain GOM							
2.3.9 - Sub-Contract Work							
2.3.9.1 - Select Sub-contractor							
2.3.9.2 - Manage Sub-contract Agreements							
2.3.9.3 - Manage shipping and receiving to and from Sub-contractor(s)							
2.3.9.4 - Confirm Sub-contractor Certification							
2.3.10 - NDQAR Activities							
2.3.10.1 - Provide logistic support							
2.3.10.1.1 - Open and close Work							
2.3.10.2 - Manage quality control							
2.3.10.2.1 - Confirm satisfactory completion of repair (s)							
2.3.10.3 - Witness and record disposal activities (including demilitarization)							
2.4 - WSM							
2.4.1 - Program Support Activities							
2.4.1.1 - Flight Safety Program							
2.4.1.1.1 - Review Flight Safety investigation							
2.4.1.1.2 - Develop corrective actions for Flight Safety incidents							
2.4.1.1.3 - Monitor Flight Safety incident trends to mitigate future occurences							
2.4.1.2 - Define AMSE program support policy							
2.4.1.2.1 - Delineate work scope between 1,2, 3rd Level							
2.4.1.3 - Address 1st and 2nd Level maintenance support issues through Tech Review Meetings							
2.4.1.4 - Address 3rd Level maintenance support issues through semi-annual Tech Review Meetings						As described	
2.4.1.5 - Address Quality issues raised by NDQAR						As described	
2.4.1.5.1 - Determine Repair and Overhaul capabilities							
2.4.1.5.2 - Determine adequacy of QA systems							
2.4.1.5.3 - Determine quality inspection systems							
2.4.1.5.4 - Determine Documentation Control Systems							
2.4.1.5.5 - Provide assistance with interpretation of contractural requirements							
2.4.1.5.6 -Review of engineering changes and deviations							
2.4.1.5.7 - Review DND/Canada complaints						As described	
2.4.1.5.8 - Ensure contractor(s) meets their obligations, as defined in Tech SOW, Log SOW, and relevant publications							
2.4.1.6 - Liaise with other Programs/Groups							
2.4.1.6.1 - Provide maintenance data to OEM and other Operators (USN, USAF, other countries)						As described	
2.4.1.6.2 - Compare maintenance program and support issues to other Operators						As described	
2.4.1.6.3 - Engage other Govt/DND organizations (NRC, QETE, ATESS, etc) to resolve MRO related issues (overlap with Engineering WBS)						As described	
2.4.2 - Tech Data Support Activities							
2.4.2.1 - Ensure that equipment and components are catalogued (DRMIS. CGCS)							
2.4.2.2 - Review, approve and disseminate Modification Instructions, Special Inspections							
2.4.2.3 - Confirm that data on IETM is accessible and current							
2.4.3 - Material Support Activities							
2.4.3.1 - Action transfer of AMSE between units							
2.4.3.2 - Respond to AA Spares orders for parts (overlaps with Material)							
2.4.3.3 - Establish R&O requirements via issuing SNOMS, SNAPs, MRCs							
2.4.3.4 - Maintain SOR (DRMIS)							
2.4.3.5 - Maintain adequate levels of spare parts, equipment and consumables at depots							
2.4.3.6 - Review and authorize MRC increase requests							
2.4.3.7 - Request and authorize Technical Investigations/Engineering Services (FS or TA directed							
2.4.3.7.1 - Quarantine, Teardown and Inspect (Strip Report)						At direction of TA/LCMM	
2.4.3.7.2 - Flight Safety Investigations						At direction of TA/LCMM	
2.4.3.7.3 -Equipment condition surveys						At direction of TA/LCMM	
2.4.3.7.4 - Repair development (Non-standard Repairs)						At direction of TA/LCMM	
2.4.3.8 - Review and authorize Modification Instructions and Special Investigations.							
2.4.3.9 - Authorize and document disposal activities							
2.4.3.10 - Authorize and organize MRPs							
2.4.4 - Maintenance Data System Management							
2.4.4.1 - Utilize DRMIS to track equipment and record maintenance history							
2.4.4.2. - Define scheduled maintenance cycles							
2.4.4.3 - Create Maintenance Plan (DRMIS) for time or interval-based inspection							
2.5 - 1 Cdn Air Div							
2.5.1 - Program Management Activities							
2.5.1.1 - Authorize use of equipment							
2.5.1.2 - Publish and maintain authorization codes (Technical Authorization Record Set (TARS))							
2.5.1.3 - Oversight of contractor delivery of services to 1st, 2nd line (SLA PG OWSM)							
2.5.1.4 - Communicate unique/new operational requirements (environmental considerations - sand, ash, extreme temps etc)							
2.5.1.5 - Provide funding for AMSE sustainment							
2.5.1.6 - Resolve resource conflicts between Wings							
2.5.2 - Engineering Support Activities							
2.5.2.1 - Interaction/approval of Ops Related Deviations							
2.5.2.2 - Review TQA, equipment availability & supportability WRT changes to approved Maintenance Program							
2.5.2.3 - Review changes affecting scope to 1st, 2nd and 3rd level maintenance (A4)							
2.5.2.4 - Review changes affecting operator procedures, tactics, training pubs (A3)							
2.5.2.5 - Signing authorities on Deviations, RARMs of a significant nature							
2.5.3 - Materiel Support Activities							
2.5.3.1 - Coordinate support for deployed (domestic, international and continental) Ops							
2.5.4 - Flight Safety, AW Significant Items (ARA, RAN, RARMs) Monitoring							
2.5.4.1 - Flight Safety Program							
2.5.4.1.1 - Review Flight Safety investigation							
2.5.4.1.2 - Develop corrective actions for Flight Safety incidents							
2.5.4.1.3 - Monitor Flight Safety incident trends to mitigate future occurences							

WBS Levels						CANADA			Third Line R+O Contractor	Outcomes	Comments
Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	First Line	Second Line	NCR/ 1 CAD			
3.0 - Enterprise Engineering											
	3.1 - Technical Investigations (TI)										
		3.1.1 - Investigation/Research to Provide Input to Incidents/Reports									
			3.1.1.1 - Perform acceptance check							As described	
			3.1.1.2 - Complete Technical Investigation Reports (DND 1057)							As described	
			3.1.1.3 - Perform airworthiness investigations							As directed by WSM	
			3.1.1.4 - Perform flight safety investigations							As directed by WSM	
			3.1.1.5 - Perform environmental hazard assessments							Assist WSM in investigations	
			3.1.1.6 - Perform technical airworthiness risk assessments								
			3.1.1.7 - Authorize deviations on maintenance programs							Provide required information to WSM	
			3.1.1.8 - Perform Special Inspections (SIs)							As directed by WSM	
			3.1.1.9 - Identify design deficiencies							Notify LCMM/TA	
			3.1.1.10 - Modifications							As directed by TA/WSM	
			3.1.1.11 - Perform equipment condition surveys							As directed by TA/WSM	
	3.2 - Engineering Support (ES)										
		3.2.1 - Engineering Support Activities									
			3.2.1.1 - Conduct system engineering for all AMSE systems							As directed by TA/WSM	
			3.2.1.2 - Conduct inter-system integration for all AMSE systems							As directed by TA/WSM	
			3.2.1.3 - Update and maintaining the AMSE equipment inspection programs								
			3.2.1.4 - Raise and address technical issues outside of maintenance program (unusual, new or excessive wear/damage)							Notify LCMM/TA	
			3.2.1.5 - Determine optimum configuration							Notify LCMM/TA	
			3.2.1.6 - Recommend AW authorities								
			3.2.1.7 - Provide direct support for ad-hoc technical issues raised by 1-3rd level organizations								
			3.2.1.8 - Develop non-standard repair (NSR) schemes							Provide required information to WSM	
			3.2.1.9 - Modify corrective maintenance programs								
			3.2.1.10 - Modify preventive maintenance programs								
			3.2.1.11 - Authorize alternate parts								
			3.2.1.12 - Recommend/approve course of action for acceptance failures and follow-up							Provide required information to WSM	
			3.2.1.13 - Recommend/approve course of action for UCRs, and following up								
			3.2.1.14 - Brief 1st and 2nd Level on noted trends affecting support								
			3.2.1.15 - Investigate improvements to tooling, AMSE and test equipment							Provide information to WSM	
			3.2.1.16 -Assess impact of Deviation approvals								
			3.2.1.17 - Review TQA, equipment availability & supportability WRT changes to approved maintenance programs								
			3.2.1.18 - Review changes affecting scope to 1st, 2nd and 3rd level maintenance								
			3.2.1.19 - Review changes affecting operator procedures, tactics, training pubs								
			3.2.1.20 - Recommend/approve Deviations								
		3.2.2 - Engineering Change Management									
			3.2.2.1 - Evaluate Design Changes requiring Airworthiness Approval / Technical Airworthiness Clearance:								
				3.2.2.1.1 - Modifications							
				3.2.2.1.2 - Alterations							
				3.2.2.1.3 - Non-Standard Repairs							
				3.2.2.1.4 - Alternate Parts							
				3.2.2.1.5 - Changes to the approved role of the equipment							
				3.2.2.1.6 - Deviations to Preventive Maintenance Program							
				3.2.2.1.7 - Deviations to Corrective Maintenance Program							
			3.2.2.2 - Implement Engineering Change Approval Process								
				3.2.2.2.1 - Identify Standards and Specifications							
				3.2.2.2.2 - Develop Engineering Change							
				3.2.2.2.3- Test and Evaluate Engineering Change							
			3.2.2.3 Approve AW of Engineering Change								
	3.3 - Integrated Logistics Support (ILS)										
		3.3.1 - ILS Management									
			3.3.1.1 - Implement TIES taskings								
				3.3.1.1.1 - Initiate							
				3.3.1.1.2 - Develop							
				3.3.1.1.3 - Submit							
				3.3.1.1.4 - Recommend							
				3.3.1.1.5 - Approve							
				3.3.1.1.6 - Manage							
			3.3.1.2 - Collect and analyze Equipment Performance Data								
				3.3.1.2.1 - Address dependability. Will the system continue to operate properly for its ELE?							
				3.3.1.2.2 - Address capability. Is the system capable of fulfilling its requirement when it performs as designed?							
				3.3.1.2.3 - Review parts & parts application data							
				3.3.1.2.4 - Review AMSE failure/maintenance data							
				3.3.1.2.5 - Review mod/SI status data							
			3.3.1.3 - Address ILS Program Changes:								
				3.3.1.3.1 - Identify variations from the predicted R&O and to alter logistics support accordingly							
				3.3.1.3.2 - Perform trend analysis to determine the cause of any problem, to institute corrective action, prepare new procedures, develop modifications, etc.							
