RAMCO AVIATION SOLUTION ENHANCEMENT NOTIFICATION

Version 5.8.9.1

Maintenance

ramco

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WHAT'S NEW IN SHOP WORK ORDER?

Shop Quick Actions Hub

Reference: APRP-661

Background

Record Shop Execution Details, being the execution screen for all shop execution has lot of tabs, links and controls that require multiple user actions. **Shop Quick Actions Hub** is a new light weight hub which saves time by having all actions available in one page, all relevant information in one screen and act as one Hub for Shop that can launch all Shop related pages.

Shop Quick Actions Hub serves as a single screen where Supervisors can review the progress of a Shop Work Order or Mechanics can perform all the shop execution activities quickly. The idea is to reduce the strain on the Mechanic for Shop Execution and help them to quickly complete their work without searching for screens/data.

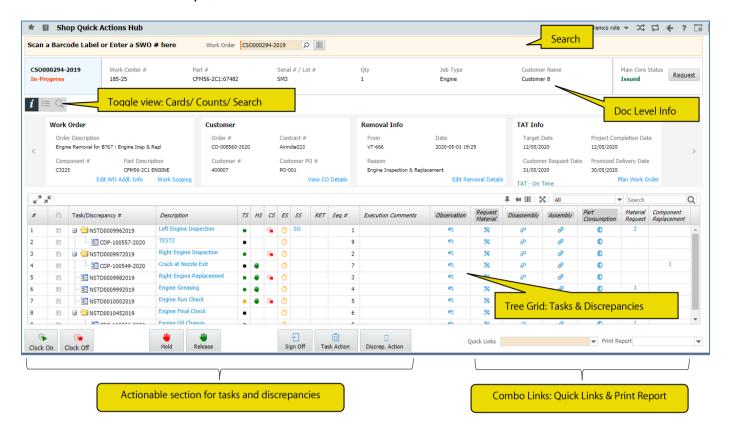
Change Details

- New light weight Hub Shop Quick Actions Hub is introduced that can allow quick/frequent actions being
 done on a Shop Work Order with the ability to launch other Uls and at the same time have all the relevant
 information on screen in one place for review. It is a new activity introduced under the component Shop
 Work Order.
- This new hub facilitates the mechanic to see all the tasks and discrepancies in a SWO in a tree view, Card view to have a full information on the SWO and an execution section from where users will be able to perform various actions associated to a task/discrepancy including raising MR, recording CR, recording Observation & Discrepancy, recording Parts Return, route parts and Resource Consumption as well.
- New popups: Apply Hold, Release Hold, Task Action, Discrepancy Action and Record Sign Off & Work Completion have also been introduced in order to aid the guick action of Shop Execution.

The launch screen for Shop Execution gives only the search section. The entire page is layered into a **Doc level info** of the SWO on the top, **Toggle view**: cards/counts/search section which has all detailed info about the SWO, **Tree section** which shows a structured representation of tasks and discrepancies in the respective SWO in a hierarchical manner and an **Actionable section** which launches required popups for various actions.



Exhibit 1: Identifies the new Shop Quick Actions Hub screen



Search: This section prompts the user to enter/select a Shop Work Order for which the Shop Quick Actions Hub should context. This is enabled in 3 different ways: Manually by entering a SWO # if known, Searching for a SWO # from the help icon and finally using the barcode scan function which launches the 'Manage Your Actions' popup from which user will be directly able to scan for a particular job in a SWO. Enter key is enabled for loading the Shop Quick Actions Hub. Only on entering a relevant Work Order in Planned/In-Progress/Completed status, the Shop Quick Actions Hub will be loaded.

Doc Level Info: This section gives high level info of the SWO with the information as shown above. It is divided into three main domains: SWO Info, SWO High level Info and Main Core Info. SWO Info shows the SWO # for which the Shop Quick Actions Hub is referenced along with the current status of the SWO. SWO High Level Info shows the main info of the referenced SWO as per the Job Type. Main Core Info section shows the status of the main core of the SWO along with a Request button if the Main Core is not issued yet. Both SWO and Main Core status are colour coded as per the following:

SWO Status:

BLACK - Planned **ORANGE** - In-Progress **GREEN** – Completed

Main Core Status:

BLACK - Not Applicable / Not Required
ORANGE - Pending Request / Pending issue

GREEN - Issued / Returned

GREY - Ext. Routed / Ext.Routed - BER / Ext.Routed-Exchange / Scrapped at Work Center / Scrapped at Warehouse



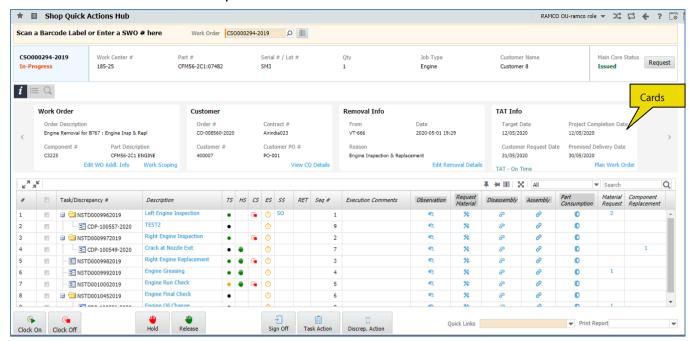
Toggle View: This section gives the preference of view for the user based on Card/Count/Search. This view is customizable using a new process parameter 'Default view for loading Shop Quick Actions Hub' available under the Entity Type: Shop Work Order Type and Entity: All user defined work order types.

Tree Grid: This section enlists all the tasks and discrepancies in the SWO in a hierarchical manner (i.e. under the respective tasks, each discrepancy reported). It shows only tasks in Planned, In-Progress and Completed status and discrepancies in UnderResolution status. Iconical representation for the current status of the tasks or discrepancies are given in column: TS (Task Status), HS (Hold Status), CS (Clock Status), ES (Estimation Status), SS (SignOff Status) and RET (Return Status). There is also an actionable section: Observation, Request Material, Disassembly, Assembly and Part Consumption which allows the user to perform the varied actions on click of the respective multiline icon. This will route Record Observation popup, Record Shop Execution Details with relevant tabs defaulted and also Record Part Consumption & Return screens. Finally, there are two columns: Material Request & Component Replacement which shows the count of the MRs raised and CRs recorded for the respective tasks/discrepancies.

Action & Combo Links: The buttons below the tree grid allows user to perform action for a single/bulk task and discrepancies including: Clock On, Clock Off, Hold, Release, Sign Off, Task Action and Discrepancy Action. Except for clocking functions, the rest all actions will launch a popup from which user will be able to perform varied actions. Combo Links section provides the user a provision to navigate to other relevant and/or related screen for execution of the SWO using Quick Links and also to print certain reports after execution of the SWO using Print Report.

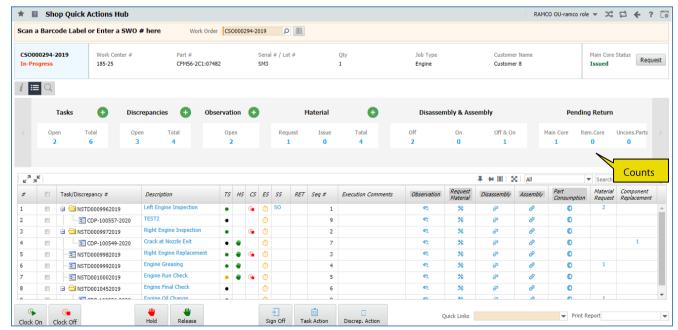


Exhibit 2: Identifies the card view of Shop Quick Actions Hub



Cards: This section gives detailed of the SWO in a logical card view. Nine set of cards are given which can be made visible by swiping across: Work Order, Customer, Removal Info, TAT Info, Dates Info, Estimation Info, MOD Info, Parent / Root Info and Repair Info. These cards are customizable using a new process parameter 'Document Info cards display order in the Shop Quick Actions Hub?' available under the Entity Type: Shop Work Order Type and Entity: All user defined work order types. There are links in the cards which will be routed to the respective screens for the referenced action from which user will be able to make the necessary changes as required.

Exhibit 3: Identifies the counts view of Shop Quick Actions Hub

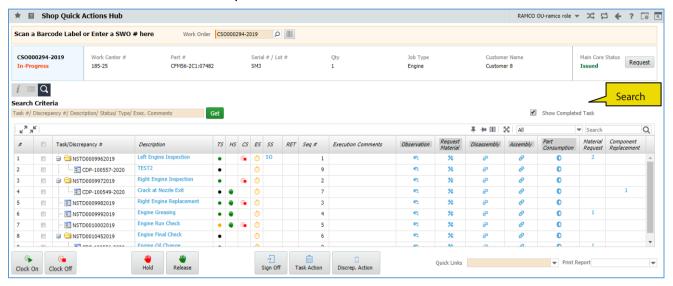


Counts: This section shows the current status of Tasks and Discrepancies and info on the Observation, Material Request raised, Component Replacement performed and also the count for pending Material Return. These are



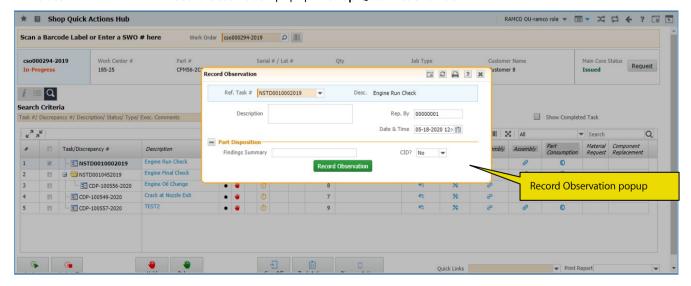
clickable counts which will navigate to RSED screen with relevant tabs defaulted for Tasks, Discrepancies, Observation, Material and Disassembly & Assembly. For the Pending Return counts, Record Part Consumption & Return screen will be defaulted. There is also a provision given for Task Addition which routes to RSED – Initial Workscoping, Record Discrepancy which routes to RSED – Report Findings, Record Observation which launches new popup Record Observation and Raise Material Request which routes to RSED – Material Request respectively.

Exhibit 4: Identifies the search view of Shop Quick Actions Hub



Search: This section enables the user to search for tasks/discrepancies in the tree grid section. This can be performed using the Global Search section with the search criteria mentioned as the watermark in the bar. The search results with the values input as search criteria can be retrieved on press of Enter key or using the Get button. There is also a provision given to retrieve only open tasks and discrepancies using the check box Show Completed Task.

Exhibit 5: Identifies the new Record Observation popup in Shop Quick Actions Hub

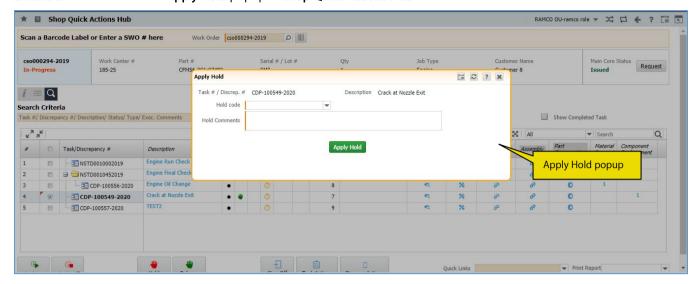


Record Observation: This is a new popup which helps the user to record observations in a SWO. This popup launches from Add Observation from the counts section as well as Observation icon in the tree grid section. It loads the tasks/discrepancies in the respective SWO along with the description of the selected task/discrepancy. User will



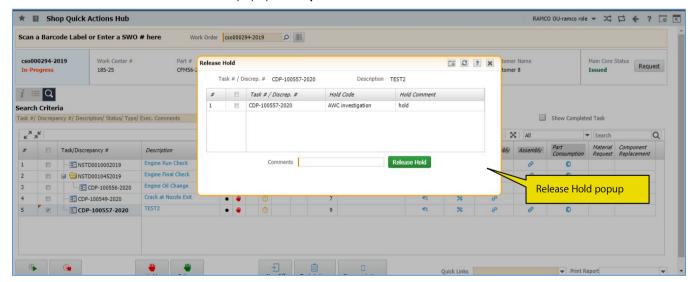
have to directly enter the description and click Record Observation to record an observation in the SWO. There is also a provision given to capture the Part Disposition details as well while recording observation.

Exhibit 6: Identifies the new Apply Hold popup in Shop Quick Actions Hub



Apply Hold: This popup launched on click of Hold button from the Action section, can be used to apply hold for single/bulk task or discrepancies. User has to enter Hold Code and Hold Comments for applying hold on tasks/discrepancies.

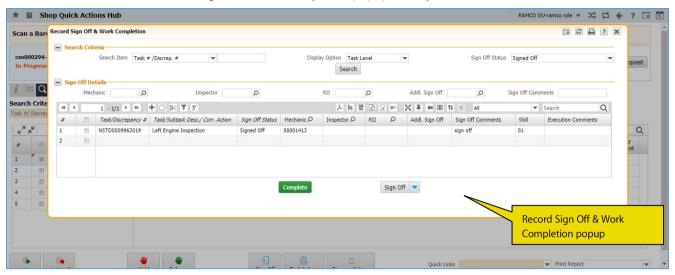
Exhibit 7: Identifies the new Release Hold popup in Shop Quick Actions Hub



Release Hold: This popup is launched on click of Release button from the Action section. It can be used to release hold for single/bulk task or discrepancies for which hold is applied. It will show the Hold Code and Hold Comments that were applied at the time of Hold. User has to enter comments and select the task/discrepancies which have to be released for execution.

