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MEGGITT SERVICES AND SUPPORT

SPEC2000 CHAPTER 11-10 AND 11-11 REPORTING FOR MRO USING WEBAPP TOOL (WITH BATCH INTEGRATION OF SAP DATA)

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REVISION RECORD SHEET

ISSUE	DATE	DESCRIPTION	REVIEWED
1	7th Jan 2020	Original release, based on Services and Support Fribourg Document PLS-918 rev03, used for SAP S2K solution. Based on S2K Web App version 1.0.3	Mal Gordon S&S Cov
2	13th Feb 2020	§4.2.2 , §5.1 Add *Delete* feature Update segments screenshots to include the *Delete* button §5.1 , §5.3 Add *Partial save* feature for the RECEIVED LRU segment	Mal Gordon S&S Cov
3	3rd of Jul 2020	§ 4.1 Add “Power BI data” and “User manual” § 5.1 Add “autosave” feature to segments SUS/RPS/NHS § 5.8.2 Add note for “autosave” feature § 8.2 Advanced exchange placed before Subcontract chapter add “autosave” comment Add APPENDIX for searching reg n° in paperwork’s Based on S2K Web App version 1.1.9	Mal Gordon S&S Cov
4	9th of June 2021	§ 1.2 No more refresh rate, now real time § 4.1 Add “Maintenance Notices” and “Api Client” to admin menu § 4.1 Delete “Boeing data” from admin menu § 4.1 Add “Engines List” in the reference menu § 5 Add engine info segment § 5.5 Add reference to the WebApp list in the table § 5.6 Add engine info segment + update all following paragraphs n° in chapter §5 § 5.9.1 Add piece parts damaged by customer in the table	Mal Gordon S&S Cov Thomas Schambach S&S CH
Prepared on : Microsoft Word 2010			

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1 GENERAL

This document introduces the ATA Spec2000 reporting and describes the procedures for implementing it in MRO activities.

1.1 What is Spec2000?

Spec2000, often abbreviated S2K, is a specification for aerospace E-business, edited by the Airlines for America (formerly known as Air Transport Association ATA). It contains recommendations for standardised communication between companies. The aim is to provide standards for the most cost effective exchange of information related to aircraft material, between airlines and suppliers.

Some Original Equipment Manufacturers (OEM) of aircraft and engines require MRO centres to report repairs data according to sections 11-10 and 11-11 of the Spec2000. The ATA does not mandate S2K compliant reporting, it is a contractual requirement of the OEMs with their suppliers. Meggitt is then contractually obliged to provide an S2K record for parts coming into our repair shops.

1.1.1 Spec2000 Chapters

The full ATA Spec2000 is a document structured in 17 chapters and has over 2300 pages. The chapters are stand alone to ease the implementation of each independently from the others. The chapters cover several topics, as for examples provisioning, procurement, customer invoicing, performance metrics, warranties and others.

This manual only covers a small part of the specification: *Chapter 11 – Reliability Data Collection/Exchange*. Chapter 11 is divided in 15 sections; but only sections *11-10 – Shop findings record* and *11-11 Piece Part record* will be addressed with this document.

The specification defines section *11-10 Shop Findings Record* as follows:

"This record is for collecting and exchanging LRU shop repair/teardown findings. It is to be completed by an aircraft operator's repair shop, third party repair facility or original equipment manufacturer for the purpose of detailing the findings associated with an LRU that enters a shop. The Shop Findings Record is also used to collect Shop Replaceable Units (SRU's) and other piece parts associated with the shop received LRU.
Key fields will link the LRU Removal Record to the Shop Finding Record."

While section *11-11 Piece Part Record* has the following definition:

"This record is for collecting and exchanging information about Shop Replaceable Units (SRU's) and other piece parts associated with a shop received LRU.
Key fields will link the Piece Part Record to the Shop Finding Record."

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1.1.2 Spec2000 extraction format

The specification also defines the format in which the Reliability Data records have to be formatted and delivered:

"The Reliability Data files defined in this specification should be formatted for exchange using the Extensible Mark-up Language (XML). XML is an international standard mark-up language for structuring data and enabling interoperability between diverse computer systems, and is widely supported by most major software applications."

For each one of these sections, a series of fields are defined as well as the valid entry for each of those fields. Some may just have a character limitation, others have a limited and predefined number of options.

1.2 MRO Process

Meggitt is required to implement reporting according to S2K for all MRO activities involving field removals. OEM rejections or "zero hours" removals may need to comply with this specification dependent on the contractual requirements.

The S2K reporting for sections 11-10 and 11-11 has been implemented in SAP in 2016. In 2019, an online tool was developed and implemented in order to add additional features that could not be prioritised in the current SAP development timeline and to allow the deployment of S2K reporting to non-SAP sites. An additional aim of this online tool is to provide data for combining with other product performance information using analysis tools such as PowerBI.

The process of data collection is similar to the SAP solution used in several shops. Where possible, information is directly retrieved from the notification linked to the repair order from SAP to the online tool. The SAP data feed is almost real time and is refreshed when entering a records.

A list of Part Numbers (PNR) for which S2K reporting is not required can be set by each MRO shop. These lists are edited directly in the online tool by site administrator (see §4.1 menu *Admin*). The online tool will filter notifications in order to exclude all PNR listed there.

The process, optimised in 4 phases, is collaborative and requires mainly actions from the repair shop administration team and technicians working on parts. The following chart illustrates a typical process with tasks by function (admin and tech) and by reporting type (SAP notification and S2K online tool).

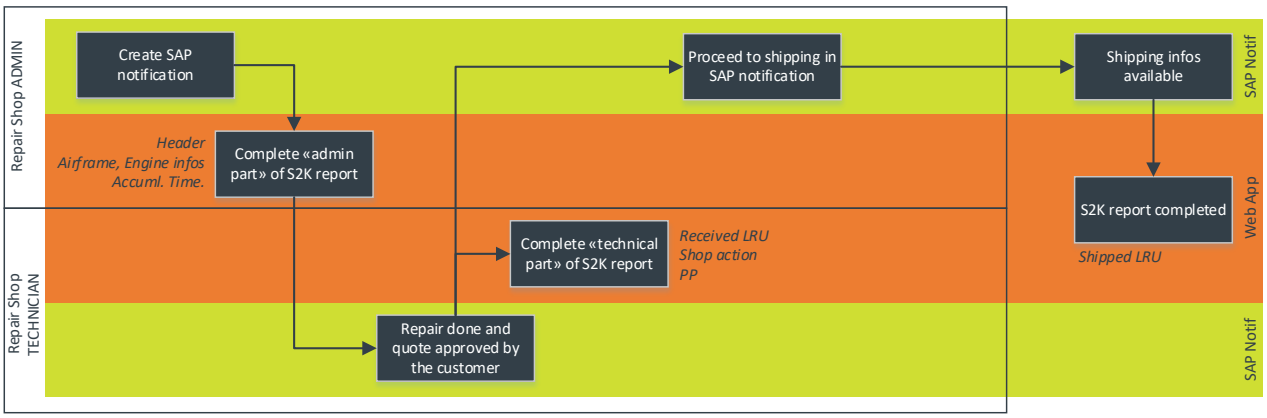

Figure 1: Typical Process workflow

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1.3 Data Extraction

Product Support or the designated person in charge of delivering the final report is able to extract the XML files correctly formatted and ready for submission. The extract can be filtered by date, Part Number, Notification number and S2K record completeness. This makes the tool very versatile and records can therefore also be used as internal indicators, for example, for part consumption or general reliability monitoring.

2 GENERAL RULES

2.1.1 Optional fields

Most of the fields are optional. This document focuses on the description of the mandatory fields to be completed for each notification.

Note: Some optional fields, if completed, will require other optional fields to be completed to avoid the record being tagged as incomplete. It is therefore recommended to concentrate on completing the mandatory fields rather than filling in optional ones.

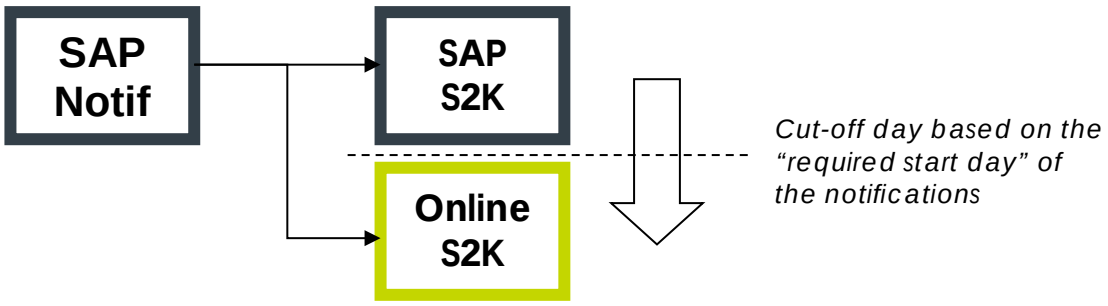
2.1.2 Missing Data

Do not make up data. If data is missing or is not detailed by the customer, use the specific characters as described in chapter §5. Most fields have a defined entry for these cases, these may be “N/A”, “zzzzz” or others. Please refer to the appropriated chapter of this document to find out applicable codes.

2.1.3 Uploading from SAP notification

Some data is automatically extracted from the notification. This data populates fields in the online tool only into “unsaved” segments.

The imported data can be modified in the S2K record. Be aware that the modification will apply to the S2K record only and will not be transferred back to SAP. For MRO sites currently using SAP S2K solution the cut-off date will be fixed. All notifications with a “required start date” before this date would need to be reported using the SAP S2K solution. Both S2K solutions are independent from each other.



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3 ACCESS TO THE ONLINE TOOL

The access to the online tool is protected by a user login and the network used. It is not possible to get access from a computer outside of Meggitt without using a VPN. The user account has to be registered in the database. Only the approved people will be able to get a login. Upper permissions to users are available on demand to the site administrator.

Minimum requirements to access to the online tool is:

- Computer (not tested on smartphone or tablet)
- Internet connection through Meggitt LAN, WLAN or VPN
- Last version of Chrome or Firefox installed
  Other browsers have not been tested so they are not recommended
- Meggitt personal or Meggitt generic email address (address MUST end “meggitt.com”)

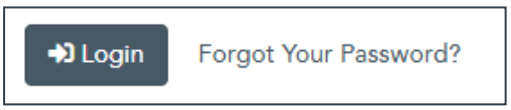
It is recommended to disable auto-fill function from your internet browser.

