Ramco Aviation Solution

Version 5.8

Enhancement Notification

Maintenance

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TABLE OF CONTENTS

WHAT'S NEW IN RAMCO EFB?

Reference: AHBG-4519

Background

FlyAnywhere (Ramco EFB) brings cutting edge technology to the flight deck that can replace the pilot's physical flight bag with a single iPad. This facilitates the reduction of paper in the cockpit, which decreases weight and cuts down clutter. The use of accurate take-off and landing calculations maximizes payload with onboard performance and CG calculations, not only reduces fuel and maintenance cost but also improves safety. The App also integrates seamlessly with Ramco's M&E system to easily report and track discrepancies and journey logs.

Change Details

A new iOS app 'FlyAnywhere' is available from Ramco. It can be installed on iPad Air / iPad Mini 2 or later with Apple A7 or later chipset with iOS 9 or later. This app syncs with an EFB Central Server (called as EFBC) which acts as a middle-man to sync with Ramco's M&E system.

The **FlyAnywhere** Application has the following components:

1. Synchronization.
2. Landing Screen.
3. Aircraft Details.
4. Pilot & Customer Information.
5. Weather.
6. Flight Planning.
7. Weight & Balance.
8. Journey Log.
9. Flight Sheet.
10. Journey Details.
11. Discrepancy & Delay Reporting.
12. Settings Screen.
13. Checklist / Emergency Checklist.
14. SIAP's & Plates.
15. Reference.

What You Can Do

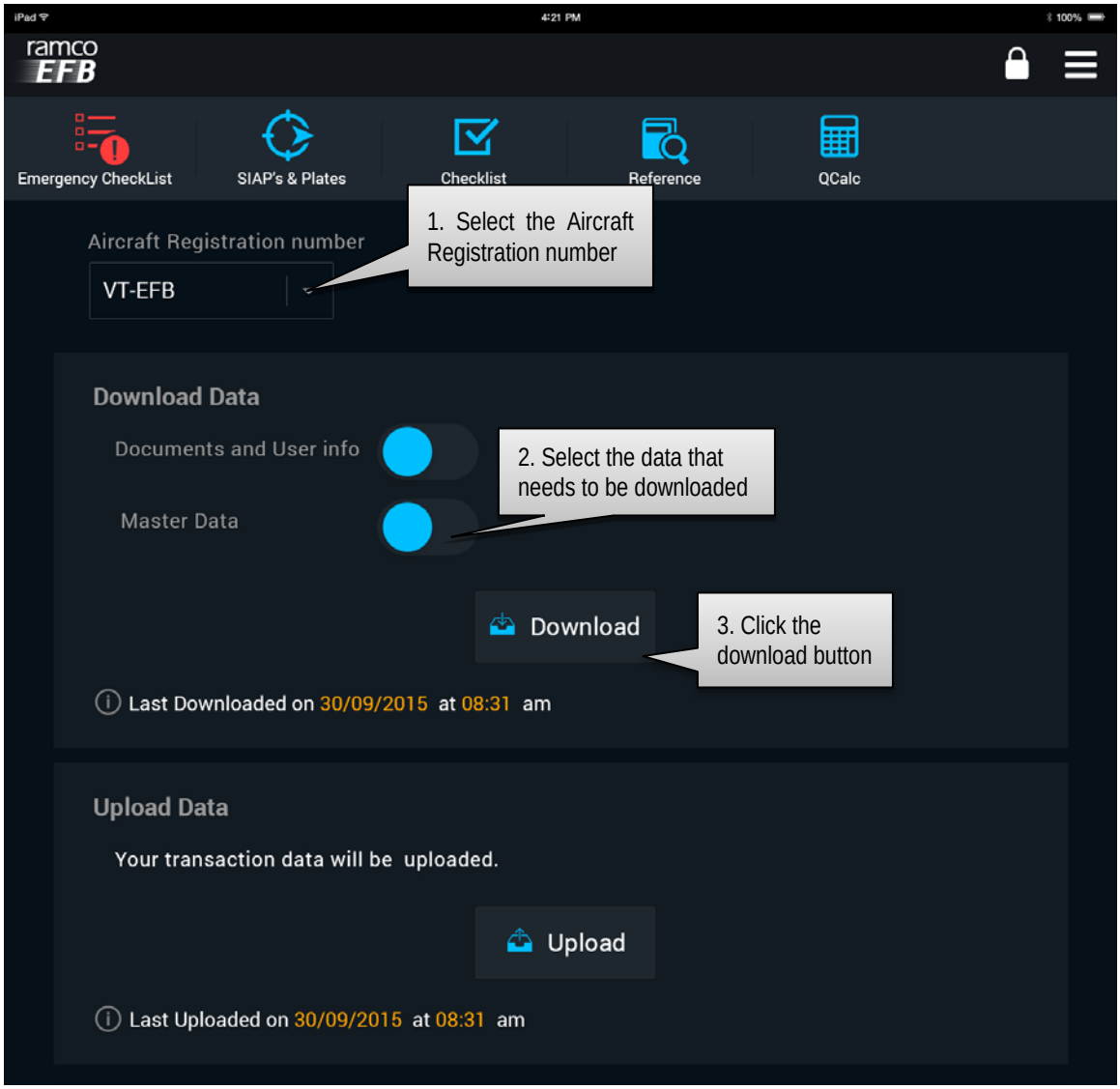
- ✓ Plan the Journey and Estimate Fuel Consumption.
- ✓ Capture Pilot & Crew information along with Customer details.
- ✓ Use Charts, Manuals and Checklists to aid the flight.
- ✓ Perform Complex Weight & Balance calculations with simple graphs and seat layout.
- ✓ Track the Journey from Engine Start to Stop over multiple Legs/Flights.
- ✓ Record Delay, Duty, Activity & Weather Info.
- ✓ View Maintenance Records of the Aircraft and see open items.
- ✓ Report Discrepancies and track status.