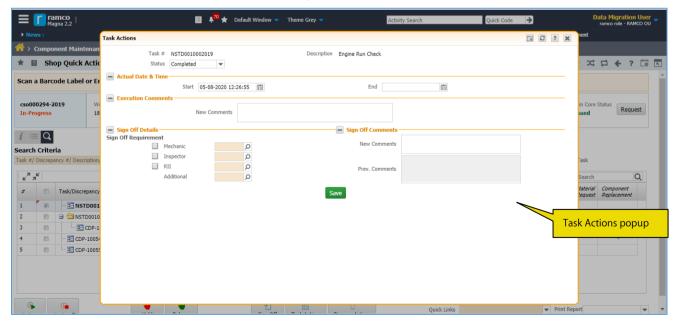


Exhibit 8: Identifies the new Record Sign Off & Work Completion popup in Shop Quick Actions Hub



Record Sign Off & Work Completion: This popup is launched from either the sign off requirement link in SS column of tree grid or the Sign Off button from the Action section beneath. It enables the user to perform sign off and complete a task for which sign off is not required. All the sign off actions: Sign Off, Void and Reject are given in the combo button beneath the popup. There is also a provision to search for tasks/discrepancies in the Sign Off Details multiline using different search criteria as shown above. There is also a provision given for bulk updating Mechanic/Inspector/RII/Addl. Sign Off/Sign Off Comments. User can enter the required input and then select the multiline records to directly apply the given bulk input. For task which do not have sign off requirement and that needs to be completed, user can directly enter Execution Comments in the multiline if needed and directly click on Complete to complete the task.

Exhibit 9: Identifies the new Task Actions popup in Shop Quick Actions Hub

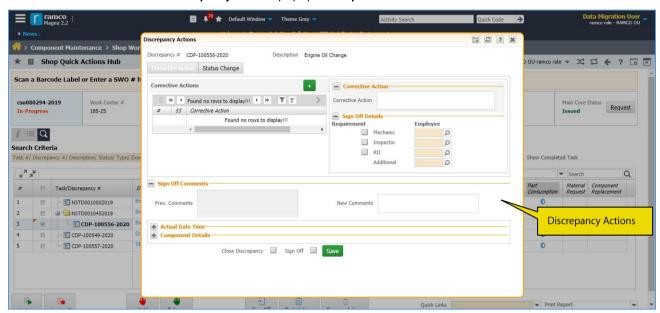


Task Actions: This popup is launched on click of Task Action button from the Action section beneath. It can be launched for a single/bulk action of task. This popup enables the user to perform various actions like: Status change,



update Actual Start/End Date & Time, enter Execution Comment and perform Sign Off by entering the Employee # and comments.

Exhibit 10: Identifies the new Discrepancy Actions popup in Shop Quick Actions Hub



Discrepancy Actions: This popup is launched on click of Discrepancy Action button from the Action section. It can be launched only for a single action of discrepancy. This popup has two tabs: Corrective Action and Status Change. Corrective Action tab enables the user to add corrective action, view all the corrective added in a multiline view, perform sign off for each corrective action, update Actual Start/End Date & Time and also Component Details. Status change can be performed from the Status Change tab. Two check boxes: Close Discrepancy and Sign Off must be checked if a discrepancy has to be closed/signed off respectively.



Shop Quick Actions Hub Improvements

Reference: APRP-936

Background

Record Shop Execution Details, being the execution screen for all shop execution has lot of tabs, links and controls that require multiple user actions. Shop Quick Actions Hub is a new light weight hub which saves time by having all actions available in one page, all relevant information in one screen and act as one Hub for Shop that can launch all Shop related pages.

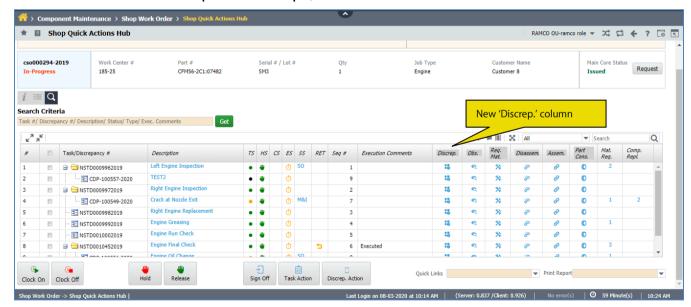
Shop Quick Actions Hub is enhanced to enable Supervisors review the progress of a Shop Work Order or Mechanics to perform all the shop execution activities quickly, in a single screen. The idea is to reduce the strain on the Mechanic for Shop Execution and help them to quickly complete their work without searching for screens/data.

Change Details

1. Report Discrepancy from Shop Quick Actions Hub multiline

A new column 'Discrep' is introduced in the multiline of **Shop Quick Actions Hub**. On click of icon in 'Discrep.' column, **Record Shop Execution Details** screen will be launched with 'Report Findings' tab defaulted along with the corresponding Task #/ Discrepancy # defaulted in the 'Reference task #' control.

Exhibit 1: Identifies the new 'Discrep' column in Shop Quick Actions Hub multiline

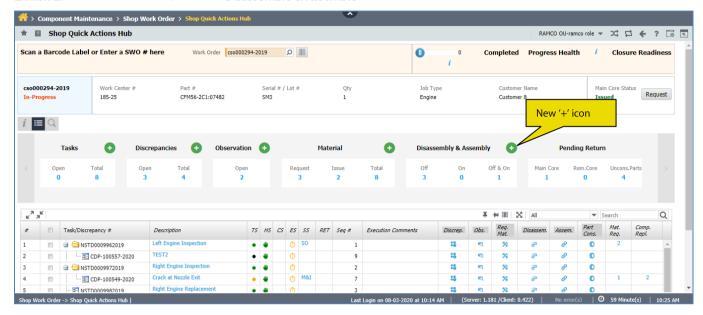




2. Record new Component Replacement directly from 'Disassemble & Assemble' card

Added a new '+' icon in the 'Disassemble & Assemble' card of count section. On click of this '+' icon, **Record Shop Execution Details** screen will be launched with 'Disassemble & Assemble Core' tab defaulted.

Exhibit 2: Identifies the new '+' icon in 'Disassemble & Assemble' card



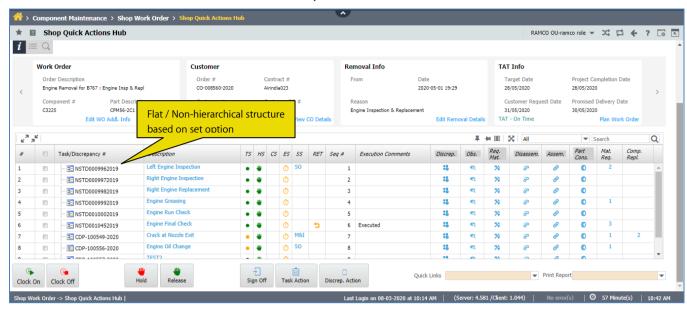
3. Turn Off Hierarchy in Shop Quick Actions Hub multiline

A new process parameter 'Show tasks & discrepancies in a hierarchical view in Shop Quick Actions Hub multiline?' is introduced under the entity type Shop Work Order Type and the entity All user defined work order types in the **Define Process Entities** activity of **Common Master** business component, to allow turning off/on of the hierarchical structure in the Shop Quick Actions Hub multiline.

Process Parameter	Value	Impact in Shop Quick Actions Hub
Show tasks &	"0" for 'No'	System will list and show the tasks and discrepancies in the increasing
discrepancies in a		order of the Seq. # without any hierarchy (i.e. no folders and nodes should
hierarchical view in Shop		be shown for a task/discrepancy having discrepancies reported under it) in
Quick Actions Hub		the multiline of Shop Quick Actions Hub.
multiline?		
Show tasks &	"1" for 'Yes'	System will list and show the tasks and discrepancies with hierarchy (i.e.
discrepancies in a		existing functionality of tree view with folders and nodes) in the multiline
hierarchical view in Shop		of Shop Quick Actions Hub.
Quick Actions Hub		
multiline?		



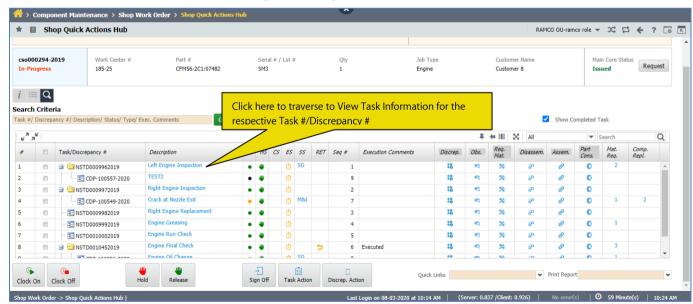
Exhibit 3: Identifies the new non-hierarchical view in Shop Quick Actions Hub multiline



4. Navigate to View Task/Discrepancy details on Description click in the multiline

Description column in Shop Quick Actions Hub multiline will now be traversed to **View Task Information** screen for viewing the information on the respective Task #/Discrepancy #.

Exhibit 4: Identifies the new traversal for 'Description' in Shop Quick Actions Hub multiline



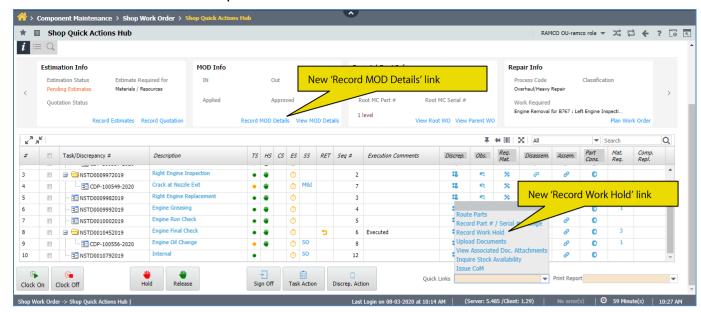
5. Record Work Hold link and Record MOD link from Shop Quick Actions hub

New link 'Record Work Hold' is provided in the Quick Links combo of **Shop Quick Actions Hub** which will traverse to **Record Work Hold** screen for respective Shop Work Order #.

New link 'Record MOD Details' is provided in the MOD Details card of **Shop Quick Actions Hub** which will traverse to **Manage Part Serial MOD Details** screen for respective Shop Work Order #.



Exhibit 5: Identifies the new links in Shop Quick Actions Hub





WHAT'S NEW IN MAINTENANCE TASK?

Ability to map a Parent Task against each Task in Bulk Task Upload while uploading tasks against a Customer Order

Reference: APRP-620

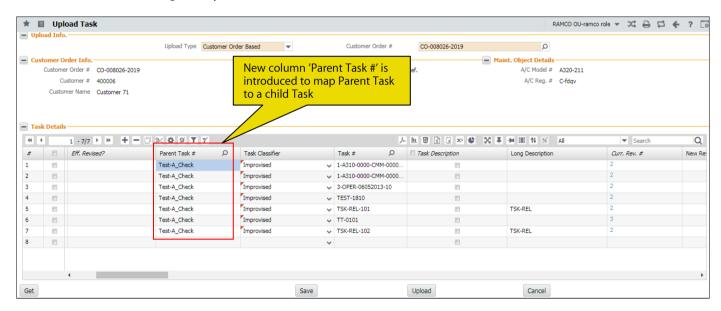
Background

In Bulk Uploading, if user tries to upload a set of Tasks (E.g. A-Check, C-Check), then the tasks gets uploaded as separate task and user finds difficult to identify the Parent Task, this has a downstream impact on Customer Order, where billing is made for a Parent Task. So, the business need is to have a provision to tag the Parent Task for Child Task.

Change Details

A new column control "Parent Task #" is added to give the user the provision to map Parent Task against an uploaded Child Task.

Exhibit 1: Identifies the changes in Upload Task screen



The above mentioned UI can be launched from Maintenance Program > Maintenance Task > Upload Task.

Here, the Parent Task is mapped to a Task and then Upload button is clicked so that the task gets updated to the respective package for which contract is created. Post execution the parent task alone can be used for billing.

WHAT'S NEW IN CONFIGURATION?

Ability to define the user level security at Maint. Operator level to restrict modification of Configuration

Reference: APRP-269, APRP-274

Background

Organizations that are working across the globe in different regions need a way to maintain configurations based on the region in which the aircraft is flying. Maintenance Operator is the flag in the system to identify the region in which an aircraft or component is present. Hence there is a need for configuration of aircrafts and components to be flagged with a maintenance operator in the system.

Change Details

To enable this functionality, following changes have been done in the **Configuration** business component.

- New Combo Control Maint. Operator # has been added as a search criteria in the Select screens of Build
 Aircraft Configuration, View Aircraft Configuration, Build Model Configuration, View Model Configuration,
 Build Component Configuration and View Component Configuration screens.
- New Combo Control Maint. Operator # has been added in the Create and Edit Configuration Class screens.
- New Display Only Control Maint. Operator # has been added in search results section of Select screens of Build Aircraft Configuration, View Aircraft Configuration, Build Model Configuration, View Model Configuration, Build Component Configuration and View Component Configuration screens.
- New Display Only Control Maint. Operator # has been added in View Configuration Class screen.
- A new process parameter "Allow modification of Configuration for Aircrafts mapped to other Maint.
 Operator codes?" has been added in the Define Process Parameters activity of the Common Master business component. Entity Type: Aircraft Entry, Entity: Aircraft, Permitted values: 0 (Not Allowed); 1 (Allowed)
- A new process parameter "Allow modification of Configuration for Components mapped to other Maint.

 Operator codes?" has been added in the Define Process Parameters activity of the Common Master business component. Entity Type: Aircraft Entry, Entity: Aircraft, Permitted values: 0 (Not Allowed); 1 (Allowed)
- A new process parameter "Allow modification of Configuration for Models mapped to other Maint. Operator
 codes?" has been added in the Define Process Parameters activity of the Common Master business
 component. Entity Type: Aircraft Entry, Entity: Aircraft, Permitted values: 0 (Not Allowed); 1 (Allowed)
- In **Build Aircraft Configuration**, **Build Model Configuration** and **Build Component Configuration** screens Maint. Operator # combo loads based on the above parameters. If it is set as "0" the Maint. Operator # combo should load only the active Maint. Operator codes linked to the login user through the Planner Group that he/she belongs, along with a blank value. If Login user is not mapped to any of the Active Planner Groups, then system will consider that the login user is not having access to any of the maintenance operators. If it is set as "1" the Maint. Operator # combo should load all the active Maint.