				3.3.1.3.3 - Provide data to support component life and rationalization procedures							
		3.3.2 - AMSE System/Sub-System Level									
			3.3.2.1 - Input/maintain technical data within departmental AMSE maintenance systems of record (DRMIS)							Provide WSM with required information	
			3.3.2.2 - Review/provide expert support on reports, documents, technical publications and engineering drawings received from or forwarded to RCAF operating units and Contractors for compliance with RCAF maintenance policy, standards and specifications.							Provide WSM with required information	
			3.3.2.3 - Provide systems expertise to TA staff, field maintenance personnel and other applicable agencies							Provide WSM with required information	
			3.3.2.4 - Develop/implement equipment modifications and improvements; prepare modification instructions							As directed by WSM	
			3.3.2.5 - Attend meetings to provide technical support (including international conferences)							As directed by WSM	
			3.3.2.6 - Accompany DGAEPM staff as required, on visits to the facilities/plants of other DND Contractor(s), engineering units and Canadian Forces Bases							As required/directed by WSM	
			3.3.2.7 - Carry out studies and directing programs to resolve logistics-generated systems degradation and technical faults and matters pertaining to AMSE								
			3.3.2.8 - Provide ILS input on DND projects/studies related to maintenance program issues								
			3.3.2.9 - Initiate modifications, special inspections and special information leaflets							As directed as WSM	
			3.3.2.10 - Review all flight safety incident reports and conduct an assessment of all AMSE-related flight safety incidents								
			3.3.2.11 - Determine equipment sparing level requirements for AMSE systems and equipment							Provide obsolescence information to WSM to assist in establishing sparing levels.	
			3.3.2.12 - Determine equipment and systems R&O requirements including surveillance of unusual wear characteristics							Notify WSM; provide technical assistance to mitigate issues.	
			3.3.2.13 - Review/recommend updates to Canadian Forces Publications (CFP) not supported by the Contractor, if tasked								
			3.3.2.14 - Identify surplus equipment and provide recommendations to Canada.							As described	
			3.3.2.15 - Execute disposal plans							As directed by WSM	
			3.3.2.16 - Investigating Unsatisfactory Condition Reports (UCR) and carrying out corrective action							As directed by WSM	
			3.3.2.17 - Draft Project and Trial/Test Directives required to task agencies such as Aerospace Engineering Test Establishment (AETE), Aerospace and Telecommunications Engineering Support Squadron (ATESS), and Quality Engineering Test Establishment (QETE) and monitoring project progress, reviewing plans and reports.								
			3.3.2.18 - Perform analyses/studies:								
				3.3.2.18.1 - Feasibility studies							
				3.3.2.18.2 - Maintenance studies							
				3.3.2.18.3 - Operational scenario studies;							
				3.3.2.18.4 - Failure studies (Qualitative & Quantitative)							
				3.3.2.18.5 - AMAF/APAF ILS validation							
				3.3.2.18.6 - DRMIS data queries & data interpretation							
	3.4 - Logistic Support Analysis (LSA)										
		3.4.1 - AMSE System/Sub-System Level									
			3.4.1.1 - Evaluate Engineering Change Proposals (ECPs) for ILS impact								
				3.4.1.1.1 - Level of Repair Analysis (LORA)							
				3.4.1.1.2 - Reliability & Maintainability (R&M) analysis							
				3.4.1.1.3 - Trending and analysis of AMSE systems and component failure data							
				3.4.1.1.4 - Maintenance Task Analysis							
				3.4.1.1.5 - Sparing Analysis							
				3.4.1.1.6 - Maintenance Program Analysis							
				3.4.1.1.7 - Life-Cycle Cost (LCC) analysis							
			3.4.1.2 - Provide identification and management of obsolescence of AMSE systems/components								
				3.4.1.2.1 - Identify/forecast, track, mitigate and correct the impact of obsolescence on AMSE equipment/systems							
				3.4.1.2.2 - Manage the replacement of obsolete and unsupportable components							
			3.4.1.3 - Respond to and provide R&O expert support to the AMSE engineering support teams, field units and R&O sub-contractors for assistance in overcoming R&O and logistics problems.							As described	
			3.4.1.4 - Provide technical/engineering services in support of materiel support services, including but not limited to, parts substitution or alternate parts identification; and							As described	
			3.4.1.5 - Integrate Airworthiness Requirements listed within the TAM with Engineering Support activities and processes.								
	3.5 - Configuration Management (CM)										
		3.5.1 - Changes to Approved ILS Baseline									
		3.5.2 - AMSE Configuration Management Policies, Plans and Procedures									
		3.5.3 - Develop and maintain process for Approval and Documentation of Design Changes									
		3.5.4 - Ensure completeness of any embodied Engineering Changes									
		3.5.5 - Monitoring/Updating of Support Requirements and Change Recommendations									
		3.5.6 - Review and Update AMSE Configuration Management Plan									
		3.5.7 - Baseline Change Implementation									
			3.5.7.1 - Approve Release of Design Change Instructions								
			3.5.7.2 - Control Configuration								
			3.5.7.3 - Implement Engineering Change							As directed by WSM	
			3.5.7.4 - Implement ILS Requirements Change								
			3.5.7.5 - Manage Technical Data								
	3.6 - Technical/Engineering Services										
		3.6.1 - Data Review for MRP								Prepare for MRP	
		3.6.3 - Specification Development									
		3.6.4 - SOW Development									
		3.6.5 - Requisition Development									
		3.6.6 - Proposal Evaluation									
		3.6.7 - Plan Development									
		3.6.8 - Recording of ECP								As directed by WSM	
		3.6.9 - Coordination of Tests and Evaluations								As directed by WSM	
		3.6.10 - Management of Paper Deliverables								As directed by WSM	

3.6.11 - Respond to Queries from Stakeholders						As required	
3.6.12 - Liaise with Suppliers, Vendors, and OEMs in Resolution of Routine Engineering and Maintenance Problems						As required	
3.6.13 - Review Correspondence/Documentation Received from TA but Generated by Other Agencies and Provision of Follow-On Recommendations						Provide advice/information to WSM	
3.6.14 - Maintenance of Technical Information Database							
3.6.15 - Advice on Product Improvement						Provide advice/information to WSM	
3.6.16 - Advice on Design Deficiencies and Design Changes						Provide advice/information to WSM	
3.6.17 - Coordination/Development of Technical Requirements Definition							
3.6.18 - Technical Issues Outside of Maintenance Program							
3.6.18.1 - UCRs							
3.6.18.2 - Deviations							
3.6.18.3 - Non-conforming parts							
3.6.18.4 - Request for Non-Standard Repair (NSR)							
3.6.18.5 - PDRs							
3.6.19 - Technical Problem Resolution							
3.6.19.1 - Technical Problem Analysis							
Approve Technical Problem Investigation							
3.6.19.2 - Technical Problem Solution Development							
Develop Technical Problem Solution							
3.6.19.3 - Manage Operational Testing and Evaluation							
3.6.19.4 - Technical Problem Solution Approval							
Review Technical Problem Solution							
3.6.19.5 - Approve/Release of SI							
3.6.20 - Provision of Technical/Engineering Solutions							
3.6.20.1 - Recommendations on Advances in AMSE Technology.						Provide advice/information to WSM	
3.6.20.2 - Attendance at Conferences, Symposia and Exhibitions						As required/directed by WSM	
3.6.21 - Provision of Liaison Engineering							
3.6.21.1 - Provide maintenance data to OEM and other Operators						As required	
3.6.21.2 - Compare maintenance program and support issues to other Operators						As required	
3.6.21.3 - Engage other Govt/DND organizations (NRC, QETE, ATESS, etc) to resolve MRO related issues (overlap with Engineering WBS)							
3.6.21.4 - Engage outside Contractor organizations to resolve MRO related issues (overlap with Engineering WBS)						As directed by WSM	
3.6.21.5 - Establish interface with specialist support within DGAEPM, ADM (MAT), 1 CAD, OTU, and other DND organizations and contractors						As directed by WSM	
3.6.21.6 - Liaise with the field / Air Div / CAS (i.e. DAR)							
3.6.21.7 - Liaise with other directorates							

WBS Levels						CANADA			Third Line R+O Contractor	Outcomes	Comments
Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	First Line	Second Line	NCR/ 1 CAD			
4.0 - Enterprise Materiel (Defence Supply Chain (DSC) - formerly known as CFSS)											
	4.1 - FAA Compliance Documentation										
		4.1.1 - Spending Authorization Form (SAF)									
			4.1.1.1 - DAP obtains SAF from RC Manager								
			4.1.1.2 - DAP keeps SAF on file								
		4.1.2 - Procurement Initiation Request Form (PIRF)									
			4.1.2.1 - DAP obtains PIRF from responsible Resource Manager								
			4.1.2.2 - DAP specifies materiel and quantities to be purchased								
			4.1.2.3 - DAP keeps PIRF on file								
		4.1.3- Financial Blanket Approval Form (FBAF)									
			4.1.3.1 - DAP obtains FBAF from RC Manager								
			4.1.3.2 - DAP keeps FBAF on file								
	4.2 - Planning										
		4.2.1 - Forecasting - Current Activities									
		4.2.2 - Forecasting - Future Activities									
			4.2.2.1 - Identify removal for scheduled maintenance (service intervals)								
			4.2.2.2 - Forecast unscheduled removals								
			4.2.2.3 - Identify Bill of Materiel to support scheduled removals and unscheduled removals							Generate materiel requirements	
			4.2.2.4 - Calculate annual materiel requirements to support sum of BOMs								
			4.2.2.5 - Calculate adequate sparing levels								
			4.2.2.5 - Verify holdings of materiel								
			4.2.2.6 - Procure required inventory based on spa								
		4.2.3 - Financial Review, Support and Oversight									
	4.3 - Procurement Approach - Inventory Types										
		4.3.1 - Parts w/ NSN - CIS (Contract-Issued Spares) Included									
			4.3.1.1 - Review priority demands which cannot be satisfied from existing stock								
			4.3.1.2 - Receive Recommended Order Buys (ROB) reports and establish reorder priorities								
			4.3.1.3 - Identify future materiel requirement								
			4.3.1.4 - Cost materiel requirements								
			4.3.1.5 - Seek approval for commitment of funds in PIRF/SAF								
			4.3.1.6 - RC Manager approves PIRF/SAF								
			4.3.1.7 - Research potential sources of supply								
			4.3.1.8 - Review existing materiel assets, including:								
				4.3.1.8.1 - Items in repair pipeline							
				4.3.1.8.2 -Substitutions							
				4.3.1.8.3 -Excess holding at bases							
				4.3.1.8.4 -Other excess holdings							
				4.3.1.8.5 -Alternates listed under family head							
			4.3.1.9 - Determine best method of satisfying ROBs (Recommended Order Buys)								
			4.3.1.10 - Determine if requirement should be totally or partially filled								
				4.3.1.11 - Ensure compliance with all federal procurement policies and regulations, including Controlled Goods						As described	
			4.3.1.12 - COLOG								
				4.3.1.12.1 - Check Federal Logistics (FEDLOG) website to see if available and acquisition code (which indicates whether or not DND is able to procure as non-US customer)							
				4.3.1.12.2 - If necessary, obtain P&A, current stock holdings and Maximum Reorder Quantity (MRQ) by asking							
				4.3.1.12.3 - If requirement is below MRQ (US mechanism to ensure that one customer does not empty shelf, thereby putting US interests at risk) and below $25K proceed with ordering.							
