

J85
PROPULSION GROUP SUSTAINMENT
(PGS)

ANNEX A
PERFORMANCE WORK STATEMENT (PWS)

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1 Introduction

1.1 Purpose

- 1.1.1 The Department of National Defence (DND), Director General Aerospace Equipment Program Management (DGAEPM), has a requirement for airworthy and cost-effective support for the General Electric J85-CAN-40 Propulsion Group (PG) systems of the Royal Canadian Air Force (RCAF) CT114 Tutor fleet. This is a long-term requirement to the End of Life of the aircraft fleet.

1.2 PWS Structure and Organization

- 1.2.1 This Performance Work Statement (PWS) describes the Work that Canada requires the Contractor to perform. Tied to this PWS is a Performance Management Specification (PfMS) (Annex D) that describes the performance outcomes required by Canada.
- 1.2.2 This PWS describes the Work that is to be accomplished (the “what”) while the method for accomplishing this work (the “how”) is to be defined by the Contractor. Where the performance of the Work is tied directly to established policies or regulations, reference will be made directing the Contractor to policies that must be met.
- 1.2.3 The PWS is divided into 10 sections:
- a. Section 1 – Introduction;
 - b. Section 2 – Transition Requirements;
 - c. Section 3 – Program Management;
 - d. Section 4 – Engineering Support Services;
 - e. Section 5 – Maintenance Support Services;
 - f. Section 6 – Materiel Support Services;
 - g. Section 7 – Training Support Services;
 - h. Section 8 – Technical Data and Publications Management Support Services;
 - i. Section 9 – Information Management Support Services; and
 - j. Section 10 – Resource Requirements.

1.3 Background

- 1.3.1 The J85-CAN-40 gas turbine engine, hereafter referred to as the J85 engine, is a variant of the General Electric J85 engine that was adapted for the CT114 Tutor aircraft. The engine was manufactured by Orenda, then a subsidiary of Hawker-Siddeley Canada Ltd, under license from General Electric - the J85 Original Equipment Manufacturer (OEM). The CT114 was procured from Canadair in the mid-1960s to train student pilots. Since the year 2000 the CT114 has been flown in the air demonstration role by 431 Squadron “Snowbirds” and in aircraft flight test at the Aerospace Engineering Test Establishment (AETE) in Cold Lake. There is currently 45 active engines and approximately 50 engines in long term storage at ATESS, Trenton, Ontario.
- 1.3.2 The CT114 fleet Estimated Life Expectancy (ELE) is 2030, with no anticipated sundown period, i.e. yearly flying rate is anticipated to remain relatively constant. It is anticipated that the CT114 Tutor fleet will be replaced in 2030.
- 1.3.3 The J85 First Line maintenance is performed by RCAF technicians of 431 Squadron Moose Jaw, Saskatchewan. In addition to military personnel, on site contractors support 431 Squadron PG sustainment activities by performing Second Level maintenance, periodic inspections, test cell operations.

1.4 In-Service Support Organization

- 1.4.1 Within the Department of National Defence, the Assistant Deputy Minister (Materiel) (ADM (Mat)) is responsible for the delivery of materiel and services required by the Canadian Armed Forces (CAF). Under the responsibility of ADM (Mat), the Director General Aerospace Equipment Program Management (DGAEPM) Division is charged with the in-service support of aircraft fleets. The Directorate of Aerospace Equipment Program Management (Fighters and Trainers), DAEPM (FT), is the directorate within DGAEPM responsible, amongst other fleets, for the in-service support of the CT114 fleet.
- 1.4.2 DAEPM (FT) 6-2 is the Technical Authority for the J85 engine and is also identified as the Propulsion Group Sustainment team (PGS team). The PGS team is responsible for planning and providing systems engineering and maintenance support for J85 engine throughout its life cycle.
- 1.4.3 Located in the National Capital Region (NCR), the CT114 Weapon System Manager (WSM) Organization provides technical engineering support for the weapon system and has overall responsibility for the sustainment and lifecycle management of the CT114 Fleet. Within the WSM Accredited Technical Organization (ATO), the Senior Design Engineer (SDE) is the Type Certificate Holder (TCH) for the CT114 fleet.

1.5 **Operational Planning Overview**

1.5.1 1 Canadian Air Division Headquarters (1 Cdn Air Div HQ), the Royal Canadian Air Force's operational command, determines the required Yearly Flying Rate (YFR) for each of its aircraft fleets to meet the mandates assigned to the RCAF by the Government of Canada.

1.5.2 YFR does vary from year to year, but should remain in the approximate range of 2,500 hours to 3,300 hours for the CT114 fleet.

1.6 **Concept of Support**

1.6.1 The J85 PGS Enterprise is designed to support the CT114 Fleet in the context of its operations worldwide. The Contractor will be an integral part of the PGS Enterprise. The Enterprise combines all of the organizations that play a role in the delivery of the outcomes required by Canada in support of the CT114 fleet's Propulsion Group.

1.6.2 The Concept of Support for the J85 PGS Contract is based on the effective implementation of Managed Repair and Overhaul Contracting in order to deliver outcomes as follows:

- a. **Life Cycle Material Management**, in that the Contractor will provide Life Cycle Material Management (LCMM) services on behalf of DND;
- b. **Supply Manager Functions**, whereby the Contractor will provide Supply Manager services on behalf of DND;
- c. **Commercial Procurement**, whereby the Contractor will forecast material procurement requirements for approval by Canada and source commercially available material wherever possible and economical; and
- d. **Industrial and Technological Benefits (ITBs)**, leveraging the Contract to create jobs and economic growth in Canada.

1.7 PWS Key Features

1.7.1 Program Management

- 1.7.1.1 Canada retains full responsibility for Program Management within the J85 PGS Enterprise, including coordination of resources and activities across the Enterprise; however, the Contractor will perform internal Program Management within Contract scope.

1.7.2 Engineering Support

- 1.7.2.1 To enable optimization of the J85 PGS Contract performance outcomes, the Contractor will be responsible for the Continuing Airworthiness activities required to support the J85 engine. The Contractor will be required to seek and to obtain acceptance from the Technical Airworthiness Authority (TAA) for the scope and depth of airworthiness authority necessary to execute its comprehensive Engineering Support Services. This will include most functions traditionally associated with an ATO.
- 1.7.2.2 Responsibility for Continuing Airworthiness provides a framework for the Contractor to identify the need for maintenance program changes; prepare and approve technical data in accordance with approved airworthiness processes to support changes deemed necessary; and implement those changes through publication amendments or other appropriate means.

1.7.3 Maintenance Support

1.7.3.1 General

- 1.7.3.1.1 The approved maintenance program for the J85 engine includes all First, Second, and Third Level maintenance activities, both scheduled and unscheduled.

1.7.3.2 First Level Maintenance

- 1.7.3.2.1 First Level maintenance is a Canada responsibility, executed by RCAF units. Through Maintenance Support Services, the Contractor will have a supporting role with respect to improving First Level maintenance troubleshooting and repair proficiencies.

1.7.3.3 Second Level Maintenance

- 1.7.3.3.1 Second Level maintenance is currently performed at Second Line (Moose Jaw) and Contractor Third Line facilities. Because of the need to improve technical proficiency at First Line, 431 Sqn may rotate RCAF technicians through the Engine Bay and the Engine Test facility (ETF) for familiarization/training purposes; however, the work at Second Line will be performed by Contractor personnel.
- 1.7.3.3.2 To facilitate Contractor accountability for Second Line production outputs, Canada will make available its Engine Repair facilities, Engine Test Facilities, and associated equipment. This information will be provided to the Contractor as an input to the Annual Activity Forecast (AAF).

1.7.3.4 Third Level Maintenance

- 1.7.3.4.1 Third Level Maintenance Repair and Overhaul (R&O) is the Contractor's responsibility.

1.7.4 Materiel Support

- 1.7.4.1 The Contractor will assume the Life Cycle Management (LCM) and Supply Manager (SM) responsibilities for all PG systems parts and support equipment.

1.7.5 Training Support

- 1.7.5.1 Formal training for First Line technicians is a Canada responsibility. Since proficiency levels of RCAF technicians will directly contribute to PGS performance outcomes, the Contractor may employ its field resources to provide mentoring, coaching, technical briefs, or other initiatives that will lead to improved proficiency.

1.7.6 Technical Data and Publications Management Support

- 1.7.6.1 In conjunction with its engineering support responsibilities, the Contractor will be required to maintain and update J85 engine technical data, as well as maintain all J85 technical publications approved maintenance program and listed at Appendix 6, List of References.

1.7.7 Information Management Support

- 1.7.7.1 Canada currently uses fleet-specific IM/IT systems that have been developed and implemented over the years. Some of these systems are deemed mandatory and operationally critical, and their continuous support and maintenance is the Contractor's responsibility. Beyond the mandatory systems, the Contractor may use IM/IT solutions that best support the Contract outcomes sought by Canada.

1.7.8 Resource Requirements

- 1.7.8.1 Unless otherwise stated in the PWS, the Contractor is to submit a proposal to the TA for Contractor resource requirements to be embedded at DND facilities to best meet support services requirements.