Note: The app works completely offline and integrates with Ramco M&E system for Discrepancy management and Journey Log tracking.

Synchronization screen

Synchronize the device to the M&E System

Product	FlyAnywhere
Screen name	Synchronization screen
Activity	Application synchronization
Role	Flight Operations / Pilot



Landing screen

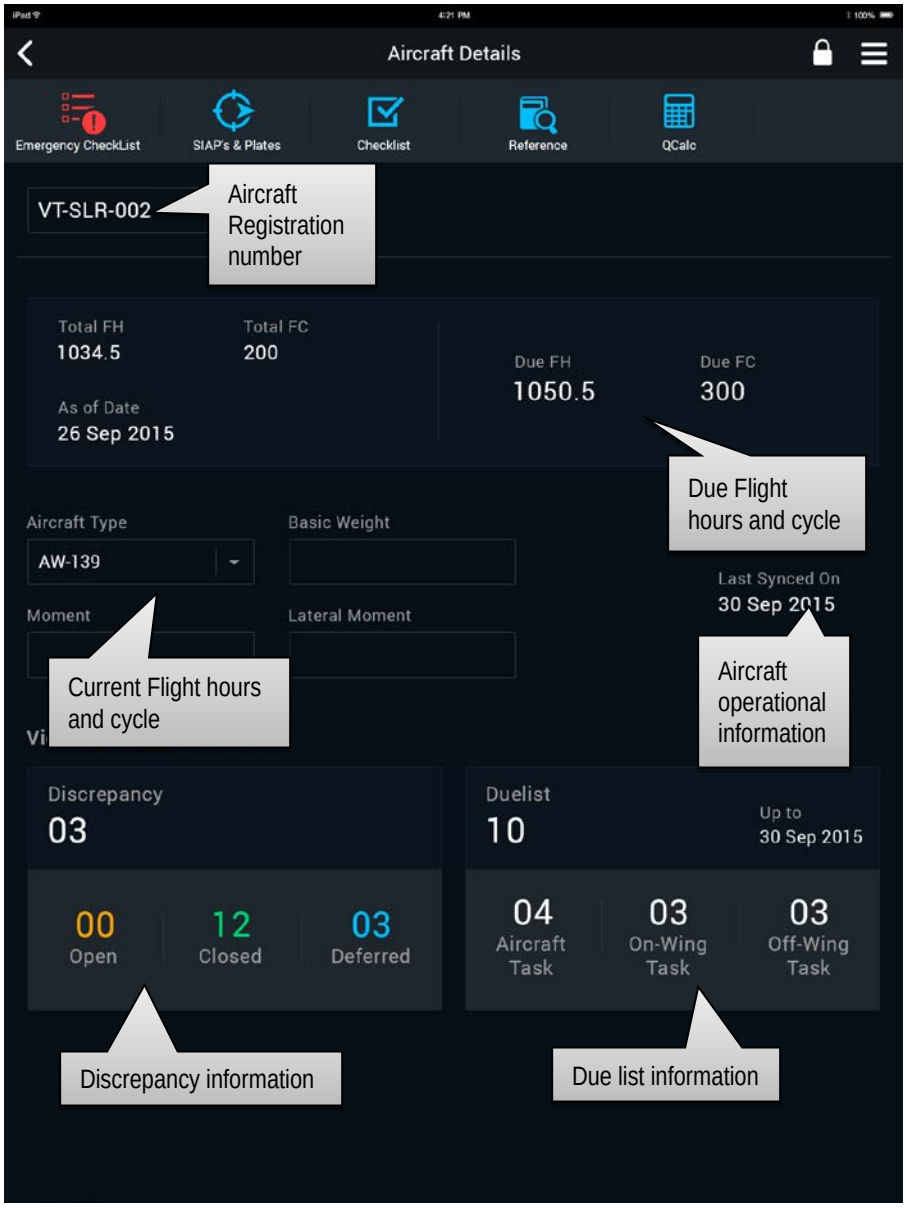
Landing screen with flight information

Aircraft Details

Aircraft details screen

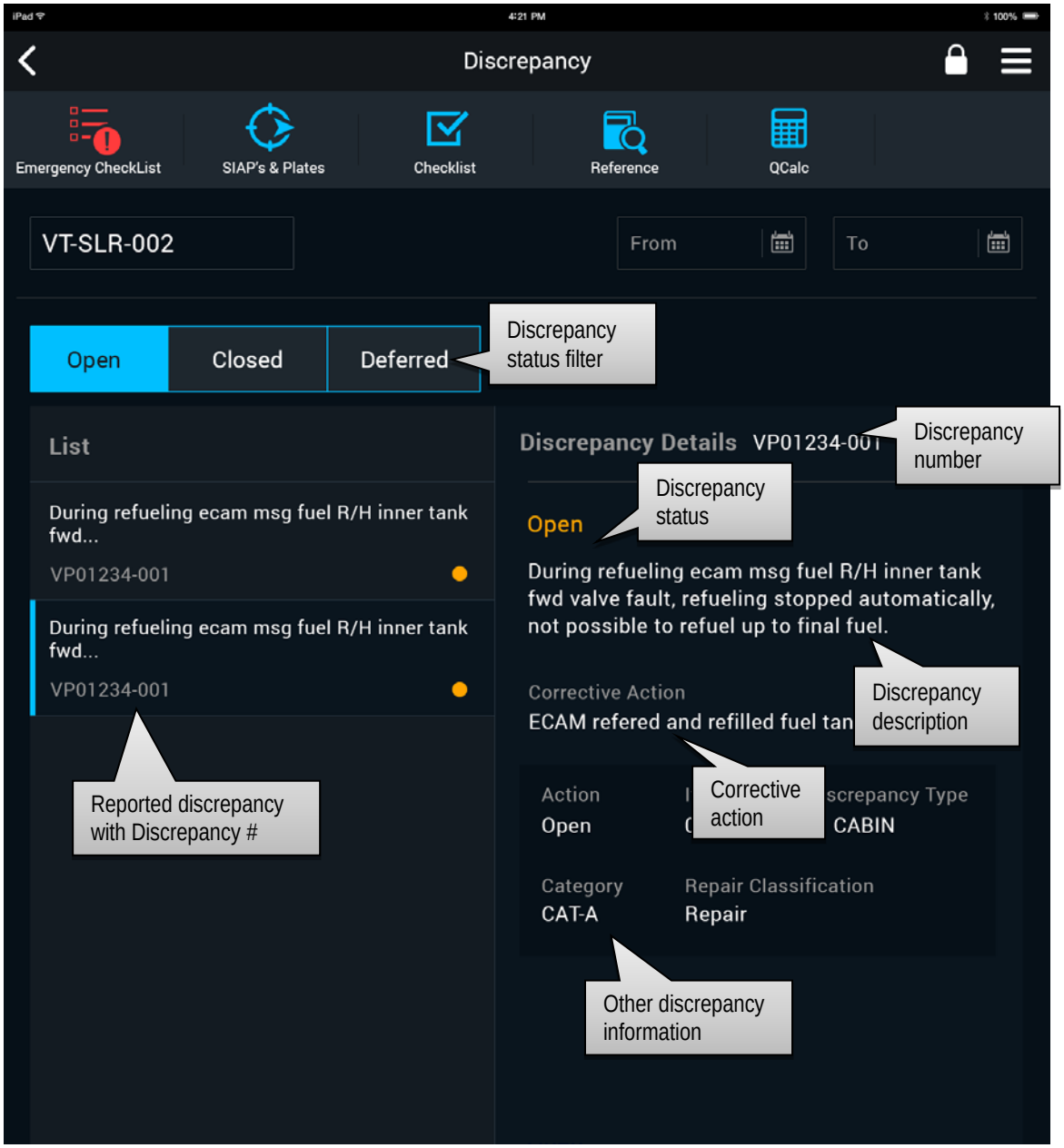
The Aircraft Details screen helps the Pilot to understand the complete information about the aircraft that is to be used during the flight operations. Total Flight hours and Flight Cycle count is listed with the Due difference to help the pilot in identifying how many hours of flight time is possible by the aircraft.

The Discrepancy Information is clearly stated using filters for Open, Closed and Deferred line items. The Pilot will be able to view the discrepancy respectively. Aircraft Due list is also provided for the pilots to gain additional information about the due tasks.



