



ramco

Ramco Aviation Solution

Version 5.7.6

Enhancement Notification

Maintenance

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WHAT'S NEW IN TECHNICAL RECORD?

Ability to Manage Task Compliance Information in Technical Records Hub

Reference: AHBf-12026

Background

This enhancement brings the ability for the Technical Record personnel to manage task compliance information from the **Compliance** tab in **Manage Aircraft / Component Records** screen of **Technical Records** business component.

Change Details

A new tab to manage compliance of the tasks for an Aircraft / Component is added in the **Manage Aircraft / Component Records** screen. The screen can be used for 3 different functions for the managing task compliance for an entity:

1. Record
2. Correction and Deletion
3. View

The usage of the above function is controlled using the security access rights. The **Compliance** tab combines the features of 'Work Compliance' in **Initialize Maint. Prog. & Update Compliance** and that of **Track Maintenance Compliance History** screens.

Compliance Tab Features:

Following features are supported in **Compliance** tab in **Technical Records** Hub:

- Record Manual Task Compliance for the program tasks
- Record direct task compliance for the aircraft or component
- Compliance Correction and Deletion for already complied tasks
- Activity Based Access Rights for different functions
- Dynamic Search

Exhibit 1: Record Mode in Compliance tab

The screenshot shows the 'Manage Aircraft / Component Records' interface. The 'Compliance' tab is selected, and the 'Record' button is highlighted. A search bar is present with a 'Search' button. A table of tasks is displayed with columns for Part #, Serial #, Task #, Current Value, Rem. Value, and Schedule. Callouts provide additional information:

- Will Retrieve the Program Task which are due along with 'As Required' tasks**: Points to the 'Record' button.
- Task#
Task Description
Eng. Doc #
Eng. Doc Type
MCR#
ATA#**: Points to the search bar.
- Prog. Item Type
Rem Value
Job Type**: Points to the dropdown menu next to the search bar.

The 'Record' option under **Compliance** tab will retrieve only the Program Tasks which are due and also the Program Task with 'Prog. Item Type' set as 'As Required' for the searched Maintenance Object or for the entity selected in the Configuration Tree (if Configuration tree click was performed).

On providing the search criteria and clicking 'Search' the system will display the searched task. On click of the Advanced Search link, the system will launch pop-up where various search criteria can be entered on which the task need to be filtered in the multiline.

- For Task compliance provide the Actual Compliance Date & Time and Execution Ref # and Execution Comments to record the compliance.


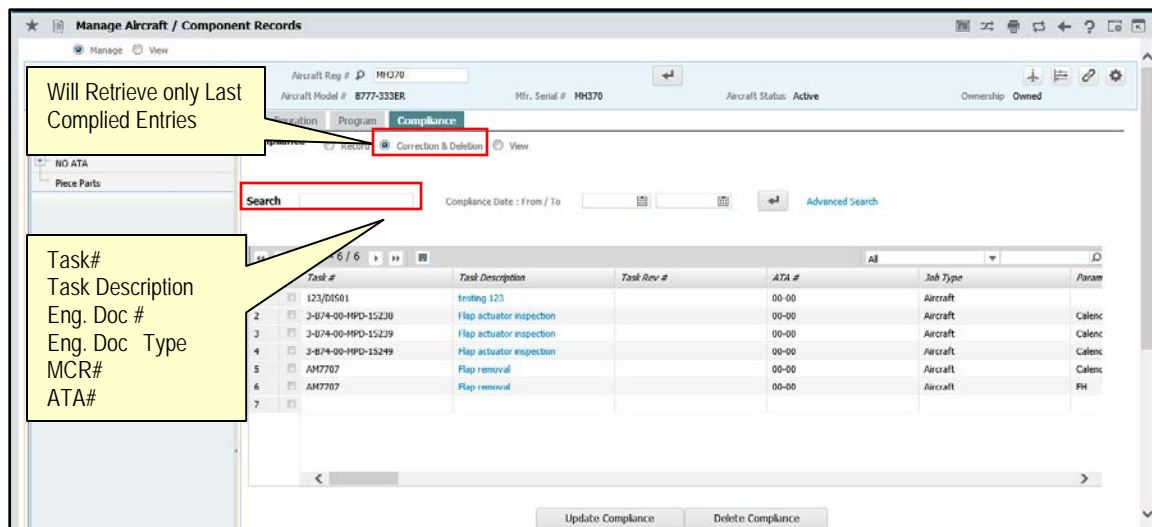
 *Note: The complied task should be effective for the entity against which it is complied. The user should have access to the 'Initialize Maint. Prog. & Update Compliance' screen to be able to perform 'Record' function.*

Exhibit 2: Correction & Deletion Mode in Compliance tab

The 'Correction & Deletion' option under Compliance tab will retrieve only the Last Complied Entries of the searched Maintenance Object or for the entity selected in the Configuration Tree (if Configuration tree click was performed).

- If the task is tracked by multiple schedules then multiple entries for the task will be retrieved in the multiline with the latest compliance date and value.
- The records can be selected in the multiline and correction / deletion of compliance entries of the tasks can be performed.
- The last compliance date and compliance value can be corrected by providing the New Compliance Date and Time, New Compliance Value, New Execution Doc # and Correction Remarks for the respective task and its corresponding parameter.
- The compliance entries can be corrected for only one entity at a time.



*Note: Verify or Audit of the complied tasks cannot be done from the Compliance Tab. The user should have access to the **Track Maintenance Compliance History** screen to be able to perform 'Correction & Deletion' function.*

Exhibit 3: View Mode in Compliance tab

The screenshot displays the 'Manage Aircraft / Component Records' interface. The 'Compliance' tab is active, and the 'View' option is selected. A callout indicates that this action will retrieve all compliance history entries. The table below lists various tasks and their details.

Task #	Task Description	Task Rev #	ATA #	Job Type	Param
123/DI501	testing 123		00-00	Aircraft	
3-874-00-MPD-15238	Flap actuator inspection		00-00	Aircraft	Calenc
3-874-00-MPD-15238	Flap actuator inspection		00-00	Aircraft	Calenc
3-874-00-MPD-15238	Flap actuator inspection		00-00	Aircraft	Calenc
3-874-00-MPD-15238	Flap actuator inspection		00-00	Aircraft	Calenc
3-874-00-MPD-15239	Flap actuator inspection		00-00	Aircraft	Calenc
3-874-00-MPD-15239	Flap actuator inspection		00-00	Aircraft	Calenc
3-874-00-MPD-15239	Flap actuator inspection		00-00	Aircraft	Calenc
3-874-00-MPD-15239	Flap actuator inspection		00-00	Aircraft	Calenc
3-874-00-MPD-15249	Flap actuator inspection		00-00	Aircraft	Calenc

The 'View' option under Compliance tab will retrieve All Compliance history entries of the searched Maintenance Object or for the entity selected in the Configuration Tree (if Configuration tree click was performed).

Exhibit 4: Dynamic Search in Record Mode

Dynamic Search

#	Part #	Serial #	Task #	Current Value	Rem. Value	Schedule
1			3-B74-00-MPD-15238		-557D	04-06-20
2			3-B74-00-MPD-15239			
3			3-B74-00-MPD-15240			
4			3-B74-00-MPD-15241			
5			3-B74-00-MPD-15242			
6			3-B74-00-MPD-15243			
7			3-B74-00-MPD-15244			
8			3-B74-00-MPD-15245			
9			3-B74-00-MPD-15246			
10			3-B74-00-MPD-15247			

For Record, the dynamic search will be based on follows:

- **Primary Search – for text input in the Search textbox**
 - Task #
 - Task Description
 - Eng. Doc #
 - Eng. Doc Type
 - MCR #
 - ATA #
 - Primary Task #
 - Primary Task Desc.
- **Primary Search – for values selected in drop-down**
 - Prog. Item Type
 - Rem Value
 - Job Type
- **Advanced Search** is also available for the 'Record' function

Exhibit 5: Dynamic Search in Correction & Deletion / View mode

Manage Aircraft / Component Records

Aircraft: MH370 | B777-333ER | Aircraft Reg #: MH370 | Aircraft Model #: B777-333ER | Mfr. Serial #: MH370 | Aircraft Status: Active | Ownership: Owned

Configuration | Program | **Compliance**

Compliance: Record | **Correction & Deletion** | View

Search [] Compliance Date: From / To [] [] [] [Advanced Search](#)

Dynamic Search

#	Task #	Task Description	Task Rev #	ATA #	Job Type	Param
1	123/DIS01	testing 123		00-00	Aircraft	
2	3-B74-00-MPD-15238	Flap actuator inspection		00-00	Aircraft	Calenc
3	3-B74-00-MPD-15239	Flap actuator inspection		00-00	Aircraft	Calenc
4	3-B74-00-MPD-15249	Flap actuator inspection		00-00	Aircraft	Calenc
5	AM7707	Flap removal		00-00	Aircraft	Calenc
6	AM7707	Flap removal		00-00	Aircraft	FH
7						

Update Compliance | Delete Compliance

For Correction & Deletion and View, the dynamic search will be based on follows:

- **Primary Search – for text input in the Search textbox**
 - Task #
 - Task Description
 - Eng. Doc #
 - Eng. Doc Type
 - MCR #
 - ATA #
 - Primary Task #
 - Primary Task Desc.
- **Primary Search - for the dates selected**
 - Compliance Date: From / To
- **Advanced Search** is also available for the 'Correction & Deletion' & 'View' function

Exhibit 6: Advance search for compliance

Advanced Search for Compliance

Task #	Task Desc	Task Type
Task Category	Applicability	ATA #
Part #	Serial #	Component #
Prog. Item Type	Job Type	Execution Doc. #
MCR #	Source Doc Type	Customer #
Eng. Doc Type	Eng. Doc #	Eng. Schedule Type
Rem. Value	Compl. Date: From / To	<input type="checkbox"/> Include Related Task

'Advanced Search for Compliance' can be launched as a pop-up from the 'Search' section for all the Compliance functions – Record, Correction & Deletion and View. The search operation will be performed for the searched Maintenance Object.



Note: If there was a tree click before the launch of the pop-up, the search operation will be performed for the entity selected in the Configuration Tree.



This feature involves commercials and is not available for all customers. Please contact your Ramco Account Manager.

Ability to Mandate Amendment Type on Aircraft Program Revision

Reference: AHBF-13923

Background

This enhancement provides the ability to mandate Amendment Type on Aircraft Program Revision in **Manage Aircraft / Component Records** screen of **Technical Records** business component.

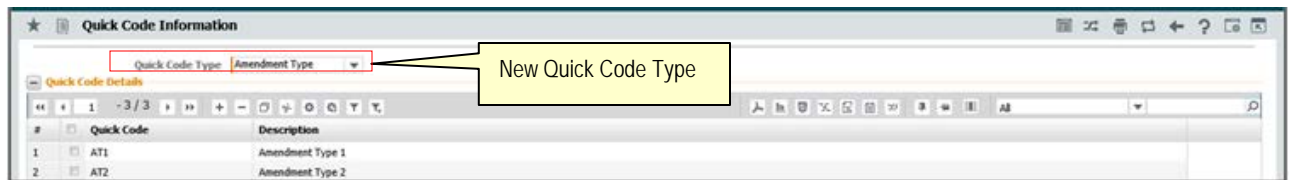
Change Details

A new set option 'Mandate Amendment Type on revision for Aircraft Specific Maintenance Program' is added in the Set Process Parameter screen under the Entity Type 'Tech Records Process Ctrl' under the Entity 'Manage Technical Records' in **Define Process Entities** activity of the **Common Master** business component. The following options can be set for the parameter:

- '0' for 'No'
- '1' for 'Yes'

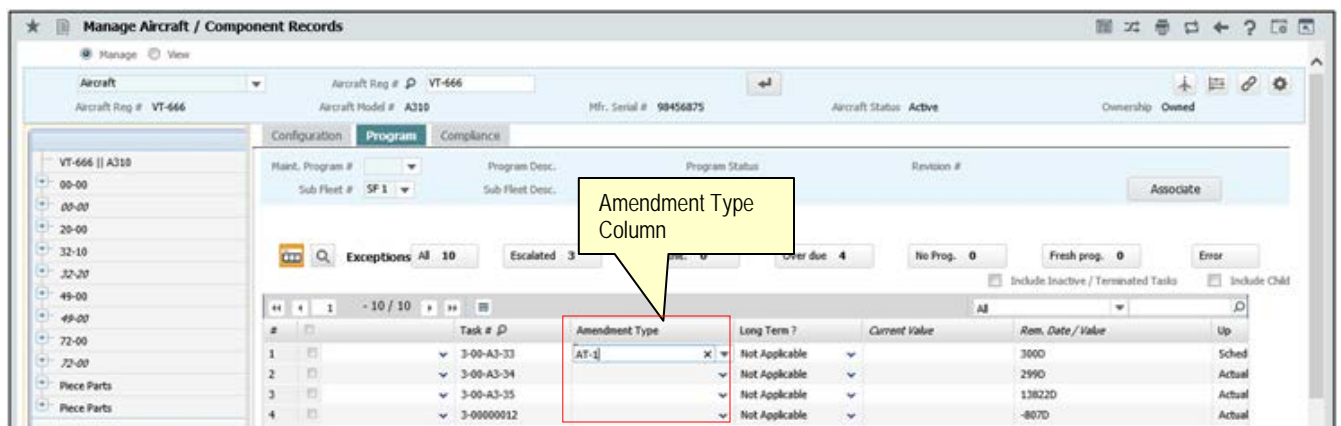
A new Quick Code Type 'Amendment Type' is added to the **Quick Code Information** screen of **Aircraft Maintenance Program** business component. Quick codes for the Quick Code Type can be manually created.

Exhibit 1: New Quick Code Type 'Amendment Type' in Aircraft Maintenance Program



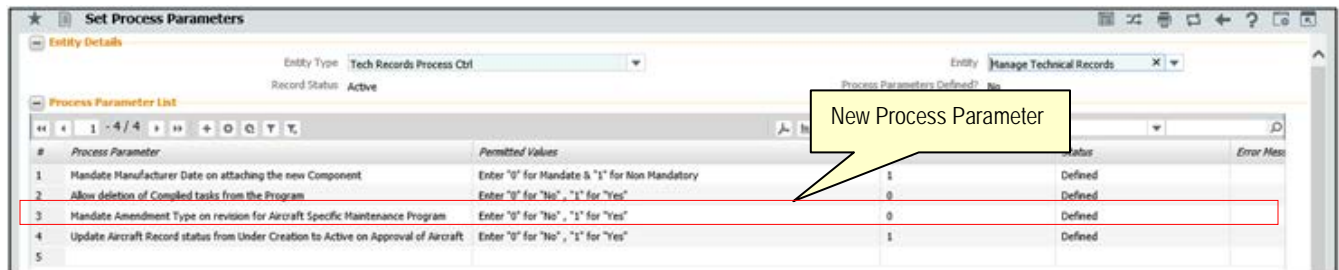
Quick Code Type 'Amendment Type' is added to the Quick Code Information screen of Aircraft Maintenance Program business component. Quick codes for the Quick Code Type can be manually created.

Exhibit 2: Amendment Type in Manage Aircraft / Component Records



The Quick Codes created for 'Amendment Type' Quick code in 'Active' status in **Quick Code Information** screen of **Aircraft Maintenance Program** business component will be loaded in the 'Amendment Type' dropdown in the **Program** tab of **Manage Aircraft / Component Records** screen in **Technical Records** business component.

Exhibit 3: New process parameter in Define Process Entities



#	Process Parameter	Permitted Values	Status	Error Mess
1	Mandate Manufacturer Date on attaching the new Component	Enter "0" for Mandate & "1" for Non Mandatory	1	Defined
2	Allow deletion of Completed tasks from the Program	Enter "0" for "No", "1" for "Yes"	0	Defined
3	Mandate Amendment Type on revision for Aircraft Specific Maintenance Program	Enter "0" for "No", "1" for "Yes"	0	Defined
4	Update Aircraft Record status from Under Creation to Active on Approval of Aircraft	Enter "0" for "No", "1" for "Yes"	1	Defined
5				

When the Process Parameter 'Mandate Amendment Type on Revision for Aircraft Specific Maintenance Program' is set as '0' ('No'), when the Aircraft Maintenance Program is revised from the **Program** tab of **Manage Aircraft / Component Records** screen, the system does not mandate the user to provide the Amendment Type.

When the Process Parameter 'Mandate Amendment Type on Revision for Aircraft Specific Maintenance Program' is set as '1' ('Yes') then if the Aircraft Maintenance Program is revised from the **Program** tab of **Manage Aircraft / Component Records** screen, the system mandates the user to select an Amendment Type. (i.e., Amendment Type should not be left blank).



Note: This feature involves commercials and is not available for all customers. Please contact your Ramco Account Manager.

Ability to Manage Task Relationship Definition from Aircraft and Component Program (Program Tab)

Reference: AHBf-13923

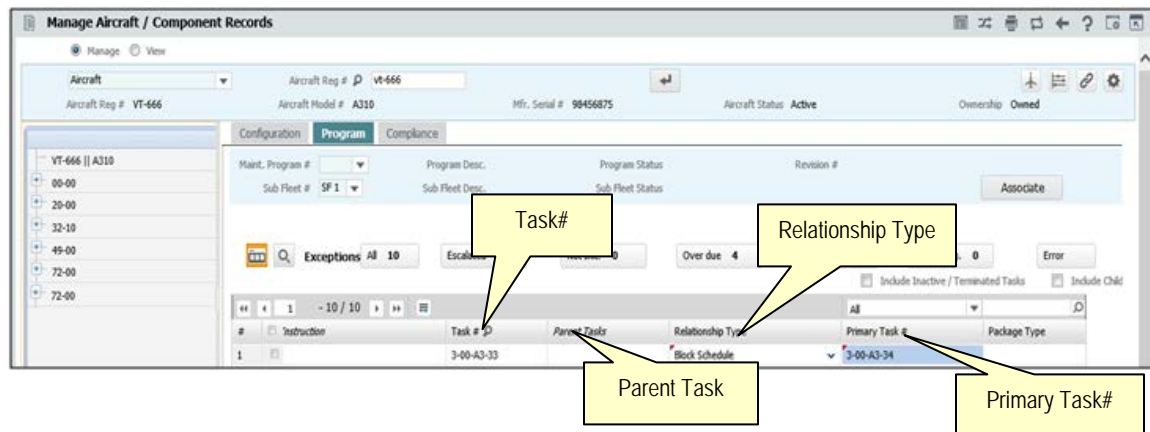
Background

This enhancement brings the ability to manage task relationship definition for Aircraft and Component Programs from **Program** tab in **Manage Aircraft / Component Records** screen of **Technical Records** business component.

Change Details

Task Relationship definition for Aircraft and Component programs can now be managed under the **Program** tab with the help of dedicated columns for updating Relationship Type and Parent task.

Exhibit 1: Task Relationship definition in Tech Records hub



In the **Program** tab, user can quickly set up the task relationship information by entering the following information: Task #, Relationship Type and Parent Task #.

Parent Task will be displayed if the Relationship Type is set as “Block Schedule”.

Note: The Relationship Types available are as follows:

- Planning - Block Schedule
- Post Compliance - Initiate Schedule
- Terminate Schedule
- Supersede

Relationship can be set for Aircraft and Components.

This feature involves commercials and is not available for all customers. Please contact your Ramco Account Manager.

Enhancement in Component Replacement

Reference: AHB-11739

Background

Ability to automatically update the Position Part # as the installed Part if the installed Part # is one way interchangeable with the Position Part #.

Change Details

A new Process Parameter 'Update Position Part # as installed Part # if the installed Part # is one way interchangeable with the Position Part #' is introduced under the Entity Type 'Tech Records Process Ctrl' and Entity 'Configuration' with the following permitted values:

- '0' for 'No'
- '1' for 'Yes'

Default value of Process Parameter is '0'.

Exhibit 1:

The screenshot shows the 'Set Process Parameters' window. The 'Entity Type' is set to 'Tech Records Process Ctrl' and the 'Entity' is 'Configuration'. The 'Record Status' is 'Active'. A yellow callout box points to a new row in the 'Process Parameter List' table, labeled 'New Process Parameter'.

#	Process Parameter	Permitted Values	Status	Error Message
1	Update Position Part # as installed Part # if the installed Part # is one way interchangeable with the Position Part #?	Enter "0" for 'No', "1" for 'Yes'	0	Defined

If the Process Parameter 'Update Position Part # as installed Part # if the installed Part # is one way interchangeable with the Position Part #' is set as '0', then on successful component attachment, even if the Installed Part # is one way interchangeable with the Position Part #, the Position Part # will not be updated with the Installed Part #.

Exhibit 2:

#	Process Parameter	Permitted Values	Status	Error Message
1	Update Position Part # as installed Part # if the installed Part # is one way interchangeable with the Position Part #?	Enter '0' for 'No', '1' for 'Yes'	1	Defined

If the Process Parameter 'Update Position Part # as installed Part # if the installed Part # is one way interchangeable with the Position Part #?' is set as '1' then on successful component attachment, if the Installed Part # is one way interchangeable with the Position Part #, then the Position Part # will be updated with the Installed Part #. Also, the Position Part Change Log will be updated with the CR #.



Note: This change will be available in all the Component Replacement transactions, as shown below:

1. *Aircraft Maintenance Execution – Component Replacement*
2. *Shop Work Order – Component Replacement*
3. *Aircraft Readiness Log*
4. *Initialize Component Assembly*
5. *Initialize and Update Component Configuration*
6. *Record Component Replacement*
7. *Edit Component Replacement Details*
8. *Manage Bulk Component Replacement Details*
9. *Reverse Component Replacement Details*
10. *Amend Component Replacement Details*
11. *AME Bulk CR*
12. *Other CR screen applicable for Mobility solutions and OFMS*
13. *Tech Records Hub – Configuration Tab*
14. *Tech Records Hub - Component Replacement Tab*

WHAT'S NEW IN SMART OPERATIONS?

Ability to record various work actions through Barcode scan.

Reference: AHBf-13399

Background

Smart Operations is a feature designed to enhance the user's experience in recording various work actions, more easily and quickly.

The screen enables the user to accomplish lot of actions with just a single scan of a Barcode that can be carried along during his day-to-day work.

This feature has already been enabled for a few basic actions such as 'Start Clock on a Task', 'Stop Clock on a Task', 'Complete Task', etc. More actions such as 'Work Hold', 'Start and Stop Indirect Time', 'Review Timesheet', etc. have also been addressed in this release.

Change Details

With this new change, the user will be able to perform certain additional actions like initiating 'hold' on a task / WO, simultaneously starting the clock on all tasks that the user had been working on previously, or stop all the running clocks, etc. This can be done with a simple scan, instead of traversing through the application to the respective screens to perform the actions.

These barcode labels can be printed on the task card cover sheet or package cover sheet depending on the one that is used by the Mechanic to carry out his work. New sheets in package print are introduced as part of the current template to facilitate printing of barcode labels.

Mechanic using Task Card as a working document

In an airframe maintenance scenario, typically, the mechanic would be carrying the task card of the task that he is working on. Hence, it would be convenient for him to get the barcode labels also printed on the task card. While setting the template for package print, task card cover sheet page should be opted to get printed.

Since the labels are printed on the respective task card itself, the barcode labels are encoded with the Task # or Discrepancy # along with the required actions such as 'Start Clock' or 'Stop Clock' and so on.

Since all the required information is encoded in the label, the user can perform all his task-level actions in just a single scan of the barcode labels.

Mechanic using Package Print as a working document

In Component / Part Maintenance scenario, typically, the work scope document containing all the tasks would be printed out and tied to the physical unit. Since a mechanic would be working with the work scope document and not with the individual task cards, it would be appropriate to get the labels printed on the package cover sheet.

Since the package coversheet may not have task level information, only actions like Start Clock, Stop Clock, etc., are printed on the cover sheet. However, the tasks on which these actions are to be performed are printed on a separate sheet called 'Task Barcode Index'. This way the barcode scan is forced to be split into two steps, where, the user must scan the action to be performed separately and scan the task/discrepancy to which the action corresponds separately.

So, when the user scans the action (like for e.g., Start Clock on a Task) first, the system directs the user to scan the Task/Discrepancy next.



Note: These new sheets are added to the existing repository of package print templates and the sheets that need to be printed should be set up in the backend tables, based on each customer requirement like it is done currently for other sheets.

Important points to be noted

- Barcode actions have been enabled for both Aircraft Maintenance cycle and Shop cycle packages.
- Various new actions such as Indirect Time, Work Hold, Start Clock on all Current Jobs, Planning an Execution Document, etc., have been incorporated in this feature.
- The user has the choice to decide the actions that are to be printed as Barcode Labels. This can be defined in the **Set Process Parameters** screen in the **Define Process Entities** activity of the **Common Master** component for the Entity Type "Package Print" and the Entity "Barcode Labels".

Defining the barcode labels to be printed

Under the business process **Maintenance Setup**, business component **Common Master** and **Define Process Entities** activity, select the link **Set Process Parameters**.

The screenshot shows the 'Set Process Parameters' window. At the top, 'Entity Type' is set to 'Package Print' and 'Entity' is set to 'Barcode Labels'. Below this, a table titled 'Process Parameter List' displays 21 parameters. Each row includes a sequence number, a process parameter description, permitted values, a value, a status, and an error message.


#	Process Parameter	Permitted Values	Value	Status	Error Message
1	Print Barcode label to Start Clock on a Task ?	Enter '0' for 'Not Required', '1' for 'Required'	1	Defined	
2	Print Barcode label to Stop Clock on a Task ?	Enter '0' for 'Not Required', '1' for 'Required'	1	Defined	
3	Print barcode label to Complete Task ?	Enter '0' for 'Not Required', '1' for 'Required'	1	Defined	
4	Print Barcode label to Review Task / Discrepancy ?	Enter '0' for 'Not Required', '1' for 'Required'	1	Defined	
5	Print Barcode label to Start Indirect Time on <Indirect Category> ?	Please enter permitted value.	KT	Defined	
6	Print Barcode label to Start Indirect Time on <Indirect Category> ?	Please enter permitted value.	Training	Defined	
7	Print Barcode label to Start Indirect Time on <Indirect Category> ?	Please enter permitted value.	OD	Defined	
8	Print Barcode label to Stop Indirect Time ?	Enter '0' for 'Not Required', '1' for 'Required'	1	Defined	
9	Print Barcode label to Initiate Work Hold on a Task due to <Hold Code> ?	Please enter permitted value.	QUOTE HOLD	Defined	
10	Print Barcode label to Initiate Work Hold on a Task due to <Hold Code> ?	Please enter permitted value.	AJWC investigation	Defined	
11	Print Barcode label to Initiate Work Hold on a Execution Document due to <Hold Code>	Please enter permitted value.	SA	Defined	
12	Print Barcode label to Initiate Work Hold on a Execution Document due to <Hold Code>	Please enter permitted value.	Comm Hold	Defined	
13	Print Barcode label to Start All Your Current Jobs ?	Enter '0' for 'Not Required', '1' for 'Required'	1	Defined	
14	Print Barcode label to Stop All Running Jobs ?	Enter '0' for 'Not Required', '1' for 'Required'	1	Defined	
15	Print Barcode label to Manage Your Open Work ?	Enter '0' for 'Not Required', '1' for 'Required'	1	Defined	
16	Print Barcode label to Plan Execution Document ?	Enter '0' for 'Not Required', '1' for 'Required'	1	Defined	
17	Print Barcode label to Review Execution Document ?	Enter '0' for 'Not Required', '1' for 'Required'	1	Defined	
18	Print Barcode label to Record Discrepancy ?	Enter '0' for 'Not Required', '1' for 'Required'	1	Defined	
19	Print Barcode label to Record Parts Replacement ?	Enter '0' for 'Not Required', '1' for 'Required'	1	Defined	
20	Print Barcode label to Record Material Request ?	Enter '0' for 'Not Required', '1' for 'Required'	1	Defined	
21				Defined	


For the Entity Type 'Package Print' and Entity 'Barcode Labels', the various Process Parameters can be set as follows:




- Yes - To print the barcode label for that action
- No - To disable the print of that barcode label
- Permitted Value - In case of Indirect Category and Hold Codes, any value that has already been defined in the system has to be given to print that label.