2 Transition Requirements

2.1 Start-Up and Services Transition

2.1.1 General

2.1.1.1 The Contractor must assume responsibility for the full scope of Work described within this PWS by the end of the Transition Period in accordance with Table 1 (below).

2.1.1.2 The Contractor must develop and deliver a Contract Transition and Implementation Plan (CTIP) in accordance with CDRL PM-003

2.1.1.3 The Contractor must meet the following transition requirements:

- a. Comply with the Readiness Review Process (RRP);
- b. Achieve Basic Operational Capability (BOC) in accordance with Table 1 below;
- c. Achieve Initial Operational Capability (IOC) in accordance with Table 1 below; and
- d. Achieve Full Operational Capability (FOC) in accordance with Table 1 below.

2.1.2 Readiness Review Process

2.1.2.1 The BOC, IOC and FOC assessments will be conducted via the RRP consisting of an initial Contract Kick-Off Meeting followed by a series of Readiness Review Meetings (RRMs).

2.1.2.2 The CTIP will be used as a source document in generating the Readiness Review Process (RRP) Basic Operational Capability (BOC), Initial Operational Capability (IOC) and Full Operational Capability (FOC) checklists.

2.1.2.3 Contract Kick-Off Meeting. The Contract Kick-Off Meeting will address transition issues including, but not limited to review and discuss the Contractor's CTIP (CDRL PM-003).

2.1.2.4 Readiness Review Meetings. The goal of the RRM's will be to evaluate the transition progress against the CTIP, review the BOC, IOC and FOC checklists, as well as to resolve issues that may arise. The RRM's will take place every two weeks, at the discretion of Canada, until IOC. RRM's will take place once per month after IOC and until FOC. The meetings will take place either in person, by tele-conference, or video-conference as directed by the TA.

2.1.2.5 Progress Review Meetings (PRMs) and Technical Review Meetings (TRMs), as defined in Section 3, will begin after IOC and may be held in conjunction with RRM's.

2.1.3 **Transition Milestones**

2.1.3.1 The Contract includes the following transition milestones:

- a. Operational Start Date. Operational Start Date (OSD) is to be set by the Contracting Authority and likely matching the date of the contract approval.
- b. BOC. The Contractor must demonstrate the capability to provide those support services deemed critical and essential as defined in Table 1, 30 days after OSD, or as defined in Table 1;
- c. IOC. The Contractor must demonstrate the capability to provide an initial level of readiness to support the activities within the scope of the Contract as defined in Table 1, six months after OSD, or as defined in Table 1; and
- d. FOC. The Contractor must demonstrate the capability to support all activities within scope of this Contract achieve 12 months after OSD, or as defined in Table 1.

Table 1: Transition Milestones

No.	PWS Ref.	Activity	BOC	IOC	FOC	Remarks	Activity may require TAA/TPT?
1	4	Obtain provisional ATO accreditation.	X			As determined by the TAA after first engagement with Contractor. Provisional Accreditation/Recognition shall be no later than IOC.	TAA
2	4	Obtain full ATO accreditation.			X	As determined by TAA after accreditation audit of Contractor. Full Accreditation/Recognition shall be no later than 12 months.	TAA
3	4	Demonstrate capability to perform Technical Investigations and Engineering Support.	X				TAA
4	4	Perform Continuing Airworthiness Functions: perform all activities and submit TDPs to Canada for approval.		X			TAA
5	4	Perform Continuing Airworthiness Functions: perform all activities and approve within Appendix 7, Decisions of Significance, scope.			X	This is contingent on status of airworthiness authorities granted as part of Provisional and/or Full accreditation by the TAA)	TAA
6	4	Provide Technical Support (para 4.5.4).	X			As soon as possible but no later than 60 days after OSD	TAA
7	5	Obtain provisional AMO accreditation.	X			As determined by TAA after first engagement with Contractor. Provisional Accreditation/Recognition shall be no later than IOC.	TAA
8	5	Obtain full AMO accreditation.			X	As determined by TAA after accreditation audit of Contractor. Full Accreditation/Recognition shall be no later than 12 months.	TAA
9	5	Provide Repair & Overhaul (R&O) services and Second Level maintenance	X				
10	5	Establish capability to perform R&O for J85 Matched kit, turbine and engine.			X		
11	5	Control Second Line output.	X				
12	5	Provide technical expertise at First Line.	X				
13	5	Perform Second and Third Level maintenance on support equipment.			X		
14	5	Manufacture parts in accordance with CFTOs and/or approved drawings.		X			TAA
15	5	Demonstrate capability to provide Mobile Repair Party (MRP).		X			

No.	PWS Ref.	Activity	BOC	IOC	FOC	Remarks	Activity may require TAA/TPT?
16	6	Assume LCMM responsibilities	X				
17	6	Conduct procurement activities of consumables and accountables (repairables).	X				
18	6	Use DRMIS for control of R&O activities.		X			
19	6	Implement and comply with R&O policies of A-LM-184-001/JS-001 as specified in PWS Part 6.	X				
20	6	Perform stocktaking and cataloguing of all GFOS in DRMIS.		X			
21	6	Establish sizing formulae for PUKs.		X			
22	6	Control, manage and stock PG systems spares PUKs.		X			
23	6	Take on Supply Manager responsibilities for all consumables and accountables (repairables) listed in Appendix 1, Propulsion Group Equipment Scope.	X				
24	6	Demonstrate capability to catalogue and maintain current stock codes in DRMIS.	X				
25	6	Demonstrate capability to prepare and submit disposal plans/paperwork.		X			
26	6	Demonstrate capability to conduct disposal activities at Third Line.		X			
27	7	Demonstrate capability to provide training on new equipment, tools, IM/IT system introduced and/or maintained by the Contractor.		X			
28	7	Demonstrate capability to provide assistance for technical familiarization of Canada personnel.			X		
29	7	Implement First Line maintenance proficiency initiatives.			X		
30	8	Manage, maintain and make available PG systems Technical Data to Canada.		X			TAA
31	8	Obtain, manage and use technical data from Original Equipment Manufacturers (OEM).		X			TAA

No.	PWS Ref.	Activity	BOC	IOC	FOC	Remarks	Activity may require TAA/TPT?
32	8	Process urgent PDRs, UCRs and publication change requests submitted by Canada and provide revised publications in PDF format.	X				TAA
33	8	Monitor and action all PDRs, UCRs and process publication change requests and submit revised publications in the required format (PDF/XML, paper, etc.).		X			TAA
34	8	Provide steady-state publications management and publishing services			X		TAA
35	9	Develop, maintain and support initial EIES capability with access to all contract deliverables and documentation/data produced in support of the Contract.		X			TAA
36	9	Finalize implementation of all EIES features.			X		TAA
37	9	Report Performance Metrics via the EIES.		X			
38	9	Provide access to historical PG deliverables and data through the EIES.			X		TAA
39	9	Establish a Disaster-Recovery system for all EIES data.		X			
40	9	Provide field support for and input to ADAM and associated tools to ensure ongoing availability.	X				
41	9	Transfer all ADAM-related IM/IT infrastructure (software and hardware), including PERFORMAS.	X			Transfer of ADAM (and associated system) hardware to Contractor must be completed within 45 days after OSD, to be coordinated as to avoid impact to Operations, and a maximum of 48-hrs system downtime.	
42	9	Use of Canada-Supported IT systems (ADAMS, FSIMS, Unsatisfactory Condition Reports (UCRS), Materiel and Training Support Services)	X				
43	9	Provide data exchange services (ADAM Data).	X				
44	9	Demonstrate compliance with IM/IT Regulations (Para 9.4).	X				
45	10	Fulfill Contractor personnel resources requirements at the MOB (10.2.1.5).	X			As soon as possible but no later than 60 days after OSD.	

No.	PWS Ref.	Activity	BOC	IOC	FOC	Remarks	Activity may require TAA/TPT?
46	10	Provide First Line maintenance and troubleshooting expertise, IM/IT support, as well as engineering and technical support on a 24/7 basis.		X			TAA for engineering and technical support
47	11	Implement reporting requirements of Annex D (PfMS).		X		Refer to Annex D, Performance Management Specification (PfMS), for amplifying details	

2.1.4 **Airworthiness Implementation**

2.1.4.1 The process for Airworthiness implementation, also referred to Initial Airworthiness, will depend on the Contractor's existing scope of accreditations, and the recognized regulatory agency under which it is currently accredited.

2.1.4.2 Typically, there are three (3) possible avenues:

- a. Contractor is already accredited by the DND TAA for similar scope. The Contractor must submit its existing TAA-approved Airworthiness Process Manuals (Engineering and Maintenance). DND TAA staff will review and advise on changes and/or new requirements in support of the scope of this Contract;
- b. Contractor is accredited by another recognized regulatory agency for similar scope. The Contractor must submit its approved Airworthiness Process Manuals (APMs) and, as directed by DND TAA staff, prepare and submit a DND Airworthiness Supplement (CDRL AW-002); and
- c. Contractor has partial accreditation for similar scope. The Contractor must submit any existing Process Manuals (CDRL AW-003/004/005) and will be directed by DND TAA staff to amend or draft and submit the required APMs in support of the scope of this Contract.