				4.3.1.12.4 - Interaction with D Svcs C and Supply Manager							
				4.3.1.12.5 - If items in FEDLOG aren't controlled by DLA, then liaise with CFLL units							
			4.3.1.13 - If not procurable through COLOG, then use either LPO or PSPC ordering process								
			4.3.1.14 - Cataloguing activities								
				4.3.1.14.1 - LCMM catalogues parts.							
				4.3.1.14.2 - Obtain DMC code for Controlled Goods, if required							
				4.3.1.14.3 - LCMM to ensure all item with NSN have QAC assigned (avoids quarantine at depot; assists in selection of appropriate QA SACC clauses)							
				4.3.1.14.4 - Determines if it should be consumable (under $1000) or accountable. If accountable, then will determine if it should be Category B (which is repairable at 3rd Line) or Category F (which is repairable at 2nd Line, then 3rd Line). Note: an accountable-consumable is still controlled.							
				4.3.1.14.5 - Determine MRC value and/or staff requests for change to R&O							
				4.3.1.14.6 - Define repairability of each part.							
				4.3.1.14.7 - Review order quantities and lead-times							
				4.3.1.14.8 - LCMM and SM review requests for lifetime buys							
				4.3.1.14.9 - Consult with technical staff (LCMM and TA), as required							
				4.3.1.14.10 - Local procurement							
		4.3.2 - Parts w/o NSN - Advanced Accountable Spares (AAS)									
			4.3.2.1 - Receipt/review/fulfilment of demand							Identify 3rd line materiel required for R&O for DND consider procuring.	
				4.3.2.1.1 - Identify future materiel requirement							
				4.3.2.1.2 - Obtain P&A from supplier							
				4.3.2.1.3 - Submit request for purchase of AAS to PA							
				4.3.2.1.4 - Review request							
				4.3.2.1.5 - Submit to TA to validate requirement							
				4.3.2.1.6 - Approve if If AAS request is valid and if funds are available.							
				4.3.2.1.7 - Contractor purchases AAS						Purchase inventory and invoice Canada	
				4.3.2.1.8 - Contractor receives AAS and provides storage							
				4.3.2.1.9 - Contractor pays supplier's invoice							
				4.3.2.1.10 - Contractor invoices Canada and provides supplier's invoice as back-up							
		4.3.3 - Parts w/o NSN - Government Furnished Overhaul Spare (GFOS/GOM)									
			4.3.3.1 - Generation of GFOS								
				4.3.3.1.1 - TA approves reduction to spares							
			4.3.3.2 - Contractor provides storage of GFOS items							Store and safeguard sufficient DND inventory to support R&O process	
			4.3.3.3 - Contractor provides inventory record-keeping system								
			4.3.3.4 - Contractor invoices Canada embodiment charge once GFOS incorporated into Repair Line.								
		4.3.4 - Parts w/o NSN - Contractor Furnished Materiel (CFM)									
			4.3.4.1 - Contractor procures, invests and stores CFM until needed on repair line							Purchase sufficient contarctor inventory to support R&O process.	
			4.3.4.2 - Once embodied into repair, Contractor invoices Canada (price of the part + embodiment charge)								
4.4 - Parts Procurement											
		4.4.1 - Inventory Holdings Review									
			4.4.1.1 - Redistribute excess holdings to satisfy requirement. If not, proceed with procurement action.								
		4.4.2 - Parts w/ NSN - CIS Included									
			4.4.2.1 - Raise requisitions (for parts w/ NSN) via PWGSC, COLOG or Standing Offers								
			4.4.2.2 - Process High Priority Requests (HPR) priority codes 1, 2, 3, 4 and/or ROBs								
			4.4.2.3 - Staff procurement documents as required								
			4.4.2.4 - Provide certification under Section 32 of the Financial Administration Act (FAA)								
			4.4.2.5 - Determine level of signing authority required on procurement instrument								
			4.4.2.6 - Execute Procurement (DND/PSPC)								
			4.4.2.7 - Follow up on delivery, especially for urgent requirements								
			4.4.2.8 - Filing of procurement file on RDIMS								
		4.4.3 - Parts w/o NSN - Advanced Accountable Spare (AAS)									
			4.4.3.1 - Contractor identifies requirement for AAS, gets P&A and submits request to purchase to PA.							As described	
			4.4.3.2 - PA/TA review.								
			4.4.3.3 - Purchase of AAS recommended by TA, then approved by PA								
			4.4.3.4 - Upon receipt, materiel stored in DND-caged area until required.							As described	
		4.4.4 - Parts w/o NSN - Contractor Furnished Materiel (CFM)									
			4.4.4.1 - Contractor procures, invests and stores CFM until needed on repair line								
			4.4.4.2 - Once incorporated into the Repair Line, Contractor invoices Canada (price of the part + embodiment charge)							As described	
		4.4.5 - Non-Conforming Parts									
			4.4.5.1 - WSM determines disposition of non-conforming parts and issue instructions (repair, rework or even acceptance "as-is")								
			4.4.5.2 - QAR determines acceptance/rejection of non-conforming part and requests corrective action. QAR may grant/accept rework on minor deviations, but it is not the norm.								
		4.4.6 - HPR Management									
			4.4.6.1 - Input demand to Wing Supply								
			4.4.6.2 - Wing Supply contact depot								
			4.4.6.3 - SM moves SC from depot to depot (a reservation) as required								
			4.4.6.4 - SM buys it (if consumable item)								
			4.4.6.5 - SM goes to LCMM (if accountable item)								
			4.4.6.6 - LCMM engages 3rd Line								
			4.4.6.7 - QAR can authorize O/T at 3rd Line or move up priority of repair								
			4.4.6.8 - Rob other equipment								
				4.4.6.8.1 - Validate parts are available						Present solutions to inventory shortfalls in order to fufil HPR requirements.	
				4.4.6.8.2 - Obtain authorization of LCMM/TA							
4.5 - Deployments and/or Operations											
	4.5.1 - Role of Canadian Joint Operations Command (CJOC)										
			4.5.1.1 - CJOC directs Task Force Generator (TFG). TFG is responsible for:								
				4.5.1.1.1 - Identifying materiel required for mission							
				4.5.1.1.2 - Issuing materiel to proper theatre Storage Location (SLoc)							
				4.5.1.1.3 - Packing materiel into sea containers and ship into theatre							
				4.5.1.1.4 - Ensure national interests wrt asset visibility, accountability and integrity of audit trails							
			4.5.1.2 - Canadian Forces Joint Operational Support Group (CFJOSG) plans and executes sustainment of AMSE								
				4.5.1.2.1 - Coordinate delivery of materiel and equipment along strategic lines of communications							

4.5.1.2.2 - Coordinate return and disposal of materiel and equipment on mission close-out							
4.5.1.2.3 - Canadian Materiel Support Group (CMSG) (subordinate to CFJOSG) provides operational-level support, warehousing and distribution for materiel, transportation services and executes reach-back for provision of additional materiel.							
4.5.1.2.4 - 3 CSU ships all initial materiel into theatre, provides asset visibility, is initial POC for any supply problems, coordinates overland shipments, receives materiel							
4.5.1.2.5 - 4 Canadian Forces Movement Control Unit (4 CFMCU) provides control of materiel moving through both Cdn and foreign Strategic Lines of Communication.							
4.5.1.3 - Mission Closure Team (MCT) or a Mission Drawdown Team (MDT) closes out a mission by doing the stocktaking, preparation, packaging and loading of materiel.							
4.5.2 - Disposal of Surplus Materiel in Theatre							
4.5.2.1 - DGAEPM declares materiel surplus prior to disposing in theatre, if requested through CJOC J3.							
4.6 - Repair of Repairables							
4.6.1 - Planning/Forecasting							
4.6.1.1 - Planning of requirements using in-house Technical team knowledge							
4.6.1.2 - LCMM to forecast future arisings							
4.6.1.3 - TA reviews LCMM's recommendations							
4.6.1.4 - Develop long-term materiel support strategies							
4.6.1.5 - Make buy vs. repair decision (Repairable Reserve)							
4.6.1.6 - Analysis of repairable, including investigating alternative testing criteria (see also Engineering WBS)							
4.6.1.7 - Airworthiness requirements - Integrate airworthiness requirements into Materiel Support Activities							As described
4.6.1.8 - Continuous improvement							
4.6.1.9 - For items selected to be repaired (on SNAPS):							
4.6.1.9.1 - Ensure that repair qty within forecast							Actively ensure that repairables are moving intothe repair line.
4.6.1.9.2 - Observe free-flow R&O process							
4.6.1.9.3 - Processes Stores Removal Requests (SRR)							
4.6.1.9.4 - Ensures items selected require repair							
4.6.1.9.5 - Verifies items reflect correct repair category and family head information							
4.6.1.10 - For items not selected for repair:							
4.6.1.10.1 - Add to RR inventory at depots							
4.6.1.10.2 - Add to existing SNAPS, if possible							
4.6.1.10.3 - Raise requisition for							
4.6.1.10.4 - Using FMS case for repair							
4.6.1.10.5 - Using multi-user Fleetway contract for one-time							
4.6.1.10.6 - Disposal and replace with new							
4.6.2 - First Line							
4.6.2.1 - Direct repairable components from 1st to 2nd Line/Supply							
4.6.2.2 - Disposal of accountable consumable is tracked (i.e. one for one exchange with Supply)							
4.6.2.3 - Complete applicable documentation to							
4.6.3 - Second Line							
4.6.3.1 - Receive mat'l from 1st Line							
4.6.3.2 - 2nd Line will repair if possible and return back to Supply (see also Maintenance WBS)							
4.6.3.3 - Whenever 2nd Line cannot complete repair, either dispose of it or send it to 3rd Line							
4.6.4 - Third Line							
4.6.4.1 - Receive mat'l from depots and 2nd Line							
4.6.4.2 -Third Line will repair if possible and return back to Supply or to unit							
4.6.4.3 - Whenever 3rd Line cannot complete repair, request disposition direction from TA/LCMM							
4.6.4.4 - Repair to Selection Notice Priority Summary (SNAPS) levels.							As described
4.6.4.5 - Process Priority Repair Requests (PRR)							
4.6.4.6 - Contractor inducts items							
4.6.4.7 - Open work order in DRMIS							
4.6.4.8 - Quarantine materiel							
4.6.5 - WSM							
4.6.5.1 - Maintain SNAPS (coordinated activity							
4.6.5.1.1 - LCMM analyses requirements and comes up with forecast (annually)							
4.6.5.1.2 - LCMM fwds forecast to TA for approval							
4.6.5.1.3 - Forecast is submitted to							
4.6.5.1.4 - SM raises Priority Action List (PAL) and submits to LCMM for review, approval and then furtherance to SM							
4.6.5.1.5 - PA reviews PAL, provides approval (looks at financial impacts to the contract ceiling) and submits to SM							
4.6.5.1.6 - SM sends fully approved PAL to +R&O email box for action							
4.6.5.1.7 - DQA retrieves email out of the +R&O email box and processes PAL request							
4.6.5.1.8 - DQA reviews changes to SNAPS levels to determine if QAR staffing levels need to be amended							
4.6.5.1.9 - Receives SNAPS change report							As described
4.6.6 - Warranty							
4.6.6.1 - Address warranty considerations and process failures							As described
4.6.6.2 - Failures under Warranty							
4.6.6.2.1 - Assess reported conditions which gave rise to warranty action.							As described
4.6.6.2.2 - Determine root cause and implement preventative action							As described
4.6.6.3 - Investigation of failure							
4.6.6.3.1 - Determine root cause, review all documentation							
4.6.6.3.2 - Notify DQA who then re-evaluates activities within Contractor's facility							
4.6.6.4 - Prepare Technical Investigation Report							As described
4.6.6.5 - Determine item eligibility for warranty							As described
4.6.7 - Quality Assurance							
4.6.7.1 - Perform risk assessment on processes and control mechanisms of Contractor							
4.6.7.2 - QAR validates processes at Contractor's site							
4.6.7.3 - Confirm contractor's Quality Management System is compliant with ISO 9001							
4.6.7.4 - Contractor maintains procedures for R&O activities							
4.6.7.5 - R&O at Contractor's facility conforms to contract clauses, specifications, SOWs and their Quality Plan							
4.6.8.6 - Contractor's Inspection stamps issued on repaired materiel							As described
4.6.7.7 - Contractor's test equipment is calibrated and maintained							As described
4.6.7.8 - First Article Inspection							
4.6.7.9 - Identify deviations to standard repairs or configurations							As described
4.6.7.9.1 - Annotate CF documentation whenever a deviation has occurred in the R&O process.							As described
4.6.8 - Publications							
4.6.8.1 - Safeguard DND pubs held at contractor sites. Electronic records to be stored on contractor's server and DND systems.							As described
4.6.8.2 - Maintain R&O work instructions, technical order books/ keep up-to-date with current revisions by exchanging old material with new. Then sign off on Record of Changes document inserted into front of each CFTO manual to indicate type of change and date.							