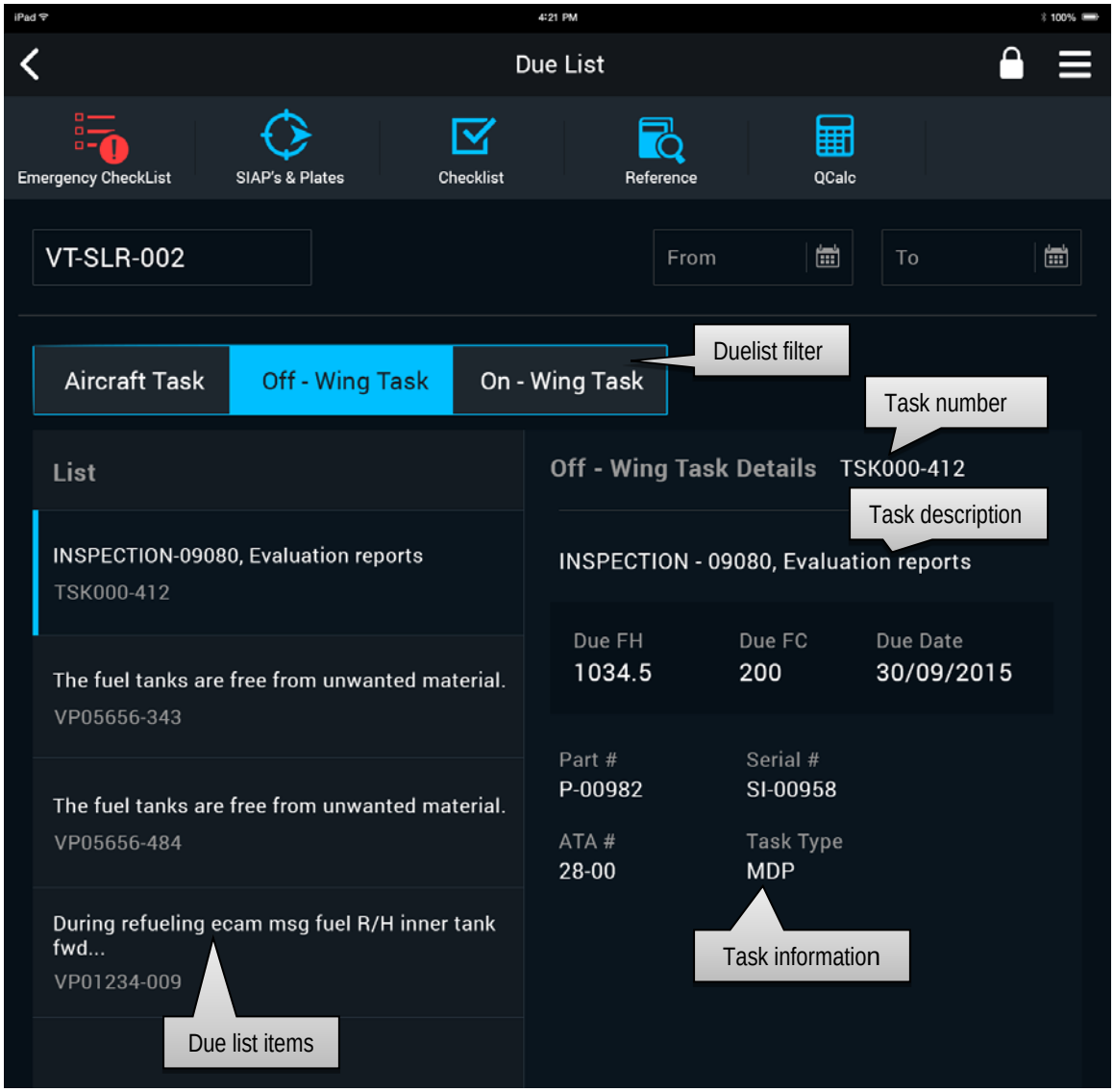
View Maintenance records

Product	FlyAnywhere
Screen name	Discrepancy details screen
Activity	View Maintenance records
Role	Flight Operations / Pilot



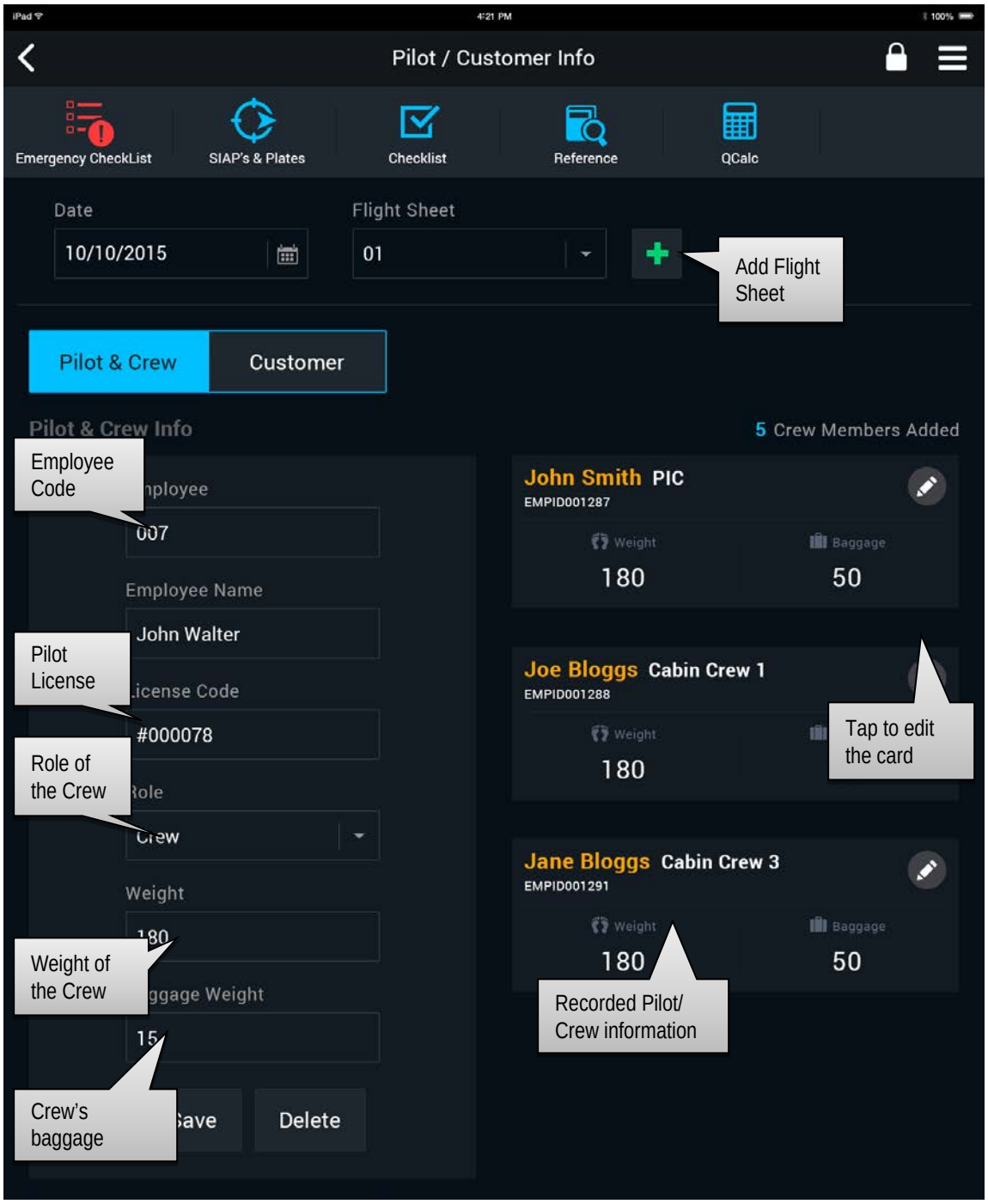
View Maintenance records

Product	FlyAnywhere
Screen name	Duelist details screen
Activity	View Maintenance records
Role	Flight Operations / Pilot