Sample Format of Barcode Labels for performing actions in Single scan as on a Task Card

The Task Card shown below is a sample for Barcode Labels that can enable actions in just a single scan.

A/C Model #	A310		Tally # / Tracking #	1 / 1
A/C Reg #	VT-866		Task #	3675/3
Exec Doc #	VP-000217-2012		Task Part #	
Parent Position			Task Part SI #	

Execution Doc #

P001VP-000217-2012

Planning & Reviews	
Go To : Plan Execution Document	Go To : Review Task/Discrepancy
	
A012VP-000217-2012	A00444814
Go To : Review Execution Document	
	
A013VP-000217-2012	

Timesheet	
Start Clock on All Current Jobs	Stop All Running Jobs
	
A009	A010
Start Indirect Time/Meeting	Start Indirect Time/Training
	
A009Meeting	A009Training
Stop Indirect Time	Start Clock on a Task
	
A007	A00144814
Stop Clock on a Task	
	
A00244814	

Work Holds	
Initiate Work Hold On Exe.Doc due to Tech Issue - Engg	Initiate Work Hold On a Task due to PE-INTERNAL

Printed Date: 10/26/2015 03:11 PM ID: 1 Page Number: 1 of 3



NOTE: The barcode labels are numbered as 'A00---' for labels in Single scan.

A/C Model #	A310		Tally # / Tracking #	1 / 1
A/C Reg #	VT-886		Task #	3675/3
Exec Doc #	VP-000217-2012		Task Part #	
Parent Position			Task Part SI #	

 A00825VP-000217-2012	 A0082044814
Initiate Work Hold On a Task due to AWC Investigation  A0081244814	Go To : Review Timesheet  A011


Work Reporting	
Go To : Record Component Replacement  A01044814	Go To : Record Discrepancy  A01444814
Go To : Record Material Request  A01044814	Complete Task  A00344814







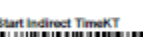
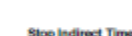


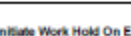
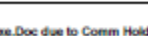
Printed Date: 10/28/2015 03:11 PM ID: 1 Page Number: 2 of 3








Sample Format of Barcode Labels to perform actions through Split scan

The sample of Barcode Labels shown below enables a user to perform actions through split scan.

The first two sheets are called the 'Coversheet for Barcode Actions', which contains only the actions to be performed.





 *Note: The Barcode Labels are numbered as 'AA0---' in split scan.*

Coversheet for Barcode Actions		Log card
Execution Doc # VP-000848-2015 Maintenance Object : A310 / VT-666		
Execution Doc #  P001VP-000848-2015		
Planning & Reviews <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> Go To : Plan Execution Document  A012VP-000848-2015 </div> <div style="width: 45%;"> Go To : Review Task/Discrepancy  AA04T001 </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 45%;"> Go To : Review Execution Document  A013VP-000848-2015 </div> </div>		
Timesheet <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> Start Clock on All Current Jobs  A009 </div> <div style="width: 45%;"> Stop All Running Jobs  A010 </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 45%;"> Start Indirect TimeKT  A006KT </div> <div style="width: 45%;"> Start Indirect TimeTraining  A006Training </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 45%;"> Start Indirect TimeOD  A006OD </div> <div style="width: 45%;"> Stop Indirect Time  A007 </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 45%;"> Start Clock on a Task  AA01T001 </div> <div style="width: 45%;"> Stop Clock on a Task  AA02T001 </div> </div>		
Work Holds <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> Initiate Work Hold On Exe.Doc due to SA  AA0829P001 </div> <div style="width: 45%;"> Initiate Work Hold On Exe.Doc due to Comm Hold  AA0820P001 </div> </div>		
Printed Date: 10/29/2015 12:33 PM Page Number: 1 of 2		

Coversheet for Barcode Actions	ramco	Log card
Execution Doc # VP-000848-2015		
Maintenance Object : A310 / VT-666		
<div><div>Initiate Work Hold On a Task due to QUOTE HOLD  AA0827T001</div><div>Initiate Work Hold On a Task due to AWC investigation  AA0819T001</div></div>		
<div>Go To : Review Timesheet  A011</div>		
Work Reporting		
<div><div>Go To : Record Component Replacement  AA15T001</div><div>Go To : Record Discrepancy  AA14T001</div></div>		
<div><div>Go To : Record Material Request  AA16T001</div><div>Complete Task  AA03T001</div></div>		
Printed Date: 10/29/2015 12:33 PM		
Page Number: 2 of 2		

The next sheet is called the 'Task Barcode Index', which contains the barcodes for all the Discrepancies and Tasks in the package.

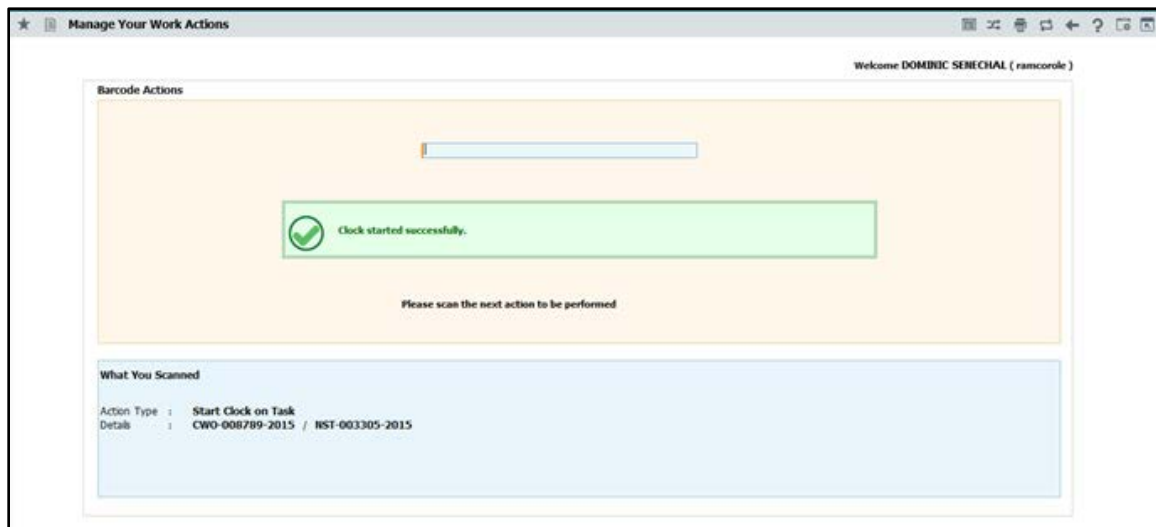
Task Barcode Index			ramco					
Exec Doc Type	Execution Doc #	A/C Model #	A/C Reg #	Component #	Part #	Serial #	Station	Date
A/C Maint. Exe. Ref. #	VP-000138-2012	A310	VT-886	NA	NA	NA	AIR	7/31/2012

Seq #	Task #	Task Description	Execution Work Center	Barcode Label
1	4589/1	dp parent	185-20	 T00142933
2	4589/2	dp child	185-20	 T00142934
3	NST-000546-2012	dfg		 T00149266
4	4589/3	deesc	185-20	 T00171046

Actions enabled for Barcoding





The following are the actions that are supported through Barcode Labels. One set of action has been designed to complete the action in the same screen. However, there are other actions that take the user to the corresponding screen, to perform the required action.

- **Start Clock on a Task:** It enables the user to Clock-in on a Task that he is working on without having to open the respective screen to start the clock.



The next sheet is called the 'Task Barcode Index', which contains the barcodes for all the Discrepancies and Tasks in the package.

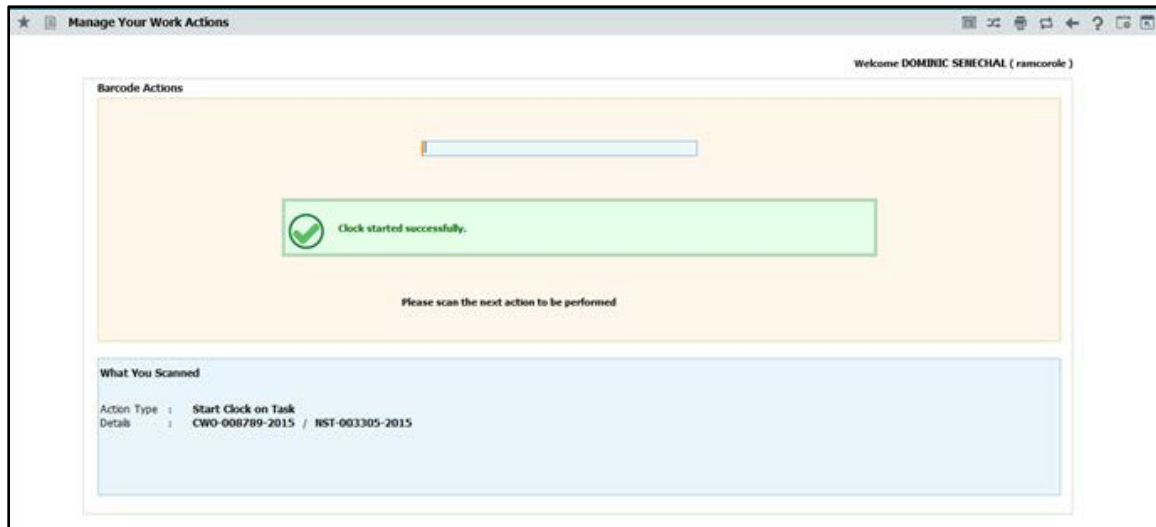
Task Barcode Index			ramco					
Exec Doc Type	Execution Doc #	A/C Model #	A/C Reg #	Component #	Part #	Serial #	Station	Date
A/C Maint. Exe. Ref. #	VP-000138-2012	A310	VT-886	NA	NA	NA	AIR	7/31/2012

Seq #	Task #	Task Description	Execution Work Center	Barcode Label
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3	NST-000546-2012	dfg		 T00149266
4	4589/3	deesc	185-20	 T00171046

Actions enabled for Barcoding

The following are the actions that are supported through Barcode Labels. One set of action has been designed to complete the action in the same screen. However, there are other actions that take the user to the corresponding screen, to perform the required action.

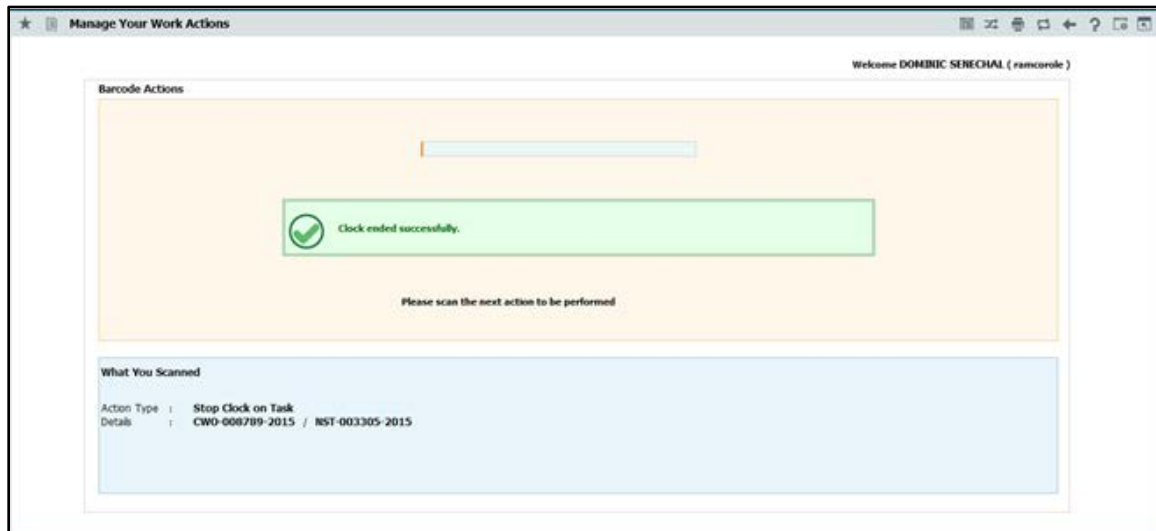
- **Start Clock on a Task:** It enables the user to Clock-in on a Task that he is working on without having to open the respective screen to start the clock.



“What You Scanned” section shows what has been scanned against what entity, as in the task or discrepancy.

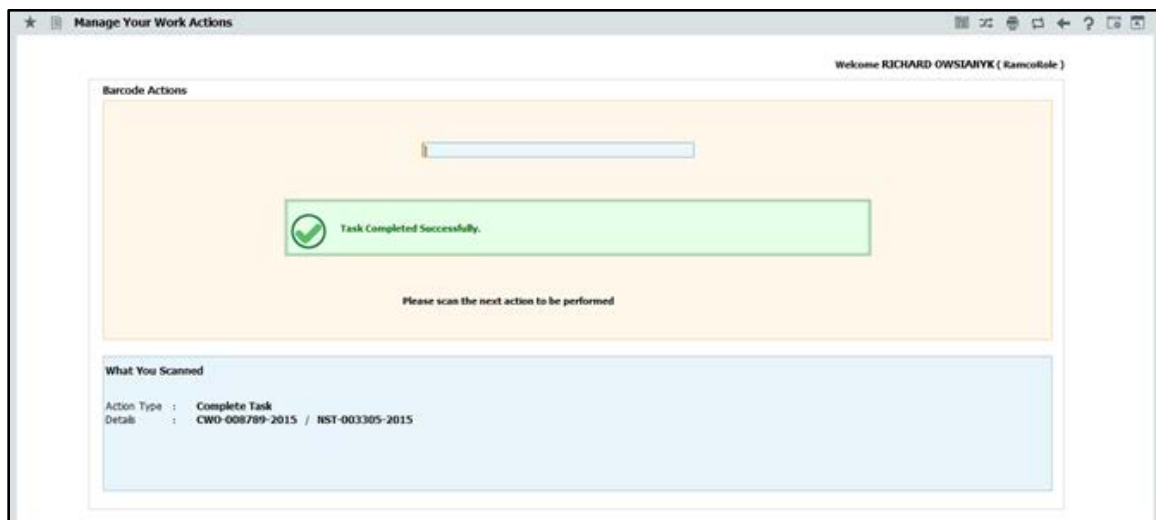
The action is completed in **Manage Your Work Actions** screen itself where the user will be shown a success message that his clock has been started.

- **Stop Clock on a Task:** It enables the user to end a running clock on a Task that he has been working on without having to open the respective screen to stop the clock.



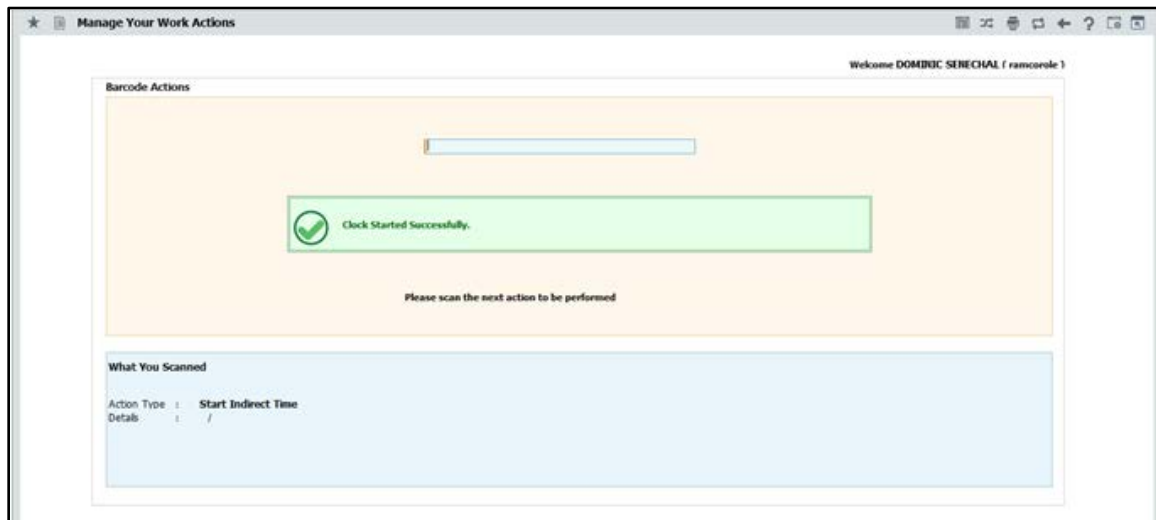
The action is completed in **Manage Your Work Actions** screen where a success message that has been stopped is displayed.

- **Complete Task:** The user can change the status of a Task to “Completed” after on completion of work.



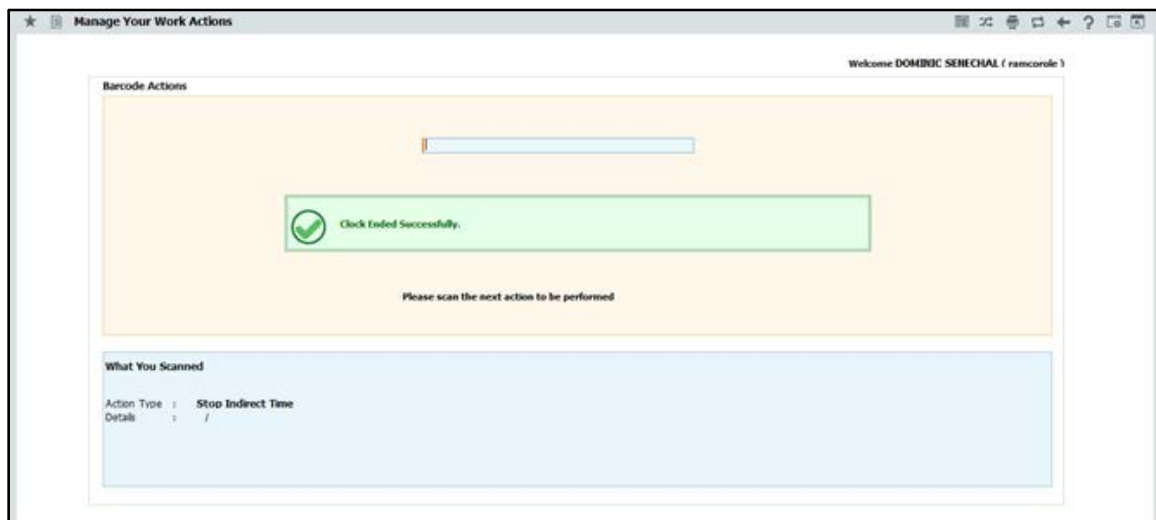
This action, as well, is completed in the same screen and a success message is displayed.

- **Start Indirect Time:** The user can start a clock on any of the Indirect Tasks, such as, Meeting, Cleaning, etc., already defined by him in 'Set Process Parameters' screen



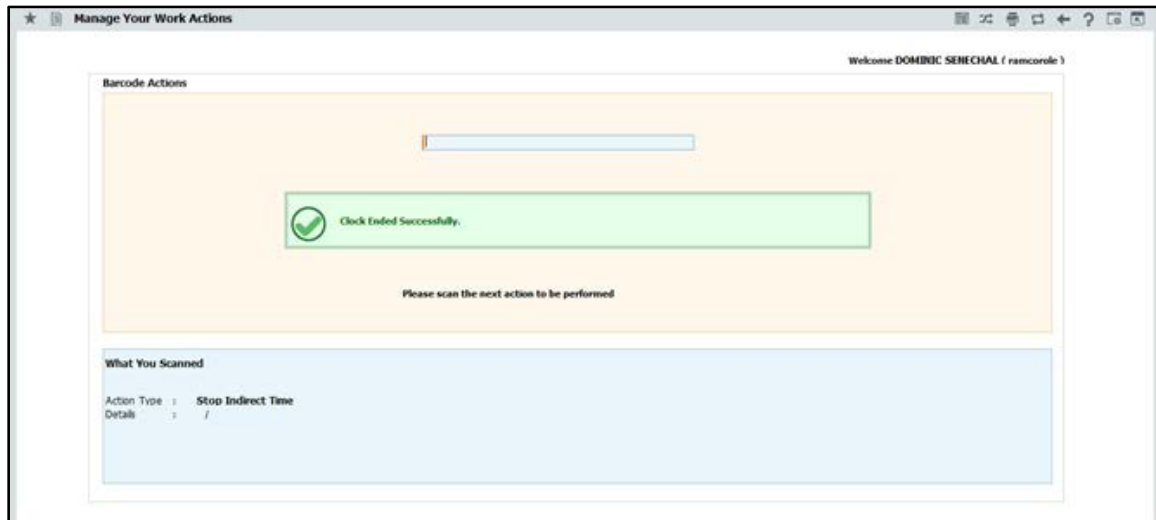
The system allows the user to Clock-in on only one Indirect Task at a time.

- **Stop Indirect Time:** This action stops the clock running on any of the Indirect Tasks.



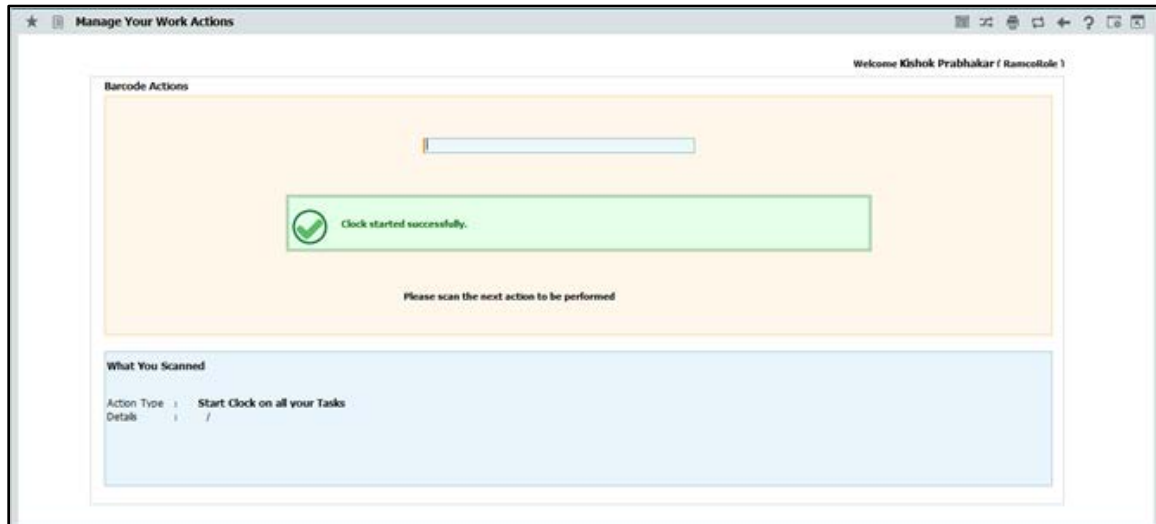
- **Initiate Work Hold:** 'Work Hold' can be put for a Task as well as an Execution Document. There could be various reasons for putting a Task or Execution Document on 'Hold', such as, unavailability of Materials, unavailability of tools, waiting for Quote, etc.

The user should have defined the reason for Hold as 'Hold Codes' in "Set Process Parameters" screen to have gotten the label printed.



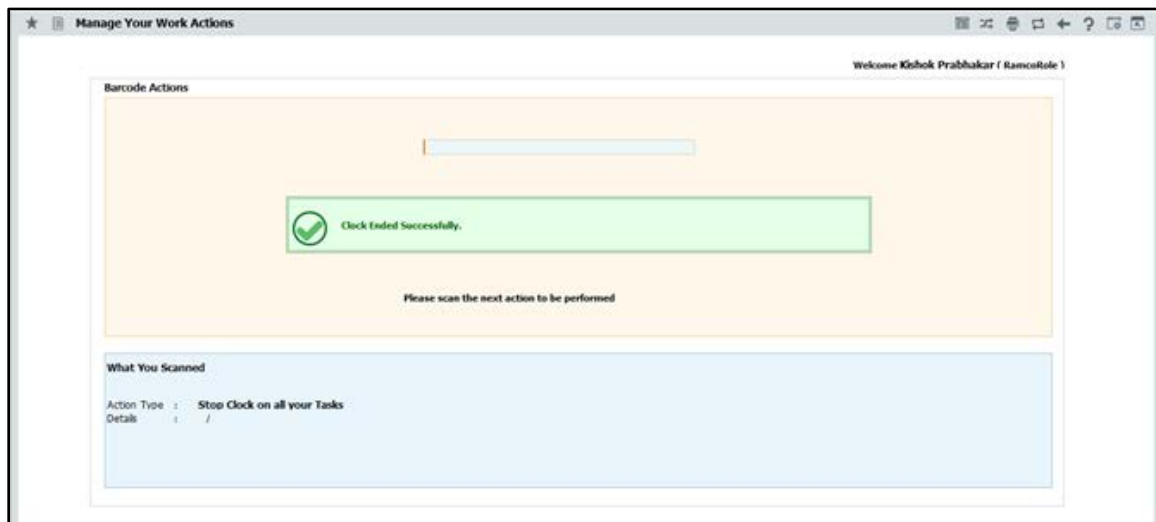
In the above image, it is shown that the Task has been put on Hold. Similarly, when a Hold is put on an Execution Document, the message will be shown accordingly.

- **Start Clock on All Current Jobs:** This label enables the user to start multiple clocks simultaneously. On a busy morning, the user need not search and scan to start the clock on each task that he had been working on the previous day. This label simply lets the user to start clocks on all incomplete jobs that he has already worked on.

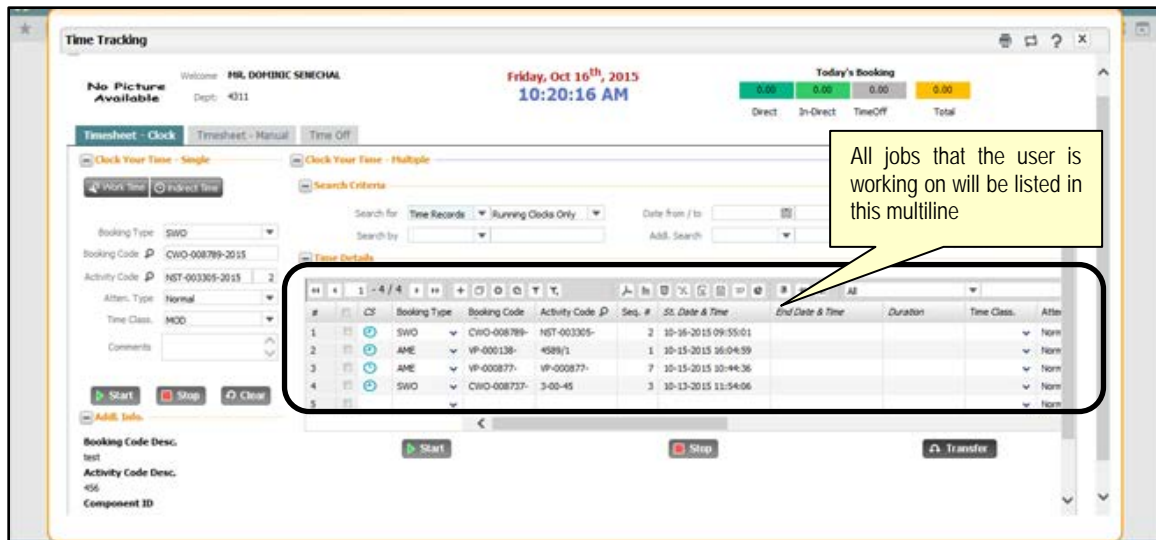


This action just starts the clock on tasks that are not yet in 'Completed' status ignoring the tasks that were put on 'Hold' recently. It is to be remembered that this action starts the clock on only Direct Tasks. (Indirect Tasks are not considered here).