4.6.8.3 - Ensure that most recent copy of technical documents (per Interactive Electronic Technical Manual (IETM)) is used. When electronic CFTO is printed, mark with "printed copies are considered uncontrolled copies and are for your reference only" then discarded after use.							
4.6.9 - Reduction to Spares							
4.6.9.1 - Review of GFOS to identify surplus items							
4.6.9.2 - Determine if activity is viable							Reduce to spares as directed by DND
4.6.9.3 - Authorize contractor to perform activity							
4.6.9.4 - Return items to inventory							
4.6.10- Closure of R&O Line							
4.6.10.1 - Closure of RMA							
4.6.10.2 - Closure of CRPA							
4.6.10.3 - Clearing of inventory issues							Perform closure activities in accordance with the contarct.
4.6.10.4 - Return of inventory to DND							
4.6.10.5 - Organizing close-out activities, financial reconciliation							
4.6.10.6 - Finalize rate negotiations, contract amendment							
4.6.11 - Disposal							
4.6.11.1 - Mutilate controlled items IAW demil instructions							
4.6.11.2 - Provide demil instructions							Disposal in accordance with aplicable standards
4.6.11.3 - Retain business decisions for disposal							
4.6.11.4 - Scrapping of materiel							
4.6.11.5 - Provide demil certificates							
4.6.11.6 - Tracking of scrapped materiel							
4.7 - Inventory/Parts Management							
4.7.1 - Maintain Visibility of DND Materiel							
4.7.1.1 - Maintain DND system of record							As described
4.7.1.1.1 - Set Reorder Point / Reorder Quantity (ROP/ROQ) for depot							
4.7.1.1.2 - Maintain parts record information and make adjustments to system of record as required (i.e. shelf life, Category Codes, superseded info, obsolete items etc.).							
4.7.1.1.3 - Analytical review (i.e. parts spending, inventory rationalization, overdue orders)							
4.7.1.1.4 - SCA verification							
4.7.1.1.5 - Resolve cataloguing issues (i.e. stock codes without ERNs or with multiple ERNs)							
4.7.1.2 - Adhere to accounting policies of Treasury Board							As described
4.7.1.3 - Track serialized items centrally.							
4.7.1.4 - DND stock and asset visibility:							
4.7.1.4.1 - Track all materiel movement in DRMIS							
4.7.1.4.2 - Ensure Shipments have CofC							
4.7.1.4.3 - Maintain CRPA (Contractor Repair Parts Account) (set min/max, adjust levels)							Maintain asset visibility on DND assets
4.7.1.4.4 - Use Repairable Materiel Account (RMA) for holding of DND materiel							
4.7.1.4.5 - Maintain ready-use/consumable stock levels (2nd Line)							
4.7.1.4.6 - Reporting on inventory levels and/or values							
4.7.2 - Controlled Goods							
4.7.2.1 - Identify and designate Controlled Goods							
4.7.2.2 - Ensure all controlled technical data in hardcopy and electronic format are marked accordingly							
4.7.2.3 - Develop and approve demilitarization instructions							

4.7.2.4 - Retain certification of demilitarization						
4.7.2.5 - Report any compromise of Controlled Goods or Controlled Technology within 48 hours					As described	
4.7.2.6 - Complete Controlled Goods training					As described	
4.7.4 - Non-Conforming Parts						
4.7.4.1 - Segregate non-conforming parts						
4.7.4.2 - Ensure non-use						
4.7.5 - Wing Supply Roles						
4.7.5.1 - Provide Wing-level (local) inventory management						
4.7.5.2 - Provide training of supply personnel, distribution account holders and units						
4.7.5.3 - Coordinate repairs through either 2nd line or 3rd line						
4.7.5.3.1 - Prepare documentation (DND 2227/2228, CF-942 tag)						
4.7.6 - Squadron Logistics Organization Roles						
4.7.6.1 - Account for materiel issued to unit						
4.7.6.1.1- Discrepancy resolution (at the unit level)						
4.7.6.1.2- Enter materiel transactions in DRMIS (both accountable and consumable)						
4.7.6.1.3- Maintain listing of account holders						
4.7.6.1.4 - Action any audit findings regarding inventory						
4.7.6.1.5 - Stocktaking of all materiel on charge to unit						
4.7.6.2 - Calculate requirements and requisition materiel IAW actual needs						
4.7.6.3 -During deployments: return surplus materiel, scrap, and reusable containers to base supply						
4.7.6.4 - Liaise with Ops Officer re: logistics requirements for planned unit/sqn training and operations						
4.7.6.5 - Assign and adjust priority of demands as required						
4.7.6.6 - Coordinate and gather all required parts/equipment for MRP						
4.7.7 - Kitting and Sets						
4.7.7.1 - Maintain kitting lists for equipment sets					As described	
4.7.7.2 - Ensure kits are complete per Equipment Checklists (ECL)					As described	
4.7.7.3 - Select kit for issue (i.e. deployment)						
4.7.7.4 - Replenishment of PUK						
4.7.7.5 - Maintain deviation records						
4.7.8 - Alternate Parts						
4.7.8.1 - Detailed review of part information					Follow TAM for alternate parts approval	
4.7.8.2 - Provide relevant technical data						
4.7.8.3 - Follow AW approval process as detailed in TAM						
4.7.9 - First Article Inspection						
4.7.9.1 - Perform First Article Inspection on newly added manufactured items						
4.7.10 - Loan of Materiel to Third Line Contractors						
4.7.10.1 - Create and manage Loan Agreement						
4.7.10.2 - Perform 100% socktaking at contractor facilities every two years					As described	
4.7.10.3 - At close of commercial R&O contract:						
4.7.10.3.1 - .Perform stocktaking					As described	
4.7.10.3.2 - Assess loaned materiel (i.e. inspection for damage which is beyond normal wear and tear)						
4.7.10.3.3 - Pack/Move loaned materiel to either depot or to new Contractor					As described	
4.7.11 - Repairable Reserve (RR)						
4.7.11.1 - Approve shipment of repairable materiel to RR						
4.7.11.2- Identify RR materiel with CF942 tag					As described	
4.7.11.3 - Retain RR materiel at depot pending order to send for repair						
4.7.11.4 - Perform annual review of RR items						
4.7.11.5 - Identify and dispose of surplus RR						
4.7.12 - Excess Materiel and Dormant Stock						
4.7.12.1 - Identify excess materiel during stocktaking or by analysis of inventory holdings					Assist DND to keep suplus materiel for accumulating	
4.7.12.2 - Reallocate stock to other SLoc which have demands for materiel (internal redistribution within DSC)						
4.7.12.3 -Complete Excess Materiel Report for requestor, latter sends excess materiel to depot						
4.7.12.4 - Assess impact of Excess Materiel returns on depot operations and storage capacity/costs.						
4.7.12.5 - Set and adjust min/max levels to correct levels in System of Record						
4.7.12.6 - Generate/execute disposal plan and adjust System of Record.						
4.7.13 - Obsolescence Materiel Mangement						
4.7.13.1 - Identify Obselete materiel					Assist DND in obsolesence management	
4.7.13.2 - If items have reached EOL, follow EOL procedure for disposal						
4.7.13.3 - If items have not reached EOL, generate and execute Disposal Plan						
4.7.13.4 - Adjust System of Record.						
4.8 - Distribution						
4.8.1 - Report Preservation and Packaging Failures - CF777, Unsatisfactory Condition Report						
4.8.2 - Materiel Packaging						
4.8.2.1 - Specify cleaning, preservation, protection and packaging of materiel IAW regulations and/or SACC clauses.						
4.8.2.2 - Perform preservation (or application of protective measures) to ensure that materiels are protected against deterioration. This includes cleaning, drying and the use of preservatives, barrier materials, cushioning and containers, when necessary.					As described	
4.8.3 - Shipping						
4.8.3.1 - Ship according to priority codes (Materiel Priority Codes) (MPC))						
4.8.3.2 - Ensure appropriate shipping containers are used					Move DND materiel IAW relevant policies/procedures.	
4.8.3.3 - Ship IAW A-LM-158-004/AG-001 Transportation Manual, Volume 4, Movement of Materiel						
4.8.3.4 - Materiel Receipt and Discrepancy Resolution - Account Holders						
4.8.3.5 - Materiel Routing - Prime Contractor to/from Sub-Contractors						
4.8.3.6 - Materiel Receipt and Validation Against Shipping Documentation					Assist DND to ensure asset visibility is maintained and the integrity of the DND system of record(DRMIS) is maintained thorughout the shipping process.	
4.8.3.6.1 - Match NSN on item to shipping manifest						
4.8.3.6.2 - Verify item count						
4.8.3.6.3 - Check for external damage						
4.8.3.6.4 - Place items that have improper packaging into quarantine and adjust holdings in DRMIS into blocked stock						
4.8.3.6.4.1 -Raise Discrepancy Reports, and investigate their resolution IAW Supply Administration Manual (A-LM-007-100/AG-001)						
4.8.3.6.5 -Transfer to the correct Plant and Storage Location						
4.8.3.6.6 -Forward vendor's packing slip/invoice to procurement/material management division responsible for payment						
4.8.3.6.7 -Perform technical inspection IAW Supply Administration Manual (A-LM-007-100/AG-001)						
4.8.3.6.8 -Sign and date receipt document						
4.8.3.6.9 -Verify that goods received match goods on Purchase Order						
4.8.3.6.10 -Verifiy if materiel is shelf-life sensitive, date of manufacture and expiry date						
4.8.3.6.11 -Verifiy if materiel is serialized i.e. has Serial Number						
4.8.3.7 - Blocked shipments (items pending due to Discrepancy Report) cannot be receipted into inventory.						