Operator codes available in the system along with a blank value.

Process Parameter: Allow modification of Configuration for Aircrafts mapped to other Maint. Operator codes?	
1 for Allowed It allows the retrieval/modification of aircraft configuration mapped to other Maint. Operator	
	codes
0 for Not Allowed	It does not allow the retrieval/modification of aircraft configuration mapped to other Maint.
	Operator codes

Default: '1' Allowed

Process Parameter: Allow modification of Configuration for Models mapped to other Maint. Operator codes?	
1 for Allowed	It allows the retrieval/modification of model configuration mapped to other Maint. Operator
	codes
0 for Not Allowed	It does not allow the retrieval/modification of model configuration mapped to other Maint.
	Operator codes

Default: '1' Allowed

Process Parameter: Allow modification of Configuration for Components mapped to other Maint. Operator codes?	
1 for Allowed	It allows the retrieval/modification of component configuration mapped to other Maint.
	Operator codes
0 for Not Allowed	It does not allow the retrieval/modification of component configuration mapped to other
	Maint. Operator codes

Default: '1' Allowed

Exhibit 1: Indicates the new controls in the select screen of Build Aircraft Configuration screen

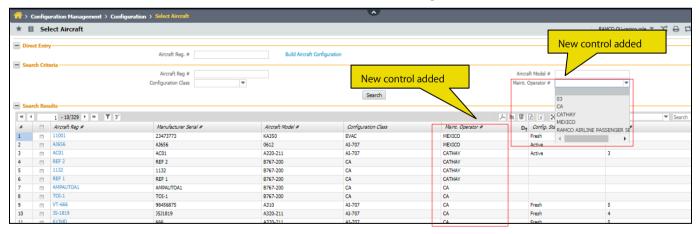




Exhibit 2: Indicates the new controls in the select screen of View Aircraft Configuration screen

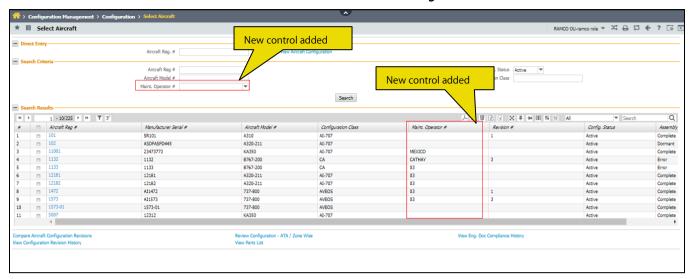


Exhibit 3: Indicates the new controls in the select screen of Build Model Configuration screen

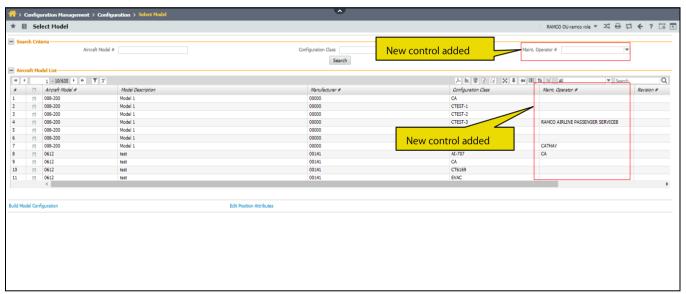


Exhibit 4: Indicates the new controls in the select screen of View Model Configuration screen

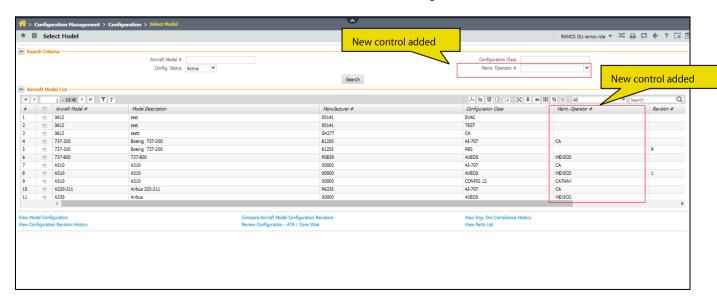




Exhibit 5: Indicates the new controls in the select screen of Build Component Configuration screen

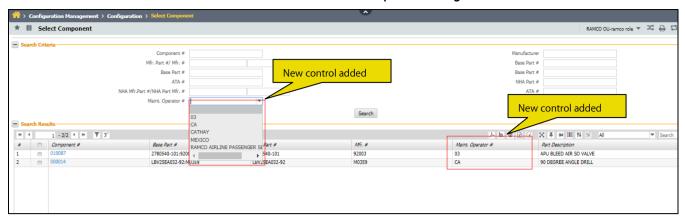
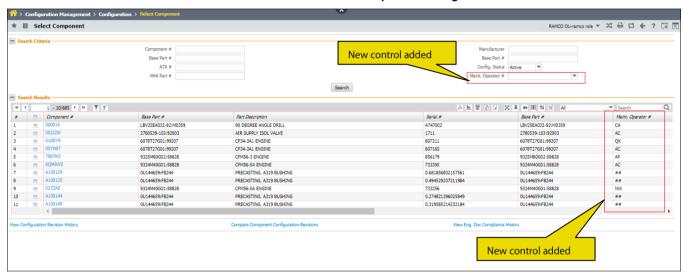


Exhibit 6: Indicates the new controls in the select screen of View Component Configuration screen



Ability to view Attachment status and Serial/Component details with filters in Help on Configuration Information popup

Reference: APRP-532

Background

To bring the visibility of whether the configuration positions are attached in the position code or not in the **Help on Configuration Information** screen.

Change Details

The changes done in the Help on Configuration Information screen are explained below:

Control Addition

The following controls are added in the Help on Configuration Information screen.

- Added four new display only columns in 'Part Details' section: Attachment Status, Attached Part #,
 Attached Serial # and Attached Component #.
- Added new controls in Display Filter section: Attachment Status (Combo), Attached Part # (Editable),
 Attached Serial # (Editable) and Attached Component # (Editable).
- The Attachment Status combo is loaded with 'Blank', 'Attached' and 'Removed' as meta data.
- The caption of Part # in both Part Details section and in Display Filter is renamed as Base Part #.

Search Logic

On invoke of Search, if Attachment Status in the Display Filter section is selected with "Attached", only the positions whose Attachment Status is "Attached" (i.e. the position is NOT EMPTY) are retrieved. If Attachment Status in the Display Filter section is selected with "Removed", only the positions whose Attachment Status is "Removed" (i.e. the position is EMPTY) are retrieved. If user has entered any input in the Base Part # control, only the positions for which the Base Part # matches the user input are retrieved. If user has entered any input in the Attached Part # or Attached Serial # control or Attached Component #, system retrieves only the positions for which the Attached Part # or Attached Serial # or Attached Component # that match the user input (indicating the positions that are NOT EMPTY and has Installed Part # or Installed Serial # or Installed Component # that matches with the user input).

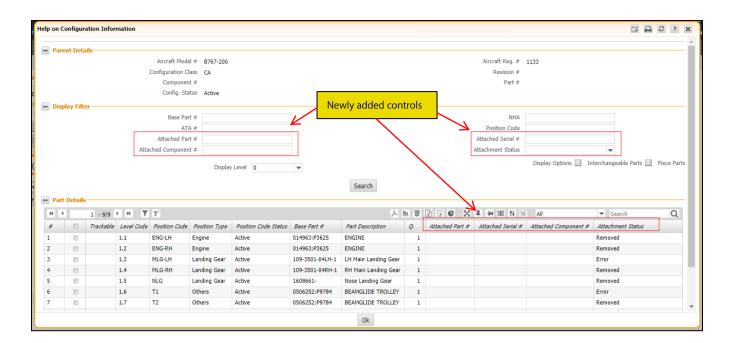
Display Logic of New columns

On invoke of Search, if the position is empty, the Attachment Status is displayed as "Removed", and BLANK is displayed for Attached Part #/Attached Serial # and Attached Component # columns. If the position is not empty, the Attachment Status is displayed as "Attached", and the attached component information is displayed in the Attached Part #/Attached Serial # and Attached Component # columns.

Note: Refer to Build Aircraft Configuration page for these details.



Exhibit 1: Identifies the control addition in Help on Configuration Information screen



WHAT'S NEW IN MAINTENANCE PROGRAM?

Ability to define the user level security at Maint. Operator level to restrict modification of Program

Reference: APRP-271

Background

Organizations that are working across the globe in different regions need a way to maintain tasks based on the region in which the task needs to be performed. As there is only one program for a given aircraft or component in the system, there is a need for user level security in program based on the maint. Operator mapped to the task to prevent user from other regions from modifying the tasks in a program.

Change Details

To enable this functionality, the following new developments have been incorporated in the **Aircraft Maintenance Program** and **Component Maintenance Program** business component.

- New Display Only Control Maint. Operator # has been added in maintenance program details section in Create and Edit Aircraft Maintenance Program, Edit Aircraft Specific Maintenance Program, Create/Edit and View Part Program, Edit and View Component Program.
- New Display Only Control Maint. Operator # has been added in the aircraft details section of Edit Aircraft
 Specific Maintenence Program.
- New Display Only Control Maint. Operator # has been added in the component details section of Edit and
 View Component Program.
- A new process parameter "Allow addition/modification of tasks from other Maint. Operator codes in Aircraft Maint. Program?" has been added in the Define Process Parameters activity of the Common Master business component. Entity Type: Aircraft Maintenance Prog, Entity: Tech. Records Process Ctrl, Permitted values: 0 (Not Allowed); 1 (Allowed).
- A new process parameter "Allow addition/modification of tasks from other Maint. Operator codes in Aircraft specific Maint. Program ?" has been added in the Define Process Parameters activity of the Common Master business component. Entity Type: Aircraft Maintenance Prog, Entity: Tech. Records Process Ctrl, Permitted values: 0 (Not Allowed); 1 (Allowed).
- A new process parameter "Allow addition/modification of tasks from other Maint. Operator codes in
 Component Maint. Program?" has been added in the Define Process Parameters activity of the Common
 Master business component. Entity Type: Part Prog, Entity: Tech. Records Process Ctrl, Permitted values: 0
 (Not Allowed); 1 (Allowed).
- A new process parameter "Allow addition/modification of tasks from other Maint. Operator codes in Part
 Program ?" has been added in the Define Process Parameters activity of the Common Master business
 component. Entity Type: Part Prog, Entity: Tech. Records Process Ctrl, Permitted values: 0 (Not Allowed); 1
 (Allowed).
- System will fetch the Maintenance Operator mapped to the task in maintenance details section of all
 program screens. Edit Aircraft Specific Maintenance Program will fetch the Maintenance Operator mapped
 to the aircraft in aircraft details section. Edit and View Component Maintenance Program will fetch the



Maintenance Operator mapped to the component in component details section.

• If the above listed set options are set as 'Not Allowed' then system will prevent users who are not mapped to the maintenance operator of task from adding or modifying the task and task details in the program screens. If the above set options are set as 'Allowed' then the system should allow all uses to modify the tasks in program screens.

Process Parameter: Allow addition/modification of tasks from other Maint. Operator codes in Aircraft Maint. Program?	
1 for Allowed	It allows the addition/modification of tasks mapped to other Maint. Operator codes in Aircraft
	Maintenance Program
0 for Not Allowed	It does not allow the addition/modification of tasks mapped to other Maint. Operator codes
	in Aircraft Maintenance Program

Default: '1' Allowed

Process Parameter: Allow addition/modification of tasks from other Maint. Operator codes in Aircraft specific Maint.	
Program ?	
1 for Allowed	It allows the addition/modification of tasks mapped to other Maint. Operator codes in Aircraft
	Specific Maintenance Program
0 for Not Allowed	It does not allow the addition/modification of tasks mapped to other Maint. Operator codes
	in Aircraft Specific Maintenance Program

Default: '1' Allowed

Process Parameter: Allow addition/modification of tasks from other Maint. Operator codes in Component Maint.	
Program ?	
1 for Allowed	It allows the addition/modification of tasks mapped to other Maint. Operator codes in
	Component Maintenance Program
0 for Not Allowed	It does not allow the addition/modification of tasks mapped to other Maint. Operator codes
	in Component Maintenance Program

Default: '1' Allowed

Process Parameter: Allow addition/modification of tasks from other Maint. Operator codes in Part Program?	
1 for Allowed	It allows the addition/modification of tasks mapped to other Maint. Operator codes in Part
	Program
0 for Not Allowed	It does not allow the addition/modification of tasks mapped to other Maint. Operator codes
	in Part Program

Default: '1' Allowed



Exhibit 1: Indicates the new controls in the select screen of Create Maintenance Program screen

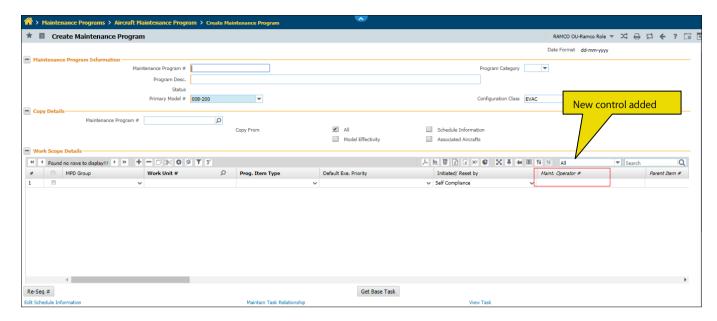


Exhibit 2: Indicates the new controls in the select screen of Edit Aircraft Maintenance Program screen