2.1.4.3 The CTIP will outline the Contractor's strategy for achieving formal DND TAA accreditation/recognition by FOC.

2.1.4.4 The Contractor must apply directly to the DND TAA for accreditation within one week of Contract award.

2.1.4.5 Regardless of the DND TAA acceptance avenue, the Contractor must submit a draft Airworthiness Management Plan (AMP) (CDRL AW-001) to the DND TAA no later than two weeks after Contract Award, and a revised AMP within two weeks of the initial engagement with DND TAA staff. The AMP will be evaluated by DND TAA staff to develop the Provisional Accreditation parameters.

2.1.5 **Materiel Management Implementation**

2.1.5.1 In addition to those transition activities listed in Table 1 required to reach steady-state, the Contractor must perform the following one-time activities and must be completed no later than FOC.

2.1.5.1.1 The Contractor must conduct an initial inventory rationalization for the current DND-owned PG systems spares inventories. The purpose of the rationalization is to remove spares from inventory that are not required to sustain the fleet until the fleet is withdrawn from service.

2.1.5.1.2 The Contractor must, for inventory that has been identified as being in excess of that required to meet fleet ELE (Para 2.1.6.1.6), perform the disposal activities as approved by the TA.

2.1.6 **Training Support Implementation**

2.1.6.1 In addition to those transition activities listed in Table 1, and required to reach steady-state training support services, the Contractor must facilitate and participate in a one-time Technical Proficiency

Working Group with RCAF First Line representatives to refine and align the Contractor Training Support Services to existing DND programs and policies. This Working Group must take place before FOC.

2.2 Close-Out and Services Transition Out

2.2.1 General

- 2.2.2.1 The Contractor must prepare and submit a Contract Close-Out Plan (CCOP) in accordance with CDRL PM-004.

3 Program Management

3.1 General

3.1.1 Canada is responsible for PGS Program Management.

3.1.2 The Contractor must perform the required internal program management over the Contract scope to meet the performance outcomes and contracted requirements. The Contractor must appoint a Program Manager responsive to the CA, PA, and TA.

3.2 Left blank intentionally

3.3 Communications and Relation Management

3.3.1 Support Services Reviews and Reporting

3.3.1.1 The Contractor must participate in the following monthly management forums:

- a. Progress Review Meetings (PRMs); and
- b. Technical Review Meetings (TRMs).

3.3.1.2 The Contractor must participate in the above meetings in person, by teleconference or video-conference as directed by Canada. The frequency of the TRMs can be reduced at the request of the TA. The frequency of the PRMs can be reduced at the request of the TA, PA, and CA.

3.4 Activity and Service Coordination

3.4.1 Technical Engineering Representative

3.4.1.1 The Contractor must appoint a representative responsive to the Technical Authority for technical services delivery coordination over the full scope of work in this PWS. The Contractor representative must have the ability to rapidly mobilize Contractor technical resources to make timely decisions and coordinate effective support to the WSM across the full spectrum of services in this PWS. This representative may be embedded within the NCR or be one of the core engineers at the Contractor's facility.

3.4.2 Annual Activity Forecast

3.4.2.1 Canada will provide, on an annual basis, the input required for the AAF, along with any assumptions and unknowns. The inputs will be as follows:

- a. Next year planned YFR and forecasted YFR to ELE;
- b. Current and future expected fleet size;
- c. Number of aircraft in plant with approximate schedule;
- d. Number of active aircraft assigned to non-flying roles with approximate schedule;
- e. Major aircraft modification programs with approximate schedule;
- f. Schedule of planned air demonstration shows for the next year;
- g. Reconfirmation of performance metric targets;
- h. Pack-Up Kit (PUK) requirements
- i. Planned ELE and amendment when applicable;
- j. Mandated Contractor travel requirements (planned symposium, conferences, visits to bases, etc.);
- k. Potential what-if scenarios to be addressed by the Contractor in the AAF;
- l. Forecast Task Based Services requirements; and
- m. Nature and quantity of approved Value Change Proposal (VCPs).

- 3.4.2.2 The Contractor must prepare and submit the AAF in accordance with CDRL PM-002 based on the inputs provided by Canada.
- 3.4.2.3 Changes affecting the AAF must be documented in accordance with the Change Order, CDRL PM-005.
- 3.4.3 **Long-Term Activity Forecast**
- 3.4.3.1 The Contractor must prepare, submit and maintain the Long-Term Activity Forecast (LTAF) in accordance with CDRL PM-001 based on the inputs provided by Canada on an annual basis as listed in para 3.4.2.1.
- 3.4.4 **Additional Work Management**
- 3.4.4.1 The Contractor must manage and control Additional Work Requirements (AWRs). AWRs will be submitted to Canada for approval and tasked using a DND 626.
- 3.5 **Cooperation with External Agencies**
- 3.5.1 As part of the platform-level weapon systems management strategy, the Contractor must seek TA support prior to establishing working-level relationships with other CT114 fleet sustainment contractors (Primary Air Vehicle, Avionics, miscellaneous out-of-scope component R&O contractors) that may be required from time to time in support of J85 PGS activities.
- 3.5.2 The Contractor must seek TA support prior to establishing communication with other DND and/or foreign military agencies that may be required from time to time in support of J85 PGS activities.

4 Engineering Support Services

4.1 General

- 4.1.1 The Contractor must perform all Engineering Support Services required to sustain the PG systems and support equipment identified in Appendix 1, Propulsion Group Equipment Scope. Canada will not be conducting these activities; however, Canada will retain specific approval authorities complementary to the Contractor's scope and depth of airworthiness authority defined in Appendix 7, Decisions of Significance.

4.2 Planning Engineering Support Services

- 4.2.1 The Contractor must provide Engineering Support Services.

4.3 Reporting Engineering Support Services

- 4.3.1 The Contractor must produce and maintain engineering records in support of all engineering support activities. Engineering records include all airworthiness-related documentation that meets the criteria for retention as part of the Type Record, Technical Record or Organizational Record in accordance with the Technical Airworthiness Manual (TAM), Part 5, Chapter 5.
- 4.3.2 The Contractor must provide the TA access to the engineering records via the Electronic Information Environment System (EIES) as defined in Section 9.

4.4 Technical Regulation

- 4.4.1 The Contractor must obtain and maintain TAA acceptance as an Accredited Technical Organization (ATO) in order to perform Engineering Support Services.
- 4.4.2 The Contractor must develop, deliver and maintain the Engineering Process Manual (EPM) in accordance with CDRL AW-003.
- 4.4.3 The Contractor must perform all engineering activities in accordance with the Technical Airworthiness Manual and DND TAA-approved EPM.

4.5 Engineering Support Services - Details

4.5.1 General

- 4.5.1.1 Engineering Support Services include three streams: Technical Investigation and Engineering Support (TIES), Continuing Airworthiness, and Technical Support.

4.5.2 Technical Investigations and Engineering Support

- 4.5.2.1 In order to meet the Contract outcomes, the Contractor must perform Technical Investigations and Engineering Support (TIES) in support of design changes or maintenance program changes. TIES may include:
- a. Technical Investigations (TIs);
 - b. Engineering Studies (ESs); and
 - c. Support to flight safety investigations.

- 4.5.2.2 TIES will generally be forecast in the AAF and LTAF and therefore not subject to a separate task authorization process.
- 4.5.2.3 In the event that TIES involve additional subcontracted expenses or are of such a complexity and duration that additional contracted resources are required to perform the TIES, they will be subject to task authorization, on an as and requested basis, and as authorized by a duly signed DND 626 Task Authorization Form.
- 4.5.2.4 The Contractor must deliver TIES in accordance with CDRL ES-001.
- 4.5.3 **Continuing Airworthiness**
- 4.5.3.1 The Contractor must perform all Continuing Airworthiness activities for the components listed in Appendix 1, Propulsion Group Equipment Scope, within the scope and depth of airworthiness authority identified in Appendix 7, Decisions of Significance.
- 4.5.3.2 The Contractor must perform the Continuing Airworthiness functions mandated by the TAM, Part 3, and further amplified below:
- a. Conduct and Control of Maintenance. The Contractor's scope for Conduct and Control of Maintenance is primarily defined in Section 5 of this PWS. However, as part of the Engineering Support Services, the Contractor must:
 - i. Manage the approved First, Second and Third Level J85 PG systems maintenance program by ensuring continued accuracy and adequacy of the technical content of the maintenance publications listed in Appendix 1, Propulsion Group Equipment Scope;
 - ii. Monitor and amend the maintenance program to ensure its effectiveness based on actual in-service experience and implement changes to accommodate approved modifications or as required as a result of monitoring activities; and
 - iii. Support the TA in assessing requests for Deviations to the Approved Maintenance Program;
 - b. Design Change Certification. Design change certification including modifications, alterations, changes to the maintenance program, alternate parts, development of new repair schemes and non-standard repairs as defined in the TAM;
 - c. Configuration Management. In-service configuration management includes configuration identification, control, status accounting and audits for all in-scope equipment identified in Appendix 1, in compliance with the TAM and the CT114 Configuration Management Plan (CMP). Specifically:
 - i. The Contractor must review on an annual basis the CT114 CMP, identified in Appendix 6, List of References, and provide recommendations for updates to ensure that it is accurate and reflects the activities of the Contractor with respect to Configuration Management (CM); and
 - ii. The Contractor must obtain configuration control numbers from the WSM for all technical airworthiness processes and forward the completed Technical Data Packages (TDP) to the CT114 WSM for retention; and
 - d. Product Usage Monitoring. Product Usage Monitoring includes:
 - i. Reviewing, responding to and implementing corrective action to Unsatisfactory Condition Reports (UCRs) and Pre-Installation Failure (PIF) reports;
 - ii. Assessing Airworthiness Directives received from the TAA or other regulatory agencies, Original Equipment Manufacturer (OEM) dispositions and Airworthiness and Aviation Safety Documents (AASDs) received from the TA for applicability

and acceptability to the J85 PG systems. (AASDs include, for instance, service bulletins from other J85 engine users).