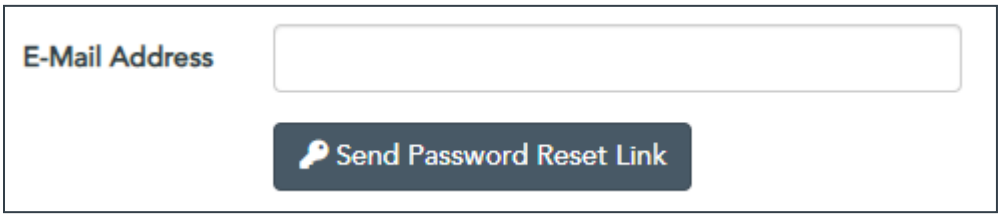
For Chrome:
Parameters → **automatic fill-in** → **addresses and others** → “disable”

For Firefox:
Options → **Privacy & Security** → **Forms & Passwords**→ **Autofill addresses** → “disable”

Address to access to the online tool is https://spec2kapp-production.azurewebsites.net/login

For the initial connection, the user e-mail address has to be registered by a site administrator. Then a link to the online tool is automatically sent to the new user. The password has to be requested using the “Forgot your Password?” function. The password will be then send to the registered e-mail address.





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4 USAGE OF THE ONLINE TOOL

Here is the basic lexical and structure of the tool:

Lists The on-line tool is organized in 3 lists: To Do, In Progress, and Other containing, Standby and Deleted. Each list contains records.

Records They are identified by their notification number. A record will only be displayed in one list. Records move from list to list by user's actions.

Segments Each record contain segments. Some segments must be completed (mandatory)

Fields Each segments contain several fields. Some fields must be completed (mandatory)

4.1 Top menu

Depending on the users' access level, content of displays may differ.

To Do This list contains all notifications that have not been treated yet. Any segment saved would move the notification to the "In Progress" list

In Progress This list contains all notifications that have at least one segment "saved"

Other This menu contains "standby" and "deleted" notifications:

Standby	notifications pending for information
Deleted	notifications voluntary deleted or automatically excluded by Part Lists

Export This page is used to create and export lists of records

Admin This menu contains pages for administrators:

Users	user's list and management
Activity	list of all activities performed by users
*Customers**	list of standard Customers Names and ICAO code
Locations	list of all locations with their management
*Cage codes**	all MRO cage codes with their management
Part lists	PNR exclusion lists per location
*Power BI data**	CSV files automatically generated everyday
*Maintenance Notices**	alerts can be set to alert users of potential site issues or maintenance/updates
*Api Clients**	API users management

(= data admin only)*

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Reference This menu contains pages of all references used:

User Manual	link to the user manual located on the S&S SharePoint
Customers	customers list with their ICAO code (§5.2)
Locations	all MRO locations with their SAP plant code and time zone (§5.2)
Cage Codes	all MRO cage codes
Aircrafts List	all aircrafts by reg. n°, model and manufacturer (§5.5)
Engines List	all engines types, models and manufacturers (§5.6)
Location Parts	all PNR excluded applicable to the site of the logged user
*RCS Failures Code*s	exhaustive list of failure codes accepted (§5.3)
Shop Action Codes	exhaustive list of shop action codes with their applicable “repair final action” indicator (§5.4)
User Roles	table of credentials per role

Username This menu contains settings of the current user logged:

Your Activities

Message Settings

Change Password

Logout Log out of the online tool.

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4.2 Lists and Navigation

4.2.1 Filters and search

Search
- Search the value within : user, ID, material, serial
- No wild char (*) needed
- Not case sensitive
- No space allowed

Status of the records
- All Statuses
- In Progress (at least one segment saved): no ship/scrap date available
- Subcontracted (highlighted in white): notification with UserStatus SUBC (§8.3)
- Complete & Scrapped (highlighted in green): scrap date provided (§8.1)
- Complete & Shipped (highlighted in green): ship date provided

Validity (not available in “ToDo” and “Deleted” lists)
- Valid: all mandatory segments are saved
- Invalid: not all mandatory segments are saved

Locations
- List of locations with their site code

From/To dates
- Filters on received date (required start date of the notification)

Submit button
- Apply the filters selected, including the search field

Reset button
- Remove all selected filters

Note: filters and search applied to a list will be also applied to the other lists (except for the export list).

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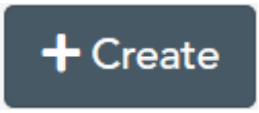
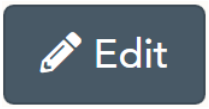
4.2.2 Actions buttons and symbols



Create a record from the “To Do” list



Edit a record

Save a segment (even partially)

Reset a filter or fields’ entries

Delete all manual entries and save the segment

Suspend a record (goes to standby list)

Resume a record (from the standby list)

Delete a record (goes to delete list)

Restore a record (from the delete list)

Invalid segment (mandatory) or invalid record

Invalid segment but not mandatory

Valid segment or valid record

Mandatory segment or mandatory field

Part shipped and the date

Part scrapped and the date

Give a feedback regarding the tool: bug, proposal, improvement.

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5 FILLING S2K RECORD

The following table shows a typical breakdown of responsibility for completion of the segments of Chapters 11-10 and 11-11.

Segment name	Chapters in this document	To be completed by
Header	5.2	Administration
Received LRU	5.3	Technician
Shop Action	5.4	Technician
Aircraft Info	5.5	Administration
Engine Info	5.6	Administration/ Technician
Shipped LRU	5.7	*No mandatory fields*
Accum. Time	5.8	Administration
Piece Parts	5.9	Technician

5.1 Records management

How to create a record

From the **To Do** list, click on the “Create” button. The header segment of the record is opened.

Note: The record will move to the “In Progress” list only if at least 1 segment is saved.

How to edit a record

From the **In Progress** or **Export** lists, click on the “Edit” button.

How to save a segment / record

From any segment, click on the “Save” button. The segments are saved one at a time. The segment is saved only if all mandatory fields are completed and all data is valid. If an error message is displayed, the segment is not saved. Check the icon next to the segment name to see which are valid (completed) or invalid (not-completed).

The only exception is in the “Received LRU” segment. This segment allows a partial save as it could completed by different functions at different steps of the repair process.

Some segments are automatically saved if mandatory fields are all completed and all fields are valid. This process is performed once per 24hrs. Related segments are “Shipped LRU”, “Engine Info”, “RPS” and “NHS”.

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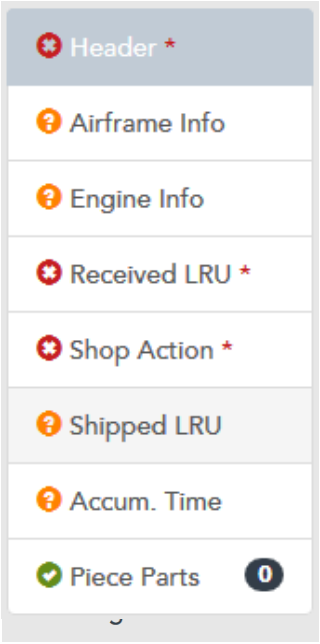
Basic rules and features



A record is considered “valid” when all mandatory segment are completed correctly. When a segment is “valid”, SAP feeds will not be able to update the data in this segment.

Only the most important segments are displayed by default. Click on the checkbox “All segments” at the bottom of the list to display all segments.

In some segments, “Reset” buttons are available. As some field are linked together, it is not possible to modify them if the related field is populated. By using these buttons it is possible to erase all related data to allow the user to start with empty fields.

“Delete” buttons are available in most segments. It allows users to delete all manual entries and save the segment with only default values and SAP feed.

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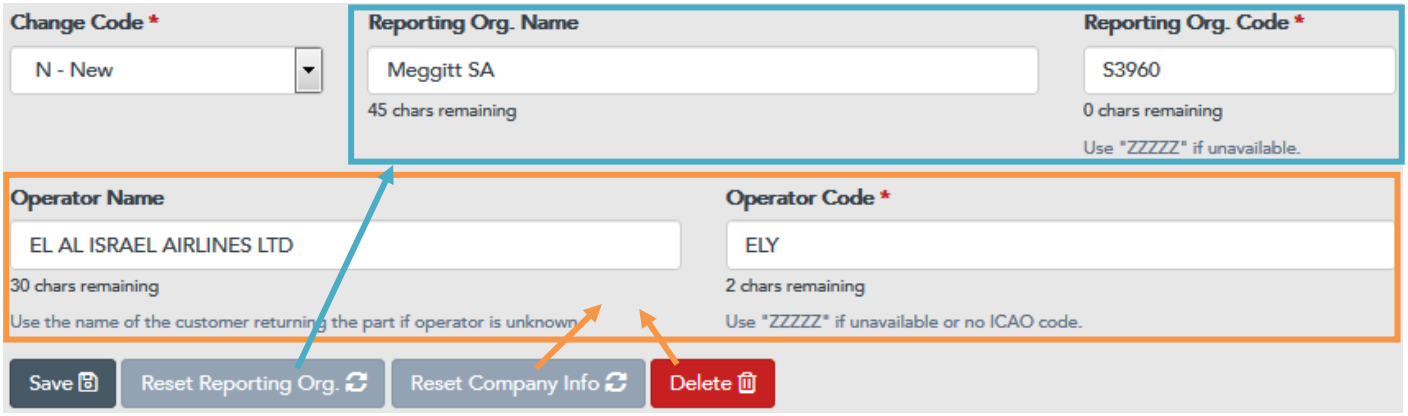
5.2 Header

The header contains basic information, as who sent the part and who is doing the repair.