- **Stop All Running Clocks:** Multiple clocks can be started similarly, multiple clocks can be stopped as well. The user need not stop individual clocks; he can stop all his running clocks before he leaves the job by the end of the day.

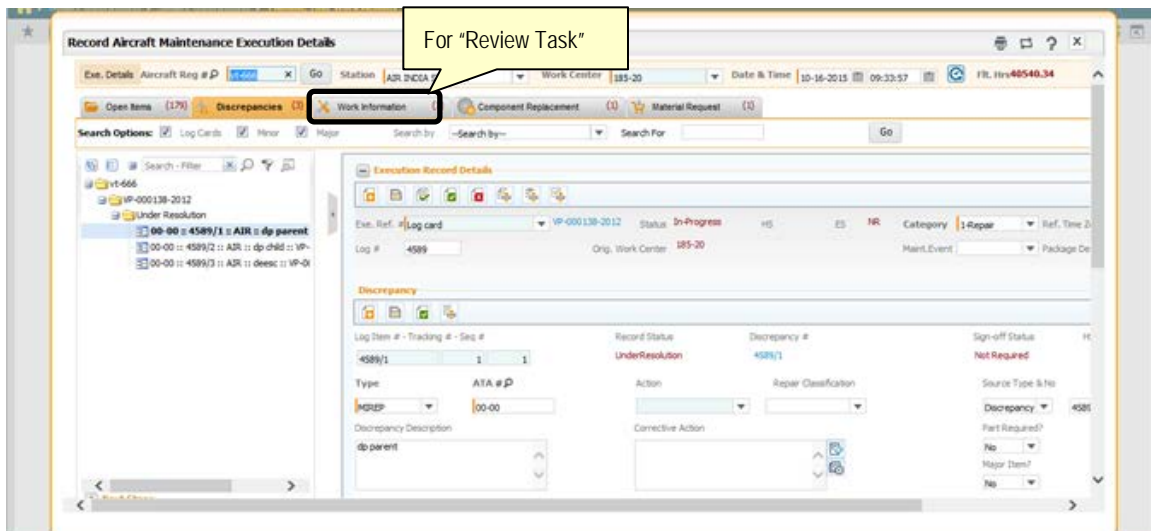


- **Review Timesheet:** This enables the user to manage all open work by navigating to the user's 'Time Tracking' screen, where he can view all the jobs he has been working on.



- **Review Task / Discrepancy:** It helps the user to review the details of the Task or the Discrepancy he is working on. It simply takes the user to the corresponding screen in Aircraft Maintenance Execution Details screen or Record Shop Execution Details screen.

The above image shows the screen for Review Discrepancy for a Package. If the user scans to review a Task in a package, then the same screen will be launched in 'Work Information' tab.



The above screen will be launched to Review Task or a Discrepancy from a Work Order. The 'Work Actual' tab corresponds to Tasks while 'Report Findings' corresponds to Discrepancy.

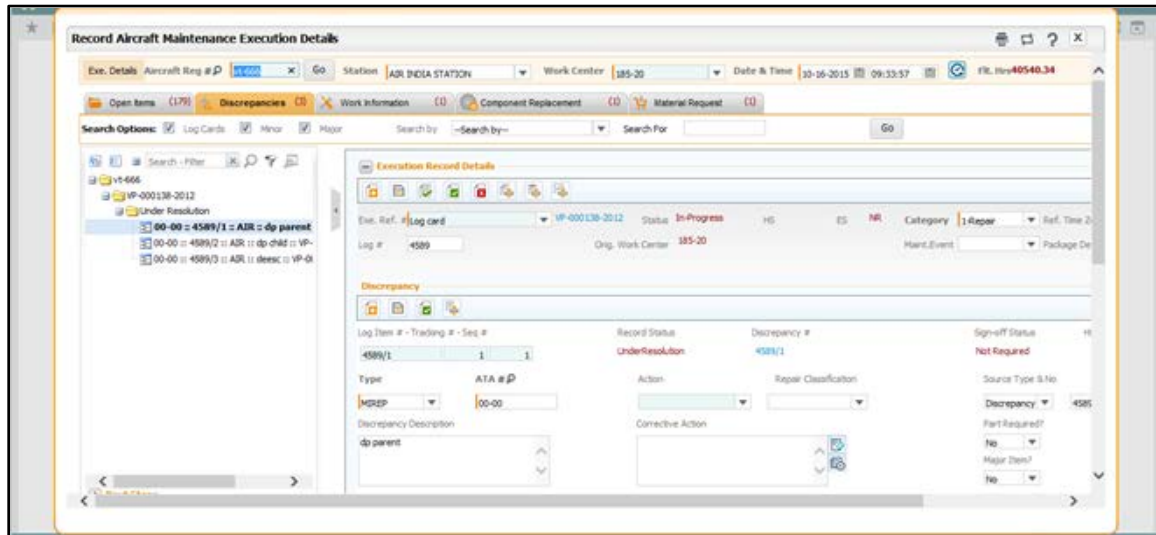
- **Plan Execution Document:** This label launches the required screen to plan the job cycle for the package. If the package is a part of Shop Cycle, then "Plan Work Order" screen will be launched. If the package is a part of Aircraft Maintenance cycle, then the **Plan Aircraft Maintenance** screen will be launched.

The above image shows the screen where a Work Order would be planned. For a Package in Airframe Maintenance, **Plan Aircraft Maintenance** screen will be launched.

- **Review Execution Document:** This label helps the user to view the details of the Discrepancy and Task in the Execution document by taking him to the respective screens. If the package is a part of Shop cycle, **Record Shop Execution Details** will be launched while, if the package is a part of Aircraft Maintenance cycle, **Aircraft Maintenance Execution Details** screen will be launched

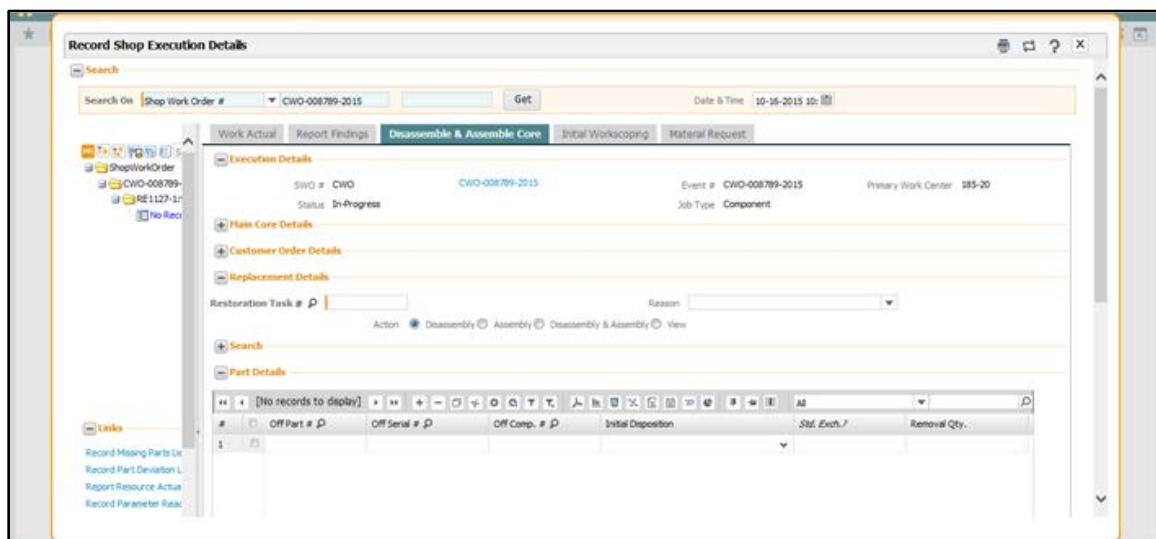
The image shows the review of a Work Order while Review of an Execution document in Aircraft Maintenance will be done in **Record Aircraft Maintenance Execution Details** screen.

- **Record Discrepancy:** While working on a Task if the user finds another damage or discrepancy, he can scan this label to record his findings against the same Execution Document. Again, if the scanned package is a part of Shop Cycle, **Record Shop Execution Details** will be launched while, if the package is a part of Aircraft Maintenance cycle, the **Aircraft Maintenance Execution Details** screen will be launched.



The above image shows the screen to 'Record Discrepancy' in a Package from Aircraft Maintenance. To 'Record Discrepancy' in a Work Order, **Record Shop Execution Details** screen will be launched.

- **Record Component Replacement:** While performing tasks on the parts, when the user wants a certain component to be replaced he can record the same by scanning this label. Yet again, if the scanned package is a part of Shop Cycle, **Record Shop Execution Details** will be launched while, if the package is a part of the Aircraft Maintenance cycle, the **Aircraft Maintenance Execution Details** screen will be launched to facilitate the same.



To record a Component Replacement for a Task in a Work Order, the above screen will be launched. To 'Record Component Replacement' for a Task in a Package, 'Record Aircraft Maintenance Execution Details' screen would be launched.

- **Record Material Request:** If the user realizes the need for any part while performing tasks, he can record the same using this label. Depending on the package type the screens launched will vary.

Material Request for a Package in Aircraft Maintenance will be done in the above screen, whereas, if the user needs to Record Material Request against a Work Order, the **Record Shop Execution Details** screen will be launched.



Note: This feature involves commercials and is not available for all customers. Please contact your Ramco Account Manager.

WHAT'S NEW IN DISCREPANCY MANAGEMENT?

Structural Damage Report

Reference: AHBf-7427

Background

Structural Damage Report helps airline operators to keep a complete track of all records such as Damage Details, photos and files associated with the damages. The complete history of a recorded repair begins with the discovery of damage on an aircraft, which involves Multiple Inspections, Repairs Executed, and Interim Actions taken or other activities which need to be tracked.

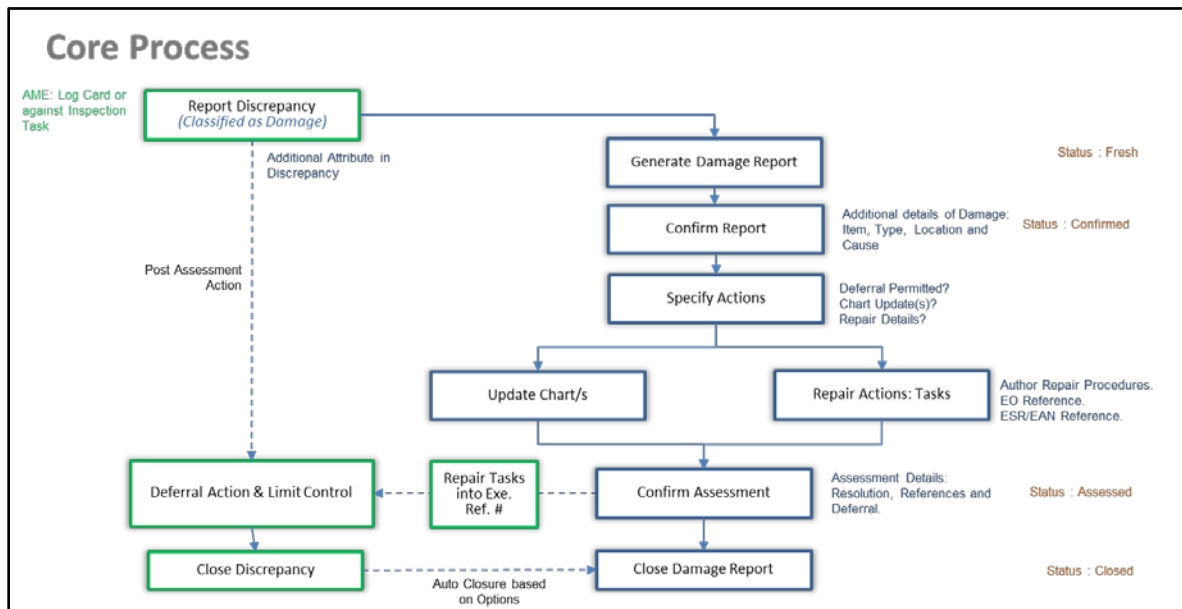
To reduce the costs of recording damages and repairs on an aircraft **Damage Inspection Report** is an easy measure to track damages from first point of discovery through to the complete repair stages.

Structural Damage Report allows the user to build a complete structural repair file for each aircraft comprising all documents and approval sheets for each damage record. Damage Inspection engineers can attach photos directly to the record first on the discovery of damages. Subsequently, during the repair stages, other information and documents can be attached to the system.

Change Details

A new component titled **Structural Damage Report** has been added under the **Discrepancy Processing** business process. The component **Structural Damage Report** includes activities such as **Maintain Quick Codes**, **Manage Damage Report**, **Maintain Master Charts** and **Manage Damage Charts**.

Process Flow:

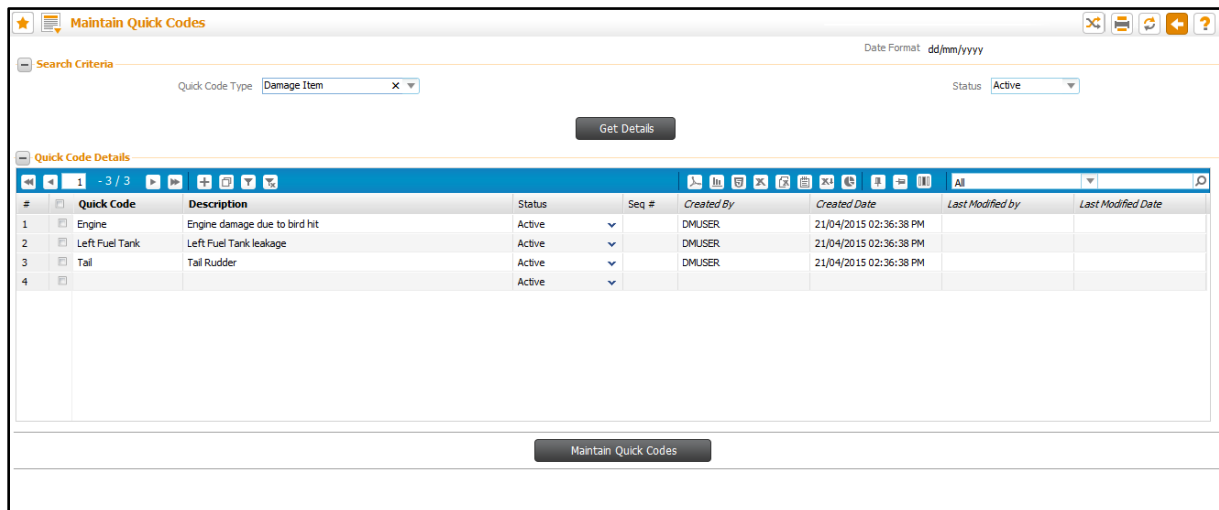


Discrepancy reported in the **Record Aircraft Maintenance Execution Details** page is identified as Damage based on the Discrepancy Parameters: 'Major' and 'Corrosion' set options. A Damage Inspection Report can be created for this Discrepancy which will be in 'Fresh' status. Once the Damage Details such as Damage Item, Type, Location and Cause are specified, the Report can be confirmed. The Report is now updated to 'Confirmed' status. The logged damage details can be assessed by an engineer who can provide Assessment Details such as Resolution, References and Deferral information along with Repair Details. Once done, the status can be changed to 'Assessed'. The Repair Tasks identified by the engineer will get pushed to the original Exe. Doc. ready to be performed by the mechanic. On closing the Discrepancy once all the tasks are completed, the **Damage Inspection Report** can be auto closed, based on set options. The **Damage Inspection Report** can be printed with all the details, for submission to OEM and for archiving purposes.

Exhibit – 1:

Maintain Quick Codes

Structural Damage Report facilitates lot of user defined values. To manage all these user defined values, **Maintain Quick Codes** screen has been provided so that the user can describe the necessary quick codes when he reports a structural damage report. A column; ‘Sequence #’ has been provided in the multiline so that the user can sort the quick codes as per his own preference.



Maintain Quick Codes

Date Format: dd/mm/yyyy

Search Criteria: Quick Code Type: Damage Item x Status: Active

Get Details

Quick Code Details

#	Quick Code	Description	Status	Seq #	Created By	Created Date	Last Modified by	Last Modified Date
1	Engine	Engine damage due to bird hit	Active		DMUSER	21/04/2015 02:36:38 PM		
2	Left Fuel Tank	Left Fuel Tank leakage	Active		DMUSER	21/04/2015 02:36:38 PM		
3	Tail	Tail Rudder	Active		DMUSER	21/04/2015 02:36:38 PM		
4			Active					

Maintain Quick Codes

Exhibit – 2:**Manage Damage Report**

Generate Mode: In generate mode, the user can generate a **Structural Damage Report** using a Discrepancy # created earlier or the user can create a new Discrepancy # with the help of the **Maintain Discrepancy Information** Link and then use it to create **Structural Damage Report**. After entering the necessary details, on click of 'Generate Report' a **Structural Damage Report** will be created.

The screenshot shows the 'Manage Damage Report' interface in 'Generate' mode. The top navigation bar includes 'Generate', 'Modify', and 'View' tabs, with 'Generate' being the active tab. Below the navigation bar, the 'Damage Report Details' section contains several input fields: 'Discrepancy #' (with a dropdown arrow), 'Category' (with a dropdown arrow), 'Date' (with a calendar icon), 'Status' (with a dropdown arrow), 'Reported by' (with a user icon), and 'Reporter Name' (with a dropdown arrow). A 'Report Details' section is also present. A 'Generate Report' button is located at the bottom right of the form. A link labeled 'Maintain Discrepancy Information' is visible on the right side of the form.



Note: Discrepancy #, Category and Date are mandatory to generate a Structural Damage Report.

Exhibit - 3:

Modify Mode: In modify mode, the user can modify the generated **Structural Damage Report** unless the generated report is in 'Closed', 'Short Closed' or 'Cancelled' status. In this mode on entering the Damage Report # and selecting the 'Go' button, the 'Main Details' corresponding to the Damage Report will be displayed.

The screenshot shows the 'Manage Damage Report' interface in 'Modify' mode. The top navigation bar includes 'Generate', 'Modify', and 'View' tabs, with 'Modify' being the active tab. Below the navigation bar, the 'Damage Report Details' section contains several input fields: 'Damage Report #' (with a dropdown arrow), 'Category' (with a dropdown arrow), 'Date' (with a calendar icon), 'Status' (with a dropdown arrow), 'Reported by' (with a user icon), and 'Reporter Name' (with a dropdown arrow). A 'Go' button is located next to the 'Damage Report #' field. A 'Report Details' section is also present. A link labeled 'Maintain Discrepancy Information' is visible on the right side of the form.

Exhibit - 4:

Main Details: Once a report is successfully generated, the user will be directed to the 'Modify' mode where the system displays the following details associated with the specified Discrepancy under 'Main Details' page.

- Damage Report Details
- Source Discrepancy Details
- Source Task Details

The screenshot displays the 'Manage Damage Report' application in 'Modify' mode. The interface is organized into three main sections, each enclosed in a dashed box and labeled with a red number:

- Section 1: Damage Report Details** (labeled 1) includes fields for 'Damage Report #', 'Category', 'Date', 'Reported by', and 'Status'. The 'Damage Report #' field contains 'SDR0003592015', 'Category' is 'QC1', 'Date' is '21/04/2015', 'Reported by' is '00000011', and 'Status' is 'Fresh'.
- Section 2: Source Discrepancy Details** (labeled 2) includes fields for 'Discrepancy #', 'Reported by', 'Reported Date', 'Aircraft Reg. #', 'Aircraft Model #', 'Config. Class', and 'Status'. The 'Discrepancy #' is '2', 'Reported by' is '00000011', 'Reported Date' is '30/04/2014', 'Aircraft Reg. #' is '6Y-JMR', 'Aircraft Model #' is 'A320-211', 'Config. Class' is 'AVEOS', and 'Status' is 'Transferred'.
- Section 3: Source Task Details** (labeled 3) includes fields for 'Exe. Doc. #', 'Visit Package', 'Task #', 'Exe. Doc. Status', and 'Task Status'. The 'Exe. Doc. #' is 'VP-000009-2012', 'Visit Package' is 'VP-000009-2012', 'Task #' is empty, 'Exe. Doc. Status' is 'In-Progress', and 'Task Status' is empty.

Below these sections is a 'Discrepancy Details' table with the following data:

#	Source	Discrepancy #	Log Item #	Discrepancy Type	Category	Discrepancy Description	Status	Corrective Action	Source
1	Primary	2	2	NONRT		CLIMB	Transferred	CRUISE COR	VP-000

At the bottom of the window, there are buttons for 'Confirm Report' and 'Cancel Report', and a 'Remarks' field.

Damage Report Details: Under Damage Report Details the following Details are displayed.

- Damage Report #
- Category
- Date on which the Report is created.
- Status of the Report generated.
- Report Details – Description as provided by the user while generating report. However, if no description is provided, the system will fetch the description provided when creating Discrepancy.
- Reported by – Emp. Code of the Reporter provided by the user while generating report or if no Emp. Code is provided the system will fetch the Emp. Code provided when creating a Discrepancy.

- Reporter Name.



Note: The user is allowed to edit 'Report Details' and 'Reported by' on click of 'Save Report Details'.

Source Discrepancy Details: Under 'Source Discrepancy Details' the following details are displayed:

- Discrepancy # - Primary Discrepancy #.
- Reported by – User who created the discrepancy.
- Reported Date – Date on which the discrepancy is created.
- Status – Status of the discrepancy.
- If the discrepancy is associated with an aircraft, then aircraft related details such as Aircraft Reg. #, Aircraft Model # and Config. Class will be displayed.
- On click of 'Aircraft Reg. #' the **View Aircraft Record** page with its necessary details will be launched.
- If the discrepancy is associated with a component, then component related details such as Component #, Part # and Serial # will be displayed.
- On click of 'Aircraft Reg. #' the **View Aircraft Record** page with its necessary details will be launched.

Source Task Details: If the discrepancy has a source package and a source task, then the following details are displayed under Source Task Details.

- Exe. Doc. #
- Task #
- Exe. Doc. Status
- Task Status

Exhibit – 5:

Manage Damage Report

Generate Modify View

Main Details Damage Details

Damage Report Details

Damage Report # SDR0003592015 Go Category QCL Date 21/04/2015 Status Fresh

Report Details CLIMB Reported by 00000011 Reporter Name

Save Report Details

Source Discrepancy Details

Discrepancy # 2 Reported by 00000011 Reported Date 30/04/2014 Status Transferred

Aircraft Reg. # 6Y-JMR Aircraft Model # A320-211 Config. Class AVEOS

Source Task Details

Exe. Doc. # Visit Package VP-000009-2012 Task # Exe. Doc. Status In-Progress Task Status

Discrepancy Details Attachments Chart Details

#	Source	Discrepancy #	Log Item #	Discrepancy Type	Category	Discrepancy Description	Status	Corrective Action	Source
1	Primary	2	2	NONRT	CLIMB	Transferred	CRUISE COR	VP-000	

Maintain Discrepancy Information Record Aircraft Maintenance Execution Details

Confirm Report Cancel Report Remarks

Record Statistics

Discrepancy Details: The 'Discrepancy Details' tab displays all the discrepancy related details in the multiline.

The following are the multiline columns in the Discrepancy tab:

1. Source
2. Discrepancy #
3. Log Item #
4. Discrepancy Type
5. Category
6. Discrepancy Description
7. Status
8. Corrective action
9. Source Doc. Ref #
10. Resolution Doc. Ref #
11. Doc. Type

The following links are available in the Discrepancy Details Tab.

1. **Maintain Discrepancy Information**
2. **Record Aircraft Maintenance Execution Details**

The links has been provided to edit the Discrepancy Information and to create a Discrepancy if needed.

Exhibit – 6:

Manage Damage Report

Generate Modify View

Main Details **Damage Details**

Damage Report Details

Damage Report # SDR0003592015 Go Category QC1 Date 21/04/2015 Status Fresh

Reported by 00000011 Reporter Name

Report Details

CLIMB

Save Report Details

Source Discrepancy Details

Discrepancy # 2 Reported by 00000011 Reported Date 30/04/2014 Status Transferred

Aircraft Reg. # 6Y-JMR Aircraft Model # A320-211 Config. Class AVEOS

Source Task Details

Exe. Doc. # Visit Package VP-000009-2012 Task # Exe. Doc. Status In-Progress Task Status

Discrepancy Details **File Attachments** **Chart Details**

All Damage Report Discrepancies

#	Ref. Doc. #	Ref. Doc. Type	Folder Path	File Name	Remarks
1	2				
2	2				

View File Upload Documents

Save File Attachments

Confirm Report Cancel Report Remarks

Record Statistics

File Attachments: This Tab displays all the file related to the Discrepancy or Damage Report. The following are the multiline columns in the Discrepancy tab:

1. Ref. Doc. #
 2. Ref. Doc. Type
 3. Folder path
 4. File Name
 5. Remarks
- The 'Ref. Doc. #' column is loaded with 'Damage Report #' and 'Discrepancy #'. If it is necessary to attach a file against that particular Damage Report or Discrepancy then the user can use the Help facility available in the 'File Name' field to select the necessary file and save it by clicking on 'Save File Attachments'.

The following links are available in the File Attachments Tab.

1. View File - To view a file, select that respective row and on click of 'View File' the selected file can be viewed.
2. Upload Documents: To upload documents this link can be used.

The following buttons are available in the **File Attachments** tab.

1. All – On click of this button files related to Damage Report and Discrepancy will be displayed.
2. Damage Report – On click of this button files related to Damage Report will be displayed.
3. Discrepancies - On click of this button files related to Discrepancies will be displayed.

Exhibit – 7:

The screenshot displays the 'Manage Damage Report' application window. It features a top navigation bar with 'Generate', 'Modify', and 'View' options. The main content area is divided into several sections: 'Main Details' (with 'Damage Report Details' and 'Source Discrepancy Details' tabs), 'Source Task Details', and 'Chart Details' (with 'Discrepancy Details', 'File Attachments', and 'Chart Details' sub-tabs). The 'Chart Details' sub-tab is currently active, showing a table with columns: #, Chart Title, Chart ID, Rev. #, File Name, Chart Group, Applicability, Affected?, and Remarks. The table is currently empty, displaying '[No records to display]'. Below the table are buttons for 'Save Chart Details', 'Confirm Report', and 'Cancel Report', along with a 'Remarks' field. The interface also includes a 'Record Statistics' button at the bottom left.

Chart Details: 'Chart Details' tab displays all the charts attached against an Aircraft model as well as Aircraft Reg. # associated with the Primary Discrepancy. The following are the multiline columns in the 'Chart Details' Tab.

1. Chart Title
2. Chart ID
3. Rev. #
4. File Name

5. Chart Group
 6. Applicability
 7. Affected
 8. Remarks
- To mark a dent on a chart, select the affected column and Save the chart details. Then, on click of the hyperlinked Chart ID column, the **Manage Damage Charts** page will launch with that chart loaded.

Manage Damage Report

Generate Modify View

Main Details **Damage Details**

Damage Report # SDR0003142015 Category QC1 Date 16/04/2015 Status Fresh
Aircraft Reg. # 6Y-JMR Aircraft Model # A320-211 Config. Class AVEOS Discrepancy # 2

Item **Type** **Location** **Cause**

Damaged Item Other Items

Additional Details

Damage Item Applicable Remarks

abc (Y)
abc (Y)
abc (Y)

Save Damage Item

Discrepancy Details File Attachments Chart Details

#	Source	Discrepancy #	Log Item #	Discrepancy Type	Category	Discrepancy Description	Status	Corrective Action
1	Primary	2	2	NONRT	CLMB	Transferred	CRUISE COR.	

Maintain Discrepancy Information Record Aircraft Maintenance Execution Details

Update Dent & Buckle Chart Link will launch **Manage Damage Charts** page where the user can select any chart to mark any dent.

The following buttons are available in the 'Chart Details' tab.

1. All Charts - All the charts attached for the Aircraft Model # as well as Aircraft Reg. # will be displayed.
2. Affected Charts - On click of 'Affected Charts', charts which were marked as affected for the Aircraft Model # as well as Aircraft Reg. # will be displayed.