- iii. Assessing applicability and relevance of Component Improvement Program (CIP) engineering and technical programs to Canada and initiating necessary follow-up actions;
- iv. Monitoring Flight Safety occurrence reports, and recommending and implementing Preventive Measures (PM) resulting from Flight Safety occurrences as required;
- v. Preparing and monitoring the progress of Special Inspection at First and Second Line in accordance with the DGAEPM procedure EMT09.034;
- vi. Provide engineering support to the CT114 Aging Aircraft Assessment Plan for secondary power systems. This consists in assessing USN failure mode dispositions provided by the TA for applicability and similarity, conducting an assessment of defined aging threats, and providing a recommendation on airworthiness of the systems until ELE;
- vii. Monitoring, tracking, and identifying airworthiness risk to the TA; and, as required, prepare airworthiness risk assessments including the staffing of Records of Airworthiness Risk Management (RARM) (CDRL ES-003);
- viii. Providing Input to the Annual Airworthiness Report (AAR) as per (CDRL ES-004); and
- ix. Providing inputs to the TA in support of product usage monitoring in the form of a Quarterly Reliability and Supportability Report for PG systems (CDRL ES-005).

4.5.3.3 Airworthiness-related Functions Retained by Canada. The Contractor must submit to the TA, all Design Change Technical Data Packages (TDPs) in support of airworthiness processes for which DND has retained approval authority as identified in Appendix 7, Decisions of Significance. The Contractor must submit the Design Change TDP in accordance with CDRL ES-002. The Contractor may make recommendations to the TA for changes to the maintenance program affecting equipment and publications not included in Appendix 1, Propulsion Group Equipment Scope, if such changes will benefit the J85 PGS Contract outcomes, and/or, are necessary as a result of changes to PG systems technical data.

4.5.4 **Technical Support**

- 4.5.4.1 The Contractor must provide timely and accurate systems expertise to the TA, field maintenance personnel and other applicable agencies including:
- a. Technical Engineering Representative services as defined in Section 10;
 - b. Attendance at meetings, conferences, and symposiums as requested by the TA to provide technical support; and
 - c. Accompanying and participating in visits by WSM staff to the MOB or other locations as required by Canada in support of PG systems sustainment.

5 Maintenance Support Services

5.1 General

- 5.1.1 The Contractor must perform Second and Third Level maintenance, repair and overhaul, and assist with First Level maintenance on all PG system components and support equipment identified in Appendix 1, Propulsion Group Equipment Scope.

5.2 Planning Maintenance Support Services

- 5.2.1 The Contractor must provide Maintenance Support Services.

5.3 Reporting Maintenance Support Services

- 5.3.1 Not used.

5.4 Technical Regulation

- 5.4.1 The Contractor must obtain and maintain TAA acceptance as an Accredited Maintenance Organization (AMO) in order to perform Maintenance Support Services.
- 5.4.2 The Contractor must develop, deliver and maintain a Maintenance Process Manual (MPM) in accordance with CDRL AW-005.
- 5.4.3 The Contractor must perform all maintenance, repair and overhaul activities in accordance with the TAM and DND TAA-approved MPM.
- 5.4.4 The P-series Canadian Forces Technical Orders (CFTOs) (C-05-005-PXX/AM-001) define the processes and policies that DND follows to accomplish maintenance and engineering operational objectives within CF airworthiness rules and standards, as well as other applicable orders and legislation. Where Contractor maintenance activities are performed in conjunction with DND personnel at First and Second Lines, the Contractor must demonstrate compliance with the P-series CFTOs.
- 5.4.5 DND policy governing calibration is C-06-020-001/AM-001 – Test Equipment Calibration Policy. Most test equipment, test apparatus and some tools require an initial and subsequent periodic inspection and calibration to ensure their accuracy. The Contractor must demonstrate that it achieves an equivalent outcome through its calibration program.

5.5 Maintenance Support Services - Details

5.5.1 General

- 5.5.1.1 The transfer of PG systems scope and depth of maintenance between Lines of maintenance is a Decision of Significance as described in Appendix 7, Decisions of Significance.

5.5.2 Third Level Maintenance

- 5.5.2.1 The Contractor must perform Third Level maintenance at Third Line on the PG system components listed in Appendix 1, Propulsion Group Equipment Scope, in accordance with the Depot Level maintenance instructions in the CFTOs listed in Appendices 1 and 6, Repair Engineering Instructions issued by the OEM, Non-Standard Repair/Military Support Instructions, applicable approved modifications, and special inspections.

5.5.3 Second Level Maintenance

- 5.5.3.1 The Contractor must control production output by determining the production requirements of Second Level maintenance activities carried out at Second Line. This includes work performed in the Engine Repair Facility (ERF) and Engine Test Facility (ETF).
- 5.5.3.2 The Contractor must perform Second Level maintenance activities using Contractor personnel at Second Line.
- 5.5.3.3 The Contractor:
- a. Must set priorities for the work including optimization of engine builds;
 - b. Must provide technical expertise and provide mentoring to RCAF personnel assigned to First Line for technical proficiency purposes (as defined in Section 7);
 - c. Must provide production capability / output in order to meet Contract outcomes:
 - i. Contractor field resources assigned to perform Second Level maintenance at Second Line must be authorized under the Contractor's AMO accreditation to perform and certify Second Level maintenance on the PG systems, up to and including Maintenance Release and Major Component Weapon System Release (as defined in C-05-005-P03/AM-001); and
 - ii. Contractor field resources assigned to perform Second Level maintenance activities at Second Line must carry out the supporting tasks associated with the maintenance carried out including, but not limited to housekeeping, tool control and shop clean-up.
 - d. May recommend and assist in implementing improvements to Second Line maintenance operations deemed beneficial in order to meet Contract outcomes, such as Industry's best practices and workflow optimization;
 - e. Must oversee the flow of materiel in and out of the Engine Repair Facility and Engine Test Facility, and optimize stock levels; and
 - f. Must supervise Contractor personnel.
- 5.5.3.4 The Contractor is responsible for the work carried out in the Engine Repair Facility and Engine Test Facility, which currently includes:
- a. Engines & Tail Pipes:
 - i. Build-up and tear-down;
 - ii. Repairs / replacements as a result of TX, FOD, FCU Change, Comp Blade Change, Hot End Inspections, etc.;
 - iii. Modifications;
 - iv. Inspections (Periodic, Out-of-Sequence, Special, NDT, etc.);
 - v. Testing and preservation; and

- vi. First Line Replaceable Unit (FLRU) replacement, inspection, modification and testing;
 - b. First Line Replaceable Units (FLRUs):
 - i. Perform electrical checks, in accordance with the Component Evaluation logic, on FLRUs removed from engines received from first line for troubleshooting. This process ensures that serviceable FLRUs are not inadvertently routed to Third Line.
 - c. Support Equipment:
 - i. Inspection/minor repair;
 - d. Storage:
 - i. Provide storage for engines removed during aircraft Periodic inspections - includes loading and unloading from a Removal and Installation (R&I) stand;
 - e. Engine Test Cell:
 - i. Operating the Test Cell;
 - ii. Routine maintenance, fault-finding and servicing of the Engine test cell;
 - iii. Conduct performance, fault-finding and serviceability runs of engines;
 - iv. Service engines after test;
 - v. Engine troubleshooting and on-engine replacement of FLRUs; and
 - vi. On-engine testing of removed engine components in accordance with the Component Evaluation Logic; and
 - f. Shipping Container:
 - i. Installation and removal of engines and modules; and
 - ii. Inspection/minor repair.
- 5.5.3.5 The Contractor must perform all Second Level maintenance not carried out at Second Line on PG system components listed in Appendix 1, Propulsion Group Equipment Scope. This maintenance must be carried out at Third Line in accordance with the CFTOs listed in Appendices 1 and 6.
- 5.5.3.6 The Contractor may submit recommendations to transfer, either on a temporary or permanent basis, Second Level maintenance activities between 15 Wing Moose Jaw and the Contractor's facility (Third Line) based on sound business case analyses. Canada may, or may not, accept these recommendations at its sole discretion.
- 5.5.4 **First Level Maintenance**
- 5.5.4.1 Canada performs First Level maintenance on the J85 PG systems in accordance with First Line publications, as listed in Appendices 1 and 6.
- 5.5.4.2 The Contractor must provide technical assistance, in the form of a Field Service Representative, to RCAF technicians on the performance of First Level maintenance in order to meet the Contract outcomes.