Field Name	*Options*	*Comment*
Fields automatically completed		
Change Code	**N** = New **D** = Delete **T** = Total Replacement	Use: **"N"** for a new notification (by default). **"D"** if the record is deleted and replaced by another one. **"T"** if the record replaces an older record which has been already extracted and sent.
Reporting Org	Any Meggitt MRO	Name of the organization filling the record. This field is linked with the *Reporting Org. Code*.
Reporting Organization	Corresponding Cage Code If no cage code is assigned: '**ZZZZZ**' (5x 'Z')	Cage code of the organization emitting the record. This field is linked with the *Reporting Org. Name*.
Fields to be completed manually		
Operator Name	Examples: **"Qatar Airways"** "**Avtrade Global HQ"** **"Meggitt Orange County"** **"Lufthansa Technik"**	Name of the operator that removed the part. If known, it has to be the operator name. If unknown, it will be the shop maintenance that had send to parts, including MOC, MAAP, Lufthansa Technik, etc. It is mandatory if "Operator code" is 'ZZZZZ' This field is linked with the *Operator Code*.
Operator Code	**ICAO 3 letter airline code**. If unknown, engine shop, or other MRO : '**ZZZZZ**' (5x 'Z')	Only operator ICAO code. If the operator is unknown, put 'ZZZZZ' This field is linked with the *Operator Name*.

Note: the exhaustive list of all customers can be consulted in the reference menu "Customers".

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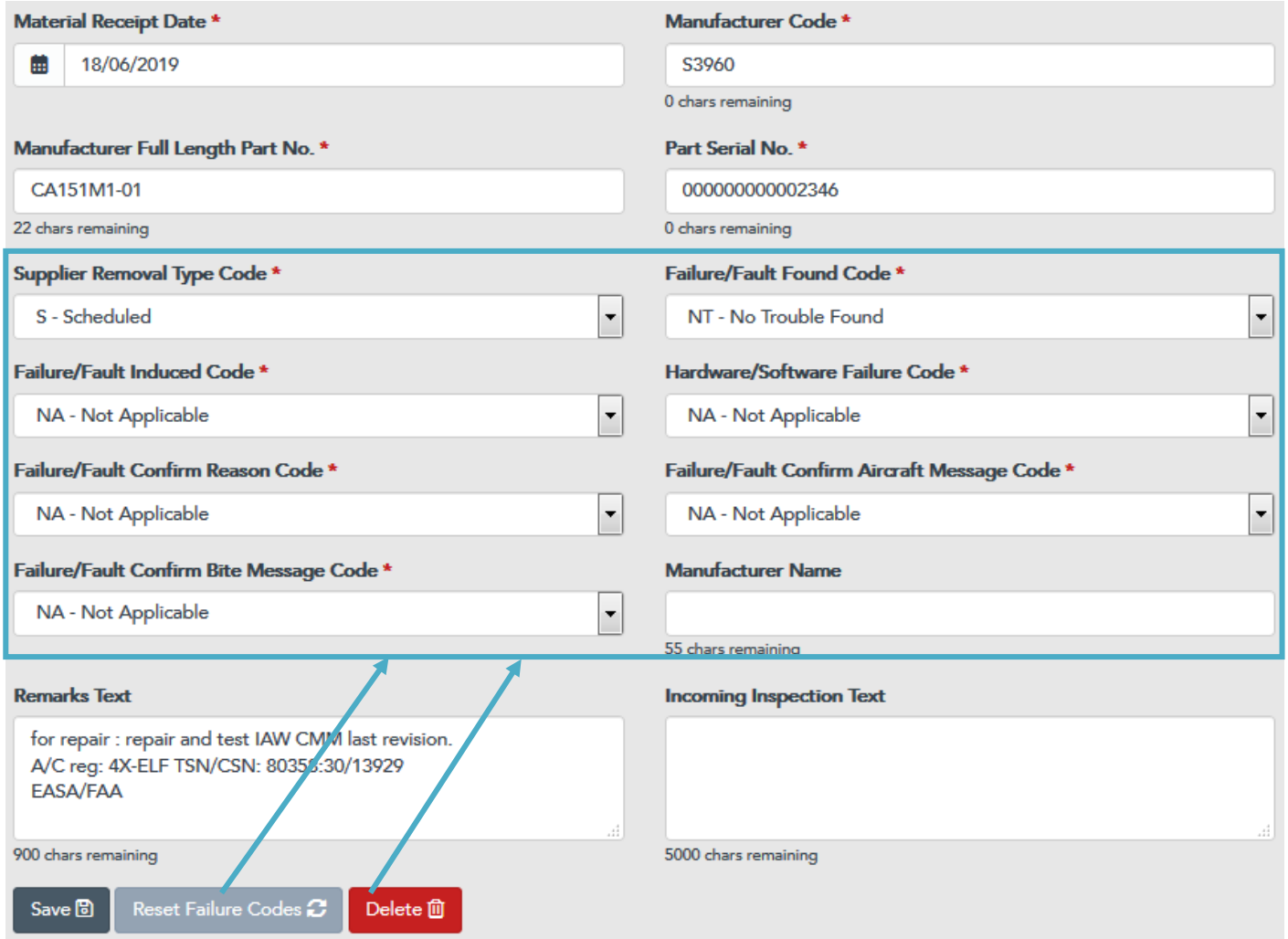
5.3 Received LRU

This segment contains the identification of the received equipment and, most importantly, information related to the shop findings.



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Field Name	*Options*	*Comment*
Fields automatically completed		
Shop Rcvd Date	Format: **dd/mm/yyyy**	Required start date of the notification.
Rcvd Part No	Example: **241-322-008-022**	Part Number of received part. Ideally the Meggitt PNR.
Received Part Mfg. Code	Code of the current manufacturing site: e.g. Meggitt SA products : **S3960** e.g. Endevco & old New Hampshire parts: **95411** (not 58880)	Cage code of the organization manufacturing the Part Automatically filled **if mentioned in SAP database.** Can be modified or has to be entered manually if missing. Note: For reporting to Collins (Purepower LRUs) this should be **Collins Cage Code 73030**
Received Mfg. Serial No.	Example: **AG07154**	Serial Number of received part.
Comment Text	Free text	Copied text from notification “Fault Details”. Discard information that should not to be communicated to customers.
Fields to be completed manually		
Supplier Removal Type Code	**U** = Unscheduled **S** = Scheduled **M** = Modification **P** = Production return (OEM) **O** = Other (Not to be used without TC Holder agreement)	Use flowchart in appendix to select the correct codes.
Failure/Fault Found	**FT** = Failed Test **NA** = Not Applicable **NT** = No Trouble Found	
Fail/Fault Induced	**IN** = Induced **NA** = Not Applicable **NI** = Not Induced	
Fail/Fault Conf Reason for Removal	**CR** = Confirmed **NA** = Not Applicable **NC** = Not Confirmed	
Fault/Failure Confirms Aircraft Msg	**CM** = Confirms A/C Msg **NA** = Not Applicable **NM** = Doesn’t Confirm A/C Msg	
Fault/Failure Conf Aircraft Part Bite Msg	**CB** = Confirms A/C Bite Msg **NA** = Not Applicable **NB** = Doesn’t Confirm A/C Bite Msg	
Hardware/Software Failure	**HW** = Hardware Failure **NA** = Not Applicable **SW** = Software Failure	

Note: the selection of some codes will limit the choice for the following fields. A warning message will appear in some cases, regarding the piece parts segment, see §5.8. The exhaustive list of all possible combinations with the warning cases can be consulted in the reference menu “RCS Failure Codes”. A partial save is possible even if not all data are filled-in.

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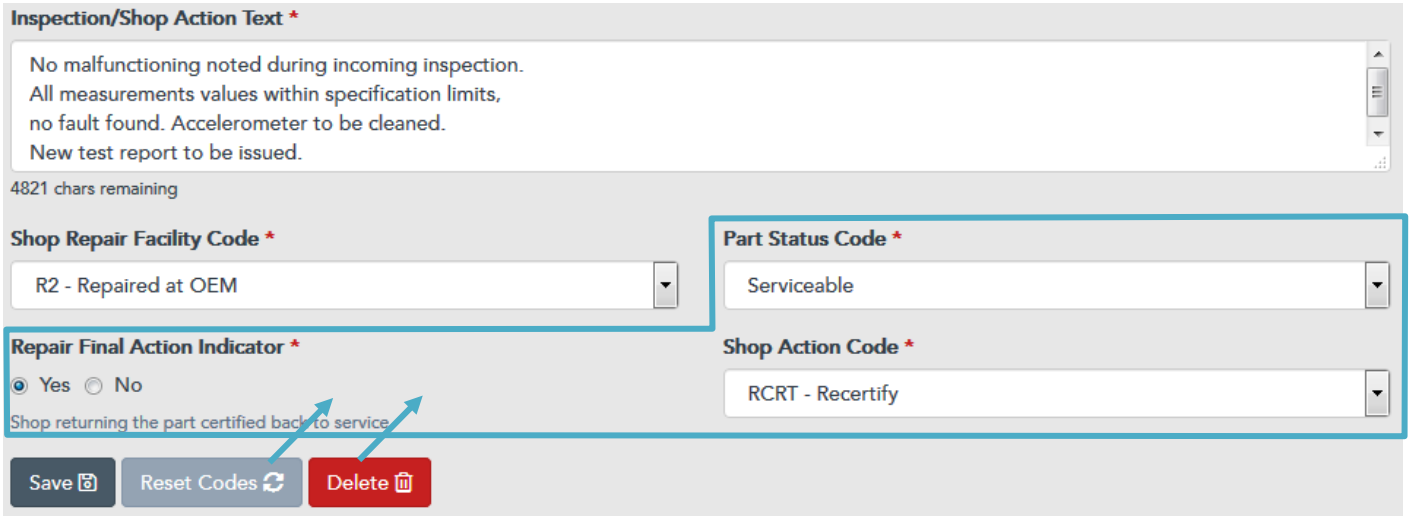
5.4 Shop Action

This segment contains all actions done to the part by the shop and its status.



Field Name	*Options*	*Comment*
Fields automatically completed		
Shop Action Text	Free text	Copied from the Repair Service Order free text. Discard information that should not to be communicated to the customers.
Fields to be completed manually		
Location Code	**R1** = Repaired at Airline Shop **R2** = Repaired at OEM **R3** = Repaired at 3rd party facility	**R2** applies to all Meggitt products repaired, regardless of the division or SBU. It is the most common selection. Applicable for Interco subcontract within Meggitt. **R3** applies only to products manufactured outside of Meggitt. Applicable for Interco subcontract external to Meggitt.
Repair Final Action Indicator	**1** = the unit returned is re-certified **0** = the unit returned is kept for investigation, scrapped or returned as-is.	In general: '1' is used when there is a re-certification of the core unit; '0' when there isn't. Linked to *Shop Action Code*
Shop Action Code	**IRTR** : repair is subcontracted **SCRP**: scrapped on site **EXCH** : advanced exchange **…**	Must answer to the question: What was the job done by the shop? Linked to *Repair Final Action Indicator*
Part status Code	**Inspected** **Tested** **Modified** **…**	Must answer to the question: What has been done on the part?