4.8.3.7.1 - Item put into blocked stock						
4.8.3.7.2 - Discrepancy number assigned						
4.8.3.7.3 - Discrepancy number forwarded to EMT/SM						
4.8.3.7.4 - Corrective action is taken by EMT/SM						
4.8.3.8 - Customs						
4.8.3.8.1 - Generate compliant customs paperwork						
4.8.3.8.2 - Forward documentation to customs broker						
4.8.3.8.3 - Track progress of shipment						
4.8.3.9 - Generate shipping transaction in DRMIS and/or NMDS						
4.8.3.9.1 - Establish dues-in at destination SLoc						
4.8.3.9.2 - Action shipping orders to SLoc as requested						
4.8.3.10 - Observe Controlled Goods regulations					As described	
4.8.3.11 - Packaging materiel						
4.8.3.12 - Inspect materiels used for cleaning, preservation, protection and packaging IAW regulations and applicable CFTOs					As described	
4.8.13 - Materiel Issue						
4.8.13.1 - Over-the-counter materiel issues:						
4.8.13.1.1 - Provide DND2227 to Sup Tech						
4.8.13.1.2 - Issue of Material directly within same MRP						
4.8.13.1.3 - Issue of consumable item to Cost Centre						
4.8.13.2 - Transfer between SLOC						
4.8.13.2.1 - Confirm Transfer Order						
4.8.13.2.2 - Receive and store serviceable item						
4.8.13.3 - Materiel Issue to Work Order						
4.8.13.3.1 - Determine if materiel in stock or not						
4.8.13.3.2 - Determine if materiel is serialised or not						
4.8.13.3.3 - Issue materiel						
4.8.14 - AMSE Movement						
4.8.14.1- EMO is covered under Supply Administration Manual A-LM-007-100/AG-001, part 5.6						
4.8.14.2 - Quartermaster Transfer Order (QTO), Equipment Movement Order (EMO).						
4.9 -Warehousing						
4.9.1 - Comply with Directorate Materiel Group						
4.9.2 - Comply with Director Supply Chain						
4.9.2.1 - Respond to submission requests from DSCO						
4.9.2.2 - Create and submit annual stocktaking performance reports						
4.9.2.3 - Create and manage stocktaking plans					As described	
4.9.2.4 - Provide inputs into annual Letter of Materiel Attestation						
4.9.2.5 - Enforce stocktaking performance standards across department						
4.9.3 - Stocktaking: 100% Inventory - Every 2 Years						
4.9.3.1 - Account for all materiel holdings						
4.9.3.2 - Account Holders (w/ help from the SupO/LogO) create and maintain stocktaking schedule						
4.9.3.3 - Compare counts to system of record and investigates discrepancies						
4.9.3.4 - Reconcile levels with DRMIS and/or manual records						
4.9.3.5 - If required, complete and execute CF152 (Write-off and/or write-on) report					Perform stocktaking activities in accordance with contract terms and conditions.	
4.9.3.6 - For tracked equipment, verify serial numbers match system of record						
4.9.3.7 - If required, correct DRMIS data						
4.9.3.8 - Verify that goods have not exceeded expiry date (if applicable)						

4.9.3.9 - Verify that applicable documentation (CofC, Mat'l Safety Data Sheet) is available or is co-located with materiel							
4.9.3.10 - Perform trend analysis and monitor discrepancies for misappropriation							
4.9.4 - Control of Stored Materiel							
4.9.4.1 - Provide storage facilities for AAS, GFOS, CIS, repaired items						Store and safeguard DND materiel while it is under contractor's care custody and control.	
4.9.4.2 - Preserve stored equipment IAW applicable CFTOs							
4.9.4.3 - Periodically assess condition of inventory							
4.9.4.4 - Quarantine storage areas are used where necessary							
4.9.4.5 - Protection against damage, deterioration and theft							
4.9.4.6 - Assign/maintain bin locations							
4.9.4.7 - Ensure that stock items with shelf life are not expired							
4.9.4.8 - Ensure that each item or unit pack with shelf life is tagged with CF1277 Shelf Life Control Tag							
4.9.5 - Compliance with Occupational Health and Safety Standards							
4.9.5.1 - Safety in handling materiel						Comply with occupational health and safety legislation.	
4.9.5.2 - Fire Safety							
4.9.5.3 - WHMIS labelling							
4.9.5.4 - Respect environmental policies							
4.9.5.4.1 - Maintain spill response process (i.e. keeping spill kits on-hand)							

WBS Levels	CANADA			Third Line R+O Contractor	Outcomes	Comments
Level 1 / Level 2 / Level 3 / Level 4 / Level 5 / Level 6	First Line	Second Line	NCR/ 1 CAD			
5.0 - Enterprise Technical Data & Intellectual Property						
5.1 - Intellectual Property						
5.1.1 - IP Rights						
5.1.1.1 - Escrow						
5.1.1.2 - Foreground intellectual property						
5.1.1.3 - Background intellectual property						
5.1.1.4 - Rights to access						
5.1.1.5 - Ownership						
5.1.1.6 - Distribution (proprietary data, distribution restrictions, copyrights)						
5.1.2 - Licenses					Obtain any licences required to service AMSE	
5.1.3 - ITAR					Subject to ITAR requirements	
5.1.4 - Controlled Goods (CG) Certification					Must have Controlled Goods certification to perform work on AMSE	
5.1.5 - User Groups & Cooperative Agreements						
5.1.5.1 - International with other military users						
5.1.5.2 - Civilian user groups						
5.1.5.3 - MOUs with other nations						
5.1.6 - Technical Data Package Management						
5.1.6.1 - Technical Data Management Strategy						
5.1.6.2 - Technical Data Management Assessment						
5.1.6.3 - Technical Data Translation Requirements						
5.1.6.4 - Technical Data Communication						
5.1.7 - Format						
5.2.7.1 - DND format (language, legibility, reproducibility, version control, completeness, tracking, identification)						
5.1.8 - Tech Data Access Requirements						
5.1.9 - Tech Data Fidelity/Integrity						
5.1.10 - Parts Traceability Requirements						
5.1.11 - Technical Data Management Services						
5.1.11.1 - Identify and establish data requirements						
5.1.11.2 - Acquire engineering data					Obtain required engineering data from OEMs or through testing, as directed by WSM.	
5.1.11.3 - Revise engineering drawings and associated data					Revise drawings as directed by WSM, to DND standards.	
5.1.11.4 - Inspect and accept data						
5.1.11.5 - Store and archive technical data						
5.1.11.6 - Maintain a technical data retrieval system					Provide technical data to WSM to ensure that data in retrieval system is current.	
5.1.11.7 - Identify surplus technical data and publications					Identify and advise WSM of outdated and surplus publications.	
5.1.11.8 - Initiate disposal of surplus technical data					At WSMs direction	
5.1.11.9 - Initiate disposal of surplus technical data						
5.1.11.9.1 - Provide TA with technical support resulting from review of information for those items requiring a business decision or a technical decision beyond the Contractor's contracted scope of responsibility.					As described	
5.1.11.10 - - Monitor and support applicable data for completeness					Notify WSM of discrepancies in techincal data; provide technical support in resolution of discrepancies.	
5.1.11.11 - Forward data, applicable and supported by DND or other Contractors, to TA for review and action;					As described	
5.1.11.12 - Provide technical advice pertaining to data					As described	
5.1.11.13 - Initiate engineering outputs resulting from review, including but not limited to:						
5.1.11.13.1 - Engineering changes;					At WSM's direction	
5.1.11.13.2 - Modification Instructions;					At WSM's direction	
5.1.11.13.3 - Publication amendments/updates;					At WSM's direction	
5.1.11.13..4 - Special inspections;					At WSM's direction	
5.1.11.13.5- Technical drawings;					At WSM's direction	
5.1.11.13.6- Changes to inspection packages;					At WSM's direction	
5.1.11.13.7- Flight Safety Investigations;					At WSM's direction	
5.1.11.14 - - Maintain repository for all applicable technical data;					At WSM's direction	
5.1.11.15 - Update Technical Data Package (TDP) to reflect current configuration to include all CF approved design changes					Provide technical information to WSM as requested	
5.1.11.16 - Control/coordinate flow of technical information;					At WSM's direction	
5.1.11.17 - Provide advice and co-ordination for completion and submission of forms relating to updating, change and maintenance, creation and distribution of publications and engineering drawings						
5.1.11.18 - Coordinate all processes involved in revision, change and maintenance of technical documentation;						
5.1.11.19 - Obtain, control and utilize OEM data in support of the work defined in the PWS; and						
5.1.11.20 - Review all recently published technical documentation/data, assess its impact, and initiate the appropriate action as determined by the impact.					Provide techical advise/support to WSM	
5.1.11.21 - Maintain a database of all technical information received which will show an auditable trail of receipt date, actions taken, airworthiness findings and certification and closing actions and dates for airworthiness purposes.						
5.2.11.22 - Prepare engineering drawings (Level 1, 2 or 3), whether retained by the Contractor or delivered to Canada.					At WSM's direction	
5.1.11.23 - Provide updates to Technical Data Package (TDP), as generated by reviews.						