5.5.4.3 The Contractor must provide timely and accurate First Level maintenance expertise to the TA, field maintenance personnel and other applicable agencies as defined in Section 10.

5.5.5 Support Equipment

5.5.5.1 The Contractor shall be responsible for performing maintenance on the items listed in Appendix 1, Propulsion Group Equipment Scope, which are used at Third Line facilities.

5.5.5.2 The Contractor shall be responsible for monitoring / coordinating the required maintenance activities to ensure availability and serviceability of the items listed in Appendix 1, Propulsion Group Equipment Scope, and used at Second Line facilities.

5.5.6 Manufacturing

5.5.6.1 The Contractor must manufacture J85 PG systems parts when local manufacture is called for by CFTOs and/or approved drawings.

5.5.6.2 The Contractor must manufacture tooling and support equipment when called for in, and in accordance with, CFTOs and/or approved drawings.

5.5.7 Mobile Repair Party

5.5.7.1 The Contractor must provide Mobile Repair Party (MRP) services as authorized by a duly signed DND 626 Task Authorization form. A MRP is defined as one or more Contractor employees that are tasked to travel to the location of the aircraft within North America and to repair/replace the applicable engine.

6 Materiel Support Services

6.1 General

- 6.1.1 The Contractor must provide Materiel Support Services for Contract Issued Spares (CIS), Government Furnished Overhaul Spares (GFOS) and equipment identified in Appendix 1, Propulsion Group Equipment Scope, and Annex F, GSM and GFE.

6.2 Planning Materiel Support Services

- 6.2.1 The Contractor must provide Life Cycle Material Management and Supply Manager services on behalf of DND as directed by the TA.
- 6.2.2 The Contractor, when authorized by Canada through the AAF and LTAF, will commercially procure material where able and economical to do so.
- 6.2.3 The Contractor may raise Cooperative Logistics (COLOG) requisitions for DND approval. Where the Contractor determines that obtaining spares / consumables through COLOG is the optimal solution, Canada shall be requested to acquire these items which will be provided to the Contractor as Government Owned Material (GOM) upon receipt. GOM constitutes GFM, GFE and Loan Equipment. DND's PA reserves the right to opt to procure equipment through COLOG or other means as the optimal procurement solution. The Contractor will not be held accountable for unreasonable delays in obtaining items through the CFSS or COLOG when it can be clearly demonstrated that this action was in the best interest of Canada.
- 6.2.4 The Contractor must determine the sparing levels to be held at each storage location (SLoc) in support of maintenance, repair and overhaul activities, including but not limited to stock held at MOBs, in Pack-Up Kits (PUKs) and at Contractor location(s).

6.3 Technical Regulation

- 6.3.1 The Contractor must comply with the requirements for materiel support activities of the following publications when dealing with DND-owned materiel:
- a. A-LM-007-100/AG-001: Canadian Forces Supply Administration Manual;
 - b. A-LM-184-001/JS-001: Special Instructions Repair and Overhaul Contractor; and
 - c. C-05-005-001/AG-001: Technical Airworthiness Manual.
- 6.3.2 In order to ensure that DND's interests are protected in terms of DND-owned materiel, the NDQAR reserves the right to carry out audits on the Contractor's materiel management system.

6.4 Procurement

6.4.1 Vendor Selection

- 6.4.1.1 The Contractor is responsible for the vendor selection and the procurement of replacement parts to support First, Second and Third Level maintenance. The Contractor must only procure approved airworthy replacement parts that fulfill the TAA requirements of the Technical Airworthiness Manual (Part 5, Chapter 2).

6.4.2 Codification & Cataloguing Support

- 6.4.2.1 When a stock code is required, the Contractor must initiate the process to catalogue items using the MI Requestor in order to support the issuance of materiel. The Contractor must maintain existing data, such as stock codes and kits on DND's inventory systems.
- 6.4.2.2 The Contractor must perform cataloguing activities, including inputting and maintaining spares data in DND's system of record.

6.4.3 Petroleum, Oils and Lubricants

- 6.4.3.1 The Contractor is not responsible for procuring Petroleum, Oils & Lubricants (POL) for First Line maintenance requirements.
- 6.4.3.2 The Contractor must procure all required POL with the exclusion of aviation fuels and engine oils to support Second Line maintenance requirements. When the Contractor requires aviation fuels and engine oils for Second Line, the Contractor must order through 15 Wing Supply.
- 6.4.3.3 The Contractor must procure all required POL to support Third Line maintenance requirement.

6.5 Warehousing Operations

6.5.1 Inventory Management

- 6.5.1.1 The Contractor must comply with and manage materiel inspection, packaging, handling and preservation requirements, including the special requirements for air shipment and dangerous goods in accordance with A-LM-184-001/JS-001 for all Canada-owned materiel in its custody.

6.5.2 Use of DND System of Record

- 6.5.2.1 In order to ensure Total Asset Visibility of DND-owned materiel while in the care, custody and control of the Contractor, the Contractor must use DND's system of record as identified in Section 9. The Contractor must comply with the requirements for data fidelity, accuracy and visibility as per the Supply Administration Manual A-LM-007-100/AG-001. Canada will assign a Supply Manager (SM) code Contractor Repair Parts Account (CRPA), Repairable Materiel Account (RMA) and/or a Regional Repairable Materiel Account (RRMA) to the Contractor.

6.5.3 Controlled Goods

- 6.5.3.1 The Contractor must restrict Controlled Goods (CG) materiel access to authorized individuals only.
- 6.5.3.2 The Contractor must prepare the End User Certificate and distribute as per regulations.

6.5.4 Discrepancies

- 6.5.4.1 The Contractor must action discrepancies in shipments in accordance with Chapter 2.1 of A-LM-184-001/JS-001.

6.5.5 Stocktaking

- 6.5.5.1 For all Government Owned Materiel in Contractor Custody (GOCC), the Contractor must perform stocktaking activities in order to ensure accuracy between physical assets and holdings in the system of record. All DND-owned inventory held at the Contractor facility must be physically counted and reported, unless specified more frequently, once every two years.

- 6.5.5.2 The Contractor must account for all CIS and GFOS in either a manual or an automated system. Regardless of the system used, the Contractor must maintain an audit trail acceptable to DND.
- 6.5.5.3 The Contractor must create a stocktaking plan in accordance with Stocktaking Plan (CDRL LOG-002) to account for DRMIS storage locations.
- 6.5.5.4 The supporting Quality Assurance Representative (QAR) and ROCEA must be contacted by the Contractor two weeks prior to the scheduled stocktaking, in order to coordinate the counts.
- 6.5.5.5 Reconciliation for each storage location must be performed at a frequency based on the stock type:
- a) A & C Class items non-controlled goods – 100%
 - b) E Class Controlled equipment – counted monthly with serial number validation quarterly.
- 6.5.5.6 At the conclusion of every stocktaking, the Contractor must prepare a stocktaking summary report in accordance with Stocktaking Summary Report (CDRL LOG-003) for each DRMIS storage location that was counted physically.
- 6.5.5.7 If discrepancies are found, a Stocktaking Investigation Report, in accordance with Stocktaking Investigation Reporting (CDRL LOG-004), is to be completed and submitted to the supporting QAR and ROCEA within 30 days of the physical count.
- 6.5.5.8 For non-catalogued materiel, the Contractor must keep accurate records. When performing a stocktaking on any GOCCM that is not accounted for in DRMIS, the Contractor must:
- a) Compare the count results with the actual quantities recorded in the Contractor's local system;
 - b) Adjust their records should deficiencies be discovered;
 - c) advise the supporting NDQAR and Procurement Authority if there are any deficiencies via email within 5 days of completion, and
 - d) Prepare and submit a deficiency report in accordance with Stocktaking Investigation Reporting (CDRL LOG-004).
- 6.5.6 **GOM Inventory Rationalization**
- 6.5.6.1 In conjunction with the stocktaking schedule, the Contractor must carry out a review of J85 GOCCM to determine if holdings of any particular item:
- a. Exceeds the economic stock retention level;
 - b. Has become surplus to requirement as a result of end item disposal/retirement; or
 - c. Has become redundant because of a modification change notice, product improvement, etc.
- 6.5.6.2 The Contractor must:
- a. Appropriately dispose of, and/or transfer, CIS and/or GFOS meeting para 6.5.8.1. criteria;
 - b. Prepare/staff the necessary documentation associated with the disposal function in accordance with paragraph 6.10 (below); and
 - c. Submit disposal documentation to DND for approval
- 6.6 **Life Cycle Materiel Management & Obsolescence Management**