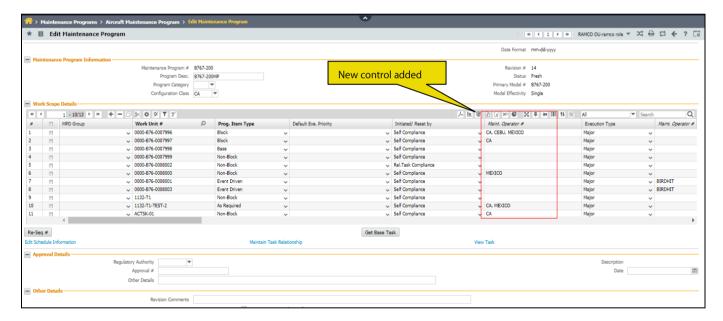




Exhibit 3: Indicates the new controls in the select screen of Edit Aircraft Specific Maintenance Program screen

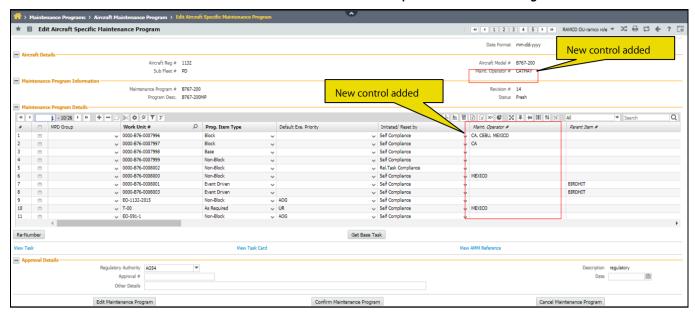


Exhibit 4: Indicates the new controls in the select screen of Edit Part Program screen

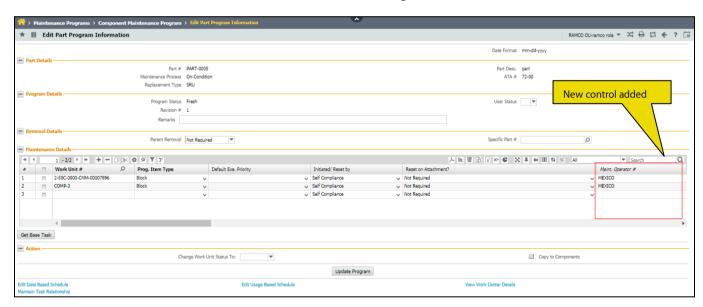




Exhibit 5: Indicates the new controls in the select screen of View Part Program screen

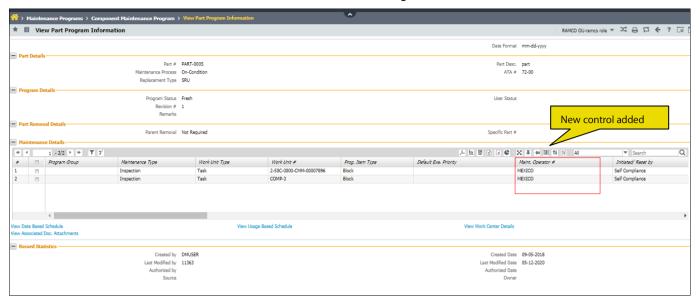


Exhibit 6: Indicates the new controls in the select screen of Edit Component Program screen

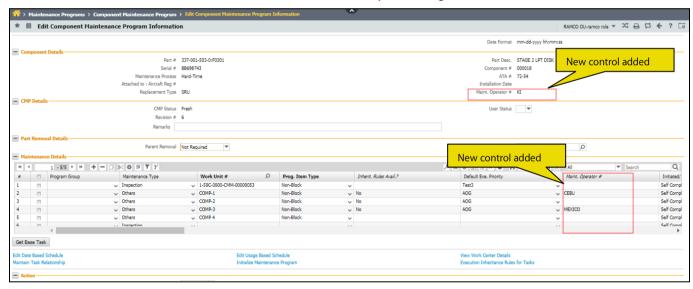
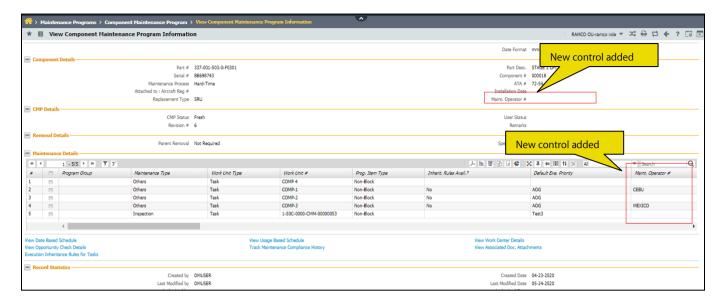




Exhibit 7: Indicates the new controls in the select screen of View Component Program screen





WHAT'S NEW IN REPAIR ORDER?

Work Completion and Teardown Report

Reference: APRP-251

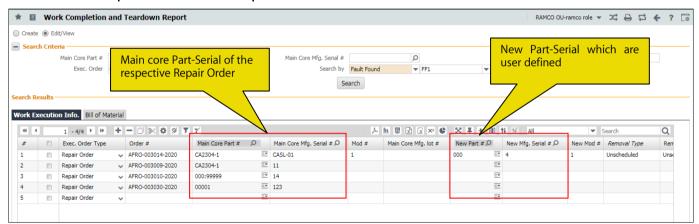
Background

An MRO/Operator receives a post execution document that contains work completion and teardown information against a repair order. This information needs to be recorded in the system and viewed or edited in one place. This enhancement speaks about the means in which the information can be captured/modified in 'Work Completion and Teardown Report'.

Change Details

A new screen "Work Completion and Teardown Report" has been introduced in the **Repair Order** business component under the **Repair Order Management** BPC that can bulk process completion records of multiple repair orders.

Exhibit 1: Work Completion and Teardown Report - Work Execution Info. Tab

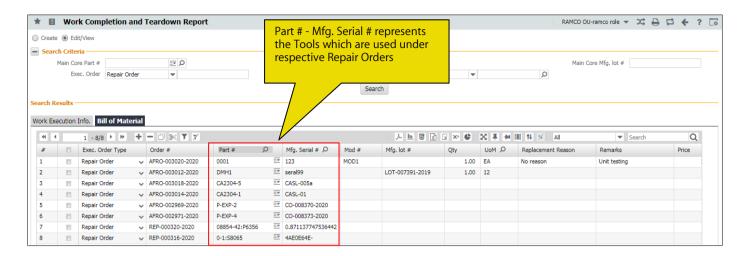


The above mentioned UI can be launched from **Repair Order Management > Repair Order > Work Completion and Teardown Report.**

Work Execution Info. tab can be used to store the information related to Repair Order - Main core Part #, Main Core Mfg. Serial # along with other information like Removal Reason, Received Condition, Warranty Claim?, Justified Removal?, Fault Found etc. There is not restriction for providing the other information in **Work Execution Info.** tab.



Exhibit 2: Work Completion and Teardown Report - Bill of Material Tab



Bill of Material tab has the information related to the tools and its cost which are used in respective Repair Orders of Work Execution Info.

WHAT'S NEW IN MAINTENANCE CHANGE REQUEST?

Derive applicable Part-Serials based on Repair date, Agency & MOD details

Reference: APRP-912

Background

In an ITM industry, SB/AD/SIL are received from vendors/regulatory authority to perform a modification to parts. SB/AD/SIL have an effectivity section that mentions the criteria to identify the components or the specific components to which the document applies. The effectivity comes in different forms and one of them is through repair details and mod details. Thus MCR should have the ability to capture the part effectivity with MOD#, MOD range, Repair date range and Repair Agency.

Change Details

In Edit Advanced Part Effectivity screen, user can define part effectivity (serial# criteria for the part) through:

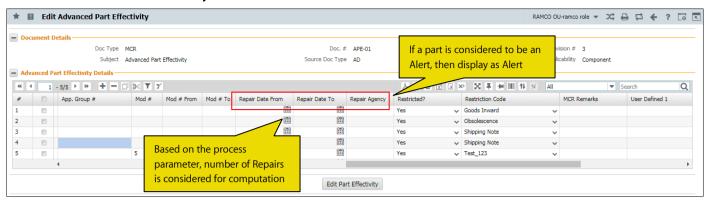
- **1.** Mod #
- 2. Mod # range
- 3. Repair agency
- 4. Repair date range

Exhibit 1: Process Parameters

Set Process Parameter (Common Master)	
Entity Type	Eng. Doc Type
Entity	All Eng. Doc
Process Parameter	No. of latest repair orders to be considered for advanced part effectivity computation
Permitted Values	0-10
Default value	3 (N)
System behavior based on process parameter value	
N	No. of latest repair orders to be considered for advanced part effectivity computation



Exhibit 2: Edit Advance Part Effectivity screen



The above mentioned UI can be launched from **Engineering Change Management > Maintenance Change Request > Edit Advanced Part Effectivity.**

Mod #: When a Mod # is provided then system should fetch all Serial # that satisfy the part criteria and carry the specified Mod# as their current Mod #. The Components thus fetched should be displayed in Impact Assessment, PCR and EO.

Mod Range: If Mod from/to is provided, then system should fetch all serial # that satisfy the part criteria and has a current Mod # that equals or falls between the Mod # range. The components fetched should be displayed in Impact Assessment, PCR and EO. **Note:** Both Mod # & Mod range cannot be applied to a same record.

Repair Agency: If 'Repair Agency' is provided then system should fetch all serial # that satisfy the part criteria and are present in repair orders sent to the specified repair agency. The Components thus fetched should be displayed in Impact Assessment, PCR and EO.

Repair Date From & To: If 'Repair Date from & to' is provided then system should fetch all serial # that satisfy the part criteria and are present in repair orders that were received with 'Repair Receipt Acceptance' date between specified repair date range. The Components thus fetched should be displayed in Impact Assessment, PCR and EO.



Update the PCR document with Part-Serial # from Impact Assessment

Reference: APRP-864

Background

When a SB/AD/SIL is received, MCR document is created in the system and an impact assessment can be created against it to analyse the impact of the engineering change on the components in the system. The components that are identified in the impact assessment document post analysis are not inducted into the engineering cycle. Ability to update the impacted components from impact assessment to PCR is thus required.

Change Details

System will consider all impact assessments for an MCR in the system and extract a list of impacted components that are recorded in these documents. Based on a set option, system will then fetch all these components to a PCR at the time of PCR creation. All modifications to the impacted components in various impact assessments will not flow to PCR after its creation.

Process Parameter

Set Process Parameter (Common Master)		
Entity Type	Eng. Doc Type	
Entity	All Eng. Doc	
Process Parameter	Update impacted components from impact assessments to PCR on creation of PCR	
Permitted Values	Enter "0" for 'No', "1" for 'Yes'	
Default value	0 (No)	
System behavior based on process parameter value		
0 (No)	Impacted Components are not considered for PCR/EO creation.	
1 (Yes)	Impacted Components will be exploded based on Impact Assessment.	

If the process parameter "Update impacted components from impact assessments to PCR on creation of PCR" is set as "1" (Yes), then the components which are saved in Impact Assessment are only considered when PCR or EO is created. If the process parameter "Update impacted components from impact assessments to PCR on creation of PCR" is set as "0" (No), then the components which are saved in Impact Assessment are not considered when PCR or EO is created, i.e., all the Part-Serials which are provided in Advanced Part Effectivity will be exploded to PCR.

WHAT'S NEW IN TASK NOTES?

Ability to update the MOD instructions to the RO from the respective Eng. Doc for the effective parts

Reference: APRP-254

Background

There are scenarios when the team setting up engineering orders in the system need to communicate special instructions to the repair shop in performing a MOD that was initiated by an Engineering Order. Hence there is a requirement to record MOD instructions in an EO and update these instructions in a repair order for the component.

Change Details

To enable this functionality, the following new developments have been incorporated in the **Task Notes** screen:

- The Task Notes popup has been enhanced to store and fetch multiple notes against a task.
- 'Notes Category' has been introduced to decide the transactions where the notes need to be fetched. This field will only load 'Repair' to signify that the active task notes will be fetched in a repair order.
- A new multiline has been introduced in **Edit Notes** screen and **View Notes** screen to view the history of all notes added against the task. User can also modify or activate or inactivate the notes in this multiline.
- On release of an Engineering Order, any notes added or modified from EO will update task master.
- Only active notes against a task will be fetched in various transactions based on Notes Category.

Exhibit 1: Indicates changes in Edit Notes popup

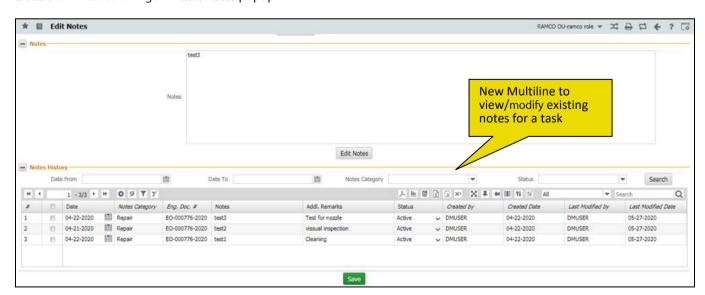
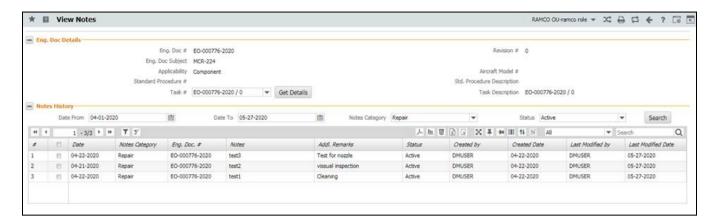




Exhibit 2: Indicates changes in View Notes popup





WHAT'S NEW IN PARTS HUB?