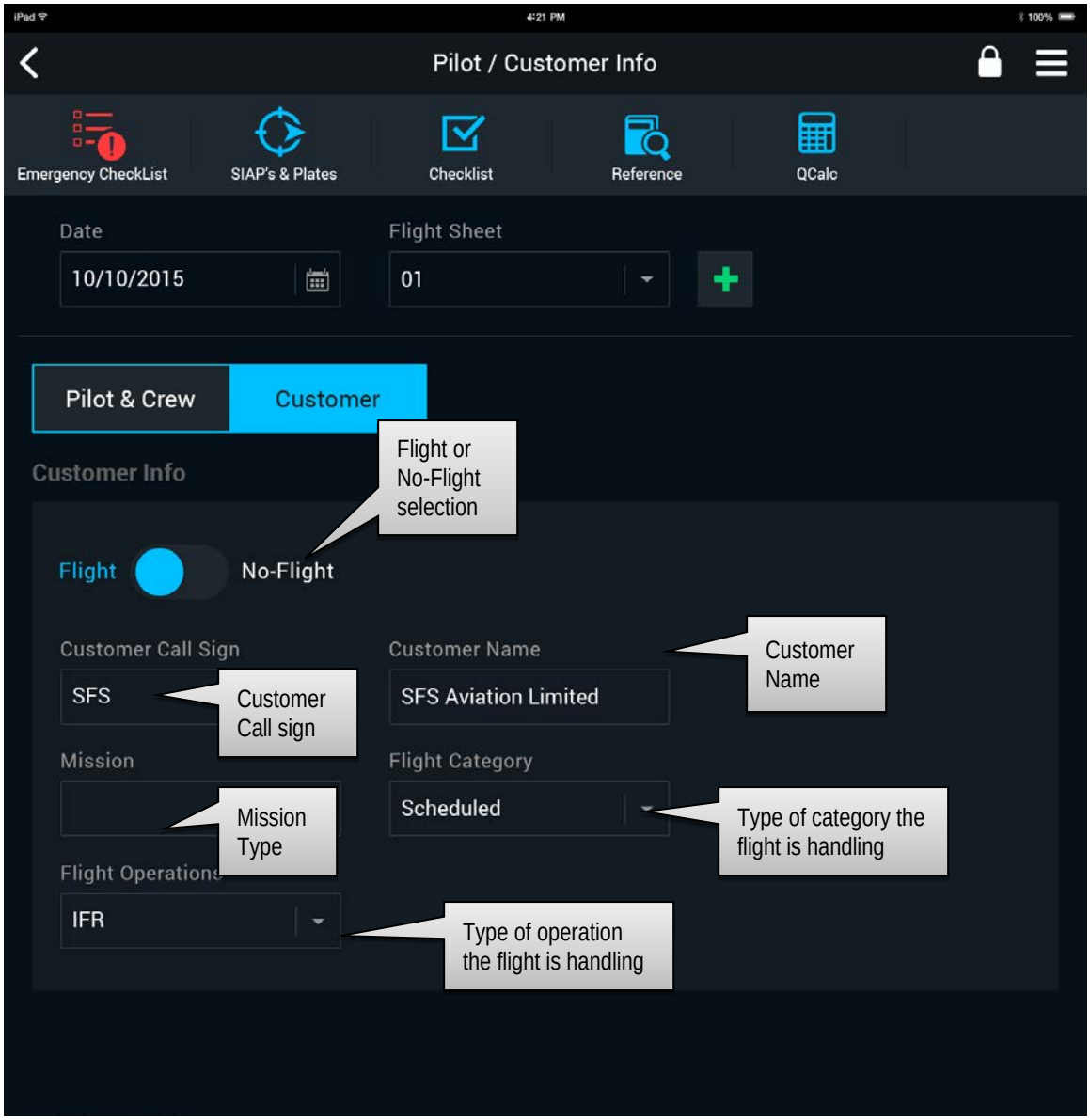
Pilot and Customer information

Pilot and Crew details screen



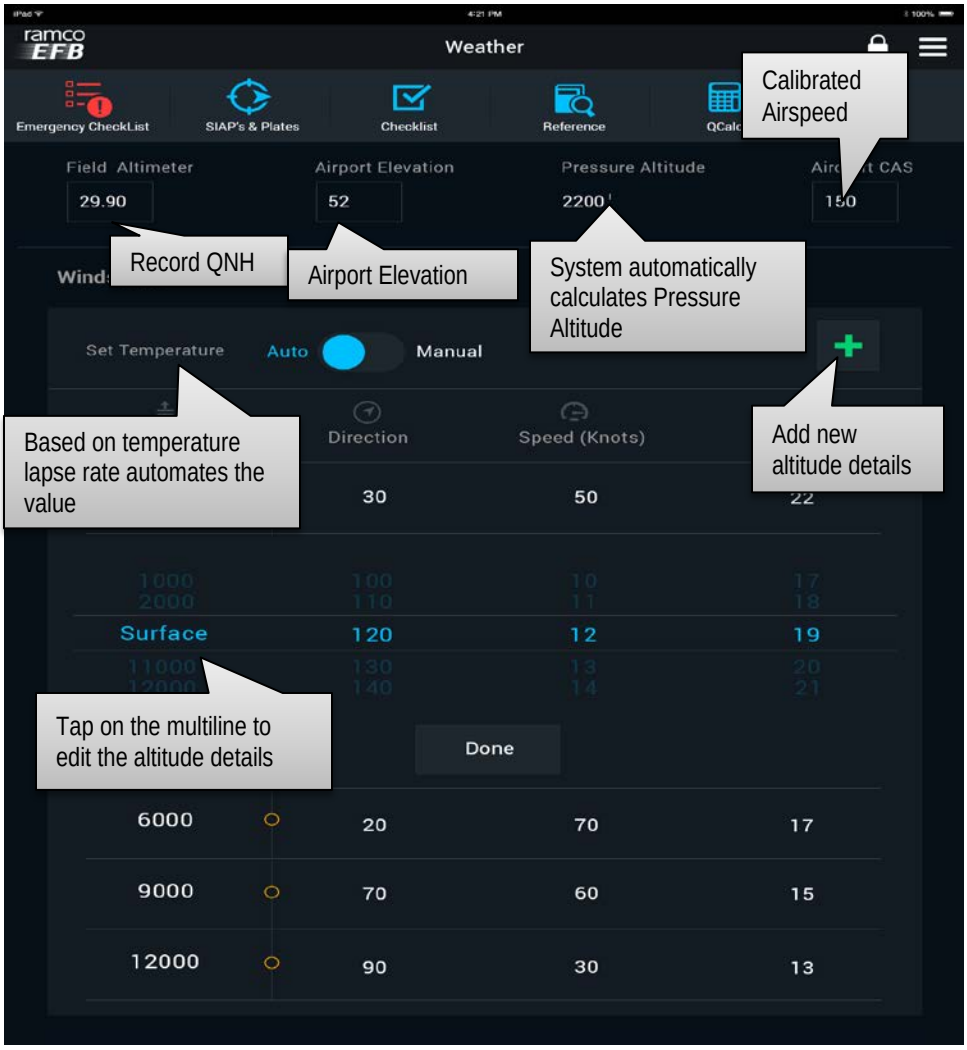
Customer information screen

The Customer information is recorded using the Customer tab. Customer call sign is recorded by which Customer name is defaulted. Flight operation and Flight Category information is also captured. The Flight operation/Pilot will be able to provide the mission details.



Record weather forecast information

The weather screen enables the pilot to record the Forecasted weather for the respective area of interest. The top section of the screen allows the Pilot to capture the Pressure Altitude by providing the Field pressure and Airport elevation information. The CAS value is also recorded which can then be used for planning the route. The Pilot can then record the forecast weather information under Wind Aloft section which is a spinner based design. The Pilot can also set the temperature calculation as automatic by which standard elapse rate (1.98 deg.C) is applied.



Flight Planning

Plan the flight route

Planning the path for the flight operation is achieved using the Flight Planning screen. The Pilots can key in the required station information for the flight path. The system calculates the Magnetic Heading, Distance, Required fuel and Flight time between the From and To station. Cruising Altitude can also be defined by the Pilot.

If a specific flight path is followed on regular basis the pilots can save the trip and re-use as required.