- 6.6.1 The Contractor must perform all Life Cycle Materiel Management (LCMM) functions on in-scope PG equipment, associated spares and support equipment deemed necessary to meet Contract requirements and outcomes sought by Canada.
- 6.6.2 The Contractor is responsible for the obsolescence management of in-scope PG equipment and associated spares. The Contractor must develop strategies to address obsolescence of parts and equipment to ensure that the performance of contracted outcomes is not negatively affected, and to ensure compliance with Continuing Airworthiness requirements as described in Section 4.5.3 of this Annex.
- 6.7 **Repair and Overhaul - Administration**
- 6.7.1 **General**
- 6.7.1.1 The Contractor must comply with the R&O requirements for all DND-owned assets (as outlined in A-LM-184-001/JS-001) with the exception of the sections covering Accountable Advance Spares (AAS), Contractor Effectiveness Report (CER), First-in-First-out (FIFO), Free-Flow Equipment, Maximum Repair Cost (MRC), Priority Repair Request (PRR), Selection Notice and Priority Summary (SNAPS), and Turn Around Time (TAT).
- 6.7.1.2 The Contractor must comply immediately with all 'stop repair' instructions issued by Canada.
- 6.7.2 **Reduction to Spares**
- 6.7.2.1 Reduction to spares is a disposal activity that must occur with appropriate authorization. The resulting piece parts will become GFOS. When the Contractor is directed by the EMT to reduce DND-owned assets into spares or scrap, the Contractor must:
- a) Disassemble the equipment in accordance with the applicable CFTO into subcomponents as directed by the TA;
 - b) Assess the desired subcomponents for serviceability;
 - c) Serviceable components that are catalogued in CGCS must be reported to the responsible NDQAR for induction to DRMIS;
 - d) Serviceable components that are not catalogued must be reported to the TA via the ROCEA for direction; and
 - e) The remaining parts and components are to be disposed in accordance with para 5.9 of this PWS.
- 6.7.3 **Special Tooling**
- 6.7.3.1 The Contractor must acquire all Special Tools and Test Equipment necessary to carry out work at Third Line; unless specifically provided by Canada, as per Annex F (GSM and GFE). All GSM and GFE will be accounted for on a separate loan agreement.
- 6.7.4 **Initiation of R&O**
- 6.7.4.1 The Contractor must initiate a Work Order on DND's System of Record for all work performed at Second and Third Line.
- 6.7.4.2 The Contractor is responsible to maintain and update the Work Order, including accumulated labour hours; and all materiel issued to or removed from the equipment.
- 6.7.5 **Identification Marking**

- 6.7.5.1 The Contractor must restore the original marking information for all equipment assemblies, their packaging and/or components after overhaul or reconditioning.
- 6.7.5.2 The Contractor must add the following information immediately adjacent to the original identification markings or previous reconditioning markings:
- a. Reconditioner's identification, date of reconditioning, inspector's stamp/number; and
 - b. When it is not practicable to add this information to the part, it is permissible to annotate the information onto a suitable tag (to be attached to the part prior to shipping).
- 6.7.6 **Completion of R&O**
- 6.7.6.1 On completion of Repair and/or Overhaul, the Contractor must:
- a. Stamp the "Contractor Certification" in accordance with Chapter 3.1 of A-LM-184-001/JS-001;
 - b. Prepare and affix a CF942 Materiel Condition Tag in accordance with C-02-005-009/AM-000;
 - c. Update applicable maintenance records;
 - d. Close the Work Order on DND's System of Record; and
 - e. Issue the equipment to the serviceable SLoc of the CRPA account.
- 6.7.7 **Warranty Consideration**
- 6.7.7.1 The Contractor must ensure that CIS returned for warranty consideration will be actioned in accordance with Chapter 9 of A-LM-184-001/JS-001.
- 6.8 **Mission Sparing Support – Air Demonstration Deployments with one PUK**
- 6.8.1.1 The Contractor must support the concurrent deployment with a PUK while sustaining local flying at MOB.
- 6.8.1.2 The Contractor must prepare PUK for deployment; ensuring that items are packaged in the appropriate shipping containers, and that all materiel contained in the PUK has been prepared in accordance with regulations applicable to the transportation of dangerous and controlled goods.
- 6.8.2 **Re-supply of Deployment PUK during Airshow Season**
- 6.8.2.1 The Contractor must prepare, stock and support the re-supply of the Pack-Up Kit (PUK).
- 6.8.2.2 Re-supply items shall be appropriately packaged and preserved as required for shipment.
- 6.8.3 **Movement of PUKs and re-supply items**
- 6.8.3.1 Canada is responsible for the movement of PUKs and replenishment items to deployed locations. The pack-up kit is in the CMTT/Green Fleet (DRMIS SCM) truck (MSV) on the road during the show swings. RCAF will retain responsibility for stocking and managing the Pack-Up Kit.
- 6.9 **Materiel Movement**
- 6.9.1 **Transportation and Brokerage**

6.9.1.1 Canada may request that the Contractor support shipment of items issued from the Contractor to any location in North America in situations where the Contractor is able to respond faster than DND. The Contractor will support these requests on an as and when requested basis when approved by both the TA and PA, and as authorized by email.

6.9.2 **Shipping Containers**

6.9.2.1 Canada will provide existing specialized shipping containers as CIS. The Contractor must obtain an approved DND626 prior to the purchase of additional shipping containers. Once purchased, the Contractor must bring them on charge as CIS.

6.10 **Materiel Disposal**

6.10.1 **General and Technical Regulations**

6.10.1.1 The Contractor can make materiel disposal recommendations; however, DND must approve all Disposal Plans.

6.10.1.2 The Directorate of Supply Chain Operations (DSCO) is the functional authority for coordinating the disposal of all surplus assets on behalf of DND. The subsequent sale of materiel is the responsibility of the GC Surplus Team of PSPC.

6.10.1.3 The Contractor must comply with Defence Supply Chain (DSC) disposal framework and policies. If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list:

- a. DAOD 3013-0: Surplus Materiel
- b. DAOD 3013-1: Disposal of Surplus Materiel
- c. A-LM-184-001/JS-001: Special Instructions Repair and Overhaul Contractor;
- d. A-LM-007-100/AG-001: Canadian Forces Supply Administration Manual;
- e. A-LM-007-015/AG-001; and
- f. Crown Assets Act.

6.10.1.4 The Contractor must perform all disposal activities to ensure non-conforming materiel does not make it into service in accordance with the TAM and its DND TAA-approved MSPM (CDRL AW-005).

6.10.1.5 The disposal of hazardous material is subject to Federal, Provincial and Municipal regulations and laws. The Contractor must adhere to these laws when disposing of items under this Contract.

6.10.2 **Disposal Plan**

6.10.2.1 The Contractor must identify PG systems assets that are in excess to DND's requirements.

6.10.2.2 The Contractor must develop, submit and maintain Disposal Plans in accordance with CDRL MAT-003.

6.10.2.3 The Contractor shall monitor and execute the disposal of dormant stock as per the DND-approved Disposal Plan (CDRL MAT-003).

6.10.2.4 The Contractor must assist DND in maximizing the net disposal revenue while minimizing processing and overhead costs.

6.10.3 **Demilitarization**

- 6.10.3.1 The Contractor must prepare, and staff to the TA, all applicable forms and plans required for Canada to approve disposal actions; including identifying the condition of the goods, and making appropriate recommendations on acceptable demilitarization methods and facilities.
- 6.10.3.2 The Contractor must comply with DND policy for demilitarization of controlled goods.
- 6.10.4 **Scrapping Action**
 - 6.10.4.1 The Contractor must ensure that spares designated for disposal are segregated from airworthy products.
 - 6.10.4.2 The Contractor must mutilate any PG component to be scrapped such that it cannot be mistaken for a serviceable component. The method of mutilation must be agreed upon between the TA and the Contractor, and must comply with all applicable demilitarization requirements.
 - 6.10.4.3 The Contractor must ensure that any scrapping action at Second and Third Line for items with demilitarization requirements must be witnessed by Quality Assurance Representative (QAR). The Contractor must allow for QAR oversight of all disposal activities.
- 6.10.5 **End-of-Fleet-Life (EFL) and Fleet Major Reduction Disposal**
 - 6.10.5.1 The specific disposal activities in support of the CT114 End-of-Fleet-Life (EFL) or in support of a major CT114 fleet aircraft reduction will be tasked using a duly signed DND 626.
- 6.11 **Materiel Administration**
 - 6.11.1 **Document Retention**
 - 6.11.1.1 The Contractor must file and retain the following auditable transaction documentation by applicable account (RMA or CRPA) warehouse either by Stock Code or by Requisition Number, in accordance with Chapter 8 of A-LM-184-001/JS-001:
 - a. Stock Code sequence followed by requisition number; or
 - b. Requisition number.
 - 6.11.1.2 The Contractor must account for/address the following:
 - a. Materiel held on CRPA, RMA and RRMA must be in DND's system of record as per the Defence Supply Chain (DSC) automated procedures in accordance with A-LM-184-001/JS-001; and
 - b. Government Furnished Overhaul Spares (GFOS) in either a manual or an automated system. Regardless of the system used, the Contractor must maintain an audit trail acceptable to DND.
 - 6.11.2 **Reporting Materiel Support Services**
 - 6.11.2.1 The Contractor must prepare and submit a Repair and Overhaul Report in accordance with CDRL MAT-001
 - 6.11.2.2 The Contractor must deliver an Annual Contractor Held Inventory (CHI) Report in accordance with CDRL MAT-002.
 - 6.11.2.3 The Contractor must deliver a Disposal Plan in accordance with CDRL MAT-003.
 - 6.11.2.4 The Contractor must deliver a Monthly Data Report in accordance with CDRL MAT-004.