Ability to show line level/part level MR status in Parts Hub

Reference: APRP-629

Background

In Parts Hub, when one Material Request is generated for multiple parts, then the Material Request Status shown in Parts Hub multiline for each part row is misleading. As soon as one of the part requirements is issued, then the entire MR Status changes to 'Partially Issued'. This isn't useful for Planners to decide for the parts that have not been issued. Hence, a new provision to view the line level MR status for parts is required in Parts Hub multiline as there in 'View Material Request' screen.

Change Details

To facilitate the view of Line Level MR status, the following changes have been introduced in Parts Hub:

- New column 'Line Level status' is introduced in Part Hubs under 'Part Requirements / Request' tab to show 'Line Status' with the same line level MR Status displayed in 'Part Details' multiline of 'View Material Request' screen for a particular Part-MR# combination.
- Status Tiles display is revamped with the following MR Line Level status: All, Authorized, Partially Issued/Recd., Completely Issued/Recd., Short Closed and the respective records under each tile can be retrieved.
- MR Status in Additional search is changed to 'Line Level Status' and has the following combo values: All, Authorized, Partially Issued/Recd., Completely Issued/Recd., Short Closed.
- Two minor changes have also been done in Parts Hub: Material Request # is now made hyperlink control which navigates to 'View Material Request' screen and 'Issue' is also made as a hyperlink control to navigate directly to 'View Issue' screen instead of Select Reference Document screen.

MS column in the multiline of 'Part Requirements / Request' tab of Parts Hub shows color coding as per the following Line Level MR status:

- Authorized : All Line Level Status in 'Authorized' status
- Green: All Line Level Status in 'Completely Issued' or 'Completely Received'
- Orange: All Line Level Status in 'Partially Issued' or 'Partially Received'
- Grey: All Line Level Status in 'Short Closed'



Exhibit 1: Identifies the changes in Parts Hub for showing Line Level Status

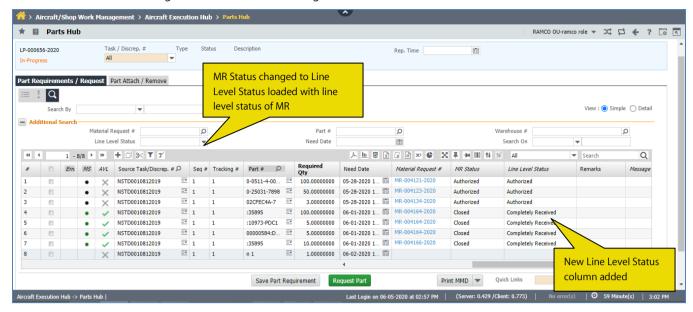
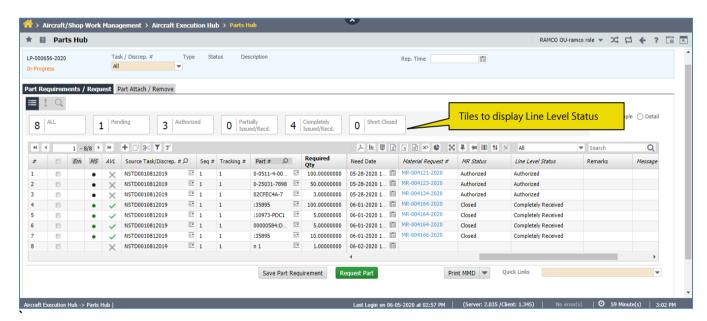


Exhibit 2: Identifies the changes in Status tiles of Parts Hub for showing Line Level Status



WHAT'S NEW IN AIRCRAFT MAINTENANCE PLANNING, AIRCRAFT FXFCUTION HUB AND F-I OG?

Ability to consider Deferred Discrepancies under In-progress packages as Due and allow allocation to other packages for execution

Reference: APRP-590

Background

Whenever discrepancy is deferred, the deferred discrepancy needs to be assigned to next package, so that the mechanic will close the discrepancy. In order to do that, the discrepancy needs to be displayed in the Planning Board, so that the Planner will assign the discrepancy to next package based on mechanic and aircraft availability. But the discrepancy will not be displayed in the planning board unless the currently assigned package is not completed. The business needs is to display the Discrepancy in the planning board as Not Package once it is deferred.

Change Details

Common Master

A new process parameter 'Consider Deferred Discrepancies under Inprogress Packages as Due?' is added under the Entity Type 'Package Type' and Entity '--All Packages--' in the **Set Process Parameters** screen of the **Define Process Entities** activity with the following permitted values:

- 0 (No) Existing Behavior System will consider the Deferred Discrepancies under In-progress packages as still allocated and will not show up as Due in AME Hub, Mechanic Anywhere and Planning Board.
- 1 (Yes) System will consider the Deferred Discrepancies under In-progress packages as Due and will not show up as Due/Overdue in AME Hub, Mechanic Anywhere and Planning Board.

Plan Aircraft Maintenance

If the process parameter 'Consider Deferred Discrepancies under Inprogress Packages as Due?" is set as '1'(Yes) and if the user searches for the Aircraft Reg. # in **Review Fleet Maintenance Plan** screen, there exists deferred discrepancies whose current Exe. Doc. is in "Inprogress" status then, these Discrepancies will be shown in the Job Details gantt of **Review Fleet Maintenance Plan** screen against the Aircraft with Planning Status as 'Not Packaged' and the discrepancy will be allowed to be allocated to another package.



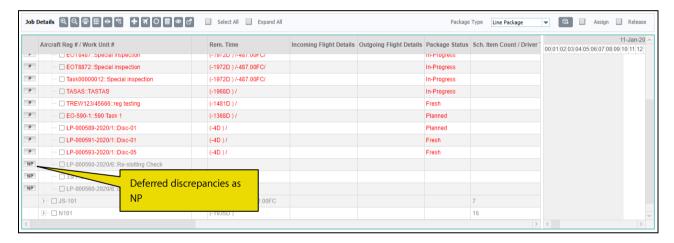
Aircraft Work Reporting Hub

If the process parameter 'Consider Deferred Discrepancies under Inprogress Packages as Due?" is set as '1'(Yes) and if the user searches for the Package # in **Aircraft Work Reporting Hub**, there exists deferred discrepancies whose current Exe. Doc. is in "Inprogress" status then, these Discrepancies will be shown in the Due Items popup of the AME Hub against the Aircraft as Due (or Overdue) and the discrepancy will be allowed to be allocated to another package.

E-Log

If the process parameter 'Consider Deferred Discrepancies under Inprogress Packages as Due?" is set as '1'(Yes) and if the user searches for the Package # in **E-Log** screen of **MechanicAnywhere**, there exists deferred discrepancies whose current Exe. Doc. is in "Inprogress" status then, these Discrepancies will be shown in the Due Items popup of MechanicAnywhere against the Aircraft as Due (or Overdue) and the discrepancy will be allowed to be allocated to another package.

Exhibit 1: Identifies the Deferred Discrepancies as Not Packaged in Review Fleet Maintenance Plan screen



WHAT'S NEW IN AIRCRAFT EXECUTION HUB, FLIGHT LOG AND SHOP WORK ORDER?

Nose # Search in AME Hub, Help on Package, PWO & RSED

Reference: APRP-943

Background

Some of the organizations use actual Manufacturer serial # in Aircraft Reg. # field, and Actual tail # will be in Nose # field. So mechanic will be more familiar with Actual tail #. Hence, provision to search the Aircraft based on the Nose # is enabled in AME Hub, PWO, RSED and Help on Execution Ref. # screens.

Change Details

Aircraft Work Reporting Hub

In Aircraft Work reporting Hub screen, the control 'for A/C Reg #' smart search is enhanced to accept the input as Nose # and suggest Aircraft Reg # based on the Nose #. Even partial match also allowed.

Help on Executio Ref.

In Search Criteria section, for the control Aircraft Reg # smart search is enabled. On search, the value (A/C Reg #) should be defaulted in the Aircraft Reg # control. If user enters a text in the "Aircraft Reg #" control in Help on Execution Ref #, then consider the input as Nose # and suggest A/C Reg # based on the Nose #. Even Partial match also allowed.

Plan Work Order

In **Plan Work Order** screen, the Search On combo should load "Rem. From Nose #" as Meta data along with previously loaded values. If user selects "Rem. From Nose #" in Search On and enters a valid Nose # in the adjacent editable control and click of Get fetches the Work Order details belongs to the Nose # entered in the work order tab.

Record Shop Execution Details

In Record Shop Execution Details screen, the Search On combo loads "Rem. From Nose #" as Meta data, along with previously loaded values. If user selects "Rem. From Nose #" in Search On and enters a valid Nose # in the adjacent editable control, and on click of Get, system fetches the Work Order details belongs to the Nose # entered in the work order tab.



Exhibit 1: Identifies the Smart Search enhanced control in Aircraft Work Reporting Hub



Exhibit 2: Identifies the Smart Search enhanced control in Help on Execution Ref.

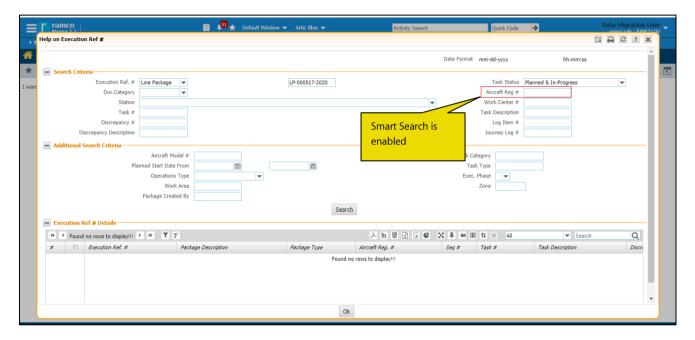


Exhibit 3: Identifies the Plan Work Order screen

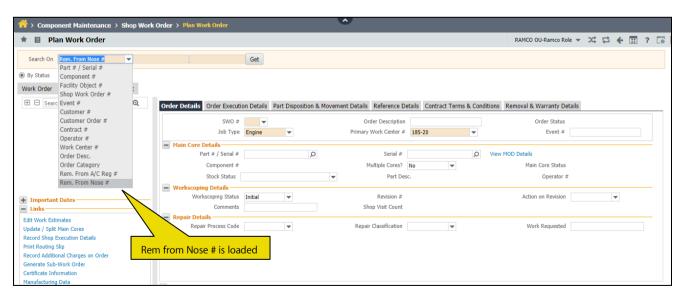
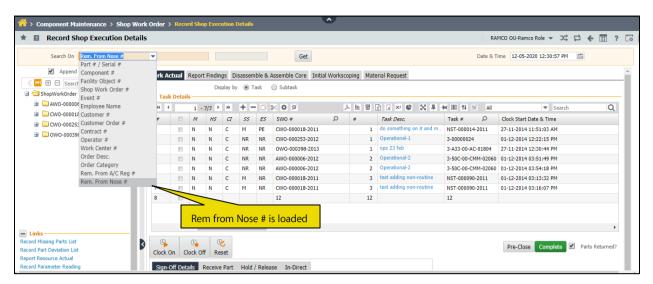




Exhibit 4: Identifies the Record Shop Execution Details screen



WHAT'S NEW IN COMMON MASTER?

Provision should be available to maintain Maint. Operator Specific Address, Logo and Airworthiness Statement

Reference: APRP-263

Background

Each AOC has different address, required to be displayed in report and there are different logos available based on Maint. Operator. There are different Operator specific different airworthiness statements that need to be printed in Engineering Reports. Hence, a new screen to feed address and logo for Maint. Operator will be provided as a link in Edit Airline Operator screen. In the same screen, a provision to capture airworthiness statements as remarks against a Maint. Operator is added.

Change Details

Edit Airline Operator

New link "Edit Airline Operator Information" is added in Edit Airline Operator screen.

Edit Airline Operator Information

A simple screen to capture the necessary information of an Operator i.e., Address, Logo and Airworthiness Statement is developed. This screen has adequate information of Operator from Edit Airline Operator screen and capabilities of capturing multiple address information are enabled. Even though user can define multiple addresses, one can be defaulted at a time. This defaulted address can be printed in Reports. This screen also has a capability to define an attachment 'logo' for an Operator and save against it. User can capture remarks against an Operator and print it as an Airworthiness Statement in Reports.

Exhibit 1: Identifies the link addition in Edit Airline Operator screen

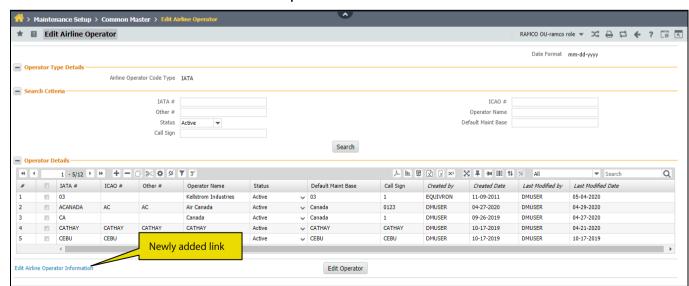
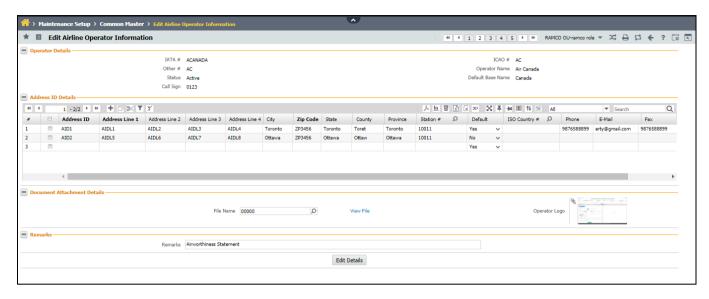




Exhibit 2: Identifies the Edit Airline Operator Information screen





WHAT'S NEW IN COMPONENT MAINTENANCE PLANNING?