5.1.11.24- Maintain and secure source material, its intellectual property rights and distribution rights, previous revisions and control documents in a form that may be retrieved for customer purposes.					As described	
5.1.11.25 - Provide direct support for ad-hoc technical issues raised by 1-3rd level organizations						
5.1.11.25.1 - Review/action publication changes (PCR, PDR) (overlap with Tech Data)						

NSN	Description	Rep Code	Support Equipment	RMA	CYF	Sent to 2nd Line 14/15	Sent to 2nd Line 15/16	Sent to 2nd Line 16/17	Sent to 2nd Line 17/18	Sent to 3rd Line 14/15	Sent to 3rd Line 15/16	Sent to 3rd Line 16/17	Sent to 3rd Line 17/18
6685-00-124-4336	TIRE INFLATOR ASSEM	B		WRD1	0020	7	13	26	10	9	13	5	17
4320-00-303-1088	PUMP,HYDRAULIC RAM,HAND DRIVEN	F		WRD1	0003	3	9	16	7	12	9	8	8
1730-21-906-4041	LADDER,AIRCRAFT BOARDING	F	Yes	WRD1	00RR		22		3	4	22		
1730-21-805-1524	MAINTENANCE PLATFORM,AIRCRAFT	F	Yes	WRD1	0010		7	2	1	1	7	10	7
1730-21-893-4926	JACK,HYDRAULIC,TRIPOD	F	Yes	WRD1	0004	9	3	1		8	3	1	
1730-00-912-3998	JACK,HYDRAULIC,TRIPOD	F	Yes	WRD1	0007	2	2			5	2	9	8
1650-21-921-1378	CYLINDER ASSEMBLY,ACTUATING,LINEA	B		WRD1	0006	6	10	2	1	8	10		1
4440-01-273-2564	DEHUMIDIFIER,DESICCANT,ELECTRIC	F		WRD1	00RR	12	7	4		3	7	4	2
4930-01-408-6110	DISPENSING PUMP,HAND DRIVEN	F		WRD1	0005			2		4			
1730-21-814-7801	JACK,HYDRAULIC,TRIPOD	F	Yes	WRD1	00RR	5	12		2	3	12		
1730-00-509-1388	JACK,HYDRAULIC,TRIPOD	F	Yes	WRD1	00RR		4	1		1	4	7	1
1730-21-893-4488	JACK,AIRCRAFT LANDING GEAR	F	Yes	WRD1	0003				1	2		2	4
1730-01-126-6239	TRAILER,LIFT,GROUND HANDLING	F	Yes	WRD1	0004	5	1	3		1	1	1	
4930-01-408-6115	DISPENSING PUMP,HAND DRIVEN	F		WRD1	0004	1	2	2	1	6	2	5	1
1730-21-901-5921	LADDER ASSEMBLY,MAINTENANCE PLAT	F	Yes	WRD1	0003	1		3	3			3	5
1730-00-203-4697	JACK,AIRCRAFT LANDING GEAR	F	Yes	WRD1	0003		2			1	2	2	
1730-21-895-3572	MULTI-PURPOSE DOLLY ASSEMBLY	F	Yes	WRD1	0001	2				1			
1730-01-471-6704	SLING,AIRCRAFT MAINTENANCE	F	Yes	WRD1	00RR			4	3			2	
1730-00-391-7932	JACK,HYDRAULIC,TRIPOD	F	Yes	WRD1	0004		6	2		2	6		1
1730-00-516-2017	JACK,HYDRAULIC,TRIPOD	F	Yes	WRD1	0003		1			2	1	1	
1730-21-805-1532	JACK,HYDRAULIC,TRIPOD	F	Yes	WRD1	0002	2		1		2			
1730-21-845-7290	JACK,HYDRAULIC,TRIPOD	F	Yes	WRD1	0001		2	1		1	2	2	1
1730-00-013-8813	JACK,AIRCRAFT LANDING GEAR	F	Yes	WRD1	0002	1				2			1
1730-01-353-0762	TOWBAR,AIRCRAFT	F	Yes	WRD1	0002				1	2			1
1730-00-554-5439	TOWBAR,AIRCRAFT	F	Yes	WRD1	00RR	1	5			1	5	2	
1730-01-126-6143	ADAPTER,ENGINE INST	F	Yes	WRD1	0004				1	1		2	1
1730-21-891-4553	VALVE,BLOCK ASSEMBLY AND PUMP	B	Yes	WRD1	0002	3	1		4		1	1	3
1730-01-511-0085	SLING,AIRCRAFT MAINTENANCE	F	Yes	WRD1	0002	3	1	1			1	2	1
4320-21-801-2204	PUMP,HYDRAULIC RAM,HAND DRIVEN	F		WRD1	0001	2	1		1	3	1		
1740-21-810-2154	TRAILER,GROUND HANDLING	F	Yes	WRD1	0001	2		1	1				
1730-00-294-3031	TOWBAR,AIRCRAFT	F	Yes	WRD1	0002					1			
1730-00-294-3397	TRAILER,RAIL TYPE	F	Yes	WRD1	0002							2	2
1730-21-805-2269	MAINTENANCE PLATFORM	F	Yes	WRD1	0005	1	1		1	4	1		
3950-21-800-4963	CRANE,FLOOR,PORTABLE	F	Yes	WRD1	00RR			1	1				
1730-21-805-9519	JACK,HYDRAULIC,TRIPOD	F	Yes	WRD1	0002		2				2	1	2
4320-01-301-3380	PUMP,HYDRAULIC RAM,HAND DRIVEN	F		WRD1	00RR	1	1				1		
1730-00-954-8751	TOWBAR,AIRCRAFT	F	Yes	WRD1	0001		1				1		
4910-21-860-1250	DEMOUNTER,PNEUMATIC TIRE	F		WRD1	0001								
1730-00-391-7913	JACK,AIRCRAFT LANDING GEAR	F	Yes	WRD1	0002	1	1	1			1	1	
1730-00-540-2343	JACK,AIRCRAFT LANDING GEAR	F	Yes	WRD1	00RR		1		1		1		
1730-21-891-4983	TEST FIXTURE KIT	F	Yes	WRD1	0001	2						2	
1730-21-891-4983	TEST FIXTURE KIT	F	Yes	WRD1	0001	2						2	
6105-01-325-4153	MOTOR,ALTERNATING CURRENT	B		WRD1	00RR	1			2	1			
1730-00-965-5744	JACK,AIRCRAFT LANDING GEAR	F	Yes	WRD1	00RR							1	
1730-00-967-9556	TOWBAR,AIRCRAFT	F	Yes	WRD1	0003								
1730-21-800-5846	JACK,HYDRAULIC,TRIPOD	F	Yes	WRD1	0001								
1730-21-800-5861	JACK,AIRCRAFT LANDING GEAR	F	Yes	WRD1	00RR		1				1		
1730-21-891-4544	PLUNGER,OUTER	F	Yes	WRD1	0001			3					
1730-21-896-9280	LAVATORY SERVICING UNIT	F	Yes	WRD1	0002			1					2
3950-21-800-1885	n	F	Yes	WRD1	00RR	3							
4320-01-320-4584	PUMP,CENTRIFUGAL	F		WRD1	0005		1				1		
4320-01-583-0483	PUMPING UNIT,HYDRAULIC,POWER DRI	F		WRD1	0001	1							
4320-21-800-1191	PUMPING UNIT,HYDRAULIC,POWER DRI	F		WRD1	00RR			1					
4920-00-670-1619	LIFT ASSY	F	Yes	WRD1	00RR					1			
4920-00-949-9408	LIFT ASSY	F	Yes	WRD1	0001								
4940-01-058-5267	MACHINE,CLEANING	F	Yes	WRD1	0002								
1730-00-148-6418	TOWBAR,AIRCRAFT	F	Yes	WRD1	00RR								
1730-00-697-1510	HOISTING UNIT,AIRCRAFT COMPONENT	F	Yes	WRD1	0002								
1730-00-837-2441	HOISTING UNIT,AIRCRAFT COMPONENT	B	Yes	WRD1	00RR								
1730-00-913-7292	JACK,AIRCRAFT LANDING GEAR	F	Yes	WRD1	00RR								
1730-21-860-3870	TOWBAR,AIRCRAFT	F	Yes	WRD1	0002								
1730-21-884-7057	STAND,UNIVERSAL,WHEEL BUILD-UP	B	Yes	WRD1	0001								
1730-21-889-6310	TOWBAR,AIRCRAFT	F	Yes	WRD1	0001								
1730-21-891-4541	CYLINDER	F	Yes	WRD1	0001								
2540-00-714-2500	HOOK,TOW	B		WRD1	00RR								
4320-21-871-7036	PUMPING UNIT,HYDRAULIC,POWER DRI	F		WRD1	0001								
4320-21-871-7036	PUMPING UNIT,HYDRAULIC,POWER DRI	F		WRD1	0001								
4320-21-897-7217	PUMP,ROTARY	B		WRD1	00RR								
4910-00-121-8577	BEAD BREAKER,PNEUMATIC TIRE	B		WRD1	0001								
4920-00-212-3079	LIFT ASSEMBLY	B	Yes	WRD1	0001								
4940-01-161-5903	BLAST CLEANING MACHINE	B	Yes	WRD1	0003								
6110-20-004-8921	PANEL,CONTROL,ELECTRICAL-ELECTRO	F		WRD1	00RR								
4120-01-508-1404	AIR CONDITIONER	F		WAR1	0016	5	10	11	1	6	10	11	4
6115-20-005-8285	GENERATOR SET,DIESEL ENGINE	B		WAR1	0005	2	1	1	1	5	1	4	
6115-21-910-4387	GENERATOR SET,DIESEL ENGINE,TRAIL	F		WAR1	0007		5	15		3	5	13	4
4920-21-871-6132	TEST STAND,HYDRAULIC SYSTEM COMP	F	Yes	WAR1	0006		3	1	1	6	3	4	
4930-00-888-5119	PREOILER	F		WAR1	0002	1	2	2		3	2		
6130-01-329-4433	POWER SUPPLY	F		WAR1	0005		3	1		3	3	1	1
4330-00-064-6638	FILTER,FLUID	F		WAR1	0003	8				3			

4920-21-903-1689	TEST STAND,HYDRAULIC SYSTEM COMP	F	Yes	WAR1	0001		1	1	1		1	2	1
4920-20-003-0263	TEST STAND,HYDRAULIC SYSTEM COMP	F	Yes	WAR1	0004							1	1
3040-01-202-9217	CYLINDER ASSEMBLY,ACTUATING,LINEA	B		WAR1	00RR		4	2			4		
4920-20-002-7871	FILLER AND BLEEDER,HYDRAULIC SYST	F	Yes	WAR1	0004	1		1					
4920-20-004-2471	FILLER AND BLEEDER,HYDRAULIC SYST	F	Yes	WAR1	0005	3	1	1	3	6	1		
4920-21-896-5369	TEST STAND,HYDRAULIC SYSTEM COMP	F	Yes	WAR1	0002		5	1			5		
4320-01-382-9589	PUMP,AXIAL PISTONS	B		WAR1	0004	1	1	2	1	2	1	3	3
3040-01-258-1706	CYLINDER,ACTUATING,LINEAR	F		WAR1	0002		7	5			7	1	2
4330-01-470-1855	PURIFIER,CENTRIFUGAL,OIL	F		WAR1	0002		6		1	1	6	4	
5998-21-885-5366	CIRCUIT CARD ASSEMBLY	B		WAR1	0014							1	3
4920-21-877-2109	FILTER AND BLEEDER,HYDRAULIC SYST	F	Yes	WAR1	0003	1	5				5	6	
6680-21-886-5120	FLOWMETER	B		WAR1	0001	1				1		2	
4920-21-740-0016	TEST STAND,HYDRAULIC SYSTEM COMP	F	Yes	WAR1	0001		1			2	1		
4920-21-911-9054	TEST STAND,HYDRAULIC SYSTEM COMP	B	Yes	WAR1	0002		3	1			3	1	
4930-20-004-4709	DISPENSING PUMP,AIR PRESSURE	F		WAR1	0002					1			2
6115-01-565-9053	GENERATOR SET,DIESEL ENGINE,TRAIL	B		WAR1	0006	6			2	1			4