Note: the exhaustive list of all possible combinations between the *Final Action Indicator* and the *Shop Action Code* can be consulted in the reference menu "Shop Action Codes".

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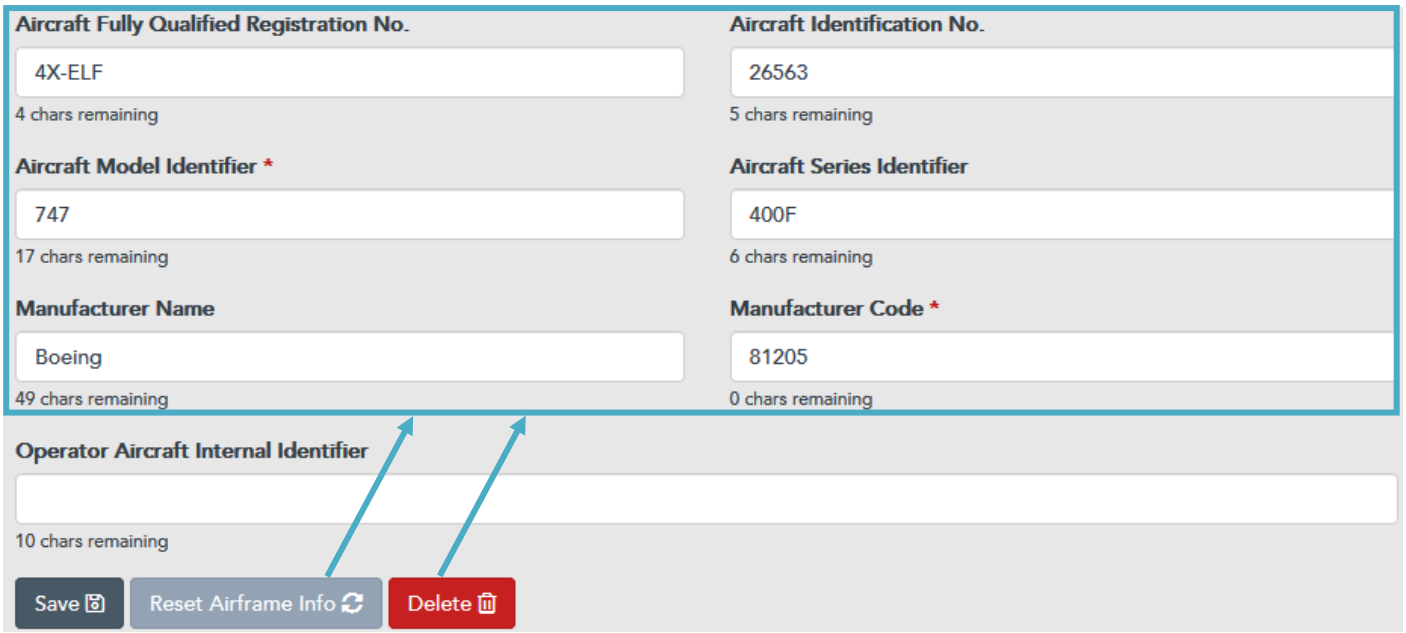
5.5 Airframe Info

This segment contains the data related to the A/C from which the returned equipment has been removed.
Note: if aircraft information is not available, the segment should not be completed.



Field Name	*Options*	*Comment*
Fields to be completed manually		
Airframe Mfg Code	Example: Boeing code : **81205** Airbus: **FA849** … If not known : '**ZZZZZ**' (5x)	Cage code of the Airframe manufacturer. For Mc-Donnell-Douglas (MD-xx or DC-xx), use Boeing code: **88277** Refer to the reference table in the WebApp for a full list.
Airframe Mfg	Example: **BOEING, AIRBUS**	Not mandatory but nice to have. More readable than cage code above. Mandatory if Mfg Code is 'ZZZZZ'. Refer to the reference table in the WebApp for a full list.
Aircraft Model	Example: **777** or **A350**	Refer to the reference table in the WebApp for a full list.
Aircraft Series	Example: **200F**	Not mandatory. Do not repeat aircraft model mentioned above. Refer to the reference table in the WebApp for a full list.
Aircraft Mfg Serial No	Example: **37639**	Only one of this is mandatory. Complete depending on what is provided by the operator.
Aircraft Reg. No	Example: **HL8251**	

Note: by entering the 2 first letters of the registration number, a drop down menu will display a list of aircraft. When selecting one, all other fields are completed. The full list of aircraft can be consulted in the reference menu "Aircraft". A memo is available in the APPENDIX to help finding the registration n° in the paperwork.

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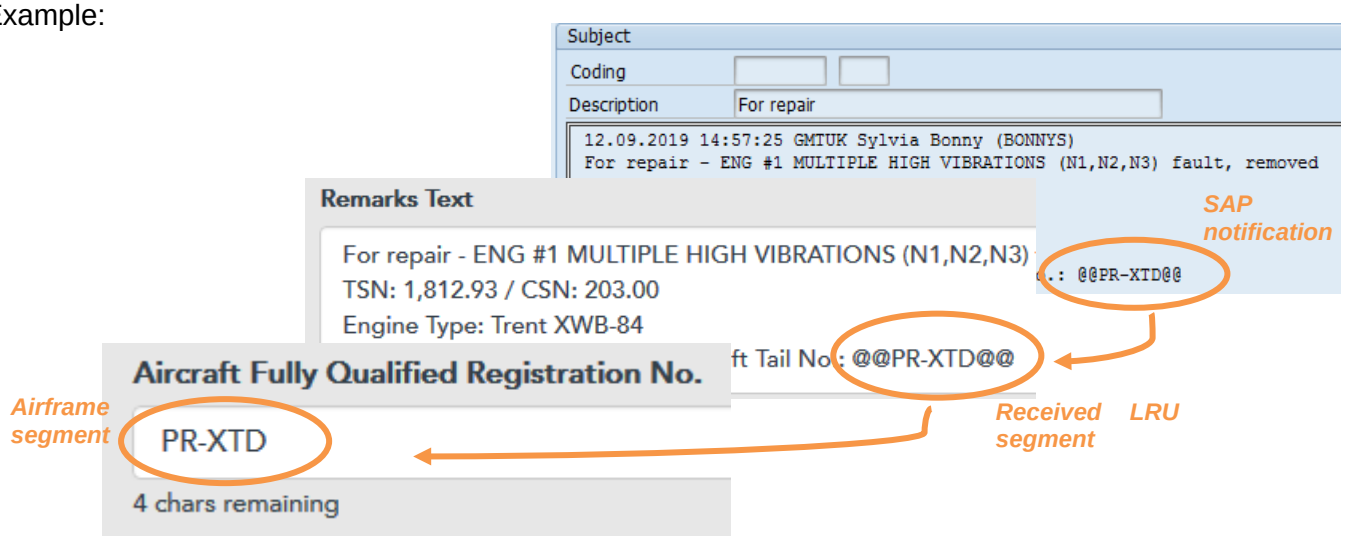
Tips: If the registration number is available in the *Remarks Text* of the *Received LRU* segment and enclosed between a double "@", this data is automatically populated in this segment. In order to enable the feature, it has to be entered with this format in SAP in the "*customer complaint text*" as shown below:

Example:



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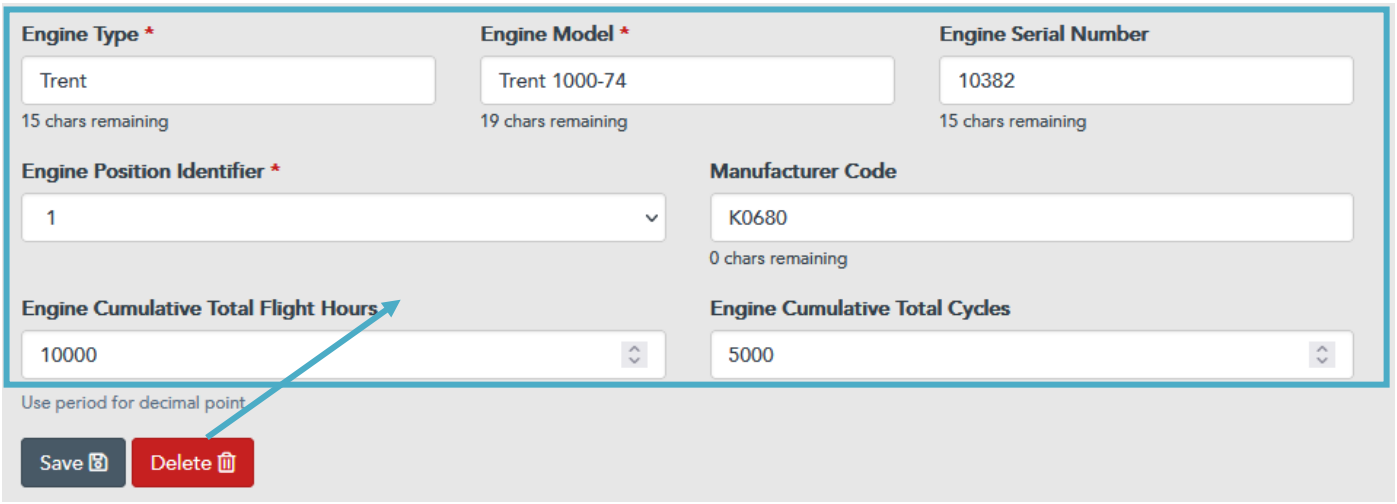
5.6 Engine Info

This segment contains the data related to the engine from which the returned equipment has been removed. When aircraft info is provided and reference found, engine segment is auto-populated and saved within 24hrs. It is possible to modify or add data and manually re-saved the segment. In the case that aircraft info are modified, ensure that engine data are still correct. If not, modify or deleted info previously saved.

Note: if engine information is not available, the segment should not be completed.