Ability to search for the Part #s that are mapped to the Planner Code

Reference: APRP-617

Background

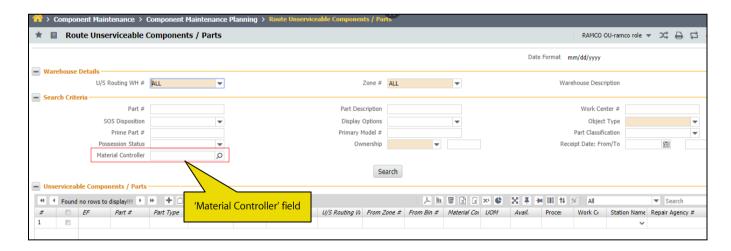
In an organization, more than one planner may be available. Each one of them will be having responsibility for different Part #. In that case, when Planners search for the Unserviceable Parts in **Route Unserviceable Parts** screen, there is no provision to search for all the Part #s that are associated to the Planner Code.

Change Details

In order to facilitate the search of parts with planner code, the following changes have been introduced in **Route Unserviceable Components / Parts** screen.

- A new control 'Material Controller' is added in the search criteria of Route Unserviceable Components /
 Parts screen
- User can also select the employee # from **Help on employee** popup, by clicking the Help on icon near the 'Material Controller' field.

Exhibit 1: Identifies the new control 'Material Controller' in Route Unserviceable Components / Parts screen



Ability to prioritize rules when there are multiple matches in Repair Automation

Reference: APRP-1250

Background

In Repair Automation Rules, more than one rule may match for a Part #. Currently, the system will consider all the rules and if any one of the rules say, Exec. Doc Generation as 'No', then system will not create the Repair Order. In this enhancement, user can define the priority for the rules. The system will consider the rules based on their priority only. If the highest priority rule saying Exec. Doc Generation as 'Yes', then system will create the RO without considering the other rules.

Change Details

- A new column 'Priority' is introduced in both 'Part Based Rules' and 'Parameter Based Rules' tabs of Repair
 Automation Rules screen.
- User can define positive integer # as the Priority for a rule and can give the same Priority for more than one rules.
- If user did not provide any number in 'Priority' column for rules, then system will consider that rules are having the least priority as given by the user.
- For Exe. Order Generation of a Part #, the priority of rules are given as follows:
 - 1. User given priority number
 - 2. Part Serial > Part > Global
 - 3. No Order Generation > Draft > Fresh > Released RO status

This means, we will consider the higher weightage for User defined given priority numbers.

If the highest user given priority number is matching more than one rule, then we will give the priority for that rules as:

Part Serial > Part > Global

If all the rules exist in the same group (i.e., Part Serial/Part/Global), then we will give priority for the RO Status as:

No Order Generation > Draft > Fresh > Released RO status

i.e., RO will be created with lowest status (RO will not be created, if any of the rules are defined with Exe. Order Generation as 'No'.

Example:

1. Three rules R1, R2 and R3 are matching for a Part. User defined Priorities are as follows:

Rule	Priority
R1	1
R2	2
R3	3

Then, we will consider the Exe. Order Generation and RO Status? of R1 rule alone.



2. Three rules R4, R5 and R6 are matching for a Part. User defined Priorities are as follows:

Rule	Priority
R4	1
R5	1
R6	2

Then we will check the applicability of R4 and R5. If applicability as follows:

Rule Applicability

R4 Part # alone

R5 Part # and Serial #

Then, we will consider the Exe. Order Generation and RO Status? of R5 rule alone.

3. Three rules R7, R8 and R9 are matching for a Part. User defined Priorities are as follows:

Rule Priority R7 1 R8 1 R9 2

Then we will check the applicability of R4 and R5. If applicability as follows:

Rule Applicability

R7 Part # alone

R8 Part # alone

Then we will check the RO Status? of R7 and R8 in the following priority:

No Order Generation > Draft > Fresh > Released RO status

If any of R7 or R8 defined Exe. Order Generation as 'No' then RO will not be created.

If R7 or R8 defined Exe. Order Generation as 'Yes' and RO Status? is Draft for any of them, then RO will be created in 'Draft' status.

Exhibit 1: Identifies the new 'Priority' column in Part Based Rules tab of Repair Automation Rules multiline

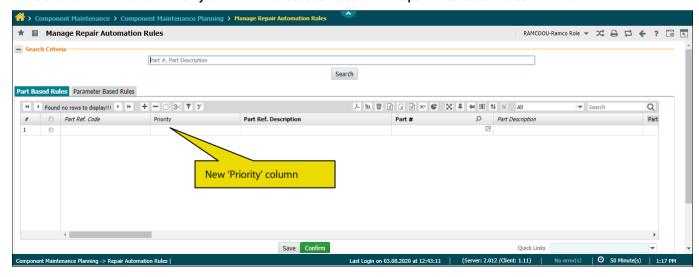
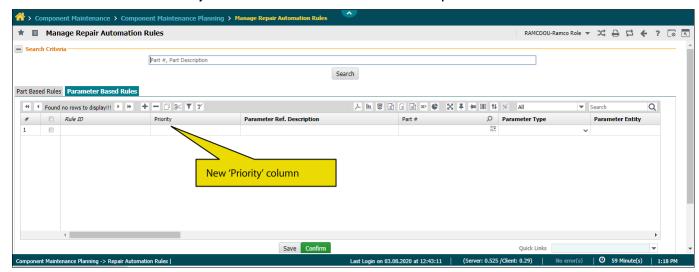




Exhibit 2: Identifies the new 'Priority' column in Parameter Based Rules tab of Repair Automation Rules multiline



WHAT'S NEW IN COMPLIANCE MANAGEMENT?

Ability to upgrade MOD to component based on compliance of MOD Task during Repair Receipts

Reference: APSE-795

Background

On performing certain tasks called MOD tasks, the component gets modified and a MOD number gets associated to the modified component. The mod tasks are usually performed during a repair and hence there is a need for compliance of MOD tasks in repair order to update the MOD number to the component.

Change Details

The compliance service has been enhanced to update the new MOD # for a component when a MOD task is performed:

- System will insert a record in Part Serial MOD Details screen in the Stock Maintenance business component.
- System will update the MOD # in the above screen based on the new MOD # set against the task in Maintain Task Part MOD details screen in the Maintenance Task business component.
- System will update this MOD # to the component when the MOD task is complied in the repair order when the inspection is completed for that component in repair receipt for the repair order.



WHAT'S NEW IN RELIABILITY ANALYSIS?

Run MTBUR Analysis for a Fleet based on Alert Definition Setup

Reference: APRP-247

Background

This enhancement brings improvements in MTBUR analysis of components that is periodically done for every month. The analysis outcome is to identify the list of parts that cross a certain threshold value of MTBUR (called the Alert value) and maintain a separate watchlist.

Currently, Ramco offers MTBUR analysis based on fixed Alert values and the Alert value in turn is computed periodically based on a standard formula. While the formula is standard, the multipliers involved could vary from one customer fleet to another, which requires to be configured.

Periodic MTBUR analysis is required to be performed and a watchlist is expected to be derived based on comparison with the computed Alert values at a fleet level.

Change Details

The existing user interface **Analyze MTBUR** for **Parts** under the component **Reliability Analysis** and the business process **Reliability Management** has been retained and enhanced to function with revised formulae. The improvements in this page are elaborated below:

- Reliability process parameters have already been identified with parameters to handle the variation in multipliers of the Alert level formula.
- Based on an option setting, the system will identify Alerts either based on existing threshold Alert MTBUR for parts or based on the computed Alert values.
- Alert Value for each Part is obtained using the following formula;

Alert Value = \ddot{X} + (Multiplication factor) σ

Where,

 $\ddot{X} = \Sigma X/N$ i.e. Mean of quarterly unscheduled removal rate

N = Count of quarters from the parameter 'Number of Quarters to be considered for URR based Alert Computation'

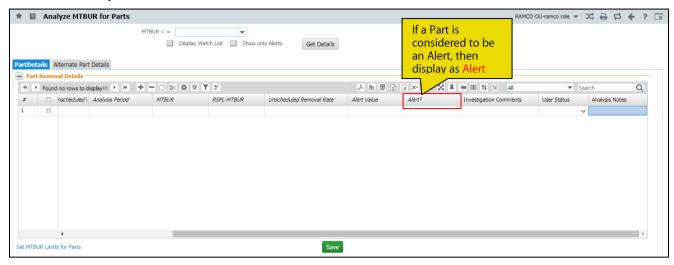
Multiplication factor = Multiplication factor from the parameter 'Multiplication Factor for URR based Alert Computation'

- σ = standard deviation of quarterly unscheduled removal rate
- The existing screen of Analyze MTBUR for parts will be retained and enhanced to represent the watchlist based on the configured Alert values
- Similar to the offline processing of LTR/NFF analysis, MTBUR is also configured as an offline process which will be run periodically, once in a day / week / month based on a parameter.
- The outcome of the offline processor will be to identify the Parts which satisfy the MTBUR alert rule and be identified with Alert flag automatically.
- Analyze MTBUR for Parts interface will show the MTBUR values for the period against the satisfied rule. For
 parts that are not identified as Alert, the system by default will display the values based on the past three
 month data. This provides the information to the user to analyze and manually tag a part as Alert, if



needed.

Exhibit 1: The Analyze MTBUR for Parts screen



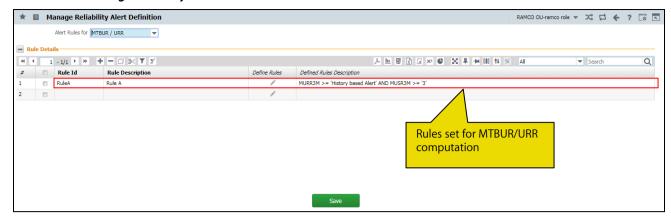
MTBUR Rule Definition:

The Rule definition for MTBUR Alerts is to be set in the **Manage Reliability Alert Definition** interface. Let us consider **Rule1** set as,

MURR3M >= 'History based Alert' AND MUSR3M >= '3', which represents "URR for 3months greater than or equal to History based Alert" and "Unscheduled Removals for 3months greater than or equal to 3". For a given part to be Alert, the part must satisfy both the rules for it to be tagged as an Alert in the Analyze MTBUR for Parts page.



Exhibit 2: The Manage Reliability Alert Definition screen



Display Reliability Notes in RO with indication on Watch list Part

APRP-861

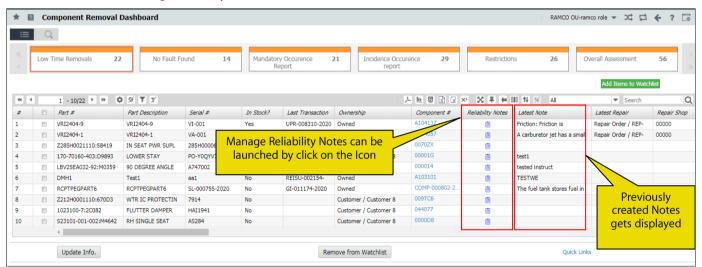
Background

There is a need to provide notes against the Component/Part with Category Information, by which the Notes/Instructions can be passed on to the respective In-charges. The instructions provided against Component must be listed in order for review and incorporation into repair. Once incorporated, the status of the instruction i.e., Active or Inactive is to be tracked.

Change Details

In order to satisfy this requirement, introducing a new combo control 'Notes Category' in the UI "Manage Reliability Notes" of **Component Removal Dashboard** to record the special instruction/notes against a part/part-serial combination. Here user is also provided with the capability to modify the added notes.

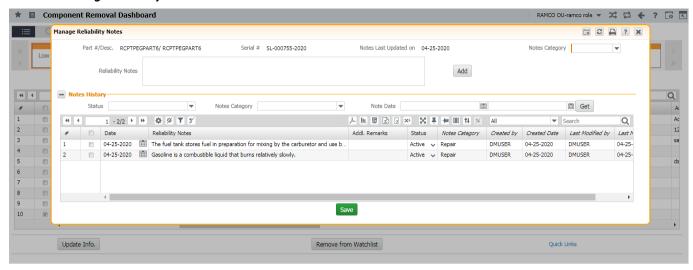
Exhibit 1: Identifies the changes in Component Removal Dashboard



The above screen can be launched from **Reliability Management > Reliability Analysis > Component Removal Dashboard.**



Exhibit 2: Manage Reliability Notes screen



In Manage Reliability Notes, user can add instruction against a Component/Part which can be later considered for Repairs. User can use the Notes History to view/modify the history of Instructions. This instruction can be modified until it is in Active status. Once Inactivated, it cannot be activated/modified or be considered for Repair. The latest Notes will get fetched onto the 'Component Removal Dashboard'.

WHAT'S NEW IN AIRCRAFT NOSE #?

Smart search on Aircraft Reg. # based on Nose # along with Nose # as Input Search Criteria

Reference: APRP-1027

Background

Specific customers are using actual manufacturer serial # in Aircraft Reg. # field and the actual tail # will be in Nose # field. So, mechanic will be more familiar with actual tail #. So this enhancement speaks about enhancing Aircraft Reg. # search with Nose #, where the mechanic will be most frequently using them.

Change Details

- 1. Smart Search should be enabled in Aircraft Reg. # field with the combination of Aircraft Reg. # and Nose #.
- In Re-Initialize/Update Parameter Values screen, "Nose #" is loaded as meta data in "Maint Object Type" of Search Criteria.
- 3. In **Initialize Maint. Prog. & update Compliance** screen, "Nose #" id loaded as meta data in "Maintenance Object" of Search Criteria.
- 4. In Manage Engineering Document screen, 'Search Document' should accept "Nose #" as an Input Data.
- 5. In 'Track Maintenance Compliance History' screen, "Nose #" is loaded as a Meta data in "Maint. Object" of Search Criteria.
- 6. In Review Fleet Maintenance Plan/Plan Aircraft Maintenance and Aircraft Maintenance Due Report screen, "Nose #" is loaded as a meta data in Search by of Search criteria.