Exhibit – 8:

Damage Details: Once main details are captured, user navigates to the Damage Details page where the following sections are displayed.

Section 1

Section 2

The screenshot displays the 'Manage Damage Report' application window. It features a top navigation bar with 'Generate', 'Modify', and 'View' options. Below this, there are tabs for 'Main Details' and 'Damage Details'. The 'Damage Details' tab is active, showing a form with the following fields:

- Damage Report #: SDR0003142015
- Aircraft Reg. #: 6Y-JMR
- Category: QC1
- Aircraft Model #: A320-211
- Date: 16/04/2015
- Config. Class: AVEOS
- Status: Fresh
- Discrepancy #: 2

Section 1 is indicated by a red '1' pointing to the top form fields. Below this, there is a section for 'Item' with a dropdown menu for 'Damaged Item' (currently set to 'Other Items') and a text area for 'Additional Details'. A 'Save Damage Item' button is located below this section. Section 2 is indicated by a red '2' pointing to the 'Additional Details' text area. At the bottom, there is a 'Discrepancy Details' section with a table showing the following data:

#	Source	Discrepancy #	Log Item #	Discrepancy Type	Category	Discrepancy Description	Status	Corrective Action
1	Primary	2	2	NONRT		CLIMB	Transferred	CRUISE COR.

At the bottom of the window, there are two links: 'Maintain Discrepancy Information' and 'Record Aircraft Maintenance Execution Details'.

Section 1: Damage Report related details will be displayed in this section.

Damage Report #

1. Category
2. Date
3. Status
4. Primary Discrepancy #

If the discrepancy is associated with the aircraft, then aircraft related details such as Aircraft Reg. #, Aircraft Model # and Config. Class will be displayed.

If the discrepancy is associated with a component, the component related details such as Component #, Part # and Serial # will be displayed.

Section 2: The following details will be displayed on click of respective buttons.

1. Damaged Item
2. Damage Type
3. Damage Location
4. Damage Cause

Exhibit – 9:

Manage Damage Report

Generate Modify View

Main Details **Damage Details**

Damage Report # 5D60003142015 Category QC1 Date 16/04/2015 Status Fresh
Aircraft Reg. # 6Y-JMR Aircraft Model # A320-211 Config. Class AVE05 Discrepancy # 2

Item Type Location Cause

Other Items

Additional Details

Damage Item Applicable Remarks

abc
abcc
abog

Save Damage Item

Discrepancy Details File Attachments Chart Details

#	Source	Discrepancy #	Log Item #	Discrepancy Type	Category	Discrepancy Description	Status	Corrective Action
1	Primary	2	2	NONRT		CLIMB	Transferred	CRUISE COR.

Maintain Discrepancy Information Record Aircraft Maintenance Execution Details

Item: User can specify the details related to Damaged Item such as component, Part and Other Items.

1. If Damaged Item is selected as Other Items then a multiline appears.

The following are the multiline columns under Item Section.

- Damage Item
- Applicable
- Remarks

Note: The system mandates the user to select applicable column against a quick code loaded from the quick code page in the multiline.

2. If Damaged Item is selected as Component then user can specify the Component #.
3. If Damaged Item is selected as Part then Part # and Serial # user can specify Part # and Serial # with a valid combination.

Exhibit – 10:

Manage Damage Report

Generate Modify View

Main Details

Damage Report # SDR0003592015 Category QC1 Date 21/04/2015 Status Fresh
Aircraft Reg. 6Y-JMR Aircraft Model # A320-211 Config. Class AVEOS Discrepancy # 2

Type

Length 5.000 UOM Width 2.000 UOM Depth 3.000 UOM
Additional Details: Bucking of column under wing box.
Corrosion Yes Local Widespread Corrosion Level 1 Part of CPCP Task Yes CPCP Task #

Discrepancy Details File Attachments Chart Details

#	Source	Discrepancy #	Log Item #	Discrepancy Type	Category	Discrepancy Description	Status	Corrective Action	Source
1	Primary	2	2	NONRT		CLIMB	Transferred	CRUISE COR	VP-000

Confirm Report Cancel Report Remarks

Record Statistics

Type: User can specify details related to Damaged Type, whether the damage is Corrosion related Damage, Dimensions of the Damage. etc.

Length, Width and Depth related to damage can be specified in their respective controls.

The following are the multiline columns under Type Section.

- Damage Type
- Applicable
- Remarks

Note: The system mandates the user to select applicable column against a quick code loaded from the quick code page in the multiline.

If the Damage found is related to corrosion then on select of corrosion as 'Yes' the following controls will be displayed.

- a) **Local or widespread:** Indicates whether the corrosion is local area or on a widespread area.
- b) **Corrosion Level:** Corrosion level has been classified into three categories.

Level 1: Corrosion, that is local and can be reworked or blended out within the allowable limit.

Level 2: Corrosion that requires repair, reinforcement, complete or partial replacement of the applicable structure.

Level 3: Corrosion occurring during the first or subsequent accomplishment of a corrosion inspection task that the operator determines to be an urgent airworthiness concern.

- c) **Part of CPCP Task:** If CPCP Task is set as 'Yes' then the system mandates the user to specify the CPCP Task #.
- d) **CPCP Task #:** The objective of Corrosion Protection and Control Program (CPCP) is to limit the material loss due to corrosion to a level necessary to maintain airworthiness.

Exhibit – 11:

Manage Damage Report

Generate Modify View

Damage Details

Damage Report # SDR0003592015 Category QC1 Date 21/04/2015 Status Fresh
 Aircraft Reg. BY-JMR Aircraft Model # A320-211 Config. Class AVEOS Discrepancy # 2

Item Type Location Cause

ATA # 00-00 Work Area W1 Zone Z1

Damage Location found.

Rivetted Area Yes Broken/Pulled/Loose Rivets No Previously Repaired Area Unknown Min. Distance from nearest Aperture/Joint 12.000 inch

Save Damage Location

Discrepancy Details File Attachments Chart Details

#	Category	Discrepancy Description	Status	Corrective Action	Source Doc. Ref. #	Resolution Doc. Ref. #	Doc. Type
1		CLIMB	Transferred	CRUISE COR	VP-000009-2012	VP-000009-2012	Aircraft Maint. Exe.

Maintain Discrepancy Information Record Aircraft Maintenance Execution Details

Confirm Report Cancel Report Remarks

Record Statistics

Location: User can specify the details related to Damage Location such as ATA #, Work Area and Zone related with Damage Location.

The following are the Multiline columns under Location section.

- Damage Location
- Applicable
- From
- To
- Remarks



Note: The system mandates the user to select applicable column against a quick code loaded from the Quick Code page in the multiline and the From column and To columns specify the Damage location.

If the Damaged Location is on a Rivetted Area then the user can specify 'Yes' or 'No'. Also, user can specify if the Damaged Location is a Previously Repaired Area or not.

Exhibit – 12:

Manage Damage Report

Generate Modify View

Damage Details

Damage Report # SDR0003592015 Category QC1 Date 21/04/2015 Status Fresh
Aircraft Reg. # 6Y-JMF Aircraft Model # A320-211 Config. Class AVEOS Discrepancy # 2

Item Type Location **Cause**

Damage Cause Known Yes

Additional Details

Save Damage Cause

Discrepancy Details File Attachments Chart Details

#	Category	Discrepancy Description	Status	Corrective Action	Source Doc. Ref. #	Resolution Doc. Ref. #	Doc. Type
1		CLIMB	Transferred	CRUISE COR	VP-000009-2012	VP-000009-2012	Aircraft Maint. Exe.

Maintain Discrepancy Information Record Aircraft Maintenance Execution Details

Confirm Report Cancel Report Remarks

Record Statistics

Cause: User can specify the details related to Damage Cause if it is known.

The following are the multiline columns under Type section.

- Damage Cause
- Applicable
- Remarks



Note: The system mandates the user to select applicable column against a quick code loaded from the Quick Code page in the multiline.

Exhibit – 13:

Manage Damage Report

Generate Modify View

Main Details **Damage Details**

Damage Report # SDR0003592015 Category QC1 Date 21/04/2015 Status Fresh
Aircraft Reg. # 6Y-JMR Aircraft Model # A320-211 Config. Class AVEOS Discrepancy # 2

Item Type Location Cause

Damage Cause Known Yes

Additional Details

Damage Cause Applicable Remarks

Bird hit ☐

Corrosion ☐

Tail strike ☐

Save Damage Cause

Discrepancy Details File Attachments Chart Details

#	Category	Discrepancy Description	Status	Corrective Action	Source Doc. Ref. #	Resolution Doc. Ref. #	Doc. Type
1		CLIMB	Transferred	CRUISE COR	VP-000009-2012	VP-000009-2012	Aircraft Maint. Exe.

Maintain Discrepancy Information Record Aircraft Maintenance Execution Details

Confirm Report Cancel Report Remarks

Record Statistics

At this point, user can either confirm the Damage Report or cancel the Damage Report by clicking 'Confirm Report' or 'Cancel Report'. When cancelling the report, user can specify cancellation notes in 'Remarks'.

Exhibit – 14:

Manage Damage Report

Generate Modify View

Main Details Damage Details **Assessment Details**

Damage Report # SDR0003592015 Category QC1 Date 22/04/2015 Status Confirmed
Aircraft Reg. # 6Y-JMR Aircraft Model # A320-211 Config. Class AVEOS Discrepancy # 2

Resolution References Deferral

Repair Category Re-Protect Area Yes

Additional Details

Repair Required Yes Chart Update Required Yes Additional Inspection Required Yes

Save Resolution Details

Discrepancy Details File Attachments Chart Details **Repair Details**

#	New?	Task #	Task Type	Repair Classification	Task Description	Est. Man Hrs.	Sub Tasks Count	Remarks
1	Yes							
2	Yes							

Eng. Doc. # / Rev. # Applicability Effective From Manage Eng. Document Author Repair Procedure

Save Repair Details

Assessed by : Emp. # Date Ref. # Confirm Assessment Short Close Report Remarks

Record Statistics

Once the Report is confirmed Assessment Details will be enabled and the following details are displayed on click of respective buttons.

1. Resolution
2. References
3. Deferral.

Exhibit – 15:

The screenshot displays the 'Manage Damage Report' application. The top navigation bar includes 'Generate', 'Modify', and 'View' buttons. The main header shows 'Main Details', 'Damage Details', and 'Assessment Details' tabs. The 'Assessment Details' tab is active, showing fields for 'Damage Report #', 'Category', 'Date', 'Status', 'Aircraft Reg. #', 'Aircraft Model #', 'Config. Class', and 'Discrepancy #'. Below this, the 'Resolution' tab is selected, showing a 'Repair Category' dropdown, 'Re-Protect Area' dropdown, 'Repair Required' dropdown, and 'Chart Update Required' dropdown. A 'Save Resolution Details' button is present. The bottom section shows a table with columns: '#', 'New?', 'Task #', 'Task Type', 'Repair Classification', 'Task Description', 'Est. Man Hrs.', 'Sub Tasks Count', and 'Remarks'. The table contains two rows of data. At the bottom, there are fields for 'Assessed by', 'Date', 'Ref. #', and buttons for 'Confirm Assessment', 'Short Close Report', and 'Record Statistics'.

Resolution: User can specify the interim actions taken against the discrepancy.

The following details will be displayed under resolution.

1. Repair Category
2. Reprotect Area
3. Repair Required
4. Chart update required

Repair Category: This category is classified into three types:

Category A

Category B

Category C

Re-Protect Area: Further protection of the damaged area can be specified by selecting 'Yes' or 'No'.

Repair Required: Further repair of the damaged area can be specified by selecting 'Yes' or 'No'. On selecting 'No' the Repair Details tab will be hidden.

Chart update required: Charts attached against the Aircraft Model # and Aircraft Reg # can be modified by selecting 'Yes'. On selecting 'No' the Chart Details tab will be hidden.

Additional Inspection Required: Further Inspection required can be specified here by selecting 'Yes' or 'No'.

Exhibit – 15:

References: User can specify the Engineering Advice Note # which was used as a referral document to Inspect the Damage. On click of 'Save' Reference Details EAN status and ESR based will be displayed.

The following are the multiline columns under Reference section.

- References
- Document Type
- Ref #
- Revision
- Remarks

The following links are available in the Reference section

1. **View Eng. Advice Note**
2. **Create Eng. Service Request**

Exhibit – 16:

Manage Damage Report

Generate Modify View

Main Details Damage Details **Assessment Details**

Damage Report # SDR0003782015 Category QC1 Date 23/04/2015 Status Confirmed
Aircraft Reg. # 6Y-JMR Aircraft Model # A320-211 Config. Class AVEOS Discrepancy # 5

Resolution References **Deferral**

Deferral Allowed Yes

Additional Details

Deferral By	Applicable	Deferral Period	Remarks
FC	<input type="checkbox"/>		
FH	<input type="checkbox"/>		
LNDG	<input type="checkbox"/>		

Maintain Discrepancy Information Record Aircraft Maintenance Execution Details

Save Deferral Details

Discrepancy Details File Attachments Chart Details **Repair Details**

#	New?	Task #	Task Type	Repair Classification	Task Description	Est. Man Hrs.	Sub Tasks Count	Remarks
1	<input type="checkbox"/>	Yes						
2	<input type="checkbox"/>	Yes						

Eng. Doc. # / Rev. # Applicability Effective From Manage Eng. Document Author Repair Procedure

Save Repair Details

Assessed by : Emp.# Date Ref. # Confirm Assessment Short Close Report Remarks

Record Statistics

Deferral: If deferral is required, user can specify it by selecting “Yes or ‘No’. On selecting ‘Yes’ a multiline having the following columns will be displayed:

1. Deferral by
2. Applicable
3. Deferral Period
4. Remarks

Note: The system mandates the user to select applicable column against deferral by in the multiline.

The following links are provided under Deferral section.

1. **Maintain Discrepancy Information**
2. **Record Aircraft Maintenance Execution Details**

Exhibit – 17:

Manage Damage Report

Generate Modify View

Main Details Damage Details **Assessment Details**

Damage Report # SDR0003782015 Category QC1 Date 23/04/2015 Status Confirmed
Aircraft Reg. # 6Y-JMR Aircraft Model # A320-211 Config. Class AVEOS Discrepancy # 5

Resolution References **Deferral**

Deferral Allowed Yes

Additional Details

Deferral By	Applicable	Deferral Period	Remarks
FC	<input type="checkbox"/>		
FH	<input type="checkbox"/>		
LNDG	<input type="checkbox"/>		

Maintain Discrepancy Information Record Aircraft Maintenance Execution Details

Save Deferral Details

Discrepancy Details File Attachments Chart Details **Repair Details**

#	New?	Task #	Task Type	Repair Classification	Task Description	Est. Man Hrs.	Sub Tasks Count	Remarks
1	<input type="checkbox"/> Yes							
2	<input type="checkbox"/> Yes							

Eng. Doc. # / Rev. # Applicability Effective From Manage Eng. Document Author Repair Procedure

Save Repair Details

Assessed by : Emp.# Date Ref. # Confirm Assessment Short Close Report Remarks

Repair Details: If the Damage Found requires any repair to be done, the user can specify the necessary Task details under 'Repair Details' tab.

Task Insertion happens on click of 'Save Repair Details' when the DIR is in 'Assessed Status'.

The following are the multiline columns under Repair Details tab.

1. Seq #
2. New
3. Task #
4. Task Type
5. Repair classification
6. Task Description
7. Est. Man Hrs.
8. Sub Tasks Count
9. Added to Exe.Doc
10. Task Execution Status
11. Exe.Ref #
12. Remarks

The tasks inserted under Repair Details tab can be referenced to an Engineering Order.

The following links are provided under Repair Details tab.

1. Manage Eng. Order

2. Author Repair Procedure.



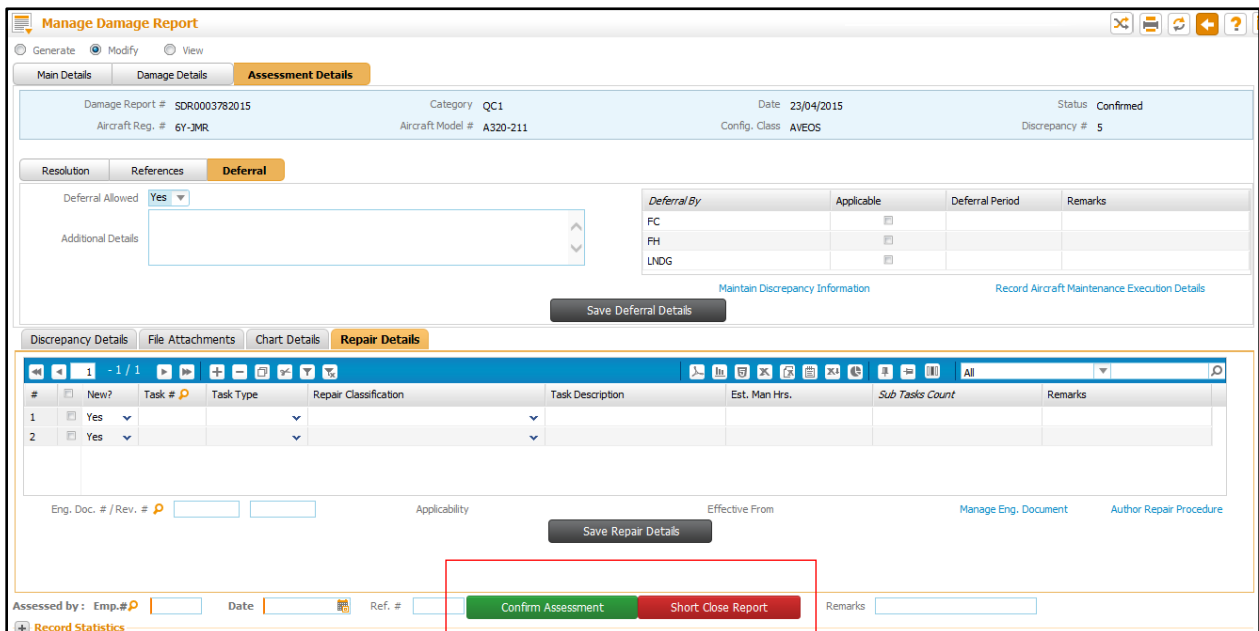
-  *Note 1: If the discrepancy is closed or transferred, the tasks will not be added to the Package.*
-  *Note 2: If the source discrepancy is in Deferred or Pending status, then no action takes place on 'Confirm Assessment'. The tasks will be added automatically once the Discrepancy is added to a new Package.*

Exhibit – 18:



The screenshot shows the 'Manage Damage Report' application. The 'Repair Details' tab is selected, displaying a table of tasks. Below the table, there are fields for 'Eng. Doc. # / Rev. #', 'Applicability', and 'Effective From'. At the bottom, there are two buttons: 'Confirm Assessment' (highlighted with a red box) and 'Short Close Report'. The 'Confirm Assessment' button is green, and the 'Short Close Report' button is red.

At this point, the user can either confirm assessment details or short closet.

- On confirming the Assessment the user needs to specify Emp # and Date on which the assessment is done.
- Once Confirm Assessment is clicked status of the Report changes to 'Assessed'.
- Once the Confirm Assessment is clicked when the DIR is in 'Confirmed' status the Repair tasks are added to the AME package.
- On Short Closing a Report, the user can specify Short Close notes in 'Remarks'.

Exhibit – 19:

The screenshot shows the 'Manage Damage Report' application. The 'Repair Details' tab is selected, displaying a table with the following data:

#	Task Description	Est. Man Hrs.	Sub Tasks Count	Added to Eve. Doc.?	Task Eve. Status	Eve. Ref. #	Remarks
1	Remove dent	1.00000000	1	No	Pending		
2							

At the bottom of the interface, the 'Close Report' button is highlighted with a red box, and the 'Print Damage Report' button is also highlighted with a red box.

After Confirming the assessment, the final action is to close the report. On click of 'Close Report', the Damage Report will be closed.

Print Damage Report

The user has an option to print the prepared Damage Report from the **Manage Damage Report** Page.

Click on the **Print Damage Report** link which is highlighted in the above screenshot, to launch the Damage Report in the PDF format, and print the file.

Damage Report:

The Damage Report, which is generated on click of **Print Damage Report** link has three sections viz.,

- Damage Details:** This section displays the information about the Damage Item, Type of Damage, Damage Location and Damage Cause.
- Assessment Details:** This section displays the information about the Resolution provided to damage identified like Reference details with respect to the damage, Deferral of the damage and the Aircraft Maintenance Engineer who assessed the Damage Report.
- Other Details:** This section displays the information on the list of charts that are selected to mark the damage points and the Repair Details which includes the Repair Task #, Task Type, Task Description, Engineering Document # etc.

Exhibit: 20

Maintain Master Charts:

Maintain Master Charts is primarily used to map a chart to the selected Object Type Viz., Aircrafts/Parts. The user entered Chart Title will be unique for a selected Chart Group of that Aircraft Model/Part or Aircraft Reg #/Component #.

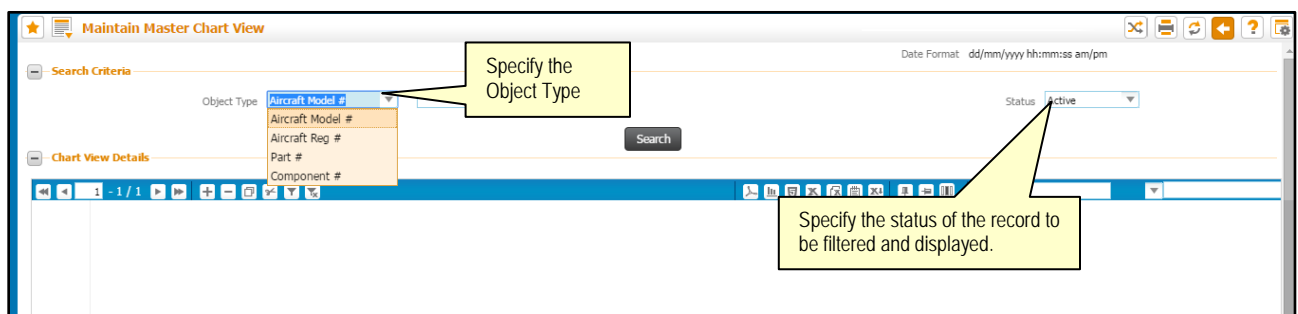
The search section provides the ability to filter the results in the Chart List section by providing any one of the inputs as shown in the image below.

- Select the Object Type against which the chart has to be mapped as shown in the Fig 1.2.

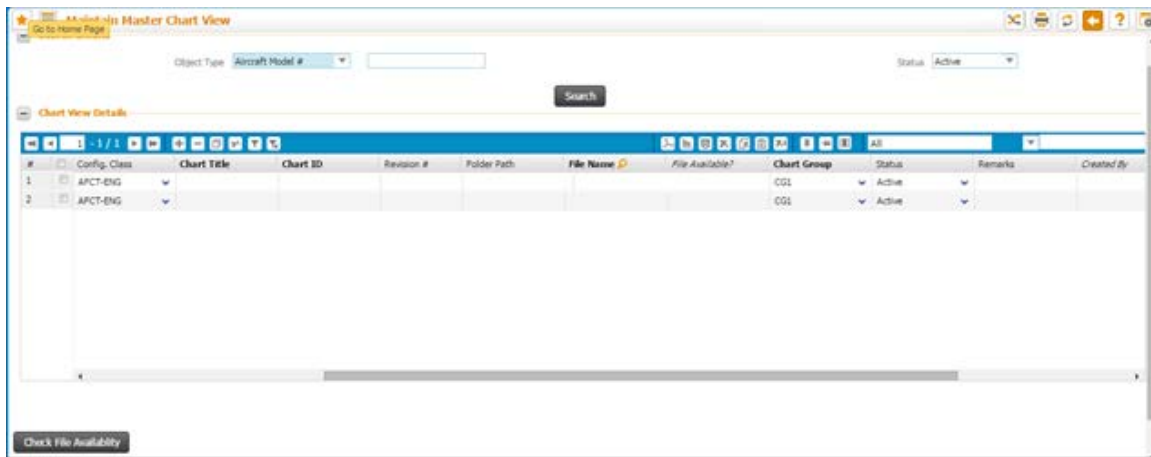
Example: On selecting Aircraft Reg # as VT-666, if the data is entered in the multiline, then the chart will be mapped to the Aircraft Reg # VT-666 only.

- Select the status of the object as shown in the Fig:1.2 to filter the results.
- Once any one of the above inputs is entered, the user can click the Search button as shown in the image above.

Note: Partial data is not accepted as Input



- Enter the Aircraft Reg #, Chart Title, Chart ID, File Name, Chart Group if the Object Type is selected as Aircraft Reg #.
- Enter the Aircraft Model #, Config Class (Not mandatory), Chart Title, Chart ID, File Name and Chart Group if the Object Type is selected as Aircraft Model #.
- Enter the Part#, Chart Title, Chart ID, File Name and Chart Group if the Object Type is selected as Part #.
- Enter the Component # or Part # and Serial #, Chart Title, Chart ID, File Name and Chart Group if the Object Type is selected as Component #.



- On clicking 'Check File Availability' button, the system displays Yes/No in the File Available column in the multiline.
- Chart Title entered will be unique for the selected Chart Group of that specified Aircraft. For example: If an Aircraft VT-666 is selected and a Chart Title is entered as Front View for the Chart Group Fuselage, the user cannot enter the same value for the Aircraft VT-666 which has the same Chart Group.
- Chart ID is unique across the entire application. It helps the user to easily identify the Chart.



Note 1: Chart Title can be repeated for the Aircraft/Part which has a different Chart Group.



Note 2: Two charts with the same Chart ID cannot be in 'Active' status at the same time.



Note 3: When the same Chart ID is entered, the status of the previous record will be made 'Revised'



Note 4: No changes will be allowed to the Revised and Inactive Chart ID's.



Note 5: If one has to modify a Model/Part level record when the object type is selected as Aircraft Reg #/Component #, the model level record cannot be modified. One can only inactivate the record and proceed with the new one. The inactivation is applicable only at the Aircraft Reg #/Component # level not at the Model/Part level.