Field Name	*Options*	*Comment*
Fields automatically completed		
Engine type	Example: **CFM56, Trent, GEnx, Leap**	Mandatory. Engine type only without series, models. Refer to the reference table in the WebApp for a full list.
Engine Model	Example: **CFM56-7B Trent 1000-74, GEnx-1B74, Leap-1A**	Mandatory. Detailed series / models Refer to the reference table in the WebApp for a full list.
Manufacturer code	Example: **CFM 58828 GE 07482 RR K0680 PW 7AXW3**	Not mandatory. Cage code of the engine manufacturer. Refer to the reference table in the WebApp for a full list.
Fields to be completed manually		
Engine Serial Number	Example: **950950, P222299, V16499**	Not mandatory but to be populated if provided.
Engine Position Identifier	Example: **UNK, 1, 2**	Mandatory. **UNK** 'Unknown' is selected by default. If known, has to be replaced by actual engine position (left = 1, right = 2)
Engine cumul. total flight hours	Example: **11926**	Not mandatory. To be completed according to information provided on the Repair Order. Please not mix this is specifically related to the engine. For accumulated time of the equipment, see §5.8.
Engine cumul. total cycles	Example: **999**	

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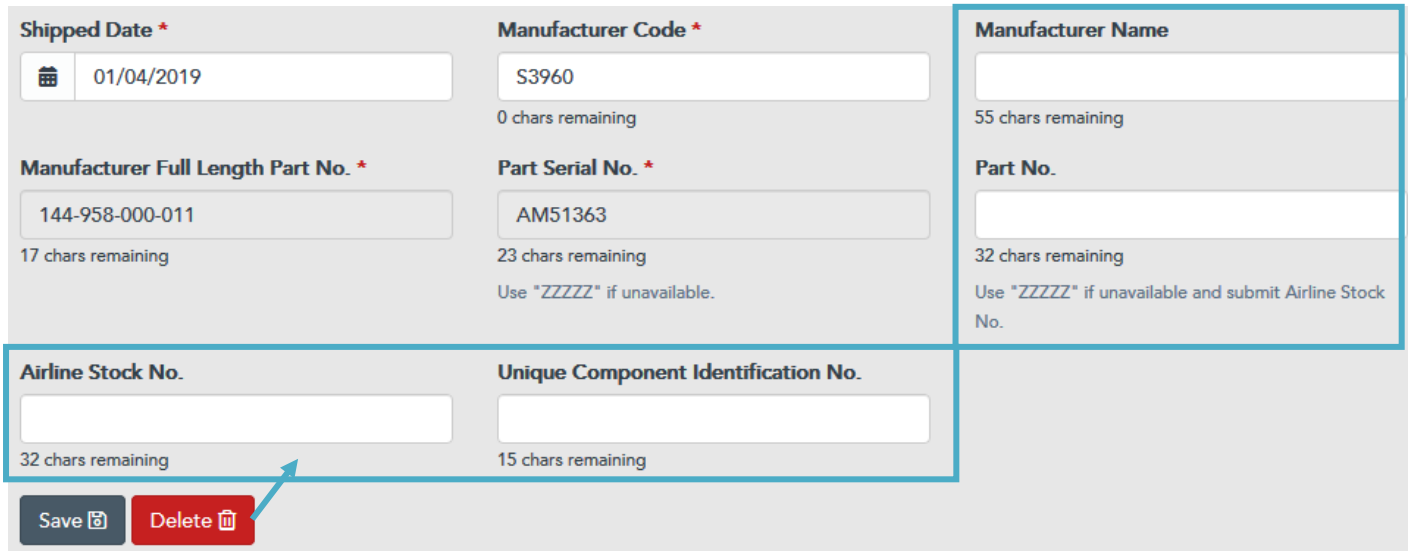
5.7 Shipped LRU

This segment is not mandatory. If the segment is used then several fields become mandatory. When available, shipping information will be automatically populated by SAP. If all 4 mandatory fields are completed and valid, this segment will be automatically saved.



Field Name	*Options*	*Comment*
Fields automatically completed		
Shipped date	Format: **dd/mm/yyyy**	Effective shipping date
Manufacturer Full Part No.	Example: **241-322-008-022**	Part Number of shipped part.
Manufacturer Code	Code of the current manufacturing site: e.g. Meggitt SA products : **S3960** e.g. Endevco & old New Hampshire parts: **95411** (not 58880)	Cage code of the organization manufacturing the Part Automatically filled **if mentioned in SAP database.** Can be modified or has to be entered manually. Note: For reporting to Collins (Purepower LRUs) this should be Collins Cage Code 73030
Part Serial No.	Example: **AG07154**	Serial Number of shipped part.

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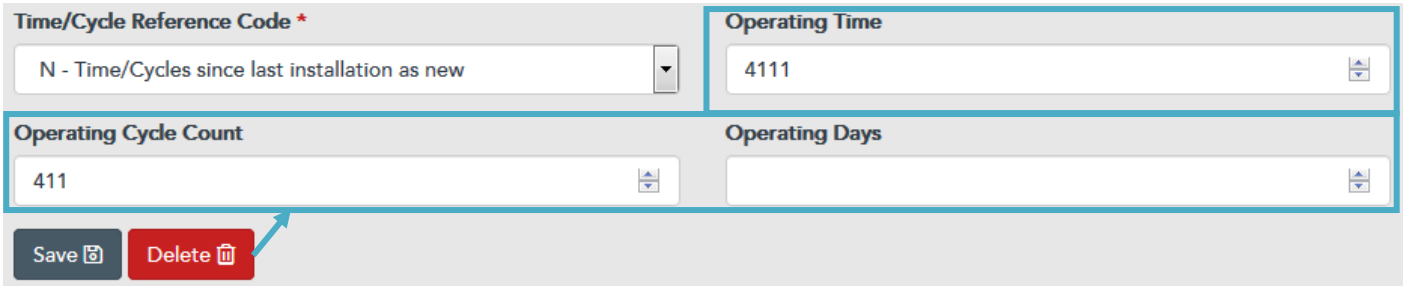
5.8 Accum. Time

Usage data, in Flight Hours, cycles etc. of the equipment is entered here.



Note: Only one of the values is mandatory once *Reference code* is entered.

Field Name	*Options*	*Comment*
Fields to be completed manually		
Time/Cycle Reference Code	**N** = Time/Cycles since last installation as new **C** = Time/Cycles accumulated since last check **I** = Time/Cycles since last installation **O** = Time/Cycles since last overhaul **R** = Time/Cycles since last repair **V** = Time/Cycles since last shop visit **X** = Time/Cycles since last inspection	Mandatory if anything else is filled in this segment. Complete according to information provided on the Repair Order. By default it is **N**.
Operating Time	Example: **11926**	Mandatory only if "**Reference Code**" above is filled. Do not use any thousands separator.
Operating Cycle Count	Example: **999**	Mandatory only if "**Reference Code**" above is filled. Do not use any thousands separator.

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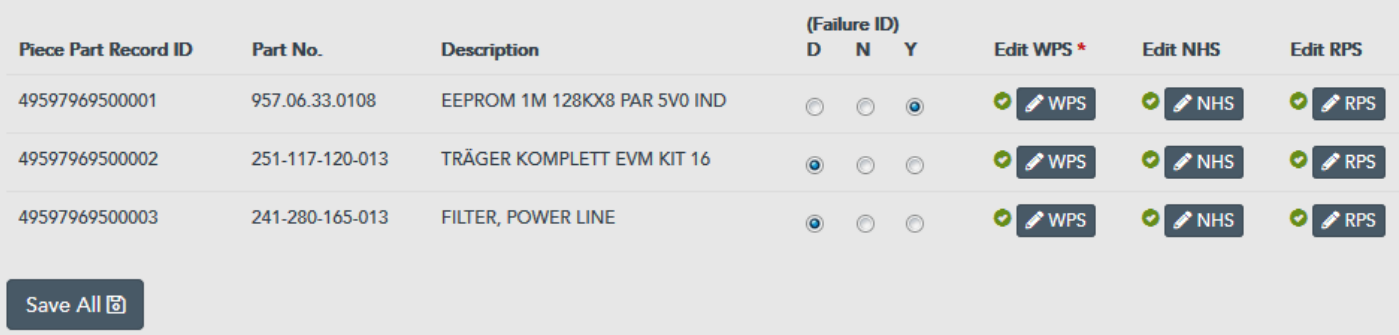
5.9 Piece Parts

Piece parts have a segment in the chapter 11-10 and then dedicated sub-segments which are in the chapter 11-11 of the Spec2000 norm.

5.9.1 Basic view

This segment contains the list of replaced piece parts, directly extracted from the SAP notification (service order). To complete this tab, a piece part failure ID (PP Fail. ID) has to be set for each entry. By default it is set to “D”.



The goal is to identify the piece part(s) that was (were) the reason for the removal of the unscheduled return. If the replaced piece part was definitely the reason then ‘Y’ shall be set as Failure ID. If the defective piece part is not related to the reason of return of the unit then ‘N’ shall be set. Scheduled removals and removals for modification will only have “D” or ‘N’ codes.

The table below helps to define which code has to be set for different cases.