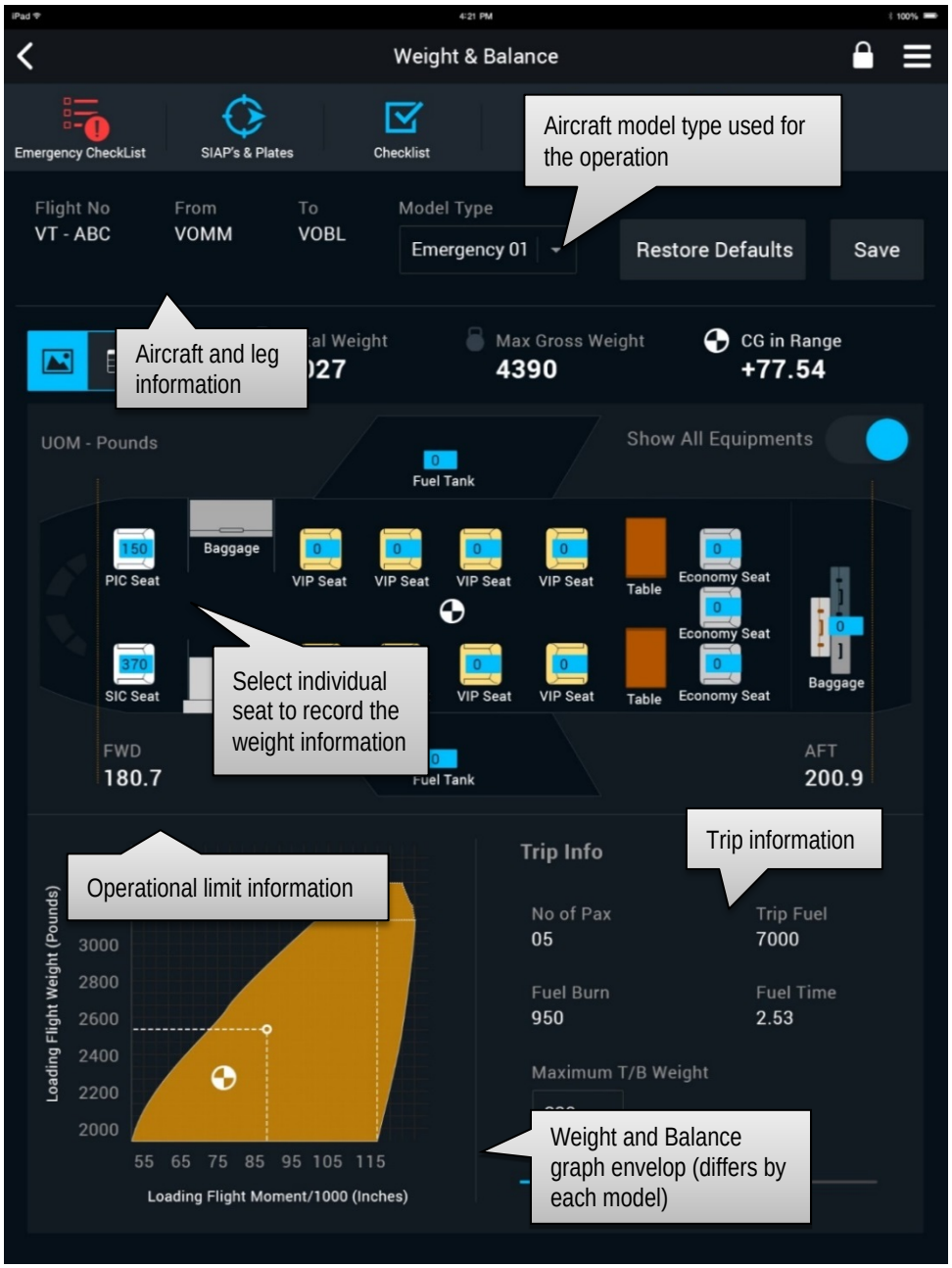
Plan the flight route

Product	FlyAnywhere
Screen name	Flight Planning
Activity	Summary level information of recorded legs
Role	Flight operations / Pilot

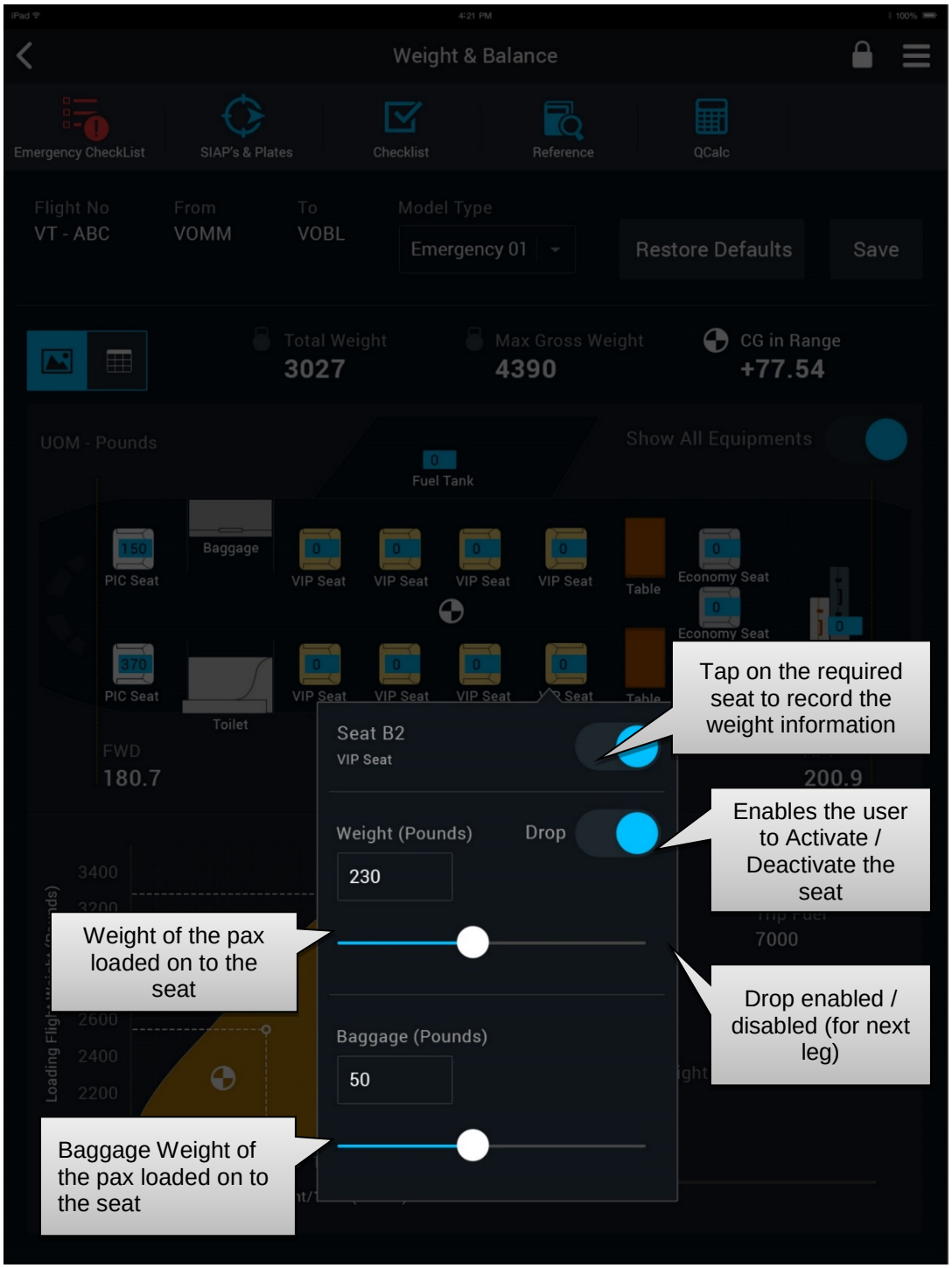
Weight and Balance

Calculate Weight and Balance for individual seat (Pictorial view)