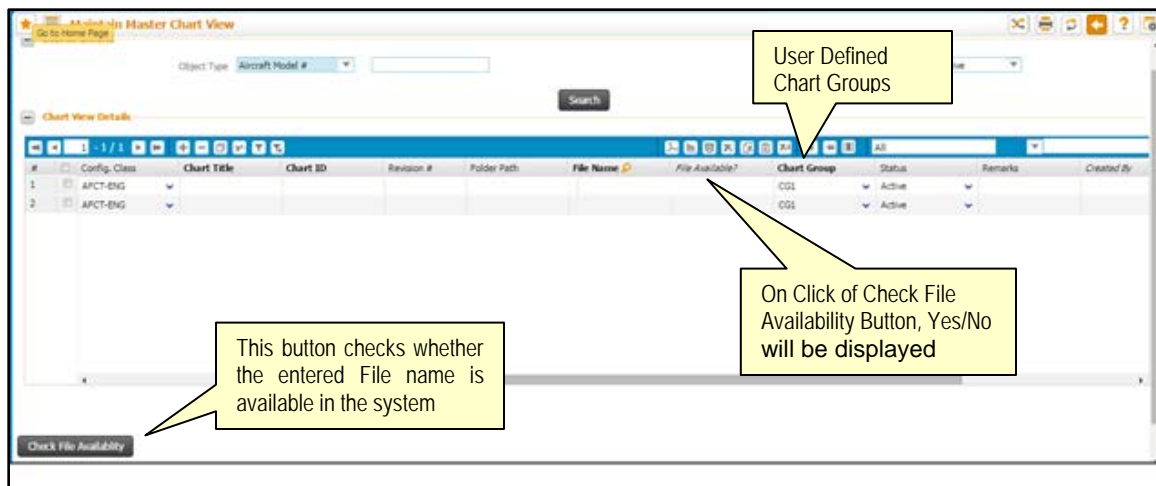
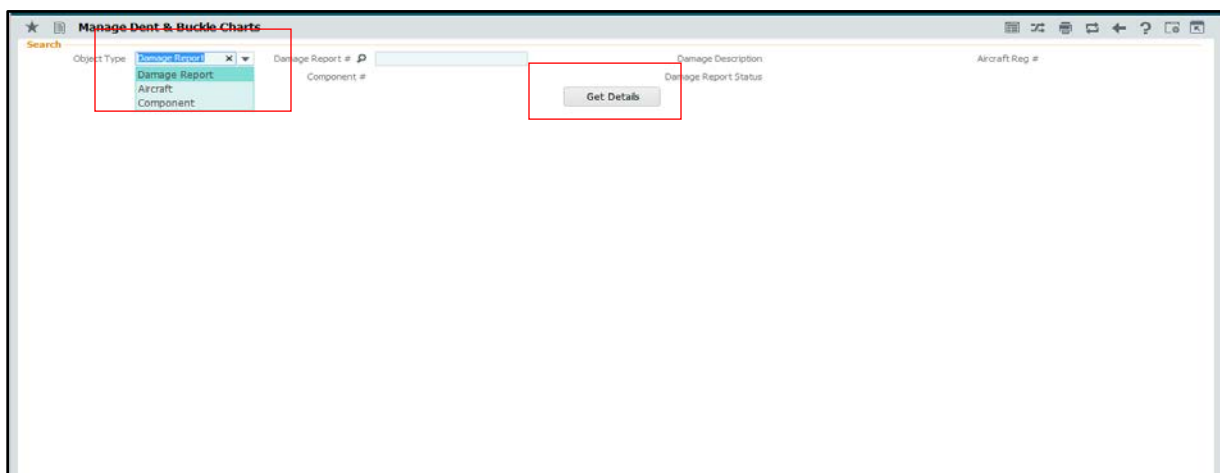


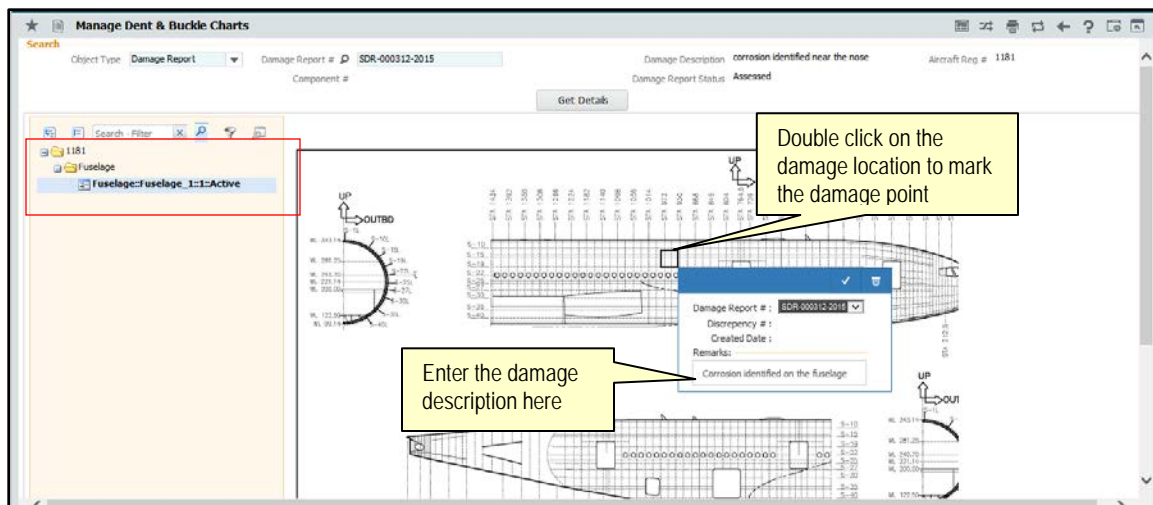
Exhibit: 21

Manage Damage Charts

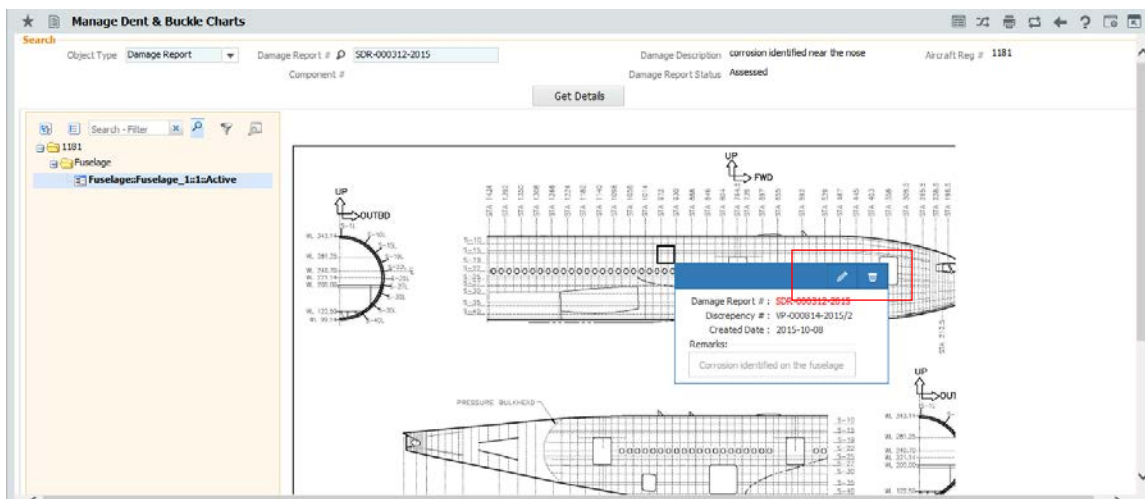
Manage Damage Charts is an interactive screen where one can mark and view the damage points of the selected charts for a specific Damage Report. For viewing the chart in this page one has to mark charts to be affected in the **Maintain Damage Report** screen while preparing the report. Listed below are the features available in the **Manage Damage Charts**

- Select the 'Object Type' and input value against the selected Object Type viz., Aircraft, Damage Report # or Component.





- To mark a damage point, place the mouse pointer on the chart and drag the mouse pointer.
- Enter the damage description by selecting the SDIR # from the combo which is listed on the pop-up window.
- Click the Tick mark to save the entered damage details or click the Delete icon to delete the entered damage points.



- To edit a Damage Description, mouse over on a specific damage point click on the 'Pen' icon .
- To view the Charts applicable for the selected SDIR's, select the SDIR from the multiline and hit the Show button. The charts applicable for the SDIR's will be highlighted.



Note: Only one damage point can be marked per chart for a SDIR.


Exhibit: 22

Help On Damage Screen

Help screen basically helps the user to search for a specific Damage Report #. This screen filters the results based on the user's search criteria.

The user can filter the results based on the Damage Report #, Discrepancy #, Report Status, Object Type, Damage Type, Damage Part, Damage Location, ATA # , Work Area, Zone, From/To Date & Time, Chart Title and Category.

The screenshot shows the 'Help On Damage Report' interface. It features a 'Primary Search Criteria Section' with fields for 'Damage Report #', 'Discrepancy #', 'Report Status' (a dropdown menu), 'Object Type' (a dropdown menu), 'Damage Part', 'Work Area', 'Damage Location', 'Zone', 'Chart Title', and 'Category'. Below this is an 'Additional Search Criteria' section with fields for 'Aircraft Model #', 'Aircraft Reg #', 'Part #', 'From / To Date', and 'Component #'. A 'Search' button is located below the search criteria. The 'Search Results Grid Section' at the bottom displays a table with columns: '#', 'Damage Report #', 'Damage Description', 'Damage Part', 'Damage Location', 'Aircraft Reg #', 'Component #', and 'Part #'. Two callout boxes are present: one pointing to the 'Object Type' dropdown with the text 'Select the Object Type for which the SDIR # is required', and another pointing to the 'Report Status' dropdown with the text 'Select the Report status by which the SDIR #'s to be filtered'.

 **Note:** If no values are entered/selected in the search criteria the system will fetch all the Damage Report # irrespective of the filters.

- Enter the From Date and To Date to fetch the records within the given date range.
- If only From Date is entered and the To Date is left blank then the system will consider current date as to date and fetch all the records within the date range.
- If only To Date is entered and the From Date is left blank then the system will fetch all the records applicable till the entered To Date.

Help On Damage Report

Primary Search Criteria Section

Damage Report # Discrepancy # Report Status

Object Type

Additional Search Criteria Section

Damage Type Damage Part Damage Location

ATA # Work Area Zone

From / To Date & Time Chart Title Category

Search

Search Results Grid Section

#	Damage Report #	Damage Description	Damage Part	Damage Location	Aircraft Reg #	Aircraft Model #	ATA #	Component #	Part #
1									

Exhibit : 23**Process Parameters for Dent and Buckle feature**

This features behaves based on the below process parameters under Common Master Business Component.

Set Process Parameters

Entity Type: Discrepancy Management Entity: Damage Inspection Report

Record Status: Active Process Parameters Defined? No

#	Process Parameter	Permitted Values	Value	Status	Error Mess
1	Mandatory Damage Report requirement for Discrepancies?	Enter "0" for 'Major', "1" for 'Corrosion', "2" for 'Both', "3" for 'Either', "4" for 'No'	3	Defined	
2	Allow damage report against regular Discrepancies?	Enter "0" for 'No', "1" for 'Yes'	1	Defined	
3	Allow actioning of Discrepancy prior to Damage Report Assessment?	Enter "0" for 'No', "1" for 'Yes'	1	Defined	
4	Allow Report generation for Discrepancy in Closed status?	Enter "0" for 'No', "1" for 'Yes'	1	Defined	
5	Allow Report generation for Discrepancy in Deferred status?	Enter "0" for 'No', "1" for 'Yes'	1	Defined	
6	Allow Report generation for Discrepancy without Exe. Doc. # reference?	Enter "0" for 'No', "1" for 'Yes'	1	Defined	
7	Auto closure of Assessed Damage Report on Primary Discrepancy closure?	Enter "0" for 'No', "1" for 'Yes'	1	Defined	
8	Allow cancellation of Tasks inserted from Damage Inspection Report?	Enter "0" for 'No', "1" for 'Yes'	1	Defined	
9	Allow modification of Damage Details of a Confirmed Damage Report?	Enter "0" for 'No', "1" for 'Yes'	0	Defined	
10	Allow modification of Damage/Assessment Details of an Assessed Damage	Enter "0" for 'No', "1" for 'Yes'	1	Defined	
11	UOM for Damage Dimensions?	Enter a valid UOM from UOM Master	mm	Defined	
12	Allow Damage Report to be assessed by the Damage Reporter?	Enter "0" for 'No', "1" for 'Yes'	0	Defined	
13	Allow referencing of a "Fresh" EO in damage report before assessment?	Enter "0" for 'No', "1" for 'Yes'	0	Defined	
14	Allow chart updates before damage report confirmation?	Enter "0" for 'No', "1" for 'Yes'	0	Defined	
15	Show only the current damage on chart in Chart View page?	Enter "0" for 'No', "1" for 'Yes'	1	Defined	
16	Show only the current damage on chart on Damage Report print?	Enter "0" for 'No', "1" for 'Yes'	1	Defined	
17	Logic for Deriving Age of Aircraft/Component for Damage Inspection Report?	Enter "0" for 'Age of Aircraft/Component as of Reported date.', "1" for 'Age of	1	Defined	

Process Parameter 1:

Set Process Parameter	
Entity Type	Discrepancy Management
Entity	Damage Inspection Report
Process Parameter	Mandatory Damage Report requirement for Discrepancies?
Permitted Values	Enter "0" for 'Major', "1" for 'Corrosion', "2" for 'Both', "3" for 'Either', "4" for 'No'
Default Value	3
System behaviour based on process parameter value	
Value: 0(Major)	Mandates Damage Report generation for the Discrepancy for which the Major Item is set as Yes.
Value 1(Corrosion)	Mandates Damage Report generation for the Discrepancy for which the Corrosion Related is set as Yes.
Value 2(Both)	Mandates Damage Report generation for the Discrepancy for which the Corrosion Related is set as Yes or Major Item is set as Yes.
Value 3(Either)	Mandates Damage Report generation for the Discrepancy for which the Corrosion Related is set as Yes or Major Item is set as Yes.
Value 3(No)	Mandates Damage Report generation for the Discrepancy for which the Corrosion Related is set as No and Major Item is set as

Process Parameter 2:

Set Process Parameter	
Entity Type	Discrepancy Management
Entity	Damage Inspection Report
Process Parameter	Allow damage report against regular Discrepancies?
Permitted Values	Enter "0" for 'No', "1" for 'Yes'
Default Value	0
System behaviour based on process parameter value	
Value: 0(No)	Does not allow creation of Damage Reports against regular discrepancy.
Value 1(Yes)	Allow creation of Damage Reports against regular discrepancy

Process Parameter 3:

Set Process Parameter	
Entity Type	Discrepancy Management
Entity	Damage Inspection Report
Process Parameter	Allow actioning of Discrepancy prior to Damage Report Assessment?
Permitted Values	Enter "0" for 'No', "1" for 'Yes'
Default Value	0
System behaviour based on process parameter value	
Value: 0(No)	Does not allow action change of the discrepancy prior to Damage Report Assessment
Value 1(Yes)	Allows action change of the discrepancy prior to Damage Report Assessment

Process Parameter 4:

Set Process Parameter	
Entity Type	Discrepancy Management
Entity	Damage Inspection Report
Process Parameter	Allow actioning of Discrepancy prior to Damage Report Assessment?
Permitted Values	Enter "0" for 'No', "1" for 'Yes'
Default Value	0
System behaviour based on process parameter value	
Value: 0(No)	Does not allow action change of the discrepancy prior to Damage Report Assessment
Value 1(Yes)	Allows action change of the discrepancy prior to Damage Report Assessment

Process Parameter 5:

Set Process Parameter	
Entity Type	Discrepancy Management
Entity	Damage Inspection Report
Process Parameter	Allow Report generation for Discrepancy in Deferred status?
Permitted Values	Enter "0" for 'No', "1" for 'Yes'
Default Value	0
System behaviour based on process parameter value	
Value: 0(No)	Does not allow to generate Damage Report generation for Deferred discrepancy
Value 1(Yes)	Allows to generate Damage Report generation for Deferred discrepancy

Process Parameter 6:

Set Process Parameter	
Entity Type	Discrepancy Management
Entity	Damage Inspection Report
Process Parameter	Allow Report generation for Discrepancy without Exe. Doc. # reference?
Permitted Values	Enter "0" for 'No', "1" for 'Yes'
Default Value	0
System behaviour based on process parameter value	
Value: 0(No)	Do not allow to generate Damage Report generation for discrepancy without Exe Doc #
Value 1(Yes)	Allows to generate Damage Report generation for Deferred discrepancy without Exe Doc #

Process Parameter 7:

Set Process Parameter	
Entity Type	Discrepancy Management
Entity	Damage Inspection Report
Process Parameter	Auto closure of Assessed Damage Report on Primary Discrepancy closure?
Permitted Values	Enter "0" for 'No', "1" for 'Yes'
Default Value	0
System behaviour based on process parameter value	
Value: 0(No)	Does not allow auto closure of Auto closure of Assessed damage report on primary discrepancy closure
Value 1(Yes)	Allows auto closure of Auto closure of Assessed damage report on primary discrepancy closure

Process Parameter 8:

Set Process Parameter	
Entity Type	Discrepancy Management
Entity	Damage Inspection Report
Process Parameter	Allow cancellation of Tasks inserted from Damage Inspection Report?
Permitted Values	Enter "0" for 'No', "1" for 'Yes'
Default Value	0
System behaviour based on process parameter value	
Value: 0(No)	Does not allow cancellation of tasks which are inserted from Structural Damage Inspection Report
Value 1(Yes)	Allows cancellation of tasks inserted from structuram damage inspection report

Process Parameter 9:

Set Process Parameter	
Entity Type	Discrepancy Management
Entity	Damage Inspection Report
Process Parameter	Allow modification of Damage Details of a Confirmed Damage Report?
Permitted Values	Enter "0" for 'No', "1" for 'Yes'
Default Value	0
System behaviour based on process parameter value	
Value: 0(No)	Does not allow modification of confirmed damage report
Value 1(Yes)	Allows modification of confirmed damage reports

Process Parameter 10:

Set Process Parameter	
Entity Type	Discrepancy Management
Entity	Damage Inspection Report
Process Parameter	Allow modification of Damage/Assessment Details of an Assessed Damage Report
Permitted Values	Enter "0" for 'No', "1" for 'Yes'
Default Value	0
System behaviour based on process parameter value	
Value: 0(No)	Does not allow modification of Assessed damage report
Value 1(Yes)	Allows modification of Assessed damage reports

Process Parameter 11:

Set Process Parameter	
Entity Type	Discrepancy Management
Entity	Damage Inspection Report
Process Parameter	UOM for Damage Dimensions?
Permitted Values	User entered UoM values
Default Value	Not Applicable
System behaviour based on process parameter value	

Process Parameter 12:

Set Process Parameter	
Entity Type	Discrepancy Management
Entity	Damage Inspection Report
Process Parameter	Allow Damage Report to be assessed by the Damage Reporter?
Permitted Values	Enter "0" for 'No', "1" for 'Yes'
Default Value	0
System behaviour based on process parameter value	
Value: 0(No)	Does not allow the Damage reporter to assess the Damage Report
Value 1(Yes)	Allows the Damage Reporter to assess the Damage Report

Process Parameter 13:

Set Process Parameter	
Entity Type	Discrepancy Management
Entity	Damage Inspection Report
Process Parameter	Allow referencing of a "Fresh" EO in damage report before assessment?
Permitted Values	Enter "0" for 'No', "1" for 'Yes'
Default Value	0
System behaviour based on process parameter value	
Value: 0(No)	Fresh EO referencing will not be allowed before the status of the SDIR changes to Assessed.
Value 1(Yes)	Fresh EO referencing will be allowed before assessing the SDIR.

Process Parameter 14:

Set Process Parameter	
Entity Type	Discrepancy Management
Entity	Damage Inspection Report
Process Parameter	Allow chart updates before damage report confirmation?
Permitted Values	Enter "0" for 'No', "1" for 'Yes'
Default Value	0
System behaviour based on process parameter value	
Value: 0(No)	Does not allow the chart updates before confirming the Structural Damage Inspection Report.
Value 1(Yes)	Allows chart updates before confirming the Structural Damage Inspection Report

Process Parameter 15:

Set Process Parameter	
Entity Type	Discrepancy Management
Entity	Damage Inspection Report
Process Parameter	Show only the current damage on chart in Chart View page?
Permitted Values	Enter "0" for 'No', "1" for 'Yes'
Default Value	0
System behaviour based on process parameter value	
Value: 0(No)	Displays all the damage points marked on the charts
Value 1(Yes)	Shows only the current damage point marked on the charts

Process Parameter 16:

Set Process Parameter	
Entity Type	Discrepancy Management
Entity	Damage Inspection Report
Process Parameter	Show only the current damage on chart on Damage Report print?
Permitted Values	Enter "0" for 'No', "1" for 'Yes'
Default Value	0
System behaviour based on process parameter value	
Value: 0(No)	Prints all the damage points on the charts
Value 1(Yes)	Prints only the current damage points on the charts

Process Parameter 17:

Set Process Parameter	
Entity Type	Discrepancy Management
Entity	Damage Inspection Report
Process Parameter	Logic for Deriving Age of Aircraft/Component for Damage Inspection Report?
Permitted Values	Enter "0" for 'Age of Aircraft/Component as of Reported date.', "1" for 'Age of Aircraft/Component as of Printed date.'
Default Value	0
System behaviour based on process parameter value	
Value: 0(No)	Age of the Aircraft/Component will be derived as on the Damage Reported Date
Value 1(Yes)	Age of the Aircraft/Component will be derived as on Printed Date



Note: This feature involves commercials and is not available for all customers. Please contact your Ramco Account Manager.

WHAT'S NEW IN CERTIFICATE OF MAINTENANCE?

Ability to issue Certificate of Maintenance by validating the certificate mapping to Customer#, Part #, Task # and Employee & Improvement to the existing report formats to latest formats approved by Regulatory

Reference: AABI-439

Background

In MRO scenarios, special validation is required to ensure that COM is issued only for customers who are eligible to receive the certificate. Similarly COM has to be issued only for valid parts and tasks. Also only valid employees having specific skills have to issue COM.

The existing COM reports for China and Thailand has been enhanced to meet with the latest China authority standards and Thailand authority standards respectively. New COM reports for Brazil and Japan are added to the product.

Change Details

1. Manage Certificate Applicability

A new screen **Manage Certificate Applicability** is introduced in **Common Master** business component, where user can select the list of applicability for each certificate types. While issuing COM for the Certificate Type, then system will validate whether the Certificate is valid for the Part, Stock status, Customer and Task. System will also validate whether the login employee is capable of issuing the certificates. This validation can be enabled based on the process parameter settings.

2. Print multiple Certificate Types

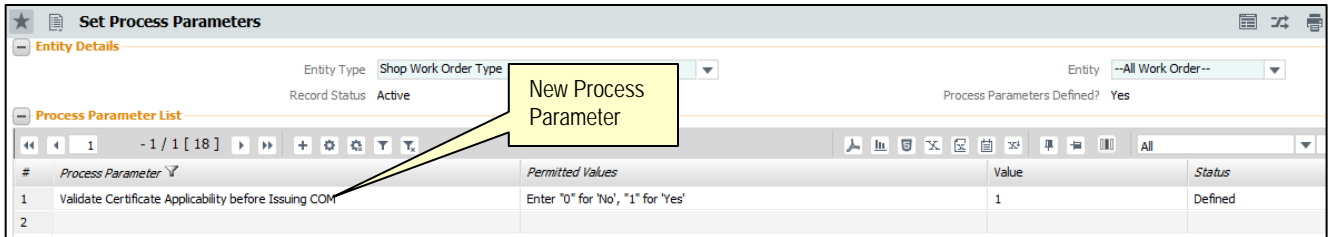
When multiple Certificate Types are selected for printing, the system will print all the selected Certificates sequentially.

3. Issue Certificate of Maintenance per Lot # and to identify them with Mfr. Lot

The system will issue Certificate of Maintenance based on Lot # and the respective Mfr. Lot # will be specified in the issued certificate.

1. Manage Certificate Applicability

Exhibit 1: New process parameter in Common Master



The screenshot shows the 'Set Process Parameters' window. The 'Entity Type' is 'Shop Work Order Type' and the 'Entity' is '--All Work Order--'. The 'Record Status' is 'Active'. The 'Process Parameters Defined?' status is 'Yes'. The 'Process Parameter List' table contains the following data:

#	Process Parameter	Permitted Values	Value	Status
1	Validate Certificate Applicability before Issuing COM	Enter '0' for 'No', '1' for 'Yes'	1	Defined
2				

If the Process Parameter 'Validate Certificate Applicability before Issuing COM' is set as '0' (No), then the system will not perform any validations while issuing the Certificate of Maintenance.

If the Process Parameter 'Validate Certificate Applicability before Issuing COM' is set as '1' (Yes), then on while issuing the Certificate of Maintenance, the validations will be performed for the applicability of the Certificate with the various Object types like Part #, Task #, Task Type, Stock Status, Repair Scheme #and Customer #, as defined in the **Manage Certificate Applicability** screen.

Exhibit 2: Manage Certificate Applicability screen

Manage Certificate Applicability

Object Type: Part # Regulatory Authority: ALL Approved By Manufacturer: Status:

Certificate Type: ☒ ALL ☐ 8130-3 ☐ BRAZIL-ANAC-Segvoo-003 ☐ Chinese AAC- 085 ☐ JAPAN-JCAB-FORM-18 ☐ Repair Station 8130-3 ☐ Thailand DCA 478-T ☐ EASA Form 1

Applicability List

#	Object Type	Object #	Object Description	Certificate Type	Regulatory Authority	Approved By M
1	Part#	REL		8130-3	Brazil ANAC	00000
2	Part#	REL		8130-3	Brazil ANAC	00000
3	Part#	REL		8130-3	Brazil ANAC	00000
4	Part#	REL		8130-3	Brazil ANAC	00000
5	Part#	REL		8130-3	Federal Aviation Administration	00000
6	Part#	REL		8130-3	Federal Aviation Administration	00000
7	Part#	REL		8130-3	Brazil ANAC	00000
8	Part#	0-0440-4-0011:36361		JAPAN-JCAB-FORM-18	General Authority of Civil Aviation	00000
9	Part#	REL		8130-3	Brazil ANAC	00000

The **Applicability List** tab in the **Manage Certificate Applicability** screen facilitates defining various applicability of the Certificate with Object Type like Part #, Task #, Task Type, Stock Status, Repair Scheme # and Customer #. The **Manage Certificate Applicability** screen will be launched only if the process parameter 'Validate Certificate Applicability before Issuing COM' is set as '1' (Yes).

Apart from this, the Skill Code required for the various Certificate Types can also be defined in the **Skill Code** tab available in the **Manage Certificate Applicability** screen.



Note: 'Approved by Manufacturer' is to be selected only when the Object type is selected as 'Task #'.

Exhibit 3: Issue Certificates screen

Issue Certificates

Eligibility: [Dropdown]

#	Certificate Type	Reqd?
1	8130-3	<input type="checkbox"/>
2	AIR CARRIER 8130-3	<input type="checkbox"/>
3	ANAC-SEGVOO-003	<input type="checkbox"/>
4	As Per LaserFiche	<input type="checkbox"/>
5	BRAZIL-ANAC-SEGVOO-003	<input type="checkbox"/>

#	Certifying Authority	Reqd?
1	ASA	<input type="checkbox"/>
2	Aveos	<input type="checkbox"/>
3	CAAC	<input type="checkbox"/>
4	CASE	<input type="checkbox"/>
5	EUROPEAN AVIATION SAFETY AGENCY	<input type="checkbox"/>

Document Attachment Details

File Name: [Field] [Upload Documents](#) [View Associated Doc. Attachments](#)

Authorization Details

Employee Code: [00041383] Employee Name: SENECHAL, DOMINIC Primary Workcenter #: [YUL-100-05]
 License #: [00041] Authorization #: [Field] Authorization Ref #: [Field]
 Skill Code: [01] Issued Date: [10-19-2015 12:51:21]

In the **Issue Certificates** screen, when the Certificate details are saved, the system will validate the applicability of the Certificate with the various Object Types as defined in the **Manage Certificate Applicability** screen, if the Process Parameter 'Validate Certificate Applicability before Issuing COM' is set as '1' (Yes).

If the Process Parameter 'Validate Certificate Applicability before Issuing COM' is set as '0' (No), then the system does not validate the applicability.

2. Print multiple Certificate Types

If multiple 'Certificate Type' is selected then on clicking 'Approved & Print', all the certificates which are selected, will be printed sequentially.

3. Issue Certificate of Maintenance per Lot # & to identify them with Mfr. Lot

The system will issue Certificate of Maintenance based on Lot # and the respective Mfr. Lot # will be specified in the issued certificate. The current certificate displays the system generated Lot # of the lots that were issued. The certificate will now display the Mfr. lot number to trace the parts correctly throughout the system and identify the parts as they move from warehouse to warehouse.

WHAT'S NEW IN SHOP WORK ORDER?

Ability to generate Material Request at Task level on release of Shop Work Order

Reference: AHBf-11968

Background

This enhancement is about improvements in **Plan Work Order** screen of **Shop Work Order** business component to generate unique Material Request for each Executable Task in the Work Order.

Change Details

A new Process Parameter 'Ability to generate Material Request at task level on release work order?' is defined in the **Define Process Entities** screen, for every user defined Shop Work Order Type. Based on the value set for this Process Parameter, Material Request is generated for each unique Planned Start Date / Time or for each executable Task in the respective Work Order.