Supplier Removal Type Code	Fault Found?	Fault Confirms removal reason	Piece part…	Piece Part Fail ID
Modification	FT	NA	x	N
Modification	NA	NA	x	D
Scheduled	FT	NA	x	N
Scheduled	NT	NA	x	D
Unscheduled	FT	CR	Is the source of the failure	Y
Unscheduled	FT	CR	Damaged but not the source of the failure	N
Unscheduled	FT	NC	The piece part replaced is not the cause of the field removal	N
Unscheduled	FT	NC	Damaged/Defect but not the source of the failure	N
x	FT	x	Damaged by the customer (FFI = IN)	N
x	x	x	Damaged during investigation	D
x	x	x	Replaced for modification/configuration change	D
x	x	x	Replaced preventively	D
x	x	x	Replaced for any other reason	D

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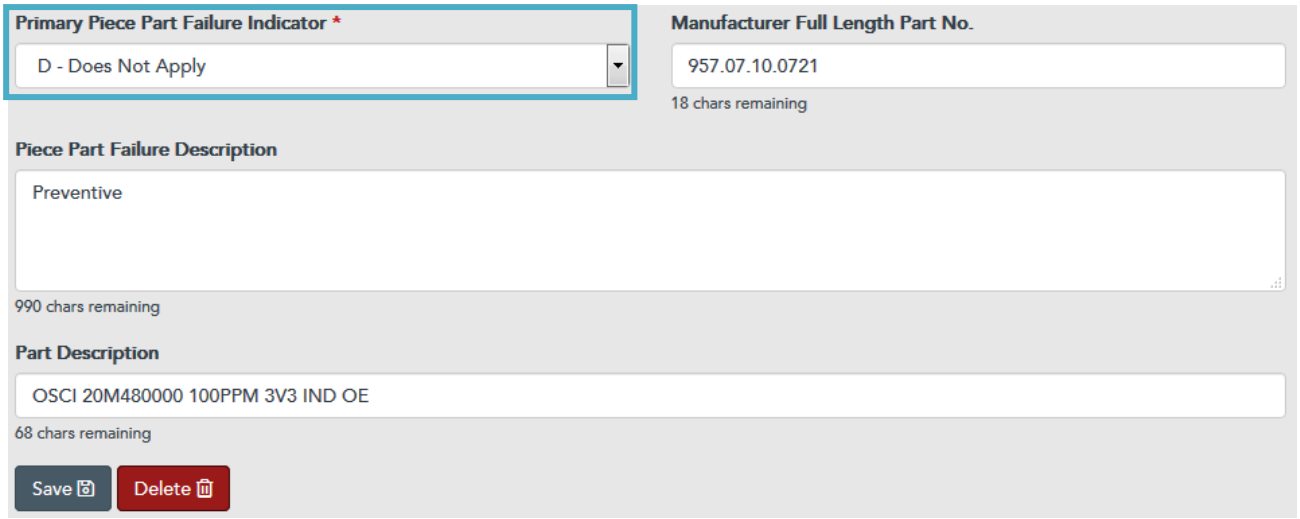
5.9.2 Detailed view

By clicking on any of the buttons WPS/NHS/RPS, it gives access to the detailed record interface for that specific piece part. It means that a notification will have one of each segments WPS/NHS/RPS reported for each piece parts replaced.

The failure ID code seen in §5.8.1 is in fact part of the WPS (Worked Piece Part) sub-segment but can be edited directly in the list of piece parts.

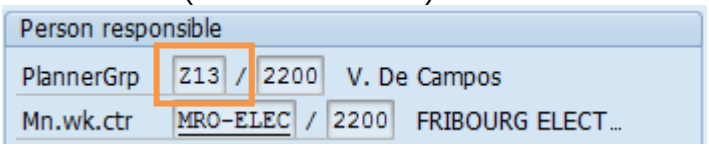


Note: the other sub-segments NHS & RPS do not contain mandatory fields and do not have to be populated manually. Note that all these sub-segments are autosaved if they are valid or saved when the “Save All” button is clicked in the Piece Parts segment.

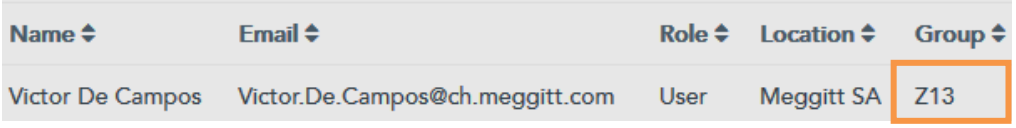
6 RECORDS ASSIGNMENT

It is possible to assign records to someone (technician) but is has to be done in SAP using the Planner Group field in the Service Order. Refer to the SAP support for more information about this field. The “PlannerGrp” code is linked to a username of the online tool and it has to be assigned by a site admin user. The name will then be displayed in the “User” column of the **In Progress** and **Export** lists.

Service Order (SAP – notification):



User configuration (online tool) :



In Progress list (online tool):

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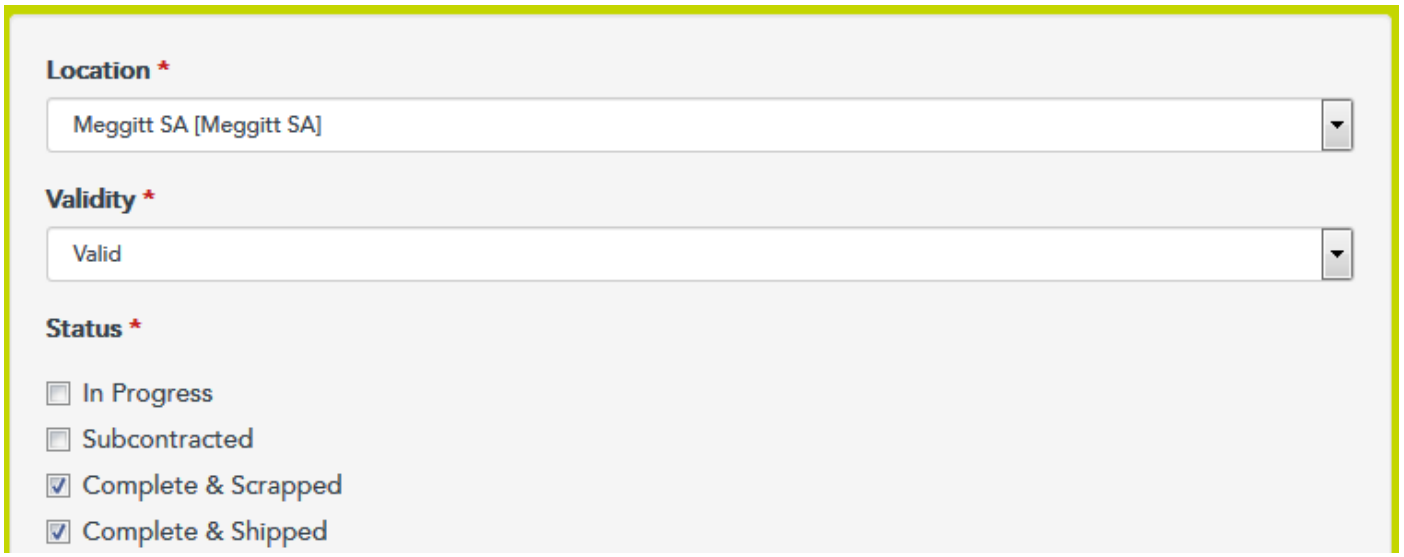
7 CHECK S2K RECORD COMPLETENESS

In order to check the completeness of records, the export page can be used as per the example below. By selecting the correct location, “Invalid” and “Complete” records, the list of all incomplete notifications are displayed. No need to indicate dates as the goal is not to export the list into XML.



Example of the different status:

Val.	PP	ID	Rec. SN	Ship. SN	Material	Status	Rep. Code	Ship/Scrap Date	
⊗	-	000350390511	8389-8-313	8389-8-313	APT401-1500	Subcontracted	S3960	12/06/19	*Subcontracted*
✓	-	000350393881	AO25928	-	144-140-000-011	Complete & Scrapped	S3960	09/09/19	*Scrap and valid*
⊗	-	000350404393	AO66640	AP62759	144-140-000-011	Complete & Shipped	S3960	07/10/19	*Shipped but not valid*
✓	-	000350405229	AO02984	-	144-140-000-011	Complete & Shipped	S3960	26/09/19	*Shipped and valid*
⊗	-	000350406365	AM24137	-	144-140-000-011	In Progress	S3960	-	*Still in progress*

Note: in case of an advanced exchange, a shipping date will be available and the record will be then considered as “Complete & Shipped”. See §8.2 for this special case.

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8 SPECIAL CASES

8.1 Scrap

When the received unit is scrapped, there will be no shipping date for the notification. The **Shipped LRU** segment will remain empty.

Segment Name	Field Name	Data	Comment
Shop action	Final indicator	**0**	Part not returned certified
Shop action	Part Status Code	**Unserviceable**	Part is not serviceable anymore
Shop action	Shop Action Code	**SCRP**	Action done by the shop -> scrapped

8.2 Advanced exchange

In case of advanced exchange, the shipping date will be automatically filled with the shipping date of the exchanged unit and autosaved if the cage code is present. The shipped date is preferred to the eventual “back-to-stock” date.

The relevant information is related to the part received. It is more important to indicate what happened to this part. Example: “back to stock recertified”, “scrapped”, etc. and filling the appropriated finding codes in the “Received LRU” segment.

8.3 Returns subcontracted to other Meggitt MRO’s

If a returned unit is received by Meggitt MRO and then subcontracted to another Meggitt MRO, each MRO is responsible for creating its own S2K record. Then some fields have to be filled specifically. By adding the “SUBC” user status in SAP, the record will be considered as subcontracted and highlighted in white in the lists.

For the MRO that subcontracts the repair:

Segment Name	Field Name	Data	Comment
Received LRU	Fault Found	**FT, NT** or **NA**	If the LRU is not tested, put “NA”
Received LRU	Others		As per the reporting flow, if Fault Found = “NA”, then put “NA” to all coded fields of the Received LRU segment. If Fault Found = “FT”, then fill the coded fields accordingly.
Shop Action	Shop Action Text	Example:: **Subcontracted to MSA**	Specify that the unit has been transferred to another repair station and the reason why.
Shop Action	Final indicator	**0**	Means “not certified” or “AS-IS”
Shop Action	Shop Action Code	**IRTR**	Means “Incomplete Repair-transferred to another facility”

➔ *See next page*

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For the MRO that receives the repair in subcontracting:

Segment Name	Field Name	Data	Comment
Header	Operator Code	**ZZZZZ**	MRO have no operator code assigned
Header	Operator Co. Name	Example: "**Meggitt Fribourg**"	Subcontractor MRO plant's name

When the unit is returned to the initial receiver, no information from the subcontracted MRO has to be put in the S2K record. The "SUBC" user status in SAP must be removed.

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9 APPENDIX

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How to find aircraft registration n° in paperwork's

The registration n° is a unique identification for an aircraft. It is given by the national authority of the operator. The reg n° contains letters, numbers and sometime a "-". Each country has its own first characters for their fleet:

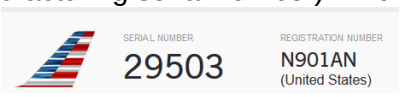
N*000XX*	US	F-	France
G-	UK	HB-	Switzerland
VT-*XXX*	India	EI-*XXX*	Ireland
A6-*XXX*	United Arab Emirates	B-*0000*	China

Where usually *X* are letters and *0* are numbers.

