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PURPOSE/SCOPE

- The purpose of this document is to outline to COLLINS Landing Gear suppliers the required method of implementing CATIA/ENOVIA-DMU.
- COLLINS Landing Gear works with many different vendors and has specific CATIA environments setup for each project. Each environment may require the use of different levels of CATIA/ENOVIA-DMU, Standards files and CATSettings files.

• <u>RESPONSIBILITIES</u>

• It is the responsibility of the supplier to ensure they have the required software at the correct level in order to communicate with COLLINS. COLLINS will not accept data which is returned from a supplier at a different level than specified for each project.

<u>REFERENCES/FORMS</u>

- Suppliers are expected to be at specific CATIA/ENOVIA-DMU functional levels for the project they
 are working on.
 - Suppliers are expected to migrate in a timely fashion.
 - COLLINS will attempt to provide advance notice when this migration will occur.
 - A new release is typically provided every six months. COLLINS does not necessarily use the latest release of CATIA/ENOVIA-DMU in production.
 - Specific service packs are available from your Business Partner.
 - Specific HotFix patches maybe be required and are available from Dassault Systemes or your Business Partner.
- Suppliers can use either CATIA or ENOVIA-DMU to view COLLINS 3D geometric data and 3D GD&T data. No other viewer is currently supported; this includes JT and 3D-PDF.
- It is expected that sub-tier suppliers will also follow these requirements.
- COLLINS will not support, nor sanction, any third party software to view CATIA 3D data.
- COLLINS uses InspectionXpert, integrated with CATIA, for the First Article Inspection (FAI).

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- CATIA or ENOVIA-DMU must be used to perform all First Article Inspections (FAI). It is unlikely
 that a supplier will be able to view all required dimensions without CATIA/ENOVIA-DMU, as not
 all dimensions are annotated.
- The FAI must be performed using CATIA or ENOVIA-DMU and cannot be performed using any third party viewing software.
- The naming of the FAI CATProduct will conform to COLLINS standards, i.e. <Part Number>_<rev>_FAI_<Supplier Name> CATProduct.
- It is required that CATIA/ENOVIA-DMU run on a Dassault certified platform which includes CPU, graphics card, graphics driver and OS. It is critical that FAI be performed on certified hardware and the correct certified graphics driver used. The latest certified driver is acceptable for those levels of CATIA/ENOVIA-DMU <u>NOT</u> listed at DS Website.
- http://www.3ds.com/implementation/technology/certified-derived-workstations
- CATIA V5 models, supplied by COLLINS, are not visibly revisioned, i.e. the file name will not have a revision number. The revision number will only be visible in the File/Properties panel. It is expected that suppliers will manage their data to ensure they are working to the correct released model.
- All file transfer of CATIA models will be through the MoveIT Server. Please contact your COLLINS sponsor to obtain MoveIT server access The Configuration and Data Management (CDM) group can assist with file transfer issues, <u>LGD.Oakville@COLLINS.utc.com</u>.
- All CATIA models will be supplied in ZIP format with password. See Content Server notes on the ZIP version currently supported.
- It is expected that suppliers will have antivirus software installed and that all models returned to COLLINS will be scanned and zipped.
- It is recommended that separate CATIA environments be setup for each project. Each environment would contain all the changes to the default CATSettings and also the Standards files. See Section 4.0 below.
- The COLLINS Landing Gear CATSettings files vary by project and are available on request by emailing <u>LGD-EngappAdmins@COLLINS.utc.com</u>.
- All environments must have 'Hybrid Design' disabled
- Tools/Options/Infrastructure/Part Infrastructure/Part Document.

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- All environments must not be able to create non-semantic tolerances/dimensions
- Tools/Options/Mechanical Design/Functional Tolerancing & Annotation.
- "Non-Semantic tolerance creation allowed' is unchecked and locked.
- 'Non-Semantic dimension creation allowed' is unchecked and locked.

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 It is recommended that suppliers use the COLLINS Landing Gear Standards files, ASME_GLG. This Standard file is based on the ASME Y14.5 1994 standard and is common across all

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COLLINS Landing Gear sites. The COLLINS Landing Gear Standard files are available on request by emailing <u>LGD-EngappAdmins@COLLINS.utc.com</u>.

- Due to Long Term Archive and Retrieval (LOTAR) issues with MBD, only CATIA Default Monospac821 font is allowed to be used. This is critical to ensure data can be migrated forward to other applications in the future. <u>www.lotar-international.org</u>
- COLLINS IT Services will not be available to support your CATIA/ENOVIA installation. ITS can
 discuss minor issues but it is up to the supplier to gain education in the administration of
 CATIA/ENOVIA through their selected DS Business Partner.
- COLLINS Landing Gear has migrated all Engineering workstations to Windows 10-64 bit.

DEFINITIONS/ACRONYMS/ABBREVIATION

- CATIA V4
 - The COLLINS AIRBUS A380 environment is currently at functional level V4.2.4.2.
 - The COLLINS BOEING environment is current at functional level V4.2.4.5 SP14.
 - The COLLINS GULFSTREAM environment is currently at functional level V4.2.4.5 SP14.
 - The COLLINS BOMBARDIER environment is currently at functional level V4.2.4.1.
- CATIA V5
 - The COLLINS AIRBUS A380 environment (R27.2.COLLINSAIRBUS) is currently at functional level V5-6R2017(V5R27, SP2).
 - The COLLINS AIRBUS A350 environment (R27.2.COLLINSAIRBUS) is currently at functional level V5-6R2017 (V5R27, SP2).
 - The COLLINS Agusta environment (COLLINSAGUSTA) is currently at functional level V5-6R2011 (V5R21, SP4).
 - The COLLINS Boeing environment (COLLINSBOEING) is currently at functional level V5-6R2021 (V5R31.3 HF 11).
 - The COLLINS Bombardier environment (COLLINSBOMBARDIER) is currently at functional level V5-6R2011 (V5R21, SP2).

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- The COLLINS Gulfstream environment (COLLINSGULFSTREAM) is currently at functional level V5-6R2018 (V5R28.3).
- The COLLINS Lockheed environment (COLLINSLOCKHEED) is currently at functional level V5-6R2020 (V5R30.2).
- The COLLINS Sikorsky environment (COLLINSSIKORSKY) is currently at functional level V5R21.4.
- The COLLINS GeneralAtomic environment (COLLINSGENERALATOMIC) is currently at functional level V5R26.3.
- All other projects within COLLINS Landing Gear use the default environment (COLLINS) which is currently at functional level V5R28.3.
- NC Programming, Tool Design and are currently at functional level V5R28.3. TestLab environments (COLLINS) is at V5R31.2.
- CATIA V6 (not currently in production at LG)

REVISION RECORD

Revision Description			
Revision	Date Entered Into Pilgrim	Summary and Reasons for Changes	Originator
00	July 7, 2016		
01	May 5, 2018	 Updated Lockheed, Boeing CATIA v5 environments. Updated Section 5, versions of peripheral software Added COLLINS General Atomics environment Windows 10 comment 	Graeme Walker
02	October 2, 2019	Updated BOEING CATIA V5 environments	Evangelos Katsinos
03	Oct 6th, 2020	Updated AIRBUS and GULFSTREAM environments	Evangelos.katsinos
04	March 15, 2021	Updated Approvals List and corrected BOEING ENV typo's	Evangelos Katsinos
05	Sept. 30, 2022	Updated Lockheed Martin, GULFSTREAM, BOEING CATIA Environment	Evangelos Katisnos

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APPROVALS

This document has been approved by the following individuals:

Evangelos Katsinos	DT Engineering Administrator