Exhibit 1: New Process Parameter

The screenshot shows the 'Set Process Parameters' window. At the top, 'Entity Type' is set to 'Shop Work Order Type' and 'Entity' is 'EWO'. 'Record Status' is 'Active' and 'Process Parameters Defined?' is 'Yes'. Below this is the 'Process Parameter List' table. A new parameter is being added, indicated by a yellow callout box labeled 'New Process Parameter' pointing to the 'Permitted values' column of the first row.

#	Process Parameter	Permitted values
1	Ability to generate Material Request at task level on release work order?	Enter '0' for 'Not Required', '1' for 'Required'
2		

If the Process Parameter 'Auto MR Generation on Order Release' is set as 'Not Required', then separate material request will be generated for the tasks having the same Planned Start Date, and the Planned Start Date of the tasks will be updated as the Need Date of the material request generated.

If the Process Parameter 'Auto MR Generation on Order Release' is set as 'Required', then separate material request will be generated for each task in the Shop Work Order and Planned Start Date of the task will be updated as the Need Date of the material request generated.

 *Note: When the Planned Start Date / Time for Tasks is lesser than the current date, on the release of Work Order, the system will update the Need date as current date.*

Provision to Add Standard Repair Task Automatically During Shop Work Order Creation

Reference: AHBf-12028

Background

This enhancement provides the ability to add standard tasks like refurbishment, bushing, automatically for appropriate parts while creating Shop Work Order.

Change Details

Maintain Maintenance Info for Part screen is enhanced to facilitate definition of Standard Repair Task for parts.

A new set option 'Allow automatic addition of Std. Repair Task on SWO Generation' is added in the **Set Process Parameters** screen under the Entity Type 'Shop Work Order' under all user-defined Shop Work Order Types to configure the automatic addition of Standard Task. The following options can be set for the parameter:

- '0' for 'Not Required'
- '1' for 'Internal Parts'
- '2' for 'All Parts'

By default the option is set as '0'.

Exhibit 1: Maintain Maintenance Info. for Part

Maintain Maintenance Info. for Part

Part Identification Details

Part # 0-0511-3-0001:99DND
Base Part # 0-0511-3-0001:99DND
Component ID Generation Auto
Part Description HYDRO FILTER COUPLING
Mod Status #
Status Active
Component ID Numbering Type C

Part Classification Details

Part Model # [] Get Details
Config. Control Basis Config. Rules
Maintenance Process On-Condition
OEM Part # []
Component Type Others
ATA # 29-10
Replacement Type LRU
Part Classification Rotable
LLP? No
PMA? No

Operational Details

Planner Code 00041383
Planner Name SENECHAL, DOMINIC
Default Maint Base RAMCO OU
Std. Repair Task # Tsk-12-ABC
Phase-out Policy All Work Centers
Default Exec. Doc for Int. Repair Routing CWC
Maint. / Resp. Work Center # YUL-100-00
TAT(Days) []
Planning Base RAMCO OU
Work Center Description ARTOS - PROJECT ADMIN
Preferred Repair Agency []
SOS Applicability Not Applicable
Consolidate Exec. Order? No

Daily Usage Details

Lead Parameter []
Average Daily Utilization []

A new control 'Std. Repair Task #' is added to the **Maintain Maintenance Info. for Part** screen in **Part Administration** business component.

- Note: The Help icon near the Std. Repair Task# control can be used to select the desired Repair Task #.*
- When the Std. Repair Task # is defined while updating the Part information for the selected Part, the system will check if it is valid and active Task #. The Task # should be effective for the Part #.*

Exhibit 2: View Maintenance Info. for Part

View Maintenance Info. for Part

Part Identification Details

Part #	0-0511-3-0001:99DND	Status	Active
Part Description	HYDRO FILTER COUPLING		
Base Part #	0-0511-3-0001:99DND	Mod Status #	
Component ID Generation	Auto	Component ID Numbering Type	C

Part Classification Details

Part Model #		Component Type	Others
Part Classification	Rotable	ATA #	29-10
Config. Control Basis	Config. Rules	LLP?	No
Maintenance Process	On-Condition	Replacement Type	LRU
PMA?	No	OEM Part #	
Cargo	No	RVS	No
MEL	No	ETOPS	No

Operational Details

Planning Base	RAMCO OU	Default Maint Base	RAMCO OU
Maint. / Resp. Work Center #	YUL-100-00	Work Center Description	ARTOS - PROJECT ADMIN
Planner Code	00041383	Planner Name	SENECHAL, DOMINIC
Std. Repair Task #	Tsk-12-ABC	Execution Facility	In-house
Preferred Repair Agency		Phase-out Policy	All Work Centers
Lower Landing Minimum		SOS Applicability	Not Applicable
TAT(Days)		Default Exec.Doc for Int.Repair Routing	CWO
Consolidate Exec. Order?	No		

A new display only control 'Std. Repair Task #' is added to the **View Maintenance Info. For Part** screen in **Part Administration** component.



Note: The Display Only 'Std. Repair Task #' will display the Std. Repair Task # if defined for the Part #.

Exhibit 3:

The screenshot shows the 'Set Process Parameters' window with the following details:

- Entity Type:** Shop Work Order Type
- Entity:** CWO
- Record Status:** Active
- Process Parameters Defined?** Yes

The table below represents the data shown in the 'Process Parameter List' table:

#	Process Parameter	Permitted Values	Value	Status	Error Mess
29	Default Sign-Off requirement for Non-Routines ?	Enter "0" for 'Mechanic', "1" for 'Mechanic & Inspector', "2" for 'Inspector', "3"	3	Defined	
30	Enforce Sign-Off ?	Enter "0" for 'No', "1" for 'Yes'	0	Defined	
31	Permit Dual Sign-off by the employee ?	Enter "0" for 'No', "1" for 'Yes'	1	Defined	
32	Allow reporting by different employee?	Enter "0" for 'No', "1" for 'Yes'	1	Defined	
33	Allow Task Reporting by ?	Enter "0" for 'All Employee', "1" for 'Assigned Employee'	0	Defined	
34	Ref. Date for Compliance ?	Enter "0" for 'Start date', "1" for 'Task Completion date', "2" for 'CoM Date'.	1	Defined	
35	Backdated reporting Time Limit (in days)	Enter a positive integer	300	Defined	
36	Assembly status check on attachment ?	Enter "0" for 'Not Required', "1" for 'Required'	0	Defined	
37	Acknowledge Receipt	Enter "0" for 'Manual', "1" for 'Automatic'	1	Defined	
38	Allow modification of Task Sign-Off requirements	Enter "0" for 'Not Allowed', "1" for 'Allowed for Routine tasks', "2" for 'Allowed for	2	Defined	
39	Allow re-opening of completed orders / tasks?	Enter "0" for 'Not Allowed', "1" for 'Allowed'	1	Defined	
40	Allow reporting on completed orders / tasks?	Enter "0" for 'Not Allowed', "1" for 'Allowed'	1	Defined	
41	Allow time reporting on discrepancies?	Enter "0" for 'Not Allowed', "1" for 'Allowed'	0	Defined	
42	Allow discrepancy closure with open service request?	Enter "0" for 'Not Allowed', "1" for 'Allowed'	0	Defined	
43	Allow receipt to different work center?	Enter "0" for 'Not Allowed', "1" for 'Allowed'	1	Defined	
44	Material Movement Document Print on Requisition from Planner	Enter "0" for 'Not Required', "1" for 'Required'	1	Defined	
45	Default Shop Work Order Type for Auto generated Project work orders?	Enter "0" for 'No', "1" for 'Yes'	1	Defined	
46	Default Shop Work Order Type for Auto generated Miscellaneous work orders?	Enter "0" for 'No', "1" for 'Yes'	1	Defined	
47	Enforce Ref. doc. # for CoM	Enter "0" for 'Non-mandatory', "1" for 'Mandatory'	0	Defined	
48	Allow direct part consumption ?	Enter "0" for 'Not Required', "1" for 'Required'	1	Defined	
49	Ability to generate Material Request at task level on release work order?	Enter "0" for 'Not Required', "1" for 'Required'	0	Defined	
50	Allow automatic addition of Std. Repair Task on SWO Generation	Enter "0" for 'Not Required', "1" for 'Internal Parts', "2" for 'All Parts'	0	Defined	

A yellow callout box labeled "New Process Parameter" points to the row for parameter 49.

If the Process Parameter 'Allow automatic addition of Std. Repair Task on SWO Generation' is set as 'Not Required', then the system will exhibit the existing behavior of Shop Work Order generation (i.e.,) even though Std. Repair Task # has been defined for the Part #, the system will not automatically add the defined Task # when the Shop Work Order is generated for that Part #.

If the Process Parameter 'Allow automatic addition of Std. Repair Task on SWO Generation' set as 'Internal Parts', then throughout the system (RSED, Plan Work Order, AME, GI, CO etc.) whenever a Shop Work Order is generated for the Part # and the Part # is an 'Internal Part' the system will check whether Std. Repair Task # is defined for the Part #. If defined, the system will automatically add the Std. Repair Task # to the Work Order of the Part # during the Shop Work Order Generation process.

If the Process Parameter 'Allow automatic addition of Std. Repair Task on SWO Generation' set as 'All Parts', then throughout the system (RSED, Plan Work Order, AME, GI, CO etc) whenever a Shop Work Order is generated for the Part # the system will check whether Std. Repair Task # is defined for the Part #. If defined, the system will automatically add the Std. Repair Task # to the Work Order of the Part # during the Shop Work Order Generation process.



Note: The following are applicable for process parameter set as 'Internal Part' and 'All Parts'.

- a. The System will check the effectivity of the Task # on Shop Work Order generation. If not effective, it will not be added in the Work Order.*
- b. If the Std. Repair Task is having Concurrent relationship with other tasks, on SWO generation the active related task will also get automatically added to the Work Order.*
- c. If the Std. Repair Task is a Workscoping task and it has Repair Scheme definitions (like intermediate and Operations Task defined under the PME), on SWO generation all active operation task under the workscoping will get added to the Work Order.*
- d. If the Part # is of Component Type and the Component have program; In the Program if there are perpetual tasks and the Perpetual task and the Std. Repair Task defined for the Part # are same; On SWO generation the system will not duplicate the Task in the Work Order.*

Ability to default Repair Receipt warehouse during Move to work center scenarios

Reference: AHBf-11681

Background

The **Shop Work Order** module offers MRO the ability to route parts for external repair in case of capability shortage in their execution facility. During repair receipt, users do have provision of issuing part back to the work center in order to perform remaining jobs.

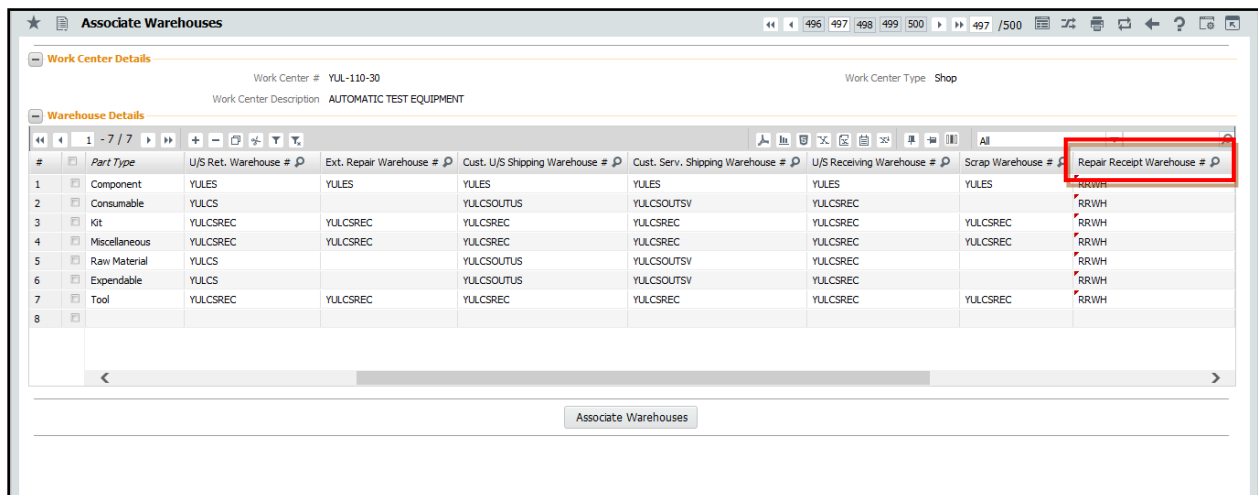
Currently in this scenario, i.e. Move to work center after external repair, system move parts either via Service Request Warehouse or U/S Receiving Warehouse based on main core conditions. But due to other weighted average effective parts in same warehouses,

- Cost which are not related to the Repair Order is getting charged to the SWO, and
- Also it changes the weighted average on the parts in inventory.

Change Details

New warehouse 'Repair Receipt Warehouse #' has been introduced in the **Associate Warehouses** screen of the **Associate Work Center Attributes** activity of the **Work Center** business component.

Exhibit 1: 'Repair Receipt Warehouse #' introduced in Associate Warehouses screen



#	Part Type	U/S Ret. Warehouse #	Ext. Repair Warehouse #	Cust. U/S Shipping Warehouse #	Cust. Serv. Shipping Warehouse #	U/S Receiving Warehouse #	Scrap Warehouse #	Repair Receipt Warehouse #
1	Component	YULES	YULES	YULES	YULES	YULES	YULES	RRWH
2	Consumable	YULCS	YULCS	YULCSOUTUS	YULCSOUTSV	YULCSREC	YULCSREC	RRWH
3	Kit	YULCSREC	YULCSREC	YULCSREC	YULCSREC	YULCSREC	YULCSREC	RRWH
4	Miscellaneous	YULCSREC	YULCSREC	YULCSREC	YULCSREC	YULCSREC	YULCSREC	RRWH
5	Raw Material	YULCS	YULCS	YULCSOUTUS	YULCSOUTSV	YULCSREC	YULCSREC	RRWH
6	Expendable	YULCS	YULCS	YULCSOUTUS	YULCSOUTSV	YULCSREC	YULCSREC	RRWH
7	Tool	YULCSREC	YULCSREC	YULCSREC	YULCSREC	YULCSREC	YULCSREC	RRWH
8								

During external routing with Final Disposition set as 'Move to Work center' in Shop Work Order, system defaults 'Receiving Warehouse #' of Repair Receipt as Repair Receipt Warehouse mapped to Primary Work center of the respective Shop Work Order.

Exhibit 2: Repair Receipt warehouse defaulted in 'Receiving Warehouse #' of Repair Receipt transaction (with 'Move To' set as 'Work Center')

The screenshot displays the 'Manage Goods Receipt' window. At the top, the 'Ref. Document #' is 'ROR-000162-2015' and the document type is 'Repair Receipt'. The 'Received At' section shows 'Receiving Location' and 'Receiving Warehouse #' (highlighted with a red box) set to 'RRWH'. The 'Received From' section shows 'Supplier #' as '00000' and 'Customer #' as 'Supplier 2'. The 'Ref. Doc. Info.' section shows 'Ref. Doc. #' as 'AFRO-002852-2015' and 'Ref. Doc. Type' as 'Repair Order'. Below this, the 'Additional Details' section contains a table with columns: '#', 'NXT', 'INS', 'PCT', 'HAZ', 'STK', 'Received Part #', 'Part Description', 'Material Type', 'Stock Status', 'Warehouse #', 'Zone #', 'Bin #', and 'Quarantined?'. The table has two rows. Row 1 shows '1', 'Move', '010SMS-MMPEC', 'BOLT 3/8" X 15 I CUTTER', 'Regular', 'Accepted', and 'Warehouse #' set to 'RRWH' (highlighted with a red box). Row 2 shows '2', 'Move', and is empty. At the bottom, there are buttons for 'Get Storage Info.', 'Record/Update Receipt', 'Update Inspection', 'Move Parts', 'Confirm Receipt', 'Cancel Receipt', and 'Reverse Receipt'.



Note: Currently, the system considers either 'Serv. Request Warehouse #' or 'U/S Receiving Warehouse' during 'Move to Work Center' scenario. System will still consider 'Serv. Request Warehouse #' or 'U/S Receiving Warehouse' if Repair Receipt Warehouse # is not defined for the Work Center.

Usability Improvements in Planning and Execution screens of Shop Work Order

Reference: AHBF-10870

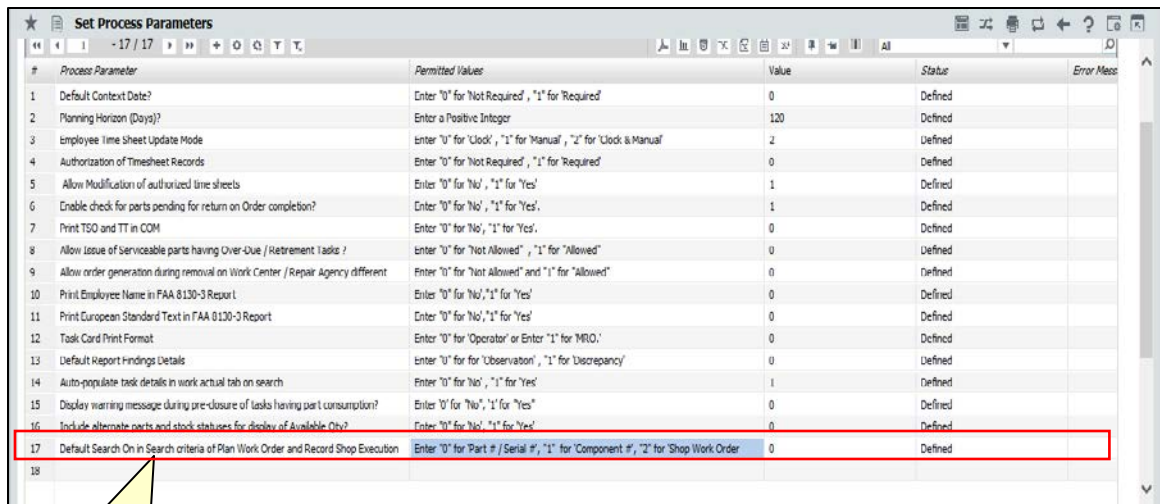
Background

Planning and Execution screens of **Shop Work Order** business component should be capable of setting organization preferred Search Criteria. Pre-setting the Search Criteria could help organization improve their workflow during Planning and Execution phases of Shop maintenance activities.

Change Details

New process parameter introduced in the **Define Process Entities** of **Common Master** business component, that governs defaulting of 'Search On' in **Shop Work Order** screens. This facilitates user to directly search Work Orders with preferred details.

Set Process Parameter (Common Master)	
Entity Type	Shop Work Order Type
Entity	'--All Work Order--'
Process Parameter	"Default Search On in Search criteria of Plan Work Order and Record Shop Execution Details"
Permitted Values	Enter "0" for 'Part # / Serial #', "1" for 'Component #', "2" for 'Shop Work Order #', "3" for 'Customer #', "4" for 'Customer Order #'
Default value	0 (Part # / Serial #)
System behavior based on process parameter value	
Above process parameter will govern value defaulted in 'Search On' of following screens during screen launch: 1) Plan Work Order 2) Record Shop Execution Details 'Search On' in above screens will be defaulted with following values based on value set in permitted values: 1) Part # / Serial # (Permitted Value = 0) 2) Component # (Permitted Value = 1) 3) Shop Work Order # (Permitted Value = 2) 4) Customer # (Permitted Value = 3) 5) Customer Order # (Permitted Value = 4)	

Exhibit 1: Newly added process parameter in Set Process Parameter screen

#	Process Parameter	Permitted Values	Value	Status	Error Mess
1	Default Context Date?	Enter "0" for "Not Required", "1" for "Required"	0	Defined	
2	Planning Horizon (Days)?	Enter a Positive Integer	120	Defined	
3	Employee Time Sheet Update Mode	Enter "0" for "Clock", "1" for "Manual", "2" for "Clock & Manual"	2	Defined	
4	Authorization of Timesheet Records	Enter "0" for "Not Required", "1" for "Required"	0	Defined	
5	Allow Modification of authorized time sheets	Enter "0" for "No", "1" for "Yes"	1	Defined	
6	Enable check for parts pending for return on Order completion?	Enter "0" for "No", "1" for "Yes"	1	Defined	
7	Print TSO and TT in COM	Enter "0" for "No", "1" for "Yes"	0	Defined	
8	Allow Issue of Serviceable parts having Over-Due / Retirement tasks ?	Enter "0" for "Not Allowed", "1" for "Allowed"	0	Defined	
9	Allow order generation during removal on Work Center / Repair Agency different	Enter "0" for "Not Allowed" and "1" for "Allowed"	0	Defined	
10	Print Employee Name in FAA 8130-3 Report	Enter "0" for "No", "1" for "Yes"	0	Defined	
11	Print European Standard Text in FAA 8130-3 Report	Enter "0" for "No", "1" for "Yes"	0	Defined	
12	Task Card Print Format	Enter "0" for "Operator" or Enter "1" for "MRO."	0	Defined	
13	Default Report Findings Details	Enter "0" for "Observation", "1" for "Discrepancy"	0	Defined	
14	Auto-populate task details in work actual tab on search	Enter "0" for "No", "1" for "Yes"	1	Defined	
15	Display warning message during pre-closure of tasks having part consumption?	Enter "0" for "No", "1" for "Yes"	0	Defined	
16	Include alternate parts and stock statuses for display of Available Qty?	Enter "0" for "No", "1" for "Yes"	0	Defined	
17	Default Search On in Search criteria of Plan Work Order and Record Shop Execution	Enter "0" for "Part # / Serial #", "1" for "Component #", "2" for "Shop Work Order"	0	Defined	
18					

Newly added process parameter that governs defaulting Search On in Shop Work Order screen

Exhibit 2: 'Search On' combo defaulted based on Process Parameter in Plan Work Order

The screenshot shows the 'Plan Work Order' application window. At the top, under the 'Search Criteria' section, the 'Search On' dropdown menu is highlighted with a red box and contains the text 'Shop Work Order #'. A yellow callout box points to this dropdown with the text: 'Search On' combo defaulted with 'Shop Work Order #' on screen launch of Plan Work Order. The form includes various tabs such as 'Order Details', 'Order Execution Details', 'Part Disposition & Movement Details', 'Reference Details', 'Contract Terms & Conditions', and 'Removal & Warranty Details'. The 'Order Details' tab is currently active, showing fields for SWO #, Job Type (Engine), Order Description, Primary Work Center # (YUL-100-01), Order Status, Event #, Serial #, Component #, Lock Status, Multiple Cores? (No), Part Desc., Main Core Status, Operator #, Workscoping Status (Initial), Revision #, Shop Visit Count, Action on Revision, Comments, Repair Process Code, Repair Classification, and Work Requested. A 'Filter Criteria' section is visible at the bottom.

Enhancement in Issue Certificates

Reference: AHBf-7961

Background

This enhancement facilitates user to retrieve Facility Object while issuing Certificate of Calibration.

Change Details

The 'Facility Object #' field in the **Certificate of Calibration** tab in the **Issue Certificates screen** is now equipped with the 'Help on Facility Object'. Now Facility Object details can be retrieved easily while issuing Certificate of Calibration.

Exhibit 1: Facility Object # is equipped with 'Help on Facility Object'

The screenshot shows the 'Issue Certificates' application interface. The 'Certificate of Calibration' tab is selected. The 'Select Action' section has 'Replace Certificate' chosen. The 'Reference Type' is 'Certificate #' and the 'Reference #' is 'COC-000015-2013'. The 'Issue Details' section is expanded, showing a table with the following data:

#	Facility Object #	Description	Cal Date	Cal Due Date
1	A5349	Auxiliary Power Trolley	10/04/2015	10/05/2015
2				

A red box highlights the 'Facility Object # 1' in the first row. A yellow callout box labeled 'Help on Facility Object' points to this cell. The bottom of the screen shows 'Save', 'Preview', 'Approved & Print', and 'Cancel' buttons, along with user and date information.



Note: This enhancement retains the capability of issuing Certificate of Calibration for Facility Objects that are not registered in Ramco's Facility Management module.

Ability to print consolidated Part Tags in Shop Work Order

Reference: AHBF-10008

Background

Record Shop Execution Details screen of **Shop Work Order** business component owns the capability of dispositioning multiple parts in one shot. Whereas, it should also possess capability of printing consolidated Part Tags for multiple removals at one stroke.

Change Details

This enhancement enables user to print consolidated Part Tag reports for multiple part removals against a Shop Work Order. Earlier, Part Tag printing was restricted to only one removal transaction. Now, you can select multiple removal transactions in the multiline and print Part Tags.

Exhibit 1: Enhanced Record Shop Execution Details screen with consolidated Part Tag printing

The screenshot displays the 'Record Shop Execution Details' screen. The left sidebar shows a tree view of Shop Work Orders. The main area contains tabs for 'Work Actual', 'Report Findings', 'Disassemble & Assemble Core', 'Initial Workscoping', and 'Material Request'. The 'Disassemble & Assemble Core' tab is active, showing 'Execution Details' for SWO # AWO-000020-2015. Below this, there are sections for 'Main Core Details', 'Customer Order Details', and 'Replacement Details'. A table titled 'Part Details' is highlighted with a red border, showing two rows of removal transactions. A yellow callout box points to the 'Print Part Tag' button at the bottom left, with the text 'Consolidated Part Tag print at one stroke'.

#	Off Part #	Off Serial #	Off Comp. #	Initial Disposition	Std. Exch.?	Removal Qty.	Group ID
1	0-0440-4-0001:36361	2	C002197-2014	1-REPAIR	No	1	
2	0-0440-4-0001:36361	15	C000001-2013	1-REPAIR	No	1	

Buttons at the bottom include: 'Print Part Tag', 'Attach/ Replace', 'Re-print Routing Slip', 'Inquire Stock Availability', 'Create New Part Request', 'Inquire Part Request Status', 'Help on Non-Comp. Removed Serial #', 'View File', 'Help on Non-Comp. Installed Serial #', and 'Attach Removed Part'.

WHAT'S NEW IN COMPLIANCE?

Component Condition update during Compliance of Retirement Task

Reference: AHBf-12727

Background

This enhancement brings the ability to update the Component Condition as 'Phased Out' during compliance of the Retirement Tasks from **Initialize Maint. Prog. & Update Compliance** screen of **Compliance Tracking & Control** business component.

Change Details

When the Set Option 'Update component condition change on task compliance from Initialize Maint. Prog. & Update Compliance?' in the **Set Process Parameters** screen under the Entity Type 'Tech Records Process Ctrl' and Entity 'Compliance' is set as 'Yes' then the following actions are executed:

- Task with Maintenance Type "Retire" is performed and if the component is not attached in Aircraft / Next Higher assembly then the Component Condition is changed as "Phased Out" and Component Status is updated as "Inactive".
- When the Shop Work Order status is changed to "Completed" and for the selected Repair Process Code if the Maintenance Type is selected as 'Retire' in **Logistic Common Master** business component, then the component condition is updated as "Phased Out" and the Component status is updated as "Inactive".

Exhibit 1: Process Parameter set as 'No'

The screenshot shows the 'Set Process Parameters' interface. At the top, 'Entity Type' is 'Tech Records Process Ctrl' and 'Record Status' is 'Active'. Below, the 'Process Parameter List' table is displayed. The second row is highlighted with a red box. A yellow callout points to the 'value' column of this row.

#	Process Parameter	Permitted Values	value	Status
1	Default view in Initialize Maint. Prog. & Update Compliance	Enter "0" for 'Compact View', "1" for 'Detailed View'	0	Defined
2	Update component condition change on task compliance from Initialize Maint. Prog. & Update Compliance?	Enter "0" for 'No', "1" for 'Yes'	0	Defined
3				

When the Process Parameter 'Update component condition change on task compliance from Initialize Maint. Prog. & Update Compliance?' in the **Set Process Parameters** screen is set as 'No' then on compliance of 'Retire' Task, the Component Condition remains unchanged.