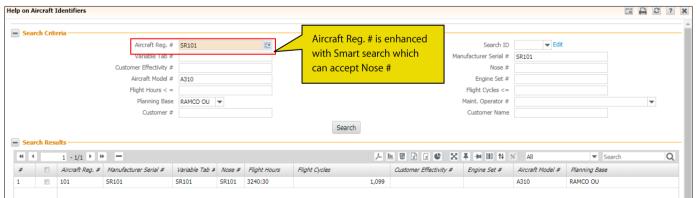
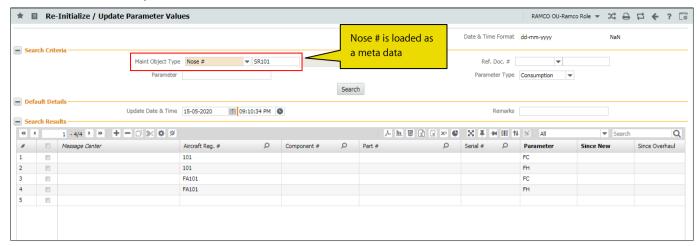


Exhibit 1: Help on Aircraft Identifiers screen

The above mentioned UI can be launched from Configuration Management > Aircraft > Help on Aircraft Identifiers.



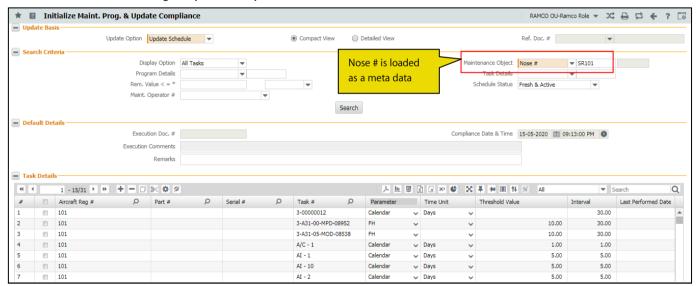
Exhibit 2: Re-Initialize / Update Parameter Values screen



The above mentioned UI can be launched from **Configuration Management > Aircraft > Re-Initialize / Update Parameter Values.**

Here, Nose # can be used as a search filter which will improve the usability for a mechanic.

Exhibit 3: Initialize Maint. Prog. & Update Compliance screen

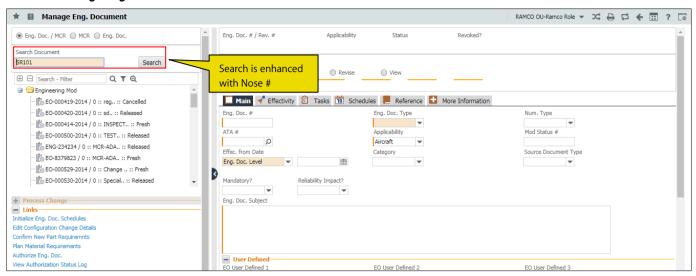


The above mentioned UI can be launched from **Compliance Management > Compliance Tracking & Control > Initialize Maint. Prog. & Update Compliance.**

Here, Nose # can be used as a search filter which will improve the usability for a mechanic.



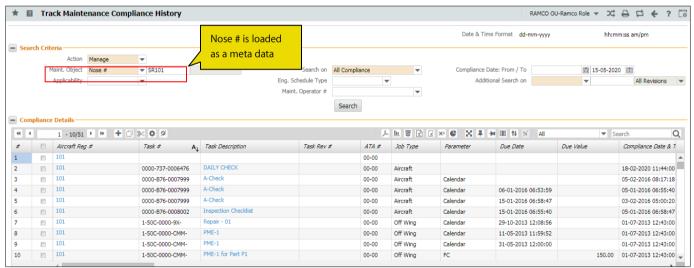
Exhibit 4: Manage Eng. Document screen



The above mentioned UI can be launched from **Engineering Change Management > Engineering Document > Manage Eng. Document.**

Here, search is enhanced with Nose # and this will improve the usability for a mechanic.

Exhibit 5: Track Maintenance Compliance History screen

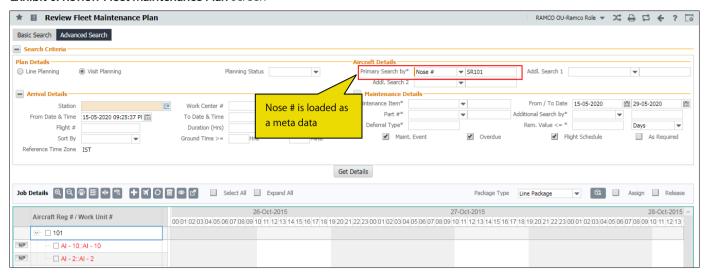


The above mentioned UI can be launched from Maintenance Program > Aircraft Maintenance Program > Track Maintenance Compliance History.

Here, Nose # can be used as a search filter which will improve the usability for a mechanic.



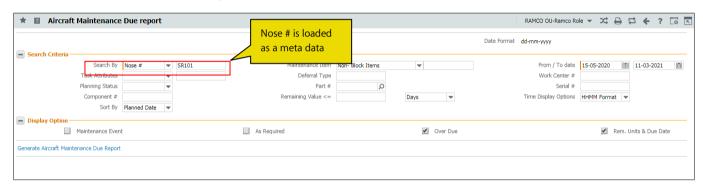
Exhibit 6: Review Fleet Maintenance Plan screen



The above mentioned UI can be launched from Maintenance Planning > Aircraft Maintenance Planning > Plan Aircraft Maintenance.

Here, Nose # can be used as a search filter which will improve the usability for a mechanic.

Exhibit 7: Aircraft Maintenance Due Report screen



The above mentioned UI can be launched from Maintenance Planning > Aircraft Maintenance Planning > Aircraft Maintenance Due Report.

Here, Nose # can be used as a search filter which will improve the usability for a mechanic.

WHAT'S NEW IN MAINTENANCE PLANNING?

Restrict Duplication of Maintenance Events within a package from Planning Board

Reference: APRP-1013

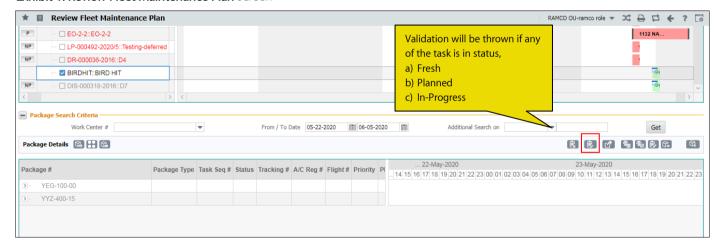
Background

When a Maint. Event is added for a second time in a package in Planning Board screen, the Maint. Event gets duplicated. A maintenance event is generally not duplicated in a package. On completion of maintenance event the same can be added again in case of any further investigation with respect to the same maintenance event or if the repair against the maintenance event did not fix the problem in the aircraft.

Change Details

The duplication will be validated if the Maint. event is duplicated before the first instance of Maint. Event is completed. Duplication of maintenance event will be restricted within a package unless the tasks in the maintenance event are completed within the package.

Exhibit 1: Review Fleet Maintenance Plan screen



The above mentioned UI can be launched from **Maintenance Planning > Aircraft Maintenance Planning > Review Fleet Maintenance Plan.**

Maint. Event is a set of Tasks which is required to be performed when an Aircraft undergoes certain emergency scenario. E.g., Bird hit, Hard landing etc. Such Maint. Event should not get duplicated when the Tasks under it are in the following status: "Fresh", "Planned" and "In-Progress". In certain situations, these events can be added again if the Tasks under a Maint. Event are in the following status: "Completed", "Closed", "Deferred", "Pre-Closed", "Cancelled", "Duplicate", "Incomplete" and "Route for Repair". The above actions can be performed using two tasks "Assign Task to Package", "Plan Job" from the Planning Board.



WHAT'S NEW IN ENGINEERING ORDER?

Retrieving Corresponding Part # as well from Serial # help

Reference: APRP-1015

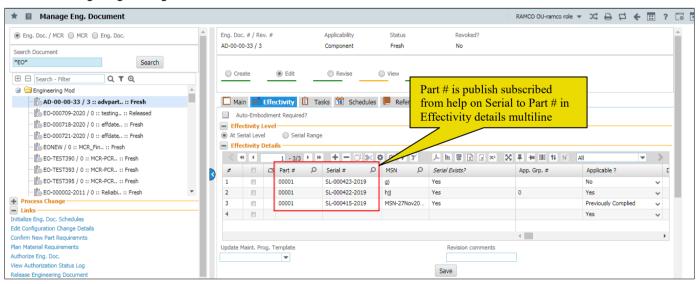
Background

This enhancement brings improvements in Manage Engineering Order. Currently, in Engineering Order based on Part # input, the Serial # help works. Whereas when a bulk of Serial # is provided in 'Help on Serial' and on closure of the help screen, the respective Part # are not fetching onto the Part # of Parent Screen, which has some usability needs.

Change Details

To address this enhancement, we have Publish Subscribed Part # from Serial help on to the Part # of Effectivity Details multiline.

Exhibit 1: Manage Engineering Order screen



The above mentioned UI can be launched from **Engineering Change Management > Engineering Document > Manage Eng. Document.**



WHAT'S NEW IN AIRCRAFT MAINTENANCE EXECUTION?

Ability to control automatic Package Completion based on set option

Reference: APRP-925

Background

Mechanics need to be validated for certain mandatory checks like entering Actual Time of Arrival/Departure, at the Package level and this cannot be done during creation of the Package as this information will now be known to the Mechanic then. By forcing the Mechanic to complete a package manually, mechanic can validate all the required data/info is filled before complete the package.

Change Details

To facilitate control of automatic package closure, following changes have been introduced in Work Reporting Hub as well as in MechanicAnywhere.

- A new process parameter "Automatically change the Package status to 'Completed' if all the Tasks &
 Discrepancies under the Package are in Completed or Terminating status?" is added under the Entity Type
 'Package Type' and Entity 'All user defined package types including Log Card' in the Define Process Entities
 activity with the following permitted values:
 - 0 (No) The package will remain in the In-Progress status, user can manually complete the package.
 - 1 (Yes) Existing Behaviour Package status automatically changed to completed once all the Tasks & Discrepancies under the Package are in Completed or Terminating status.
- If the process parameter "Automatically change the Package status to 'Completed' if all the Tasks & Discrepancies under the Package are in Completed or Terminating status?" is set as "No", then once all the Tasks & Discrepancies under the Package are in Completed or Terminating status, Complete button will load as in the Package Status Combo button of Work Reporting Hub. User can click the Complete button and manually complete the Package.
- If the process parameter "Automatically change the Package status to 'Completed' if all the Tasks & Discrepancies under the Package are in Completed or Terminating status?" is set as "No", then once all the Tasks & Discrepancies under the Package are in Completed or Terminating status, Complete will be load as combo value in Status change pop up of MechanicAnywhere. User can click the complete button and manually complete the Package.



Exhibit 1: Identifies the changes in Work Reporting Hub

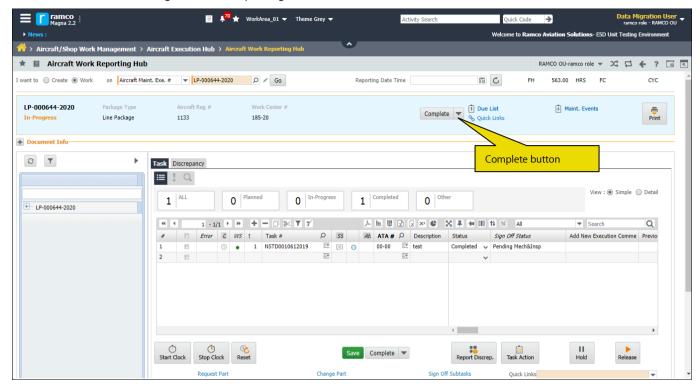
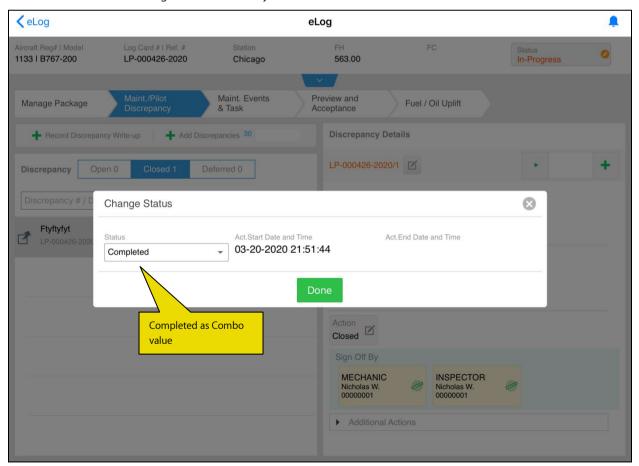


Exhibit 2: Identifies the changes in MechanicAnywhere





WHAT'S NEW IN PARTS HUB?

View Short Closed Material Requests in Parts Hub

Reference: APRP-873

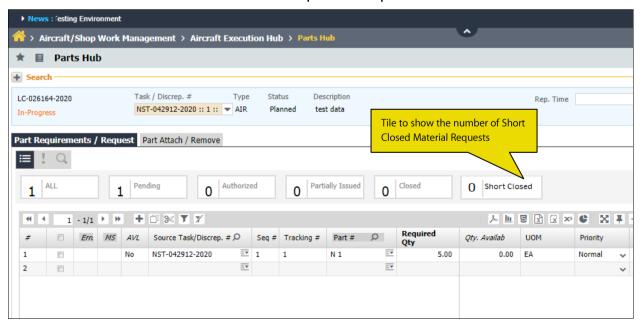
Background

For the Task Part Requirements, system generates Material Request automatically on release of Package. Since Qtys are wrongly provided, Planners are short closing MRs. For the parts which are short closed, system defaults part # in Parts Hub screen since these are defined in Task part requirements. Mechanic/Inspectors might raise Material Request by seeing parts getting defaulted. This can be stopped if Short Closed Material Requests are displayed.