4920-20-003-0260	TEST STAND,HYDRAULIC SYSTEM COMP	F	Yes	WAR1	0006	2	2			2	2		6
7240-01-519-2896	DISPENSE,DRINKING WATER STORAGE	F		WAR1	0006			2	1	2		3	1
4920-20-007-5790	TEST STAND,HYDRAULIC SYSTEM COMP	F	Yes	WAR1	0001		2			1	2		
6130-21-911-6066	POWER SUPPLY SUBASSEMBLY	B		WAR1	0005	3	2	1		3	2	1	
1740-00-537-1945	TRAILER,AIRCRAFT EN	F	Yes	WAR1	0002							2	
5998-21-885-5368	CIRCUIT CARD ASSEMBLY	F		WAR1	0008								1
4920-21-913-8286	TEST STAND,HYDRAULIC SYSTEM COMP	B	Yes	WAR1	0002		1				1	1	
4920-01-287-1303	TEST STAND,HYDRAULIC SYSTEM COMP	B	Yes	WAR1	0001					1		1	
1730-01-362-9168	STAIRCASE,AIRCRAFT BOARDING	F	Yes	WAR1	0002		1	1		2	1	1	2
4320-01-038-2443	PUMP,HYDRAULIC RAM,HAND DRIVEN	A		WAR1	0003				3				
4920-20-002-7786	FILLER AND BLEEDER,HYDRAULIC SYST	F	Yes	WAR1	0001	1							
4920-21-893-9368	FILTERING UNIT,LIQUID COOLANT	F	Yes	WAR1	0001		1				1		
4920-21-806-5370	TESTER,PRESSURIZED CABIN LEAKAGE	B	Yes	WAR1	0002	1	1		1		1	2	
2815-01-398-3104	POWER UNIT,DIESEL	F		WAR1	0001		1				1		
4920-21-900-4129	TEST STAND,HYDRAULIC SYSTEM COMP	B	Yes	WAR1	0002	1				1			
5998-21-885-5370	CIRCUIT CARD ASSEMBLY	F		WAR1	0002								
1730-21-886-1231	PLATFORM ASSEMBLY,MAINTENANCE	F	Yes	WAR1	0001		2	1		1	2	1	2
3655-21-898-2948	CART,NITROGEN	F		WAR1	0002	2	1				1	1	1
2330-01-430-0310	TRAILER,TANK	F		WAR1	0001	1	1			1	1		1
5998-21-885-5733	CIRCUIT CARD ASSEMBLY	F		WAR1	0001					1			1
4920-21-898-0281	TEST STAND,HYDRAULIC SYSTEM COMP	F	Yes	WAR1	0001		1	1			1		
4520-01-342-9465	HEATER,DUCT TYPE,PORTABLE	F		WAR1	0001	1			2	1			1
4930-20-007-4752	FILLING SET,OIL	F		WAR1	0006								
5985-21-812-2333	DUMMY LOAD,ELECTRICAL	B		WAR1	00RR								
5998-21-906-6272	CIRCUIT CARD ASSEMBLY	B		WAR1	0001								
6110-00-601-2985	DISTRIBUTION BOX	F		WAR1	00RR								1
2330-01-558-5335	TRAILER,TANK	F		WAR1	0004								
3040-01-528-3204	CYLINDER ASSEMBLY,ACTUATING,LINEA	F		WAR1	0001								
4310-21-803-3048	VACUUM PUMP UNIT,ROTARY	B		WAR1	00RR	1							
4320-21-892-1380	PUMP,AXIAL PISTONS	B		WAR1	0002							2	
4320-21-900-4675	PUMP,AXIAL PISTONS	F		WAR1	0001		1				1		
4320-21-921-0690	PUMP,AXIAL PISTONS	F		WAR1	0001								
4920-01-417-9081	TEST STAND,HYDRAULIC SYSTEM COMP	F	Yes	WAR1	0001								
4920-21-814-7878	TANK,AIRCRAFT ENGINE PREOILER	F	Yes	WAR1	0001							1	
4920-21-860-2446	TEST STAND,HYDRAULIC SYSTEM COMP	F	Yes	WAR1	0001		1	1			1		
4920-21-882-7961	FILLER AND BLEEDER,HYDRAULIC SYST	F	Yes	WAR1	0005							5	
4920-21-893-9097	TEST STAND,HYDRAULIC SYSTEM COMP	B	Yes	WAR1	0001					1			
4920-21-920-2725	FILTER AND BLEEDER, HYDRAULIC SYST	B	Yes	WAR1	0001								
4930-20-006-7084	1 LITRE AIRCRAFT ENGINE OIL FLUID DIS	F		WAR1	0002								
5998-21-912-2988	CIRCUIT CARD ASSEMBLY	F		WAR1	0005								
5998-21-912-6046	CIRCUIT CARD ASSEMBLY	B		WAR1	0003								
6150-00-342-3995	LOAD BANK,ELECTRICAL	F		WAR1	0001					1			
1730-21-869-1182	WASH CART	F	Yes	WAR1	0001								
2330-01-430-0315	TRAILER,TANK	F		WAR1	0001								
2805-01-097-2652	ENGINE,GASOLINE	B		WAR1	0003								
2910-01-421-1107	GOVERNOR,DIESEL ENGINE	F		WAR1	0001								
4240-00-368-6126	FILTER UNIT,GAS-PARTICULATE	B		WAR1	00RR								
4310-20-001-2741	COMPRESSOR UNIT,RECIPROCATING	B		WAR1	0020								
4310-21-869-3745	COMPRESSOR UNIT,RECIPROCATING	B		WAR1	0015								
4310-21-877-2523	COMPRESSOR UNIT,RECIPROCATING	B		WAR1	00RW								
4310-21-893-9365	VACUUM PUMP,ROTARY	B		WAR1	00RR								
4310-21-900-4454	DRAIN DEVICE,AUTOMATIC	B		WAR1	0002								
4310-21-904-1354	COMPRESSOR UNIT,RECIPROCATING	B		WAR1	0004								
4320-01-300-2732	PUMP,HYDRAULIC RAM,HAND DRIVEN	F		WAR1	00RR								
4320-21-882-7464	PUMP,AXIAL PISTONS	B		WAR1	00RR								
4320-21-921-0688	PUMP,AXIAL PISTONS	F		WAR1	0001								
4920-20-002-7725	TEST STAND,HYDRAULIC SYSTEM COMP	F	Yes	WAR1	00RR								
4920-21-804-5433	TESTER,PRESSURIZED CABIN	B	Yes	WAR1	0002								
4920-21-871-7110	RESERVOIR ASSEMBLY	F	Yes	WAR1	0001								
4920-21-879-6522	TEST STAND,PROPELLER	B	Yes	WAR1	0001								
4920-21-896-5370	TEST STAND,HYDRAULIC SYSTEM COMP	F	Yes	WAR1	0002								
4920-21-913-8287	TEST STAND,HYDRAULIC SYSTEM COMP	B	Yes	WAR1	0001								
4920-21-921-2752	TEST STAND,HYDRAULIC SYSTEM COMP	F	Yes	WAR1	0000								
4930-01-582-1090	DRAINING KIT,FUEL	F		WAR1	0004								
6105-21-892-5142	MOTOR,ALTERNATING CURRENT	F		WAR1	0001								
6110-21-879-3496	STARTER,MOTOR	B		WAR1	00RR								
6115-21-847-8395	LOAD BANK,REACTOR GROUP	B		WAR1	00RR								

6115-21-847-8396	LOAD BANK,RESISTOR GROUP	B		WAR1	00RR								
6115-21-847-8397	LOAD BANK,RESISTOR GROUP	B		WAR1	00RR								
6115-21-847-8398	LOAD BANK,REACTOR GROUP	B		WAR1	00RR								
6625-00-508-2923	TESTER ASSY,ELECTRI	B	Yes	WAR1	00RR								
6115-20-008-6995	GENERATOR SET,DIESEL ENGINE,TRAIL	F		WAF1	0012		9		2		9	14	4
4720-01-324-0233	HOSE ASSEMBLY,AIR DUCT	F		WAF1	0050	11	4	6	12		4	36	
4720-01-431-9628	HOSE ASSEMBLY,AIR DUCT	F		WAF1	0002	10	9		4		9		2
6670-01-563-4800	LOAD CELL,FORCE-WEIGHT	B		WAF1	0005	7	5			2	5		6
4720-01-437-0894	HOSE ASSEMBLY,AIR DUCT	F		WAF1	0002		12				12	3	1
4720-01-545-0232	HOSE ASSEMBLY,AIR DUCT	F		WAF1	0002	12				1			6
4140-01-105-6326	FAN,CENTRIFUGAL	B		WAF1	0005			1		2		3	6
1560-01-492-8259	VENTILATING SYSTEM,	B		WAF1	0001								
3655-01-363-8184	GENERATING AND CHARGING PLANT,OX	F		WAF1	0005		3	1		1	3		3
6110-01-141-8160	REGULATOR,VOLTAGE	B		WAF1	0003	1	2	4	4	1	2	3	2
6125-21-890-7439	MOTOR-GENERATOR	F		WAF1	0003			1	2	1		3	2
4940-12-342-1655	CLEANER,STEAM,PRESSURE JET	F	Yes	WAF1	0002	1	3			2	3	2	
4140-01-306-9138	FAN,CENTRIFUGAL	F		WAF1	0003		1		2	2	1		
5998-01-420-7471	CIRCUIT CARD ASSEMBLY	B		WAF1	0002		8		1		8		
6125-01-314-3552	MOTOR-GENERATOR	F		WAF1	0005		3	2	1	1	3	3	1
3655-01-592-3227	GENERATING AND CHARGING PLANT,OX	F		WAF1	0002			1				1	2
6115-01-286-0365	GENERATOR SET,DIESEL ENGINE,TRAIL	B		WAF1	0001		2				2		1
6110-01-100-7637	MEMORY BOARD	B		WAF1	0001	2		1		3			1
6115-01-407-2439	GENERATOR SET,DIESEL ENGINE,TRAIL	B		WAF1	0002	1	1			1	1	1	
4940-12-317-0345	CLEANER,STEAM,PRESSURE JET	F	Yes	WAF1	0001		1				1		
1560-01-492-8255	VENTILATING SYSTEM,	F		WAF1	0001			1					
4940-12-353-1895	CLEANER,STEAM,PRESSURE JET	F	Yes	WAF1	0004							1	
4940-12-311-9511	CLEANER,STEAM,PRESSURE JET	F	Yes	WAF1	0004								1
4920-00-884-3001	PLATE,BASE	F	Yes	WAF1	00RR			1		1		1	
4310-01-530-1782	FILTER ASSEMBLY,FLUID	F		WAF1	0002				3				
4940-12-334-0327	CLEANER,STEAM,PRESSURE JET	F	Yes	WAF1	0001								
1560-01-492-8256	VENTILATING SYSTEM,	F		WAF1	0001								
3655-01-329-3019	GENERATING AND CHARGING PLANT,OX	B		WAF1	0001								
3920-01-528-3389	TRUCK,DOLLY	F		WAF1	0001								
4720-01-529-1971	HOSE ASSEMBLY,AIR DUCT	F		WAF1	0002	10							
4720-01-562-4911	HOSE ASSEMBLY,AIR DUCT,AIR BREATH	B		WAF1	0001								
4920-00-884-3002	SOCKET,SLEEVE	F	Yes	WAF1	0001	1							
5120-00-337-9652	MULTIPLIER,TORQUE WRENCH	F	Yes	WAF1	00RR	2				2			
5670-01-462-8941	VENTILATOR,AIR CIRCULATING	B		WAF1	0002			3					
6130-01-470-9381	CONVERTER,FREQUENCY,ELECTRONIC	B		WAF1	0002			1					
8145-01-492-7777	SHIPPING AND STORAGE CONTAINER,M	F		WAF1	0001				2				
4720-01-431-9623	HOSE ASSEMBLY,AIR DUCT,AIR BREATH	B		WAF1	0002								