Exhibit 2: Process parameter set as 'Yes'

#	Process Parameter	Permitted Values	Value	Status
1	Default view in Initialize Maint. Prog. & Update Compliance	Enter "0" for 'Compact View', "1" for 'Detailed View'	0	Defined
2	Update component condition change on task compliance from Initialize Maint. Prog. & Update Compliance?	Enter "0" for 'No', "1" for 'Yes'	1	Defined
3				

When the Process Parameter 'Update component condition change on task compliance from Initialize Maint. Prog. & Update Compliance?' is set as 'Yes' then the following actions are executed:

- In **Initialize Maint. Prog. & Update Compliance** screen, Compliance of task with Maintenance Type "Retire" is performed and if the Component is not attached in Aircraft / Next Higher assembly then the Component Condition is changed to 'Phased Out' and the Component Status is updated as "Inactive".
- When the Shop Work Order status is getting changed to "Completed" and selected Repair Process Code's Maintenance type is selected as "Retire" in **Maintain Repair Process Code** activity of the **Logistic Common Master** then component condition is updated as "Phased Out" and Component status is updated as "Inactive".



Note: For Component on which the retirement task is complied, the following must be ensured:

- i. The Component must not be attached to Aircraft
- ii. The Component must not be attached to another Component Assembly
- iii. No Open transaction should exist for the Component

WHAT'S NEW IN AIRCRAFT MAINTENANCE EXECUTION?

Usability Improvements in Record Part Consumption & Return Screen

Reference: AHBf-11760

Background

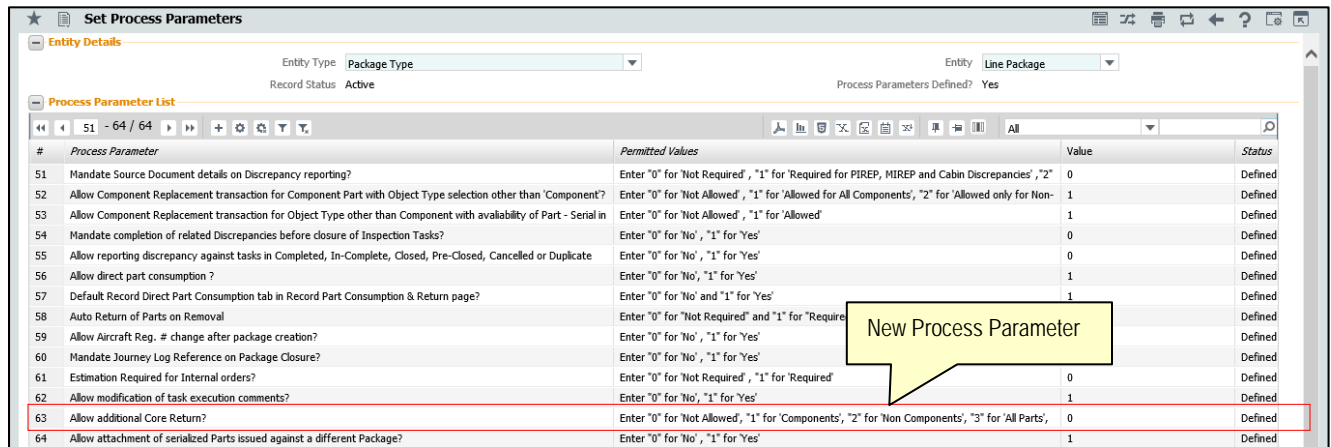
This enhancement brings the ability to return additional cores without recording a component removal transaction in **Record Part Consumption & Return screen** of **Aircraft Maintenance Execution** business component.

Change Details

- A new Process Parameter 'Allow additional Core Return?' is added in the **Set Process Parameters** screen under the Entity type 'Package Type' with the following permitted values:
 - '0' for 'Not Allowed'
 - '1' for 'Components'
 - '2' for 'Non Components'
 - '3' for 'All Parts'

By default the option is set as '0'.
- Search option in **Record Part Consumption & Return** screen is modified to retrieve parts with No Issue reference number and No Component Replacement reference number.
- The Multiline in **Return Core** tab of **Record Part Consumption & Return** screen is modified to support addition of new Part # to be returned without Issue reference and Component Replacement reference.


Exhibit 1: New Process Parameter 'Allow additional Core Return?' in Define Process Entities




#	Process Parameter	Permitted Values	Value	Status
51	Mandate Source Document details on Discrepancy reporting?	Enter "0" for 'Not Required', "1" for 'Required for PIREP, MIREP and Cabin Discrepancies', "2"	0	Defined
52	Allow Component Replacement transaction for Component Part with Object Type selection other than 'Component'?	Enter "0" for 'Not Allowed', "1" for 'Allowed for All Components', "2" for 'Allowed only for Non-	1	Defined
53	Allow Component Replacement transaction for Object Type other than Component with availability of Part - Serial in	Enter "0" for 'Not Allowed', "1" for 'Allowed'	1	Defined
54	Mandate completion of related Discrepancies before closure of Inspection Tasks?	Enter "0" for 'No', "1" for 'Yes'	0	Defined
55	Allow reporting discrepancy against tasks in Completed, In-Complete, Closed, Pre-Closed, Cancelled or Duplicate	Enter "0" for 'No', "1" for 'Yes'	0	Defined
56	Allow direct part consumption ?	Enter "0" for 'No', "1" for 'Yes'	1	Defined
57	Default Record Direct Part Consumption tab in Record Part Consumption & Return page?	Enter "0" for 'No' and "1" for 'Yes'	1	Defined
58	Auto Return of Parts on Removal	Enter "0" for 'Not Required' and "1" for 'Required'	0	Defined
59	Allow Aircraft Reg. # change after package creation?	Enter "0" for 'No', "1" for 'Yes'	0	Defined
60	Mandate Journey Log Reference on Package Closure?	Enter "0" for 'No', "1" for 'Yes'	0	Defined
61	Estimation Required for Internal orders?	Enter "0" for 'Not Required', "1" for 'Required'	0	Defined
62	Allow modification of task execution comments?	Enter "0" for 'No', "1" for 'Yes'	1	Defined
63	Allow additional Core Return?	Enter "0" for 'Not Allowed', "1" for 'Components', "2" for 'Non Components', "3" for 'All Parts',	0	Defined
64	Allow attachment of serialized Parts issued against a different Package?	Enter "0" for 'No', "1" for 'Yes'	1	Defined

- If the Parameter 'Allow additional Core Return?' is set as 'Not Allowed', then the system will not allow Return with no Issue or CR reference.

- If the Parameter 'Allow additional Core Return?' is set as 'Components', then the System will check whether the given Part # is of type Component and will then allow the Return to be created for the given Part # and quantity against the given Exec. Ref # and Task #.

 *Note: For parts with other part types, the system will not allow Return, with no Issue or CR reference.*

- If the Parameter 'Allow additional Core Return?' is set as 'Non Component', then the system will check whether the given Part # is of type other than 'Component' and will then allow the Return to be created for the given Part # and quantity against the given Exec. Ref # and Task #.

 *Note: For Parts with Part Type 'Component', the system will not allow Return with no Issue or CR reference.*

- If the Parameter "Allow additional Core Return?" is set as 'All Parts', then the system will allow Return for all parts with no Issue or CR reference.

Exhibit 5: Search option in **Record Part Consumption & Return** screen

Record Part Consumption & Return

Search Criteria

Display Option: **All Parts**

Task # / Description:

Search On:

Material Request #

Execution Ref. # / Description

Customer # / Order #

Requested Work Center #

Return Unconsumed Parts **Return Cores** **Record Direct Part Consumption**

Return Part Details

#	Issued Part #	Issued Serial #	Issued Lot #	Issued Qty.	Exe. Ref. #	Tracking #	Seq. #	Task #	Rem. / Return Part #
1					VP-000104-2012	1	1	3-00000012	0-0440-4-0001:36361
2					VP-000097-2012	1	1	3-00000012	0-0440-4-0001:56561
3					VP-000104-2012	1	1	3-00000012	00ABC
4	MN-CR-02:81205	SCM-INV-008-1		1.00	VP-000141-2012	1	1	3-00000012	MN-CR-02:81205
5	MN-CR-02:81205	SLQ51		1.00	VP-000141-2012	1	1	3-00000012	MN-CR-02:81205
6					VP-000141-2012	1	1	3-00000012	MN-CR-02:81205
7					VP-000141-2012	1	1	3-00000012	MN-CR-02:81205
8					VP-000141-2012	1	1	3-00000012	PS9836:99212
9					VP-000141-2012	1	1	3-00000012	PS9836:99212
10					VP-000422-2013	1	1	3-50C-00-MPD-	00XYZ

Update Reconcile Return Warehouse Return Parts

When Display option is selected as 'All Parts' or 'All Returned Parts' and search is invoked, the system will additionally retrieve all the Parts that have been returned with No Issue Reference number and No Component Replacement Reference number.

The Multiline in **Return Core** Tab has been modified to support addition of new Part # to be returned without Issue reference and CR reference.

Enhancements in Component Replacement Tab to Route Parts to Shop

Reference: AHBf-12718

Background

This enhancement provides the ability to provide Work Center, Work Requested and Certificate Type for Shop Work Order generated from Aircraft Maintenance Execution on Removal in **Record Aircraft Maintenance Execution Details** screen of **Aircraft Maintenance Execution** business component.

Change Details

Following controls and links are now provided in the **Component Replacement** Tab in Aircraft Maintenance Execution screen:

➤ *Certificate Type: Drop-down*

The control will be loaded with Certificate Types along with 'Blank'.

➤ *Work Center #: Drop-down*

Existing Display Only field is changed to Dropdown. Execution Work Center mapped to the station (selected in AME will be loaded). Execution Work Center identified for the Part# in Part Administration will be defaulted. Shop Work Order will be created in the Work Center chosen.

➤ *Work Requested: Editable*

A new non-mandatory field to mention custom work requested.

➤ *Link to Plan Work Order screen*

Once the Shop Work Order is generated from Aircraft Maintenance Execution, the link can be used to transverse to Shop Work Order for Work Scoping and release.

Follows changes are done in Shop Work Order:

➤ *Screen launch from Aircraft Maintenance Execution*

Shop Work Order Number will be subscribed (From AME CR Tab) and auto search will be invoked to retrieve details.

➤ *Order Description*

Removal Remarks entered by the Mechanic in AME screen will be displayed in this field based on a new set option.

The new set option "Work Order Description for auto generated Shop Work Order?" is added in the **Set Process Parameters** screen under the Entity Type "Disposition Code" with Permitted Values:

- "0" for 'Reason'
- "1" for 'Removal Remarks'

By default the value is "0"

➤ *Comments*

Certificate Type entered by the Mechanic in AME will be displayed here as a string "Certificate Type: XXXX".

➤ *Work Requested*

Work Requested that is entered by the Mechanic in AME will be displayed in the field 'Work Requested' in **Order Details** tab of Shop Work Order.

Exhibit 1:

The screenshot shows the 'Record Aircraft Maintenance Execution Details' form. Annotations highlight the following changes:

- Newly added controls:** A red box highlights the 'Work Requested' text input field and the 'Certificate Type' dropdown menu.
- Control Type changed to Combo from Display Only:** A yellow callout points to the 'Work Center #' dropdown menu, which now displays 'YVR-110-30'.
- Newly added Link:** A red box highlights the 'Plan Work Order' link in the bottom navigation area.

Other visible form fields include: Source (Remove), Removed Part # (R-06), Installed Part #, Object Type (Other Parts), Employee # (00041383), Acceptance Ref., Status (Removed), Removed Serial # (SL-000060-2014), Installed Serial #, Record Mode (Normal), Removal Remarks (Removed), Component Replacement # (NCR-000769-2014), Rem. Disposition / Codn. (1-Repair, UnServiceable), Reason # (Remove for Maintenance), Removal Qty. (1), A/C Position #, Attachment Qty., Date & Time (04-17-2014, 17:26:27), Serial # Type (Existing), Confirmed Failure? (Not applicable), Repair Agency # (99999), and Latest Return # / Status.

Following controls and links are now provided in the **Component Replacement** Tab in **Aircraft Maintenance Execution** screen:

- Certificate Type will be loaded with Certificate Types along with a 'Blank' value.
- The existing Work Center # Display Only control is now changed to Drop-down. Execution Work Center mapped to the station (selected in AME will be loaded). Execution Work Center identified for the Part # in Part Administration will be defaulted. Shop Work Order will be created in the Work Center chosen.
- Work Requested is an editable field to mention custom work requested.
- **Plan Work Order** link can be used to transverse to Shop Work Order for Work Scoping and release.

Exhibit 2:

The screenshot shows the 'Plan Work Order' interface. Key elements and callouts include:

- Search Criteria:** A red box highlights the 'Search On' dropdown set to 'Shop Work Order #', the input field containing 'AWO-000016-2014', and the 'Get' button. A callout states: "SWO is defaulted and auto search invoked".
- Order Details:** The 'Order Description' field is set to 'REMOVE', highlighted with a red box. A callout states: "Order Description based on Set Option".
- Main Core Details:** The 'Part # / Serial #' is 'R-06 / SL-000060-2014'. The 'Lot #' is 'COMP-000051'. The 'Stock Status' is 'Accepted'.
- Workscoping Details:** The 'Workscoping Status' is 'Initial'. The 'Comments' field contains 'Certificate Type: 8130-3', highlighted with a red box. A callout states: "Certificate Type shown in Comments".
- Repair Details:** The 'Work Requested' field is highlighted with a red box. A callout states: "Work Requested as defined in AME".

On selecting Plan Work Order link in **Component Replacement** tab, the following actions will take place:

- Plan Work Order screen will be launched and Shop Work Order Number will be subscribed (From AME CR Tab). Auto search will be invoked to retrieve details.
- Order Description will either display Reason # or Removal Remarks based on set option.

If the set option "Work Order Description for auto generated Shop Work Order?" in the Set Process Parameter screen under the Entity Type "Disposition Code" is selected as "0" then Order Description will display Reason#.

If the set option "Work Order Description for auto generated Shop Work Order?" in the Set Process Parameter screen under the Entity Type "Disposition Code" is selected as "1" then Order Description will display Removal Remarks.

- Certificate Type entered in AME will be displayed in the Comments field as a string "Certificate Type: XXXX".
- Work Requested that is entered in AME will be displayed in the field 'Work Requested' in **Order Details** tab of Shop Work Order.

WHAT'S NEW IN AIRCRAFT MAINTENANCE / SHOP MAINTENANCE?

Ability to ensure that part being attached is issued against the same package / work order

Reference: AHBf-14120

Background

A requirement was raised to restrict attachment of parts that has been issued against a different Package / Work Order. This enhancement provides following advantages in Aircraft Maintenance / Shop Maintenance:

1. Firms up the Configuration security in the system i.e. it can avoid the risk of attaching wrong parts issued for a different Package / Shop Work Order.
2. Improved finance postings against maintenance execution documents.

Change Details

New process parameters are introduced in **Common Master** business component that can allow or restrict attachment of parts that has been issued against a different Package / Shop Work Order.

Process Parameter 1

Set Process Parameter (Common Master)	
Entity Type	Package Type
Entity	Log Cards, User Defined values
Process Parameter	"Allow attachment of serialized Parts issued against a different Package?"
Permitted Values	Enter "0" for 'No' , "1" for 'Yes'
Default value	1 (Yes)
System behavior based on process parameter value	
Value: 0 (No)	System will restrict attachment of Serial controlled Parts issued against a different Package.
Value: 1 (Yes)	System will allow attachment of Serial controlled Parts issued against any Package.

Process Parameter 2

Set Process Parameter (Common Master)	
Entity Type	Shop Work Order Type
Entity	User Defined values
Process Parameter	"Allow attachment of serialized Parts issued against a different shop work order?"
Permitted Values	Enter "0" for 'No' , "1" for 'Yes'
Default value	1 (Yes)
System behavior based on process parameter value	
Value: 0 (No)	System will restrict attachment of Serial controlled Parts issued against a different Shop Work Order.
Value: 1 (Yes)	System will allow attachment of Serial controlled Parts issued against any Shop Work Order.

Exhibit 1: Newly added process parameter for Package Type in Define Process Entities

Set Process Parameters

Entity Type: Entity:

Record Status: Process Parameters Defined?

Process Parameter List

#	Process Parameter	Permitted Values	Value	Status	Error Mess
53	Allow Component Replacement transaction for Object Type other than Component	Enter '0' for 'Not Allowed', '1' for 'Allowed'	1	Defined	
54	Mandate completion of related Discrepancies before closure of Inspection Tasks?	Enter '0' for 'No', '1' for 'Yes'	1	Defined	
55	Allow reporting discrepancy against tasks in Completed, In-Complete, Closed, Pre-	Enter '0' for 'No', '1' for 'Yes'	0	Defined	
56	Allow direct part consumption ?	Enter '0' for 'No', '1' for 'Yes'	1	Defined	
57	Default Record Direct Part Consumption tab in Record Part Consumption & Return	Enter '0' for 'No' and '1' for 'Yes'	1	Defined	
58	Auto Return of Parts on Removal	Enter '0' for 'Not Required' and '1' for 'Required'	0	Defined	
59	Allow Aircraft Reg. # change after package creation?	Enter '0' for 'No', '1' for 'Yes'	0	Defined	
60	Mandate Journey Log Reference on Package Closure?	Enter '0' for 'No', '1' for 'Yes'	0	Defined	
61	Estimation Required for Internal orders?	Enter '0' for 'Not Required', '1' for 'Required'	0	Defined	
62	Allow modification of task execution comments?	Enter '0' for 'No', '1' for 'Yes'	1	Defined	
63	Allow additional Core Return?	Enter '0' for 'Not Allowed', '1' for 'Components', '2' for 'Non Components', '3'	3	Defined	
64	Allow attachment of serialized Parts issued against a different Package?	Enter '0' for 'No', '1' for 'Yes'	1	Defined	
65					

Set Process Parameters

Exhibit 2: Newly added process parameter for Shop Work Order Type in Define Process Entities

Set Process Parameters					
Entity Details					
Entity Type: Shop Work Order Type		Entity: CWO		Record Status: Active	
Process Parameter List		Process Parameters Defined? Yes			
#	Process Parameter	Permitted Values	Value	Status	Error Mess
28	Auto Inclusion of Overdue Tasks ?	Enter '0' for 'Not Required', '1' for 'Required'	1	Defined	
29	Default Sign-Off requirement for Non-Routines ?	Enter '0' for 'Mechanic', '1' for 'Mechanic & Inspector', '2' for 'Inspector', '3'	3	Defined	
30	Enforce Sign-Off ?	Enter '0' for 'No', '1' for 'Yes'	0	Defined	
31	Permit Dual Sign-off by the employee ?	Enter '0' for 'No', '1' for 'Yes'	1	Defined	
32	Allow reporting by different employee?	Enter '0' for 'No', '1' for 'Yes'	1	Defined	
33	Allow Task Reporting by ?	Enter '0' for 'All Employee', '1' for 'Assigned Employee'	0	Defined	
34	Ref. Date for Compliance ?	Enter '0' for 'Start date', '1' for 'Task Completion date', '2' for 'CoM Date'.	1	Defined	
35	Backdated reporting Time Limit (in days)	Enter a positive integer	300	Defined	
36	Assembly status check on attachment ?	Enter '0' for 'Not Required', '1' for 'Required'	0	Defined	
37	Acknowledge Receipt	Enter '0' for 'Manual', '1' for 'Automatic'	1	Defined	
38	Allow modification of Task Sign-Off requirements	Enter '0' for 'Not Allowed', '1' for 'Allowed for Routine tasks', '2' for 'Allowed for	2	Defined	
39	Allow re-opening of completed orders / tasks?	Enter '0' for 'Not Allowed', '1' for 'Allowed'	1	Defined	
40	Allow reporting on completed orders / tasks?	Enter '0' for 'Not Allowed', '1' for 'Allowed'	1	Defined	
41	Allow time reporting on discrepancies?	Enter '0' for 'Not Allowed', '1' for 'Allowed'	0	Defined	
42	Allow discrepancy closure with open service request?	Enter '0' for 'Not Allowed', '1' for 'Allowed'	0	Defined	
43	Allow receipt to different work center?	Enter '0' for 'Not Allowed', '1' for 'Allowed'	1	Defined	
44	Material Movement Document Print on Request from Planner	Enter '0' for 'Not Required', '1' for 'Required'	1	Defined	
45	Default Shop Work Order Type for Auto generated Project work orders?	Enter '0' for 'No', '1' for 'Yes'	1	Defined	
46	Default Shop Work Order Type for Auto generated Miscellaneous work orders?	Enter '0' for 'No', '1' for 'Yes'	1	Defined	
47	Enforce Ref. doc. # for CoM	Enter '0' for 'Non-mandatory', '1' for 'Mandatory'	0	Defined	
48	Allow direct part consumption ?	Enter '0' for 'Not Required', '1' for 'Required'	1	Defined	
49	Ability to generate Material Request at task level on release work order?	Enter '0' for 'Not Required', '1' for 'Required'	0	Defined	
50	Allow automatic addition of Std. Repair Task on SWO Generation	Enter '0' for 'Not Required', '1' for 'Internal Parts', '2' for 'All Parts'	1	Defined	
51	Allow attachment of serialized Parts issued against a different shop work order?	Enter '0' for 'No', '1' for 'Yes'	1	Defined	
52	Automatic re-sequencing of operations in shop work order during work scoping?	Enter '0' for 'No', '1' for 'Yes'	1	Defined	

WHAT'S NEW IN WORK MONITORING AND CONTROL?

Ability to Auto Search in WMC if Launched with AME # or SWO # Reference

Reference: AHBf-5045

Background

This enhancement brings usability improvements in **Manage Work Assignments and Reporting screen** of **Work Monitoring and Control** business component.

Change Details

The system will invoke Auto Search on page launch if a valid AME # or SWO # is available in the Ref. Doc. # control.

Exhibit 1: Review Work tab - Ref. Doc # null, From Date / To Date exists

The screenshot displays the 'Manage Work Assignments and Reporting' application window. The 'Review Work' tab is selected. The 'Search Criteria' section includes fields for 'Maintenance Object', 'Ref. Doc. Type', and 'Primary Work Center #'. The 'Ref. Doc. #' field is empty, highlighted by a red box and a callout stating 'Ref. Doc # is empty'. The 'Date From / To' field is populated with '08/10/2015 00:00:00' and '11/08/2015 00:00:00', highlighted by a red box and a callout stating 'From Date and To Date'. The 'Additional Search Criteria' section includes 'Display Option' (set to 'All') and 'Search On'. A 'Search' button is located at the bottom right.

On page launch, if a valid AME # or SWO # is not available in the Ref. Doc. # control and **Review Work** tab is defaulted, then From Date will be defaulted with the date which is two months earlier than the current date and time will be defaulted as '00:00:00'.

On page launch, if a valid AME # or SWO # is not available in the Ref. Doc. # control and **Review Work** tab is defaulted, then To Date will be defaulted with the date which is one month later than the current date and time will be defaulted as '00:00:00'.

Exhibit 2: Review Work tab - Ref. Doc # exists, From Date / To Date blank

The screenshot shows the 'Manage Work Assignments and Reporting' application. The 'Review Work' tab is active. The 'Ref. Doc. #' field is populated with 'VP-000087-2012'. The 'Date From / To' field is empty. A yellow callout bubble points to the 'Ref. Doc. #' field with the text 'Ref. Doc# exists'. Another yellow callout bubble points to the 'Date From / To' field with the text 'From Date and To Date are BLANK'. The interface includes search criteria, additional search criteria, and a task grid at the bottom.

On page launch, if a valid AME # or SWO # is available in the Ref. Doc. # control and **Review Work** tab is defaulted, then From Date and To Date will be defaulted with "BLANK" and Auto Search will be invoked.

Exhibit 3: Manage Employee Work tab - Ref. Doc # null, From Date / To Date exists

The screenshot displays the 'Manage Work Assignments and Reporting' application window. The 'Manage Employee Work' tab is selected. The interface includes several search criteria sections:

- Search Criteria:** Maintenance Object (dropdown), Ref. Doc. Type (dropdown), Primary Work Center # (dropdown), and Ref. Doc. # (text field, highlighted with a red box and a callout stating 'Ref. Doc # is empty').
- Additional Search Criteria:** Display Option (dropdown), Search On (dropdown), Addl. Search On (dropdown), Employee # (text field), Task Status (dropdown), and Date From / To (text field, highlighted with a red box and a callout stating 'From Date and To Date').

A 'Search' button is located at the bottom center of the form.

On page launch, if a valid AME # or SWO # is not available in the Ref. Doc. # control and **Manage Employee Work** tab is defaulted, then From Date will be defaulted with the date which is two months earlier than the current date and time will be defaulted as '00:00:00'.

On page launch if **Manage Employee Work** tab is defaulted, then To Date will be defaulted with "BLANK" regardless of whether AME # or SWO # exists or not.

Exhibit 4: Manage Employee Work - Ref. Doc # exists, From Date / To Date blank

The screenshot shows the 'Manage Work Assignments and Reporting' application window. The 'Manage Employee Work' tab is active. In the 'Search Criteria' section, the 'Ref. Doc. #' field is populated with 'VP-000087-2012', which is highlighted with a red box and a callout bubble stating 'Ref. Doc# exists'. Below this, the 'Date From / To' field is empty, also highlighted with a red box and a callout bubble stating 'From Date and To Date are BLANK'. The 'Search' button is located below the search criteria. In the 'Default Details' section, the 'Assigned Hours' field shows '10/09/2015 14:16:27'. The 'Search Result' section at the bottom indicates '[No records to display]'. The interface includes various navigation and search controls, and a table header for the search results is visible at the bottom.

On page launch, if a valid AME # or SWO # is available in the Ref. Doc. # control and **Manage Employee Work** tab is defaulted, then From Date and To Date will be defaulted with "BLANK" and Auto Search will be invoked.



Note: If the WMC page is launched from **Create Package** screen from **Planning Board**:

- The system will default the AME #, Display option will be defaulted to 'New assignment'. The Multiline Assignment view will be defaulted based on the option setting in **Common Master**.
- The system will automatically invoke search.
- The system will default the AME # and system will invoke Auto Search on click of **Review Work** tab.

Ability to generate Material Request on confirmation of Estimates for Packages

Reference: AHBf-15416

Background

Aircraft Maintenance Execution business component should have the capability to automate Material Request generation on confirmation in work estimates with part requirements.

Change Details

This enhancement streamlines the manual process of generating Material Request for estimated parts during Aircraft Maintenance depending on below process parameter under **Common Master** business component.

Set Process Parameter (Common Master)	
Entity Type	Package Type
Entity	Log Cards, User Defined values
Process Parameter	"Auto MR Generation on confirmation of Estimate?"
Permitted Values	Enter "0" for 'No' , "1" for Yes'
Default value	0 (No)
System behavior based on process parameter value	
Value: 1 (Yes)	System automatically generates Material Request on confirmation of Estimates under following conditions: 1) Task must be Planned or In-Progress Status 2) Task must have Need Frequency set as 'Always' in Record Work Estimates screen
Value: 0 (No)	System will not generate Material Request on confirmation of work estimates with Part Requirements.



*Note: The Part # for which the MR is getting generated should always be 'Effective' for the Aircraft defined in the **Aircraft** business component.*



MR cannot be generated for the task with 'Hold code' whose parameter 'Prevent Material Request' is set as 'Yes'.