7 Training Support Services

7.1 General

7.1.1 The Contractor must provide the following Training Support Services:

- a. Assistance to Canada in improving First Line technicians' maintenance proficiency as necessary to achieve Contract outcomes; and
- b. Training for Canada personnel on new equipment, tools, and IM/IT systems introduced or maintained by the Contractor and to be used by Canada personnel.

7.2 Planning Training Support Services

7.2.1 The Contractor must perform Training Support Services in accordance with this Annex.

7.3 Reporting Training Support Services

7.3.1 Not used.

7.4 Technical Regulation

7.4.1 Formal training of Canada technicians leading to trade-essential qualifications is provided by 2 Cdn Air Division and regulated through the Canadian Forces Individual Training and Education System (CFITES).

7.4.2 The authority to perform and certify on-aircraft and off-aircraft work is regimented by the TAM. In accordance with C-05-005-P03/AM-001, this authority is granted to RCAF technicians by a unit Senior Aircraft Maintenance Supervisor (SAMS) for each set of tasks applicable to First or Second Level maintenance in accordance with the 1 Cdn Air Div-approved Aircraft Weapon System Authorization Codes (A-PD-055-500/PQ-000).

7.4.3 The Contractor's Training Support Services must be compatible with these regulations.

7.5 Training Support Services - Details

7.5.1 First Line Maintenance Proficiency

7.5.1.1 Proficiency gains at First Line will contribute to Contract performance outcomes (e.g., improved availability through the reduction of No Fault Found findings) and can be achieved via initiatives such as: informal coaching; technical briefs; development of On-the-Job-Training (OJT) packages; and recommendation for Unit Employment Training Plans (UETP) improvements. As required, to meet the Contract performance outcomes, the Contractor may assist DND in improving First Line maintenance technical proficiency with particular focus on testing, troubleshooting, and repair skills of First Line Canada technicians.

7.5.2 IM/IT Training Requirements

7.5.2.1 The Contractor must provide user training and user manuals to Canada personnel on IM/IT applications that are provided and/or supported by the Contractor. Training must be provided for new users, and for existing users where enhancements are implemented that affect the use of the application and/or data.

7.5.2.2 The Contractor must provide user training and user manuals for new tools, techniques, methods, or equipment introduced by the Contractor.

7.5.3 **Additional Training Requirements**

7.5.3.1 The Contractor must provide assistance for technical training of DND personnel when requested by Canada using a DND 626 tasking.

8 Technical Data and Publications Management Support Services

8.1 General

- 8.1.1 The Contractor must provide Technical Data and Publications Management Support Services as defined in this Section.

8.2 Technical Data Management Support Services

- 8.2.1 The Contractor must perform all of the activities necessary to update and maintain the PG systems Technical Data including, but not limited to: collecting; organizing; storing; controlling; disseminating; using; and disposing of Technical Data.
- 8.2.2 The Contractor must perform Technical Data Management Support Services in accordance with this Annex.
- 8.2.3 Contractor-managed Technical Data must be made available to Canada on request.
- 8.2.4 The Contractor must set up and maintain a repository for the collection and management of Logistic Support Analysis Records (LSAR) required in delivering performance-based sustainment services. This includes the records associated with Appendix 4, Contract Data Requirements List & Data Item Descriptions, and its Addendum 1, as well as the following Technical Data:
- a. Contractor-produced Technical Reports;
 - b. J85 and Secondary Power Systems Routine Engineering Orders (REOs);
 - c. J85 and Secondary Power Systems Engineering drawings (as received and in accordance with CDRL TD-001);
 - d. OEM-supplied data in support of the PG systems;
 - e. R&O maintenance documentation (ADAM portion of the Maintenance Record Set, Third Line Maintenance Reports, Certificates of Conformance for PG Systems and Components);
 - f. Bottom Line Measures and associated records;
 - g. J85 and Secondary Power Systems Non-Standard Repairs (NSRs);
 - h. Software documentation related to PG software systems;
 - i. J85 Second and Third Line CFTOs in accordance with Publication Management and Publishing Services; and
 - j. Other Technical Data as defined by the TA.
- 8.2.5 The Contractor must provide to the TA, the technical data generated in support of airworthiness processes as stated in Section 4.
- 8.2.6 The Contractor must review PG system related documentation received from the TA (originating from the OEM or other organization) and assess its impact on the PG system Technical Data. The assessment is to be staffed in accordance with paragraph 4.5.3.2.d.
- 8.2.7 The Contractor must provide, when requested by the TA, PG systems-related input and updates to the CT114 Canadian Military Aircraft Type Certificate (CMATC).

8.3 **Publication Management and Publishing Support Services**

8.3.1 **General**

- 8.3.1.1 The Contractor must maintain, publish and distribute J85 PG Systems First, Second and Third Level maintenance and Operational publications as specified in Appendix 1, Propulsion Group Equipment Scope.
- 8.3.1.2 In addition to those publications listed in Appendix 1, Propulsion Group Equipment Scope, the Contractor must maintain the currency and accuracy of the PG systems technical data contained in generic First, Second and Third Level CT114 maintenance publications.

8.3.2 **Maintenance**

- 8.3.2.1 The Contractor must perform the full spectrum of publication maintenance activities, as applicable to the in-scope J85 PG systems, to ensure adequate and airworthy publications are available to support maintenance, engineering, materiel and operational activities. The Contractor must ensure that the publications are kept up-to-date such that they accurately reflect the equipment or processes they support.
- 8.3.2.2 The Contractor must:
 - a. Conduct periodic audits of publications to ensure current versions are adequate;
 - b. Review and action all incoming source data in conjunction with engineering support requirements stipulated in paragraph 4.5.3, including Publication Discrepancy Reports (PDRs) and UCRs;
 - c. Identify the impact of publication changes on the J85 PG technical data and all other publications;
 - d. Identify the impact of changes to J85 PG technical data on all First, Second and Third Level CT114 maintenance publications;
 - e. Prepare and approve the TDP in support of publication amendments in accordance with engineering support requirements of Section 4 paragraph 4.5.3, Appendix 7, Decisions of Significance, and applicable TAM policies; and
 - f. Maintain a master copy of each publication.

8.3.3 **Publishing**

- 8.3.3.1 The Contractor must comply with publishing standard C-01-100-100/AG-006, and other applicable specifications and instructions listed in Appendix 6, List of References, for all technical publications used by Canada personnel.
- 8.3.3.2 The Contractor must publish publication amendments in the same format as its parent publication.
- 8.3.3.3 The Contractor must conduct technical accuracy, verification and validation of proposed amendments.
- 8.3.3.4 The Contractor must translate amendments to bilingual publications and verify accuracy of translated amendments.

8.3.4 **Distribution**

- 8.3.4.1 The vehicle for distribution of the First and Second Line publications resides primarily in the CT114 IETM application. The Contractor must submit XML source code and soft copy (PDF) of amendments, as identified in Appendix 1, Propulsion Group Equipment Scope, to the IETM administrator if the publication is published in the IETM.
- 8.3.4.2 The Contractor must reproduce, distribute and release the publication amendments in hardcopy format if not published in the IETM.

8.3.5 **Task-based Publication Management and Publishing Support Services**

- 8.3.5.1 In addition to the requirements above, the Contractor must provide TA-requested Publications Management and Publishing Support Services on an 'as when requested' basis, as authorized by a duly signed DND 626 Task Authorization form.

9 Information Management Support Services

9.1 General

- 9.1.1 The Contractor must provide Information Management Support Services encompassing all of the activities and functions required to collect, warehouse, format and deliver data and information.
- 9.1.2 The PGS Contract-Electronic Information Environment (EIE) consists of a combination of existing Canada IT systems and existing Contractor IT systems.

9.2 Planning Information Management Support Services

- 9.2.1 The Contractor must perform Information Management Support Services.

9.3 Technical Regulation

- 9.3.1 The Contractor must comply with the following policies where applicable:
 - a. Maintenance of the necessary IM/IT infrastructure to ensure compliance with the DND IM/IT Security Assessment and Authorization (SA&A) process in accordance with National Defence Security Orders and Directives (NDSOD) Chapter 7. This infrastructure must include all hardware, software, and networks including secure networks where required;
 - b. The PSPC Industrial Security Manual baseline security requirements for the safeguarding of DND/CF information and assets for all information systems that are owned by the Contractor and in which Canada-owned data resides or will reside;
 - c. The Royal Canadian Mounted Police (RCMP) Technical Security Standard for Information Technology (TSSIT) dated 1997 and the NDSOD for all Contractor-provided Information Systems that connect to DND Information systems or process and/or store classified and/or designated DND/CF data;
 - d. The Canadian Security Establishment (CSE) Information Technology Security Guidance publication ITSG-06 Clearing and Declassifying Electronic Data Storage Devices for all magnetic storage media provided by the Contractor which become Canada property, and for all magnetic storage media that are controlled by the Contractor and on which Canada-owned data resides or will reside; and
 - e. The CSE Information Technology Security Directive publication ITSD-22 Baseline Security Requirement for Network Security Zones assets provided by the Contractor which become Canada property, and for all information and IT assets that are owned by the Contractor and in which Canada-owned data resides or will reside.