Full list per country: https://en.wikipedia.org/wiki/List_of_aircraft_registration_prefixes
Knowing them a bit helps to locate them in the paperwork's. The registration n° could be given as:

- Reg
- Reg n°
- Tail
- Tail n°
- A/C reg
- A/C tail

But sometimes the MSN is given (manufacturing serial number) which consists of 5 numbers:



If the aircraft is transferred from an operator to another, the reg n° will then change, but not the MSN.
The reg n° could be re-used in the time if the previous aircraft has been removed from service for long enough.
Then check out which one is still "in-service" or check against product's application.

Customers habits

Ryanair
Irish aircrafts reg n° always start with "EI-"
Ryanair gives then only the 3 last digits : "DHR" -> "EI-DHR"

US airlines
American aircrafts reg n° always start with "N".
US airlines sometimes give only the last digits.
Then just add the "N" in front.

Chinese airlines
Chinese reg n° always start always with "B-".
Sometimes the "-" is missing, then just add it.

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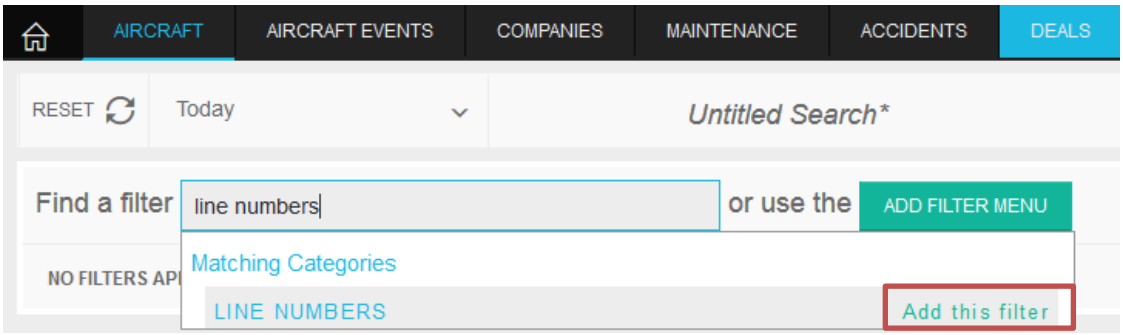
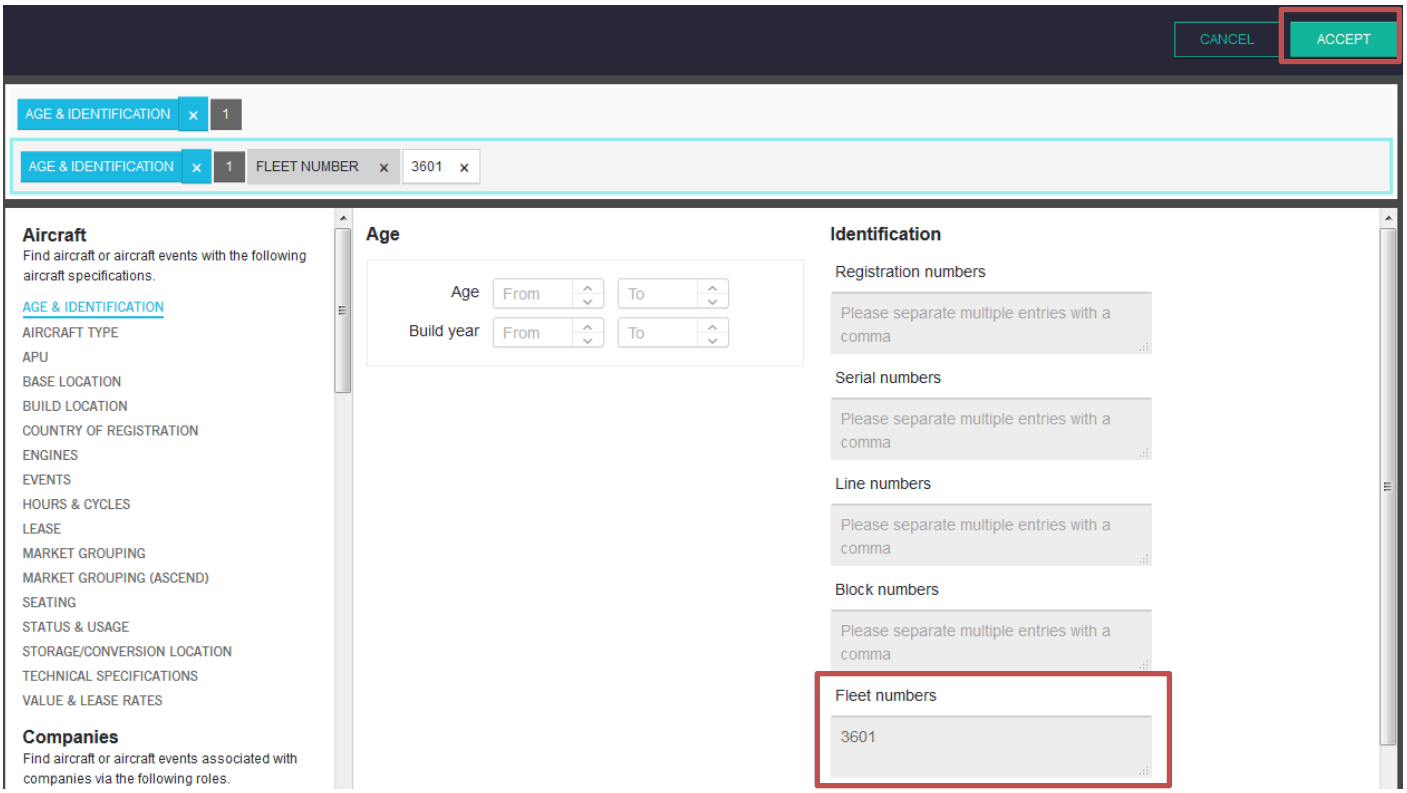
American Airlines / Delta Air Lines
They use to provide the fleet n° of their aircraft.
Look for the corresponding registration n° in Cirium as explain below:

1. Type “line numbers” in the filter field
2. Click “Add this filter”
3. Enter the data provided in the PO into the “fleet numbers” box
4. Click “Accept”
5. Identify the correct aircraft and get the registration n°





Aircraft Manufacturer	Aircraft Master Series	Registration	Fleet Number	Aircraft Status	Operator
Boeing	737-700	N301DQ	3601	In Service	Delta Air Lines
UAC (Ilyushin)	Il-62 M	CCCP-86508	3601	Retired	Aeroflot

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S2k Reporting Flowchart – Received LRU segment

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Supplier Removal Type Code

Field RCC

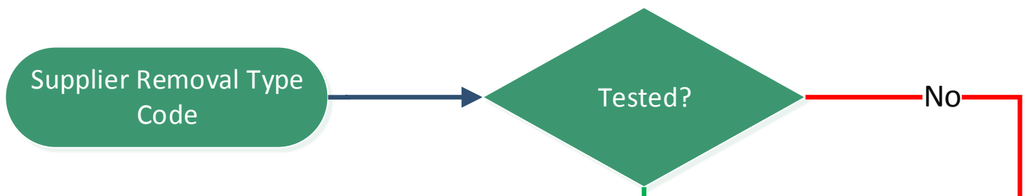
U – Unscheduled removal
Known or suspected malfunction

S – Scheduled removal
To perform maintenance, to retain in a serviceable condition

M – Modification
Application of SBs, Retrofits, Upgrades

P – Production
OEM return

O – Others
Any other cases. Need TC-Holder approval to use it



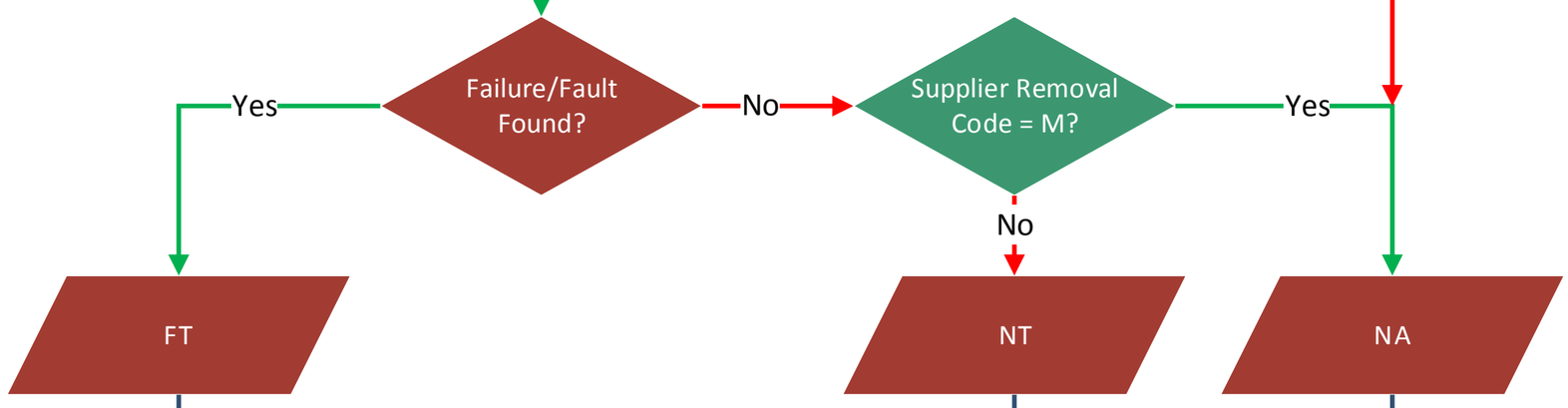
Failure/Fault Found

Field FFC

FT – Failed Test
Fault/Failure found during investigation

NA – Not Applicable
Unit returned for Modification (**M**) and no failure detected