Exhibit 1: Newly added process parameter in Common Master business component

★ Set Process Parameters

Entity Details

Entity Type: Package Type Entity: Log card Record Status: Active Process Parameters Defined? Yes

Process Parameter List

#	Process Parameter	Permitted Values	Value	Status	Error Mess
45	Basis for Auto Inclusion of Due Tasks	Enter "0" for 'Not Required', "1" for 'Planned Start Date', "2" for 'Schedule	0	Defined	
46	Default Sign-off Requirement for Non Routines	Enter "0" for 'Not Required', "1" for 'Mechanic', "2" for 'Inspector', "3" for 'Mech. &	0	Defined	
47	Auto Reconciliation of Components	Enter "0" for 'Not Required', "1" for 'Required - On Task Closure'	0	Defined	
48	Retain Context Date within a Package?	Enter "0" for 'No', "1" for 'Yes'	1	Defined	
49	Enable Direct Printing?	Enter "0" for 'No', "1" for 'Yes' Enter "0" for 'No', "1" for 'Yes'	0	Defined	
50	Compliance reversal required on task re-opening ?	Enter "0" for 'Not Required' and "1" for 'Required'	0	Defined	
51	Auto Short close of Open Material Request	Enter "0" for 'On association of Package', "1" for 'On release of Package'	1	Defined	
52	Allow Deferral of Planned Tasks?	Enter "0" for 'No', "1" for 'Yes'	1	Defined	
53	Allow Component Replacement transaction for Component Part with Object Type	Enter "0" for 'Not Allowed', "1" for 'Allowed for All Components', "2" for 'Allowed only	1	Defined	
54	Allow Component Replacement transaction for Object Type other than Component	Enter "0" for 'Not Allowed', "1" for 'Allowed'	1	Defined	
55	Mandate completion of related Discrepancies before closure of Inspection Tasks?	Enter "0" for 'No', "1" for 'Yes'	0	Defined	
56	Allow reporting discrepancy against tasks in Completed, In-Complete, Closed, Pre-	Enter "0" for 'No', "1" for 'Yes'	0	Defined	
57	Allow direct part consumption ?	Enter "0" for 'No', "1" for 'Yes'	1	Defined	
58	Default Record Direct Part Consumption tab in Record Part Consumption & Return	Enter "0" for 'No' and "1" for 'Yes'	1	Defined	
59	Auto Return of Parts on Removal	Enter "0" for 'Not Required' and "1" for 'Required'	0	Defined	
60	Allow Aircraft Reg. # change after package creation?	Enter "0" for 'No', "1" for 'Yes'	0	Defined	
61	Mandate Journey Log Reference on Package Closure?	Enter "0" for 'No', "1" for 'Yes'	0	Defined	
62	Estimation Required for Internal orders?	Enter "0" for 'Not Required', "1" for 'Required'	0	Defined	
63	Include alternate parts and stock statuses for display of Available Qty?	Enter "0" for 'No', "1" for 'Yes'	1	Defined	
64	Allow status change of discrepancies which are already assigned to a package?	Enter "0" for 'No', "1" for 'Yes'	1	Defined	
65	Allow status change of discrepancies from more than one package?	Enter "0" for 'No', "1" for 'Yes'	0	Defined	
66	Allow modification of task execution comments?	Enter "0" for 'No', "1" for 'Yes'	1	Defined	
67	Allow additional Core Return?	Enter "0" for 'Not Allowed', "1" for 'Components', "2" for 'Non Components', "3"	3	Defined	
68	Allow attachment of serialized Parts issued against a different Package?	Enter "0" for 'No', "1" for 'Yes'	1	Defined	
69	Auto MR Generation on confirmation of Estimate?	Enter "0" for 'No', "1" for 'Yes'	0	Defined	

New process parameter

Set Process Parameters

Ability to Display Tracking # and Seq # and Order Task Based on Seq # in Package

Reference: AHBf-15450

Background

This enhancement provides the ability to display Tracking # and Seq # in **Review Work** tab and order tasks based on Seq # in the package in **Manage Work Assignments and Reporting** screen of **Work Monitoring and Control** business component.

Change Details

- Tracking # and Seq # of the task will be displayed in **Review Work** tab of **Manage Work Assignments and Reporting** screen under **Work Monitoring and Control** business component.
- Task Ordering in **Work Monitoring and Control** business component will be based on Seq # in the package.

Exhibit 1:

The screenshot displays the 'Manage Work Assignments and Reporting' application window. At the top, the title bar reads 'Manage Work Assignments and Reporting'. Below the title bar, there is a 'Search Criteria' section with a dropdown menu for 'Maintenance Object' set to 'Aircraft Reg #'. A yellow callout box labeled 'Aircraft Reg #' points to this dropdown. To the right of the search criteria, there are fields for 'Primary Work Center #' and 'Ref. Doc. #'. Below the search criteria, there is an 'Additional Search Criteria' section with a 'Display Option' dropdown set to 'All', a 'Search On' dropdown set to 'Task #', and a 'Search' button. To the right of these fields, there are date range fields for 'Date From / To' (08/14/2015 00:00:00 to 11/12/2015 00:00:00) and a 'Status' dropdown. At the bottom of the window, there is a Gantt chart. A yellow callout box labeled 'Sequence # and Tracking #' points to the 'Seq #' and 'Tracking #' columns in the Gantt chart. The Gantt chart shows a task bar for '13-Oct-2015' with a duration of 00:01:02.

On selecting Maintenance Object as 'Aircraft Reg #', the Gantt Chart will display two new columns Seq # and Tracking # of the respective tasks.

The tasks will be ordered based on Seq # in package and displayed in the Gantt Chart.

Ability to generate Variance Summary Report & Variance Report for Estimated vs. Actual Efforts & for Estimated vs. Actual Cost from Work Monitoring & Control

Reference: ACAI-44

Background

This enhancement introduces a new screen **Variance Report** in **Work Monitoring and Control** business component to generate Variance Summary Report and Variance Report for Estimated vs. Actual Efforts and for Estimated vs. Actual Cost for the given Aircraft Reg # / Part # / Execution Document #.

Change Details

A new screen **Variance Report** is introduced in **Work Monitoring and Control** business component and there are two links in the screen to launch either Variance Summary Report or Variance Report for the given Aircraft Reg # / Part # / Execution Document #.

A new Entity 'VAR Report' is added under the Entity Type 'Reports'. The following Process Parameters are defined in the **Define Process Entities** screen under the newly added Entity 'VAR Report'.

- '*Range for defaulting 'From Date' till Current Date*' – A positive integer which denotes the number of months with which the 'From Date' will be earlier than the Current Date.
- '*Default options for Est. Man Hours from*' – To specify from where the Est. Man Hours is referred. For example, the 'Est. Man Hours; are referred from:
 - 'Task Estimates', if the parameter is set as '0'.
 - 'Task Skill Requirements', if the parameter is set as '1'.
 - 'Execution Doc Skill Requirement', if the parameter is set as '2'.
- '*Option for Time Display*' – To specify if the Time Display is in 'Decimal Format' (Parameter set as '0'), or 'HHMM' format (Parameter set as '1'.
- '*Default options for Est. Material Cost from*' – To specify from where the Est. Material Cost is referred. For example, Est. Material Cost is referred from:
 - 'Task Material Requirements', if the parameter is set as '0'.
 - 'Execution Doc Material Requirement', if the parameter is set as '1'.

Exhibit 1: Set Process Parameters

#	Process Parameter	Permitted Values	Value
1	Range for defaulting 'From Date' till Current Date	Enter a positive integer value	5
2	Default options for Est. Man Hours from	Enter "0" for 'Task estimates' or Enter "1" for 'Task Skill Requirements' or Enter "2" for 'Execution Doc Skill Requirement'	1
3	Option for Time Display	Enter "0" for 'Decimal Format' or Enter "1" for 'HH:MM format.'	1
4	Default options for Est. Material Cost from	Enter "0" for 'Task Material Requirements' or Enter "1" for 'Execution Doc Material Requirement'	0

Exhibit 2: Variance Report screen

Variance Summary Report & Variance Report can be generated from the 'Variance Report' screen by providing the Aircraft Reg # / Part # / Execution Document #. The 'To Date' will be defaulted with the current date and the 'From Date' will be defaulted with the date which is earlier than the current date by the number of months mentioned in the Process Parameter 'Range for defaulting 'From Date' till Current Date'.

The Est. Man Hours & Est. Material Cost is arrived by referring the source as mentioned by the Process Parameters 'Default options for Est. Man Hours from' and 'Default options for Est. Material Cost from' respectively. Accordingly the variance is calculated & report is generated. Selection of the 'Ref. Doc Type' is mandatory as the report is generated for either AME Packages or Shop Work Order but not for both. The following filters are also available for generating reports: Task #, Task Description, Task Status.



Note: If 'Execution Doc # From' and 'Execution Doc # To' belongs to different objects like 'Part' and 'Aircraft', the system will validate the same.

Exhibit 3: A sample Variance Summary Report

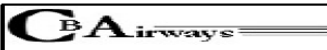
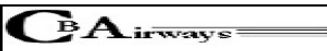
		Variance Summary Report			64 SARDAR PATEL ROAD, TARMANI, CHENNAI, TAMILNADU, INDIA.							
From:		To:		Status:		Report Generated For 17/05/2011			To 17/10/2015			
Aircraft Reg # From: MH370		Aircraft Reg # To: MH370		Task #:			Status:					
Part #:		Base Currency: CAD										
Task Desc.:												
Execution Doc #	Aircraft Reg #	Part # ~Part Desc.	Status	Est. Man Hours	Act Man Hours		Labor Variance	Est Mat Cost	Act. Mat Cost	Mat Variance		
					Man Hours(Permanent)	Man Hours (Temporary)						
VP-000488-2014	mh370		In-Progress		0.01		0.01			0.00		
VP-000530-2014	MH370		Completed				0.00			0.00		
VP-000535-2014	MH370		In-Progress	123.00			-123.00		276.44	276.44		
VP-000545-2014	mh370		In-Progress				0.00		138.22	138.22		
VP-000549-2014	MH370		In-Progress				0.00		7805.37	7805.37		
VP-000570-2014	MH370		Closed	10.00			-10.00			0.00		
VP-000574-2014	mh370		Completed	9.00			-9.00			0.00		

Exhibit 4: A sample Variance Report

		Variance Report				64 SARDAR PATEL ROAD, TARMANI, CHENNAI, TAMILNADU, INDIA.						
From:		To:		Status:		Report Generated For 17/05/2011 To 17/10/2015						
Aircraft Reg # From: MH370		Aircraft Reg # To: MH370				Task #:		Status:				
Part #:		Base Currency: CAD										
Task Desc.:												
Execution Doc #	Aircraft Reg #	Part # ~Part Desc.	Task #	Task Desc.	Status	Est. Man Hours	Act Man Hours		Labor Variance	Est Mat Cost	Act. Mat Cost	Mat Variance
							Man Hours(Regular)	Man Hours (Contract)				
VP-000488-2014	mh370		123/DIS01	testing 123	In-Progress		0.01		0.01			0.00

WHAT'S NEW IN AIRCRAFT MAINTENANCE PLANNING?

Enhancements in Plan Aircraft Maintenance

Reference: AHBF-9593

Background

The **Review Fleet Maintenance Plan** screen in **Aircraft Maintenance Planning** is the de facto central planning board used by maintenance planners. Hence, it would be more analytical if the screen had the capability to bring to the attention of planners those specific parameters (one among multiple maintenance parameters configured for each task) that initiated execution of tasks on aircraft.

Change Details

This enhancement highlights those triggering parameters that have prompted the task execution. The **Rem. Time** column in **Job Details Gantt** section of **Review Fleet Maint. Plan** screen will display the triggering parameter for the work unit/task # within suggestive brackets. This enables planners to quickly identify the triggering schedules for work units/tasks on the aircraft.

Exhibit 1: The Triggering parameter in Review Fleet Maintenance Plan screen

The screenshot displays the 'Review Fleet Maintenance Plan' interface. The 'Job Details' section contains a table with columns: Aircraft Reg # / Work Unit #, Rem. Time, Incoming Flight Details, Outgoing Flight Details, Package Status, Sch. Item Count / Driver Task, Def. Item Count / Package #, Eng. Doc Count / Type, MEL & CDL Count / Def. Type, and Due Date. A callout bubble points to the 'Rem. Time' column, stating: 'The parameter that triggered the task appears inside brackets.' The 'Rem. Time' values are shown in brackets, such as '(-1182D)/-749.00FH/26' and '(-803D)/-614.47FH'.

Aircraft Reg # / Work Unit #	Rem. Time	Incoming Flight Details	Outgoing Flight Details	Package Status	Sch. Item Count / Driver Task	Def. Item Count / Package #	Eng. Doc Count / Type	MEL & CDL Count / Def. Type	Due Date
VT-RMC	(-1182D)/-749.00FH/26	// :: AM :: :			35	1	8	24	
test-005: test-005	-1180D			Progress		VP-000013-2012		DMI	03/05/2012 07:09:3
VP-000011-2012/2: test-002	-1179D			Progress		VP-000011-2012			04/05/2012 07:05:1
DR-000009-2012: Radio Com: Cra	-1136D			Progress		VP-000002-2012		DMI	16/06/2012 01:28:3
A31-7-MP-00000005: Inspection	(-866D)					VP-000021-2012			13/03/2013 09:08:2
Task12: Task12gds	(-803D)/-614.47FH			In-Progress		VP-000005-2012	EO-000003-2013		15/05/2013 12:00:0
test1: test	-763D			In-Progress		VP-000005-2012		DMI	24/06/2013 04:39:1
test2: test	-763D			In-Progress		VP-000005-2012		DMI	24/06/2013 04:39:1
OPERA-A3-MPD-ROU-000036::C	(-714D)			Fresh		VP-000862-2014			12/08/2013 12:06:0
A31-APU-MP-00000027: Inspectio	(199.11FH)			In-Progress		VP-000064-2013			02/11/2013 12:30:0

WHAT'S NEW IN FLIGHT LOG?

Ability to record Flight Hours without Flight Cycles in Journey Log

Reference: AHBF-9598

Background

1. Helicharter service providers always ensure to satisfy one of the crucial needs of their customer i.e. time saving. Customer can request for a service at any time, from anywhere. In order to handle this requirement, Customer Service Teams in the organization will assign helicopters flying in customers' nearby locations.

In such situation, there is a requirement to record two journeys for a single Journey Leg. First Journey is for internal operations and second journey is for customer operations when the helicopter was used for customer services. This information can be further used for billing the customer. The system should provide the capability to record first Journey with Flight Hour information without landing, whereas second Journey with both Flight Hours and landing information.

2. Training flights in Flight Training schools are subjected to multiple Take-off. Operators might turn-off the engine each time after the landing. In such situations, Engine Cycle also should get updated along with number of Take-offs in Journey Log details.

Change Details

1) Ability to record journey log Flight Hours with zero Take offs:

In order to manage above mentioned scenario of recording journey with Flight Hour information and without landings, system should be capable of retaining Flight Hours information when Take Off value is set zero. A new parameter has been introduced in **Set Options** screen of **Flight Log** business component.

Set Options (Flight Log)	
Category	Journey Log Computation Option
Parameter	"Permit Flight Hour update in Journey Logs with zero Take Offs?"
Permitted Values	Enter "0" for 'No', "1" for 'Yes'
Default value	0
System behavior based on process parameter value	
Value: 1 (Yes)	When user provides zero Take Off in JL with Actual Flight Hours Log Mode, system will retain Flight Hours but nullifies Flight Cycles.
Value: 0 (No)	When user provides zero Take Off in JL with Actual Flight Hours Log Mode, system will nullify both Flight Hours and Flight Cycles.



Note: Above behavior is implemented for all Flight Statuses of Journey Log.

2) Ability to inherit Flight Cycle to Engine Cycles during multiple Take Offs:

This enhancement enables updating Engine Cycles from Flight Cycles when there are multiple Take Offs in a Journey Log. A new parameter has been introduced in **Set Options** screen of **Flight Log** business component.

Set Options (Flight Log)	
Category	Journey Log Computation Option
Parameter	"Update Flight Cycles to Engine Cycles?"
Permitted Values	Enter "0" for 'No', "1" for 'Yes'
Default value	0
System behavior based on process parameter value	
Value: 1 (Yes)	System will inherit Engine Cycles from Flight Cycles during multiple Take Offs.
Value: 0 (No)	Engine Cycle will be updated as "1" even though Flight Cycles is greater than one during multiple Take Offs.



Note: Above behavior is implemented for all Journey Log Flight Ops. Type.

Enhancements in View A/C Maint. Exe. Ref.

Reference: AHBF-11057

Background

Facility to review all open Aircraft Maintenance Execution Documents.

Change Details

The **Select Execution Ref #** screen of **View A/C Maint. Exe. Ref. #** activity is enhanced to review all open Aircraft Maintenance Execution Documents. A new 'Exec. Status' named '**Open**' has been introduced in **Select Execution Ref #** screen to filter all open Execution Documents.

The system retrieves result based values chosen in the 'Exec. Status' drop down boxes:

Exec. Status (Drop Down 1)	Exec. Status (Drop Down 2)	Exe. Ref. Status
Exe. Ref.	Open	Draft, Fresh, Planned, In-Progress
Task	Open	Fresh, Planned, In-Progress

Exhibit 1:

Select Execution Ref # screens with Exec. Status Drop Down 1 as 'Exe. Ref.' and Exec. Status Drop Down 2 as 'Open'

The screenshot displays the 'Select Execution Ref #' interface. It includes a 'Search Criteria' section with fields for Aircraft Reg. #, Log Item #, Customer # / Name, Customer Order #, Work Center #, Journey Log #, Search On, Addl. Search On, Execution Ref. #, Exec. Status (set to 'Exe. Ref.'), Estimation Status (set to 'Exe. Ref.'), and Date From / To. A 'Search' button is located below these fields. The 'Search Results' section shows a table with columns: #, Execution Ref. #, Package Description, Exe. Ref. Status, Estimation Status, Hold Status, and Aircraft Model #. The table currently displays '[No records to display]'. A dropdown menu for 'Exec. Status' is open, showing options: Open, Draft, Fresh, Planned, In-Progress, Completed, Closed, and Cancelled.

Exhibit 2:

The Select Execution Ref # screens with Exec. Status Drop Down 1 as 'Task' and Exec. Status Drop Down 2 as 'Open'

The screenshot shows a web application window titled "Select Execution Ref #". It features a "Search Criteria" section with input fields for Aircraft Reg. #, Log Item #, Customer # / Name, Customer Order #, Work Center #, Journey Log #, Search On, and Addl. Search On. There is a "Search" button. To the right, there are dropdown menus for Execution Ref. #, Exec. Status (set to "Task"), Estimation Status (set to "Exe. Ref."), and Date From / To. A date format "mm/dd/yyyy" is displayed. Below the search criteria is a "Search Results" section with a table. The table has columns: #, Execution Ref. #, Package Description, Exe. Ref. Status, Estimation Status, Hold Status, and Aircraft Model #. The table is currently empty, displaying "[No records to display]" and "Found no rows to display!!!". A dropdown menu is open for the "Exec. Status" field, showing options: Open, Fresh, Planned, Deferred, In-Progress, In-Complete, Pre-Closed, Completed, Closed, and Cancelled.

Date Format: mm/dd/yyyy

Search Criteria

Aircraft Reg. # Work Center #

Log Item # Journey Log #

Customer # / Name Search On

Customer Order # Addl. Search On

Search

Search Results

[No records to display]

#	Execution Ref. #	Package Description	Exe. Ref. Status	Estimation Status	Hold Status	Aircraft Model #
Found no rows to display!!!						

Exec. Status: Task

Estimation Status: Exe. Ref.

Date From / To:

Open

Fresh

Planned

Deferred

In-Progress

In-Complete

Pre-Closed

Completed

Closed

Cancelled

WHAT'S NEW IN COMPONENT MAINTENANCE?

Ability to generate Component Maintenance Due Report

Reference: AHBf-13333

Background

The existing Aircraft Maintenance Due Report allows users to retrieve the tasks that are due on the Aircraft and its attached Components. There is no provision to view the due tasks for Components and its sub-assemblies alone. Also there is no provision to view the due tasks for Components and its sub-assemblies if the Component is not attached to Aircraft.

Change Details

A new report called "Component Maintenance Due Report" is added to the Ramco Aviation Product, to facilitate user to view the due task for Components and its sub-assemblies. This report allows the user to retrieve Due task and 'As Required' task for the Component and Sub-Components.

A new activity **Component Maintenance Due Report** is added under the **Reports - Component Maintenance** business component.

Exhibit 1: New activity 'Component Maintenance Due Report' under 'Reports - Component Maintenance' business component

The screenshot shows a web application window titled "Generate Component Maintenance Due Report". The window has a standard toolbar with icons for search, zoom, print, and other functions. The main content area is divided into two sections: "Search Criteria" and "Display Option".

Search Criteria:

- Part #**: A text input field with a magnifying glass icon.
- From/To Date**: Two date pickers showing "10-19-2015" and "10-19-2017".
- Planner Group**: A dropdown menu.
- Maintenance Type**: A dropdown menu.
- Mfr. Serial #/ Serial #**: A text input field.
- Component #**: A text input field with a magnifying glass icon.
- Sort By**: A dropdown menu with "Planned Date" selected.
- Program Item Type**: A dropdown menu.
- Maintenance Item**: A dropdown menu.
- Task Attributes**: A dropdown menu.
- Execution Facility #**: A text input field.
- Rem. Value <=**: A text input field.

Display Option:

- ☐ As Required
- ☒ Overdue
- ☒ Rem.Units & Due Date

At the bottom of the form, there is a blue button labeled "Generate Component Maintenance Due Report".



Note: User can enter the Part # alone to generate the Due Report for all the Components matching the Part # entered.



Rem. Units & Due Date information will be optionally displayed in the report based on the 'Rem. Units & Due Date' check box selected while launching the report.

Exhibit 2: Component Maintenance Due Report


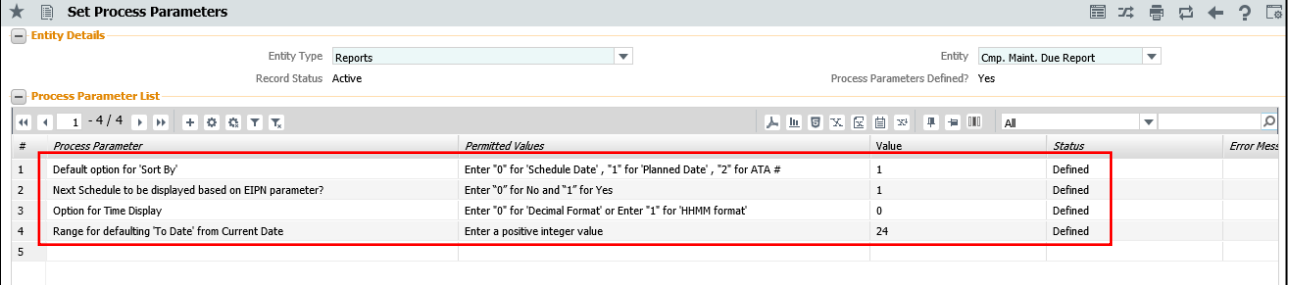
		Component Maintenance Due Report							84 SARDAR PATEL ROAD, TARMANI., CHENNAI, TAMILNADU, United States				
Part #	Part Description	Serial #	Mfr. Serial #	Component #	Report Duration	Location:	ATA #			Planner Group	Parameter	SN	SO
0-0440-4-0001: 56561	IP TURBINE ROTOR BLADE	SRL-00001	SRL-00001	C003992-2015	From Jan 1 1900 To Oct 19 2015		72-00			PG2	FC FH	11050.00 42000.00	
ATA #	Task # ~ Description ~ Job Type	Position Code Level Code	Part # ~ Part Description ~ Serial # ~ Comp #	NHA Details Part#~Part Desc Code~ Serial # ~ Comp #		Interval	Tolerance	Current Values	Last Performed	Triggering Parameter	Rem. Units	Next Scheduled	Forecasted/ Due at Date
72-00	3-00-46-test task~Off- Wing		0-0440-4-0001: 56561-IP TURBINE ROTOR BLADE-SRL- 00001-C003992- 2015			Threshold 400 Days 9000.00 FH 90 Days 900.00 FH	19 Days	11050.00 FC 42000.00 FH	06-18-2015 15:22:31 32000.00 FH	FH	59 Days -9100.00 FH	12-17-2015 23:59:59 32900.00 FH	4/16/2013 11:59:59 PM
72-00	3-00-48-test task~Off- Wing		0-0440-4-0001: 56561-IP TURBINE ROTOR BLADE-SRL- 00001-C003992- 2015			Threshold 1000 Days 10000.00 FH 90 Days 9000.00 FH	19 Days	11050.00 FC 42000.00 FH		FH	999 Days 0.00 FH	06-14-2018 23:59:59 42000.00 FH	10/13/2015 11:59:59 PM
20-00	3-00-50-test task~Off- Wing	POS 1~1.1	0-0440-4-0005: 36361-MAPCO AFT OVEN-SRL- 000001-C003993- 2015			Threshold 500 Days 5000.00 FH 60.00 FC 250 Days 300.00 FH 90.00 FC	5 Days	11050.00 FC 42000.00 FH		FC			3/16/2013 11:59:59 PM
20-00	3-00-51-test task~Off- Wing	POS 1~1.1	0-0440-4-0005: 36361-MAPCO AFT OVEN-SRL- 000001-C003993- 2015			Threshold 900 Days 3000.00 FH 190 Days 230.00 FH	20.00 FH	11050.00 FC 42000.00 FH		FH	151 Days -39000.00 FH	03-18-2016 23:59:59 3000.00 FH	6/8/2010 11: 59:59 PM
20-00	3- 00000007~Restoration Task~Component Removal	POS 2~1.2	0-0440-4-0005: 36361-MAPCO AFT OVEN-SRL- 000002-C003994- 2015					11050.00 FC 42000.00 FH	-	FC	-		4/15/2013 11:59:59 PM
*Escalated Task Report Generated On: 10/19/2015 12:30:14 PM mm-dd-yyyy hh:mm:ss Generated By : SENECHAL, DOMINIC													

Exhibit 3: New Process Parameters added in 'Common Master' business component


The screenshot shows the 'Set Process Parameters' window. The 'Entity Type' is set to 'Reports' and the 'Entity' is 'Cmp. Maint. Due Report'. The 'Record Status' is 'Active' and 'Process Parameters Defined?' is 'Yes'. Below this is a 'Process Parameter List' table with 5 rows. The first four rows are highlighted with a red border.

#	Process Parameter	Permitted Values	Value	Status	Error Mess
1	Default option for 'Sort By'	Enter "0" for 'Schedule Date', "1" for 'Planned Date', "2" for ATA #	1	Defined	
2	Next Schedule to be displayed based on EIPN parameter?	Enter "0" for No and "1" for Yes	1	Defined	
3	Option for Time Display	Enter "0" for 'Decimal Format' or Enter "1" for 'HHMM format'	0	Defined	
4	Range for defaulting 'To Date' from Current Date	Enter a positive integer value	24	Defined	
5					



Note: The process parameters shown in 'Exhibit 3' above, are added for the Component Maintenance Due Report under the Entity Type 'Report' and Entity 'Cmp. Maint. Due Report'

1. If the Process Parameter "Default option for 'Sort By'" is selected as "0" then 'Sort By' control will be defaulted with "Schedule Date". If the option is selected as "1" then 'Sort By' control will be defaulted with "Planned Date". If the option is selected as "2" then 'Sort By' control will be defaulted with "ATA" on 'Component Maintenance Due Report' page launch.
2. If the Process Parameter "Next Schedule to be displayed based on EIPN parameter?" is selected as "0", then the Next Schedule Value will be calculated based on the Current value of that Component. If the option is selected as "1" then the Next Schedule Value will be calculated based on the Current value of EIPN of the Sub-assembly Component.
3. If the Process Parameter "Option for Time Display" is selected as "0" then the Time will be displayed in the Decimal format in the report output. If the option is selected as "1" then the Time will be displayed in the 'HHMM' format in the report output.
4. Based on the value entered for the Process Parameter "Range for defaulting 'To Date' from Current Date", system will compute and default the To Date on the 'Component Maintenance Due Report' screen launch. Value enter in the control will be considered as Months. If the value is entered as 2, then From Date will be defaulted as current date and To Date will be defaulted as 2 months later the current date.

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