9.4 Information Management Support Services – Details

9.4.1 Electronic Information Exchange System

- 9.4.1.1 The Contractor must develop, maintain and support a secure EIES accessible for Canada users. The EIES must provide access to program management, performance and other PGS information, data and functions to complement the existing Canada-provided IT systems.
- 9.4.1.2 Specifically, the EIES must provide:
- a. Access to all contract deliverables;
 - b. Access to all documentation and data produced in support of the Contract;
 - c. Visibility into the mandated performance indicators (SHIs) in accordance with the schedules and definitions provided in CDRLs PF-001; and
 - d. Access to historical PG systems deliverables and data not already contained in the Canada-provided IT systems.
- 9.4.1.3 The EIES must incorporate, as a minimum, the following features of a document management system:
- a. Version control;
 - b. Access control to authorized users; and
 - c. Capability for Canada to download/upload files.
- 9.4.1.4 The Contractor must provide access to the EIES through a single interface accessible from any computer connected to the Defence Wide Area Network (DWAN).
- 9.4.1.5 The Contractor must provide an off-site disaster recovery system with a 24-hour interval back-up of all EIES data.
- 9.4.2 **Canada-Provided IT Systems**
- 9.4.2.1 **General**
- 9.4.2.1.1 DND has several IT systems that presently support the PGS program. Details regarding the existing applications, their interfaces and the databases related to each are found at Appendix 3, Information Management/Information Technology (IM/IT) Environment.
- 9.4.2.2 **Mandatory Canada-Provided, Contractor-Supported IT Systems**
- 9.4.2.2.1 Canada will provide the mandatory IT systems to be supported by the Contractor and associated hardware for management and use, including all data contained therein. The Contractor must provide Canada continued access and use of all existing and newly generated data.
- 9.4.2.2.2 The Canada-provided IT systems, as described in Appendix 3, IM/IT Environment, fall under the mandatory category.
- 9.4.2.2.3 The Contractor must support the software and hardware associated with the Canada-provided Contractor-Supported IT systems as described in Appendix 3.
- 9.4.2.2.4 The Contractor is responsible for the routine maintenance of the software and hardware associated with the systems as described in Appendix 3. Routine maintenance is to include routine software updates to these software systems to ensure their continued compatibility with other systems.
- 9.4.2.2.5 Canada will retain the responsibility for the procurement of replacement hardware associated with these systems. The Contractor must recommend to Canada, upgrades or changes to address obsolescence issues or reduced performance of the system due to normal usage.

9.4.2.2.6 Automated Data for Aerospace Maintenance (ADAM) system is the TAA-approved J85 engine Electronic Record Keeping System. The Contractor must ensure that the integrity of the data input and stored in ADAM is maintained at all times and that ADAM remains compliant with TAM, Part 5, Section 2.

9.4.2.3 Mandatory Canada-Provided, Canada-Supported IT Systems

9.4.2.3.1 The Contractor must input data into, employ or interface fully with the following Canada-supported IT systems as required in order to meet program outcomes and First and Second Level maintenance data recording requirements. Maintenance and support for these systems are a DND responsibility.

9.4.2.3.2 Canada will provide access to the following IT systems:

- a. Defence Wide Area Network (DWAN);
- b. Data Management System/Maintenance Record Set (ADAM/MRS);
- c. Defence Resources Management Information System (DRMIS);
- d. Flight Safety Information Management System (FSIMS);
- e. UCR Database;
- f. Canadian Government Catalogue of Materiel (CGCM);
- g. CT114 Publications and Library Management System (PALMS); and
- h. CT114 Interactive Electronic Technical Manual (IETM).

9.4.2.3.3 Prior to being provided with user accounts for Canada-supported IT systems, designated Contractor personnel will be required to attend initial training. Canada will provide the required training. Training will be provided in the event of upgrades, amendments or replacements for any Canada-unique systems.

9.4.3 Electronic Data Exchange Services

9.4.3.1 The Contractor must facilitate electronic data exchange between PGS Contract IT systems and other DND data systems as described in Appendix 3, IM/IT Environment.

10 Resource Requirements

10.1 General

- 10.1.1 This section defines the personnel resources that the Contractor must provide in order to enable the support services defined in Sections 2 through 9, as well as the Canada facilities made available to embedded Contractor personnel.

10.2 Personnel

10.2.1 General

- 10.2.1.1 The Contractor must establish its personnel resources to execute the Support Services defined in this PWS. Unless otherwise specified, Canada will not mandate nor direct the Contractor to allocate or retain personnel or resources to support the Work.
- 10.2.1.2 The Contractor must undertake all necessary recruitment, training, security clearance preparation and other human resources functions to ensure its personnel have the required skills, experience and qualifications to fulfill the Support Services requirements in this PWS.
- 10.2.1.3 The Contractor must provide personnel resources embedded within Canada facilities to provide the following services:
- 10.2.1.3.1 The following functions must be provided by Contractor personnel embedded at 15 Wing Moose Jaw:
- a. As defined in 5.5.3: Second Level maintenance production and coordination;
 - b. As defined in 5.5.4: First Level maintenance support (First Line Field Service Representative); and
 - c. As defined in 9.5.2: Field support for Contractor-maintained IM/IT systems.
- 10.2.1.3.2 The number of personnel assigned by the Contractor to perform the services at a given location is to be proposed by the Contractor in the CTIP in accordance with CDRL PM-003. Changes in the number of contracted resources proposed in the CTIP shall be subject to acceptance by Canada as detailed in the AAF and LTAF submissions.
- 10.2.1.4 The Contractor is required to appoint a dedicated Life Cycle Materiel Manager and Supply Manager, co-located with the WSM in the NCR.
- 10.2.1.5 Contractor personnel assigned to work in Canada's facilities shall conform to the administrative and security regulations of the establishment to which they are assigned, and be available on-site during core business hours.
- 10.2.1.6 The Contractor must make accessible a responsive point of contact during off-hours with the ability to reach back to the appropriate Contractor support services personnel in case of urgent operational need. The Contractor's point of contact must be able to coordinate provision of requested support services covering the scope of the PWS on a 24/7 basis, 365 days/year.

10.2.2 Personnel Certifications and Qualifications

- 10.2.2.1 Contractor personnel involved in performing airworthiness-related tasks must be authorized by the Contractor Senior Maintenance Manager, Senior Design Engineer or equivalent as defined in the TAA-approved Contractor airworthiness process manuals.

- 10.2.2.2 The Contractor must make available, upon request from the TAA, personnel airworthiness authorization records for all Contractor personnel involved in the performance of the work in this PWS.
- 10.2.2.3 Contractor personnel assigned to MOBs to provide technical support to First Line must have a minimum of 2 years of experience on the J85-CAN-40, and a minimum of 5 years of experience in aircraft and/or engine maintenance.
- 10.2.3 **PG Systems Technical Engineering Representative**
- 10.2.3.1 The Contractor must provide Technical Engineering Representative services responsive to the TA. Technical Engineering Representative services are defined as the provision of technical advice beyond what can be provided by a simple review of the applicable CFTOs. The technical advice must be based on relevant, prior hands-on maintenance, maintenance supervision, or engineering support experience on the applicable systems. This resource may be embedded within the NCR or may be one of the core engineers at the Contractor's facility.
- 10.2.4 **Training for Contractor Personnel**
- 10.2.4.1 The Contractor must provide qualified personnel with the necessary skills and qualifications. If one of the Contractor's personnel is replaced, then the replacement personnel may receive access to DND-specific training courses. The enrolment of Contractor personnel into the training course will require prior written approval by the TA and all associated costs must be absorbed by the Contractor.
- 10.2.4.2 For DND-generated changes to training requirements, the training will be provided by DND at no cost to the Contractor. Training may also be provided on DND-unique systems that have been recently implemented or changed.
- 10.3 **Facilities**
- 10.3.1 **MOB Facility (15 Wing Moose Jaw)**
- 10.3.1.1 Canada will provide office space for Contractor personnel at the MOB, as defined in Appendix 8, Wing Facility Support. Canada will furnish the offices, and provide telephone (CSN), and DWAN access.
- 10.3.1.2 Contractor personnel assigned to Second Line maintenance functions must share the existing Canada facilities and equipment with Canada personnel. Canada retains responsibility for the following Second Line maintenance facility support activities:
- a. Provision of serviceable Aircraft Maintenance Support Equipment (AMSE);
 - b. Servicing and calibration of existing tooling required for Second Line maintenance; and
 - c. All other support activities mandated by DND, the RCAF, the Wing or Squadron, and related to the upkeep of the facilities.
- 10.3.1.3 Contractor personnel may operate the J85 Engine Test Facility (ETFs) as required in support of Second Line production; however, maintenance of the ETFs and associated equipment is a Canada responsibility, including the maintenance of a service contract for ETF calibration.
- 10.3.1.4 Maintenance of the J85 Engine Test Facility is currently accomplished through an omnibus contract for multiple RCAF fleets. Should the requirement arise, and upon successful completion of negotiations, Canada reserves the right to transfer this scope to the Contractor.
- 10.3.1.5 The Second Line Maintenance Facilities are described in Appendix 8, Wing Facility Support.