4720-01-431-9626	HOSE ASSEMBLY,AIR DUCT,AIR BREATH	B		WAF1	0002								
4920-01-528-3206	VENTILATING SYSTEM	F	Yes	WAF1	0001								
6125-01-442-5659	MOTOR-GENERATOR	B		WAF1	0001								
8145-01-492-7770	SHIPPING AND STORAGE CONTAINER,M	F		WAF1	0001								
8145-01-492-7771	SHIPPING AND STORAGE CONTAINER,M	F		WAF1	0001								
1740-01-031-5868	TRAILER,GROUND HANDLING	F	Yes										
3040-21-910-1904	CYLINDER ASSEMBLY,ACTUATING,LINEA	B				6		3	4				
3040-21-910-1905	CYLINDER ASSEMBLY,ACTUATING,LINEA	B				6		2	5				
1730-01-384-2805	TOWBAR,AIRCRAFT	F	Yes			4							
1450-01-359-5782	ADAPTER,ADJUSTABLE,TRAILER TO GUI	D											
1730-21-895-3277	CART,ELECTRICAL CABLE	F	Yes										
1730-01-330-4643	TOWBAR,AIRCRAFT	F	Yes										
1730-01-009-0446	MAINTENANCE PLATFORM,AIRCRAFT	F	Yes			2							
2910-01-643-5934	PUMP,MODIFIED HAND	F						5	3				
2330-21-801-6633	TRAILER,AMMUNITION	F				3							
1730-21-755-0039	JACK,HYDRAULIC,TRIPOD	F	Yes										
1730-21-899-7083	WASH CART	F	Yes			2							
1740-00-491-0382	DOLLY	F	Yes						4				
4730-01-288-2456	TESTER,NOZZLE ACTUA	F											
5120-01-596-2293	JACK,HYDRAULIC,HAND	F	Yes										
1730-01-617-5289	TOWBAR,AIRCRAFT	F	Yes			1		1	2				
4940-21-910-0489	PLATFORM LIFT	F	Yes						2				
1730-00-133-9417	DOLLY ASSEMBLY,AIRC	F	Yes					2					
1740-00-106-8512	TRAILER,GROUND HANDLING	F	Yes						2				
6685-21-898-1768	TESTER,PRESSURE GAGE	B				2		3	1				
6150-01-494-6299	LOAD BANK,ELECTRICAL	B				1		2					
1730-01-109-1146	JACK,AIRCRAFT LANDING GEAR	F	Yes										
1730-21-884-7872	JACK,AIRCRAFT LANDING GEAR	F	Yes					3					
1740-00-718-1579	TRAILER,GROUND HANDLING	F	Yes			1		3					
4320-00-671-3294	PUMP,HYDRAULIC RAM,HAND DRIVEN	D				2		1	5				
1730-01-013-4185	JACK,AIRCRAFT LANDING GEAR	B	Yes						1				
4320-01-201-3231	PUMP,RECIPROCATING	D				2		3	1				
1730-01-547-3069	TOWBAR,AIRCRAFT	F	Yes			2							
1740-01-103-9693	TRAILER,GROUND HANDLING	F	Yes					1	1				
3040-01-505-0574	CYLINDER ASSEMBLY,ACTUATING,LINEA	G				3			3				
1740-00-680-2910	TRAILER,GROUND HANDLING	F	Yes										
3040-01-503-8476	CYLINDER ASSEMBLY,ACTUATING,LINEA	F				1		1					
1730-00-216-8894	CYLINDER ASSEMBLY,T	F	Yes			1		1					
4320-01-201-3232	PUMP,RECIPROCATING	D				2		2	1				
4320-20-001-9906	PUMP,HYDRAULIC	F							1				
6670-01-389-6170	LOAD CELL,FORCE-WEIGHT	B											
4320-00-812-5019	PUMP,RADIAL PISTONS	G						1					

1730-01-398-7252	JACK,AIRCRAFT LANDING GEAR	F	Yes			2							
1730-00-516-7930	TRAILER,RAIL TYPE	F	Yes										
2835-21-807-0161	ENGINE,GAS TURBINE,NONAIRCRAFT	F											
1730-21-808-1998	TOWBAR,AIRCRAFT	F	Yes										
1730-00-390-5620	MAINTENANCE PLATFORM,AIRCRAFT	F	Yes			1							
1730-00-554-5436	JACK,HYDRAULIC,TRIPOD	F	Yes										
1730-01-103-9685	TOWBAR,AIRCRAFT	F	Yes										
1730-01-398-8097	WATER CART	F	Yes										
1730-01-399-1100	JACK,HYDRAULIC,TRIPOD	F	Yes										
1730-01-526-0568	TOWBAR,AIRCRAFT	F	Yes										
1730-01-552-8012	CRADLE,GROUND HANDLING EQUIPMEN	F	Yes			5							
1730-21-845-8042	STAND,BOMB	A	Yes										
1730-21-913-2828	TOWBAR,AIRCRAFT	F	Yes										
1740-01-231-4826	TRAILER,GROUND HANDLING	F	Yes										
2330-20-003-1085	TRAILER,TANK	F											
2835-21-892-4796	POWER UNIT,GAS TURBINE ENGINE	F				1							
2990-01-581-5811	POWER TAKEOFF,ENGINE	F											
4320-00-868-9812	PUMP,HYDRAULIC,HAND	G											
4320-01-262-8385	PUMP,HYDRAULIC RAM,HAND DRIVEN	G						1					
4820-00-593-3148	VALVE,ROTARY,SELECTOR	F											
4910-01-518-1465	BEAD BREAKER,PNEUMATIC TIRE	G											
4920-00-019-9262	JACK TESTER ASSY	F	Yes										
4920-00-019-9262	JACK TESTER ASSY	F	Yes										
4920-00-086-6900	STAND,MAINTENANCE,RAIL TYPE	F	Yes										
4920-00-858-0954	STAND,MAINTENANCE,AIRCRAFT ENGIN	F	Yes						2				
4920-00-870-2150	LOCK ASSY,LIFT	D	Yes										
4920-01-569-1181	JACK ACFT AXLE,AIRC	F	Yes					1					
4920-21-814-7879	TANK,AIRCRAFT ENGINE PREOILER	B	Yes										
5365-00-398-3784	RING,EXTERNALLY THREADED	F	Yes										
1730-00-390-5618	MAINTENANCE PLATFORM,AIRCRAFT	F	Yes										
1730-00-532-6704	CASTER ASSEMBLY,SHO	D	Yes										
1730-00-657-1177	TRAILER,LIFT,GROUND HANDLING	F	Yes										
1730-01-107-7952													
1730-01-237-4397	CYLINDER ASSEMBLY,J	F	Yes										
1730-01-254-3673	STAND,AIRCRAFT PROPELLER	D	Yes										
1730-01-275-4519	JACK,AIRCRAFT LANDING GEAR	G	Yes										
1730-01-311-2326	JACK,HYDRAULIC,TRIPOD	F	Yes										
1730-01-312-5428	TOWBAR,AIRCRAFT	F	Yes										
1730-01-399-1101	JACK,HYDRAULIC,TRIPOD	G	Yes										
1730-01-534-6421	TOWBAR,AIRCRAFT	F	Yes										
1730-01-553-4706	CART,SERVICE,LAVATO	F	Yes										
1730-01-576-2655													
1730-01-610-8519	TOWBAR,AIRCRAFT	F	Yes										
1730-01-612-0210													
1730-01-630-3160	TOWBAR,AIRCRAFT	A	Yes										
1730-01-654-0524	JACK,HYDRAULIC,TRIPOD	F	Yes										
1730-20-004-3692	TOWBAR,AIRCRAFT	F	Yes										
1730-21-801-7976	JACK,AIRCRAFT LANDING GEAR	F	Yes										
1730-21-805-1525													
1730-21-805-2270													
1730-21-814-3259													
1730-21-815-9000													
1730-21-881-4878	JACK,HYDRAULIC,TRIPOD	F	Yes										
1730-21-893-4468	CABLE ASSEMBLY,EMERGENCY TOWINC	F	Yes										
1730-21-898-2571	TOWBAR,LIGHTWEIGHT,AURORA	F	Yes										
1730-21-901-5580	TOWBAR,AIRCRAFT,EXTENDED	B	Yes										
1730-21-912-9459	TRAILER,LIFT,GROUND HANDLING	B	Yes										
1730-21-913-2827	TOWBAR,AIRCRAFT	F	Yes										
1740-21-846-6499	TRAILER,UTILITY	F	Yes										
1740-21-914-2249	TRAILER,GROUND HANDLING	F	Yes										
2330-01-507-3883	TRAILER,TANK	F											
2835-21-852-2161	ENGINE,GAS TURBINE,NONAIRCRAFT	F											
2835-21-896-1249	ENGINE,GAS TURBINE,NONAIRCRAFT	F											
2835-21-910-7587													
3040-01-508-1941	CYLINDER ASSEMBLY,ACTUATING,LINEA	F											
3040-01-556-9064	CYLINDER ASSEMBLY,ACTUATING,LINEA	F											
4320-00-659-8942	PUMP,HYDRAULIC RAM,HAND DRIVEN	D											
4320-00-997-7130													
4320-01-056-4793	PUMP,HYDRAULIC	G											
4320-01-245-8685	PUMPING UNIT,HYDRAULIC,POWER DRI	F											
4320-01-399-1758	PUMPING UNIT,HYDRAULIC,POWER DRI	F											
4320-21-814-3259	RAM,HYDRAULIC	B											
4320-21-814-3259	RAM,HYDRAULIC	B											
4330-01-522-2007	FILTER UNIT,FLUID,PRESSURE	F											
4510-01-385-2362	TOILET,AIRCRAFT	B											
4520-01-482-8571	HEATER,DUCT TYPE,PORTABLE	F											
4820-21-880-5752	MANIFOLD ASSEMBLY,PRESSURE REGU	B											
4910-00-293-3849	TRAILER,LIFT,WHEEL	F											
4920-00-075-0603	TESTER,NOZZLE ACTUA	B	Yes										
4920-00-306-4374	GUAGE ASSY	F	Yes										
4920-00-474-3234	TEST STAND,PROPELLE	B	Yes										
4920-00-709-1371	BASE PLATE	D	Yes										
4920-01-552-6919	TEST STAND HYDRAULI	F	Yes										

4920-20-001-5214	TESTER,AIRCRAFT JACKS	F	Yes										
4940-12-356-6100	CLEANER,STEAM,PRESSURE JET	F	Yes										
4940-21-910-5045	PLATFORM LIFT	G	Yes										
5120-00-525-8684	BASE PLATE ASSY	F	Yes										
6110-20-002-9556	PANEL,POWER DISTRIBUTION	F											
6670-01-389-6227	COMPUTER,AIRCRAFT WEIGHT-BALANC	B											
6670-01-609-3465	SCALE,WEIGHING	B											
6670-01-618-0886	LOAD CELL,FORCE-WEIGHT	B											