Change Details

- A new process parameter "Display Short Closed Material Requests in Parts Hub?" is added under the Entity Type
 'Package Type' and Entity 'All user defined package types including Log Card' in the Set Process Parameters
 screen of the Define Process Entities activity with the following permitted values:
 - 0 (No) Existing Behaviour System will not show the Short Closed Material Requests
 - 1 (Yes) System will show the Short Closed Material Requests in multiline and also as a Tile
- A new tile 'Short Closed' is added in tile section. If the set option to show short closed material request is set as
 'Yes', the tile will show the count of the short closed material requests and all the short closed material requests
 will be retrieved in the multiline.
- On click of the count of Short Closed tile, only the Short Closed Material Requests will be fetched in multiline.
- New combo value 'Short Closed' is added in the control 'Line Level Status' in search section to search the Short
 Closed Material Requests. If the set option to show short closed material request is set as 'No', then the combo
 value will be hidden.

Exhibit 1: Identifies the new tile Short Closed in Part Requirement/Request tab of Parts Hub





Material Availability as Color Coded icon instead of just YES or NO

Reference: APRP-871

Background

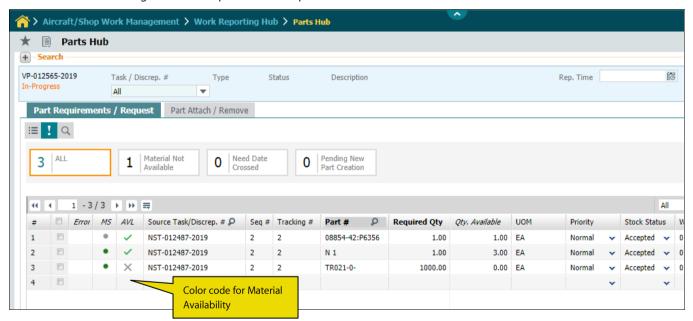
In Part Requirements/Request tab of **Parts Hub** screen, the material availability status will show as Yes/No in the 'AVL' column of multiline. It will be very useful to distinguish the Material request if the availability of part is indicated as the color code.

Change Details

To facilitate the view of Material availability status as color code, the following changes have been introduced in **Parts Hub**:

- New icon is introduced to indicate the availability of requested material. This icon will be displayed instead of 'Yes' in 'AVL' column 'Part Requirements/Request' tab.
- New icon is introduced to indicate the non-availability of requested material. This icon will be displayed instead of 'No' in 'AVL' column Part Requirements/Request tab.

Exhibit 1: Identifies changes in Part Requirements/Request tab of Parts Hub



WHAT'S NEW IN COMPLIANCE HISTORY?

Retrieve the Task information in Compliance History while being launch from Component Maintenance Program

Reference: APRP-1022

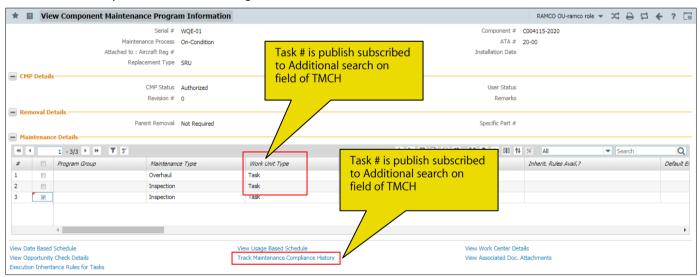
Background

When user launches Track Maintenance Compliance History screen with Task # from View Component Maintenance Program Information screen, the Task # is not flowing onto TMCH currently. This enhancement brings improvements in Track Maintenance Compliance History screen so that when user launches TMCH from View Component Maintenance Program Information, the selected Task # Compliance History will get fetched.

Change Details

To address this enhancement, we have publish subscribed Task # from View Component Maintenance to the Additional Search on field on **Track Maintenance Compliance History** screen, so that when user launches TMCH from **View Component Maintenance Program Information** screen, the Task gets defaulted in 'Additional Search on' field along with the Task # with auto search enabled.

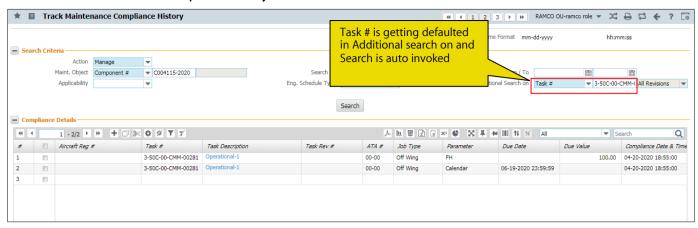
Exhibit 1: View Component Maintenance Program screen



The above mentioned UI can be launched from Maintenance Program > Component Maintenance Program > View Component Maintenance Program Information



Exhibit 2: Track Maintenance Compliance History screen



WHAT'S NEW IN COMPLIANCE MANAGEMENT?

Retrieve all child tasks in IMPUC when the given Task # in search is a Primary Task

Reference: APRP-1023

Background

In IMPUC, the primary task filter can only be used to fetch tasks in Block Base relationships in the system. Tasks with other relationships are also added in a program and there is a need to edit the schedules of these tasks from IMPUC.

Change Details

IMPUC screen's primary task filter has been enhanced in the 'Update Schedule' mode where the primary task filter will now consider all task relationships in the system.

Logic:

Previously when the user chooses Update option as "Update Schedule or Work Compliance" and provides 'Primary Task #' and invokes Search, only those Tasks with Block-Base gets fetched in the Task details multiline. Now for Update Option – 'Update Schedule', the Primary Task filter is enhanced i.e., when search is invoked it will fetch those tasks which have relationships like:

- i. Concurrent Execution Specific
- ii. Concurrent Execution Group
- iii. Concurrent Execution Conditional
- iv. Conditional
- v. Predecessor Constraint
- vi. Conflict
- vii. Initiate Schedule
- viii. Initiate Records Follow-up
- ix. Terminate Schedule
- x. Supersede

Screen Traversal:

IMPUC can be launched from Compliance Management > Compliance Tracking & Control > Initialize Maint. Prog. & Update Compliance.



WHAT'S NEW IN RELIABILITY ANALYSIS?

Generate LTR report along with Investigation details

APRP-233

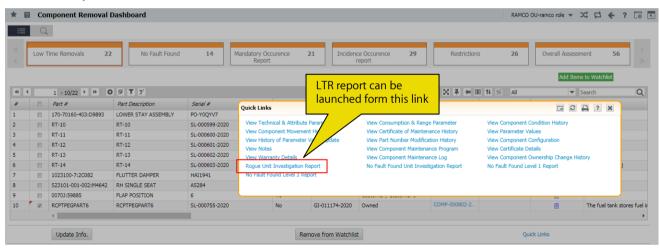
Background

A Value engineer, after having a look at the Component Removal Dashboard is in need to generate a Report regarding LTR assessments and produce it to his customers, for the information gathered from Shop Findings. This enhancement deals with the report which speaks about 'Roque Unit Investigation Report'.

Change Details

In order to satisfy this requirement, a provision to generate a "Rogue Unit Investigation Report" is introduced. This report consists of the essential parameters, for which customer the report is being generated along with the Repairer to whom the Component has been sent for repair in recent time. The report mainly speaks about the Repair order and the findings while executing the repairs.

Exhibit 2: Component Removal Dashboard - Quick Links



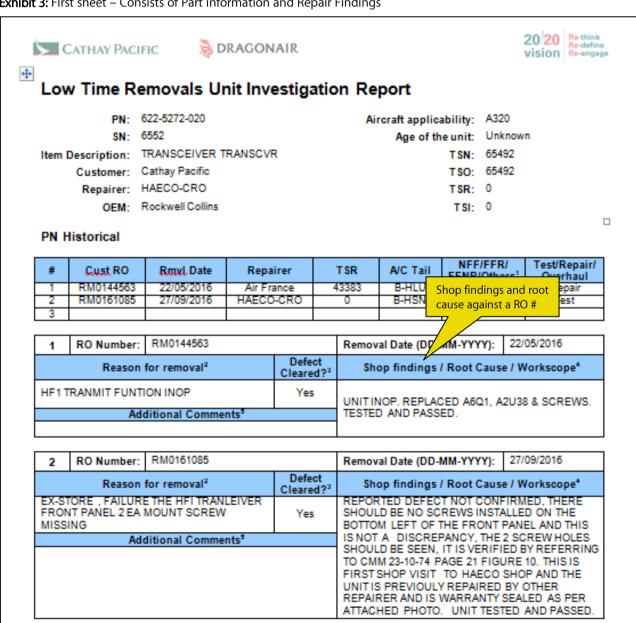
The above mentioned UI can be launched from Reliability Management > Reliability Analysis > Component Removal Dashboard > Quick Links.



Exhibit 2: Header section of Low Time Removals Unit Investigation Report



Exhibit 3: First sheet – Consists of Part information and Repair Findings



WHAT'S NEW IN WORK MONITORING AND CONTROL?

Ability to filter for Packages/Work Orders using Employee # of the person who has booked time on the tasks under the Package/Work Order

Reference: APRP-927

Background

In an organization, multiple employees will work on multiple packages. Therefore, there should be a provision for the supervisor to search packages using Employee # of the person who has booked time on the Task/Discrepancy under the Package/Work Order.

Change Details

In order to facilitate the search of Packages/Work Orders using Employee #, the following changes have been introduced in **Work Monitoring and Control** business component.

- A search value 'Jobs of Employee #' is added in the combo of control 'Search On' in the search section of Review Work tab of Manage Work Assignments and Reporting screen.
- If the user select the combo value 'Jobs of Employee #' and enters a valid employee ID in the editable control and clicks the 'Search' button, the Gantt will retrieve the packages/Work Order containing the Task/Discrepancy against which the person has booked the time.

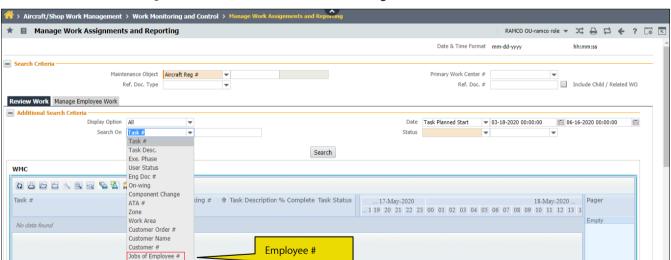


Exhibit 1: Identifies the changes in Review Work tab of Work Monitoring and Control screen

WHAT'S NEW IN AIRCRAFT MAINTENANCE EXECUTION, AIRCRAFT FXFCUTION HUB AND MFCHANICANYWHERE?

Ability to restrict swap CR transaction within the same Aircraft in AME, Parts Hub & MechanicAnywhere

Reference: APRP-952

Background

User wants to do swap and cannibalize transactions to parts on the same aircraft. Currently when performing a swap or cannibalize transaction, the system will let you enter PN and SN that is currently attached to another aircraft which is in flying condition. This will mislead further operations in the business.

Change Details

Common Master

A new process parameter "Allow Swap and Cannibalization across Aircrafts?" is added under the Entity Type 'Package Type' and Entity 'all user defined package types including Log Card' in the **Set Process Parameters** screen of the **Define Process Entities** activity with the following permitted values:

- o 0 (Not Allowed) System will not allow swap and cannibalization across aircrafts.
- o 1 (Allowed) Existing Behavior System will allow swap and cannibalization across aircrafts.

Aircraft Maintenance Execution

If the process parameter "Allow Swap and Cannibalization across Aircrafts?" is set as '0' (Not Allowed) and the user performs component replacement transaction with source set as "Swap" or "Cannibalization" in **Record Aircraft**Maintenance Execution Details screen, and the Installed Part # / Serial # provided is not available in the current Aircraft, then system will validate the user on save as ""Allow Swap and Cannibalization across Aircrafts?" is set as "Not Allowed". Please enter Installed Part # / Serial # that is already available in the Aircraft Reg # <%1>".

Aircraft Work Reporting Hub

If the process parameter "Allow Swap and Cannibalization across Aircrafts?" is set as '0'(Not Allowed) and the user performs component replacement transaction with action set as "Swap" or "Cannibalization" in **Parts Hub** screen and the Installed Part # / Serial # provided is not available in the current Aircraft, then system will validate the user on change part as ""Allow Swap and Cannibalization across Aircrafts?" is set as "Not Allowed". Please enter Installed Part # / Serial # that is already available in the Aircraft Reg # <%1>".

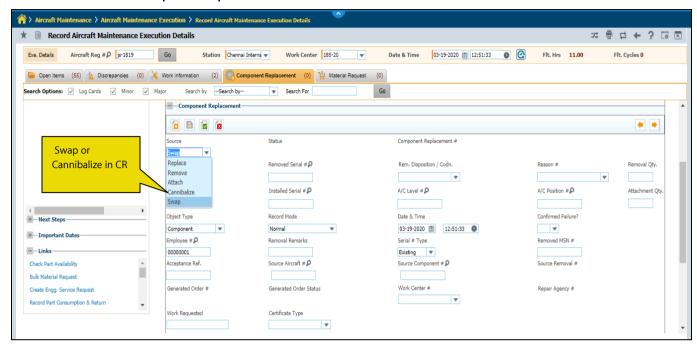
MechanicAnywhere

If the process parameter "Allow Swap and Cannibalization across Aircrafts?" is set as '0'(Not Allowed) and the user performs component replacement transaction with source set as "Swap" or "Cannibalization" in **Component**Replacement screen of MechanicAnywhere and the Installed Part # / Serial # provided is not available in the current Aircraft then system will validate the user on save as ""Allow Swap and Cannibalization across Aircrafts?" is set as



"Not Allowed". Please enter Installed Part # / Serial # that is already available in the Aircraft Reg # <%1>".

Exhibit 1: Identifies the Component Replacement tab in Record Aircraft Maintenance Execution Details screen





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