NT – No Trouble Found
No Fault/Failure Found



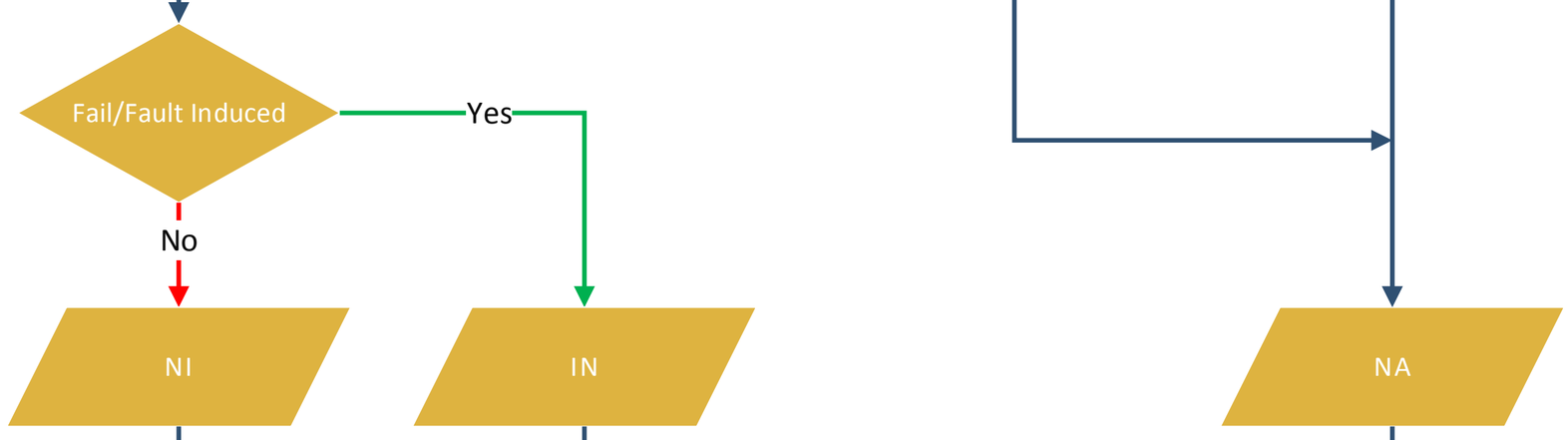
Fai/Fault induced

Field FFI

IN – Induced
Mishandling, Unit used out of specification

NA – Not Applicable

NI – Not Induced
Unit used within specification.



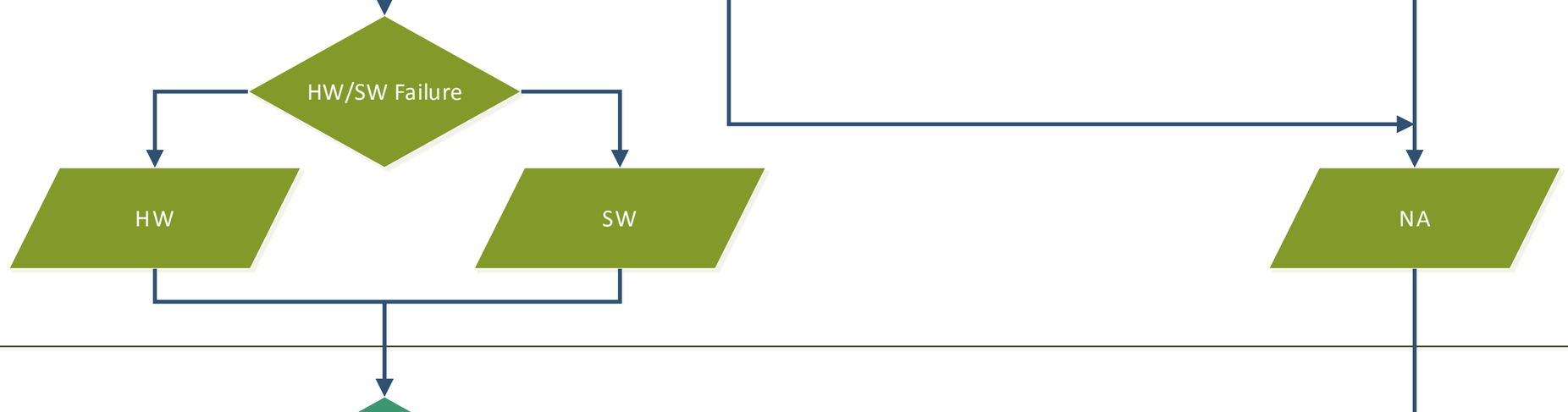
HW/SW Failure

Field FHS

HW – Hardware Failure
Failure nature is HW

NA – Not Applicable

SW – Software failure
Failure nature is SW



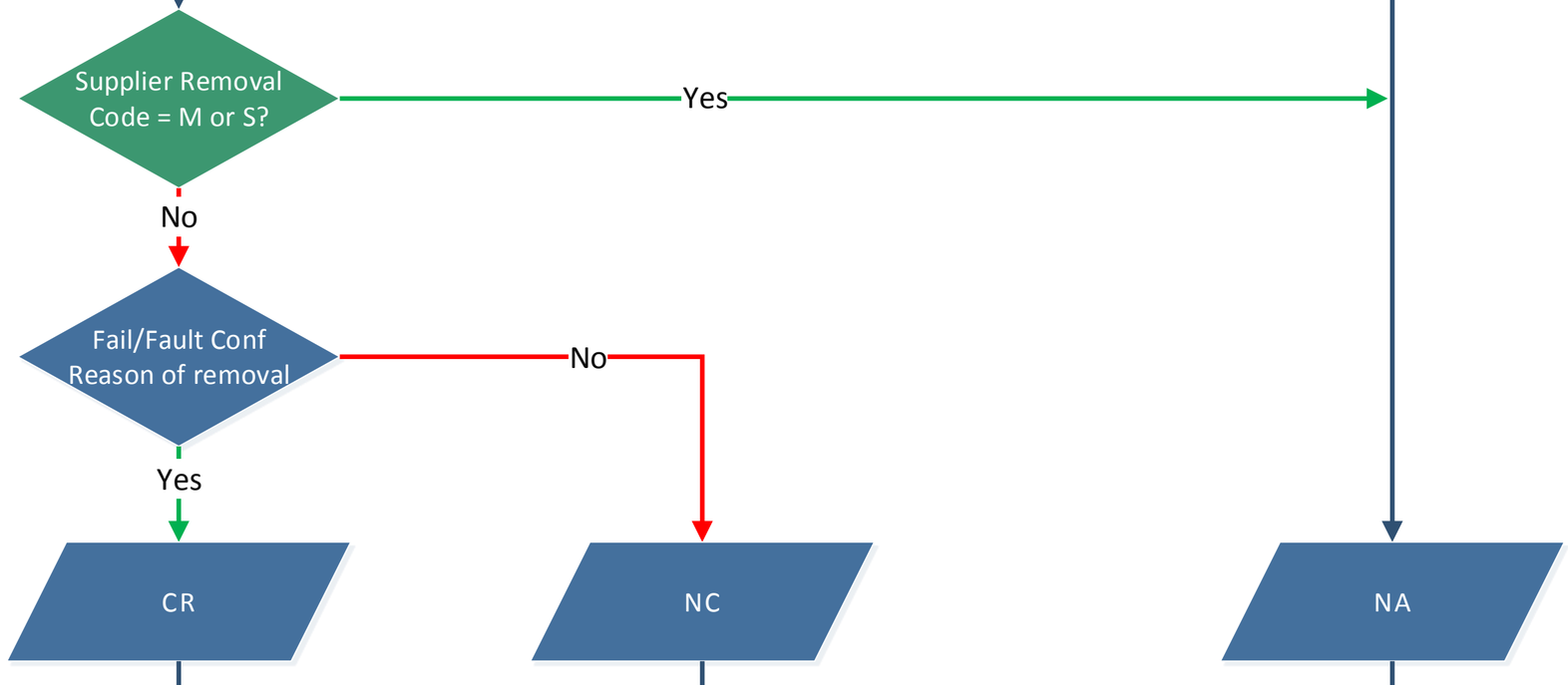
Fail/Fault Conf Reason of removal

Field FCR

CR – Confirmed
Failure/Fault found which substantiates the reason for removal

NA – Not Applicable
If returned for Modification (**M**) or Scheduled (**S**)

NC – Not Confirmed
Failure/Fault found which does not substantiates the reason for removal



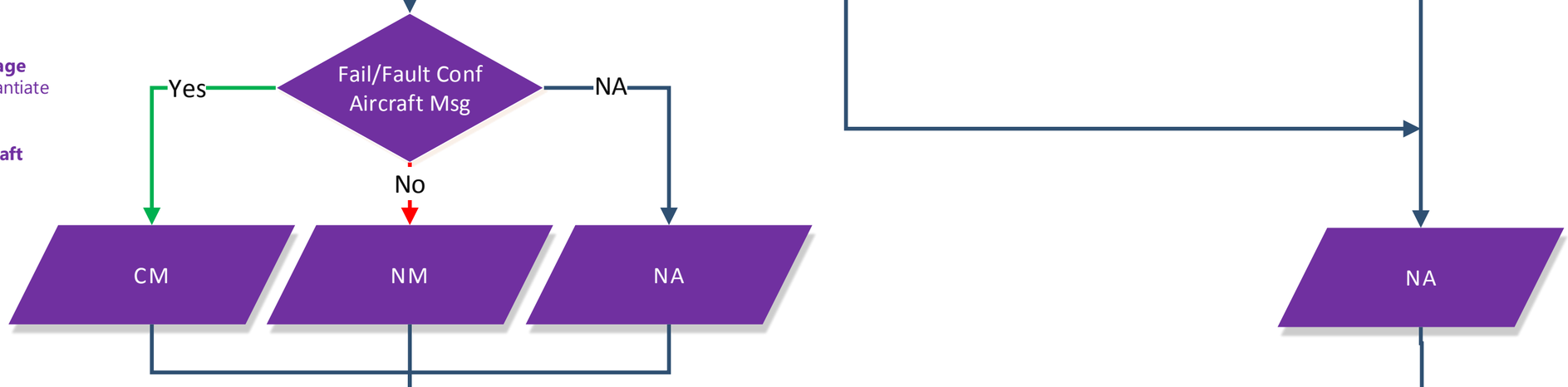
Fail/Fault Conf Aircraft Msg

Field FAC

CM – Confirms Aircraft Message
Failure/Fault found does substantiate reported Aircraft Message.

NM – Does not Confirm Aircraft Message
Failure/Fault found does not substantiate reported Aircraft Message.

NA – Not Applicable
No reported Aircraft Msg or Unknown.



Fail/Fault Conf Bite Msg

Field FBC

CB – Confirms Bite Message
Failure/Fault found does substantiate reported Part Bite Message.

NA – Not Applicable
No reported Bite Msg or Unknown.

NB – Does not Confirm Bite Message
Failure/Fault found does not substantiate reported Part Bite Message.