The Center of Gravity (CG) calculation is achieved using the Weight & Balance screen. The Pilots can view a pictorial representation of the aircraft along with the seat & cargo configuration. The Pilot will be able to tap on the respective seat / cargo section and load the weight. If the pax has to be dropped for the next leg of the flight the pilot will be able to select the drop seat option. The CG graph envelop is also available for the Pilot to ensure the CG is within the limits

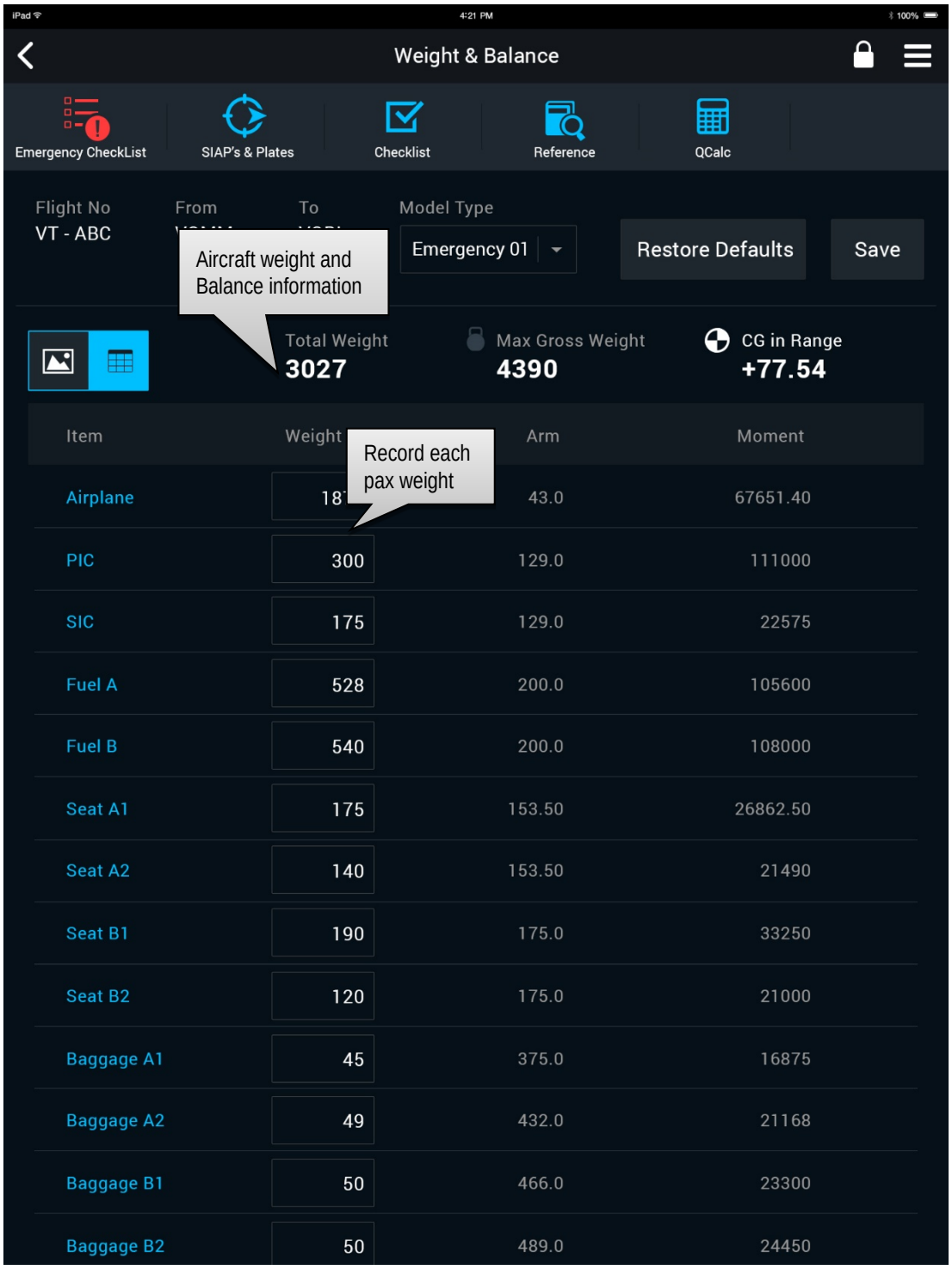


The Pilot can tap on the respective seat and the pop-out (refer image below) appears from which the Pilot will be able to ensure the seat is active in condition, Drop is applicable or not and weight information for the pax.



Calculate Weight and Balance for individual seat (Load and Trim view)

The traditional Load and Trim sheet is also available for the Pilot to calculate the Center of gravity limits. The Pilot can provide the individual weights for the respective seats and the system can automatically calculate the CG value.

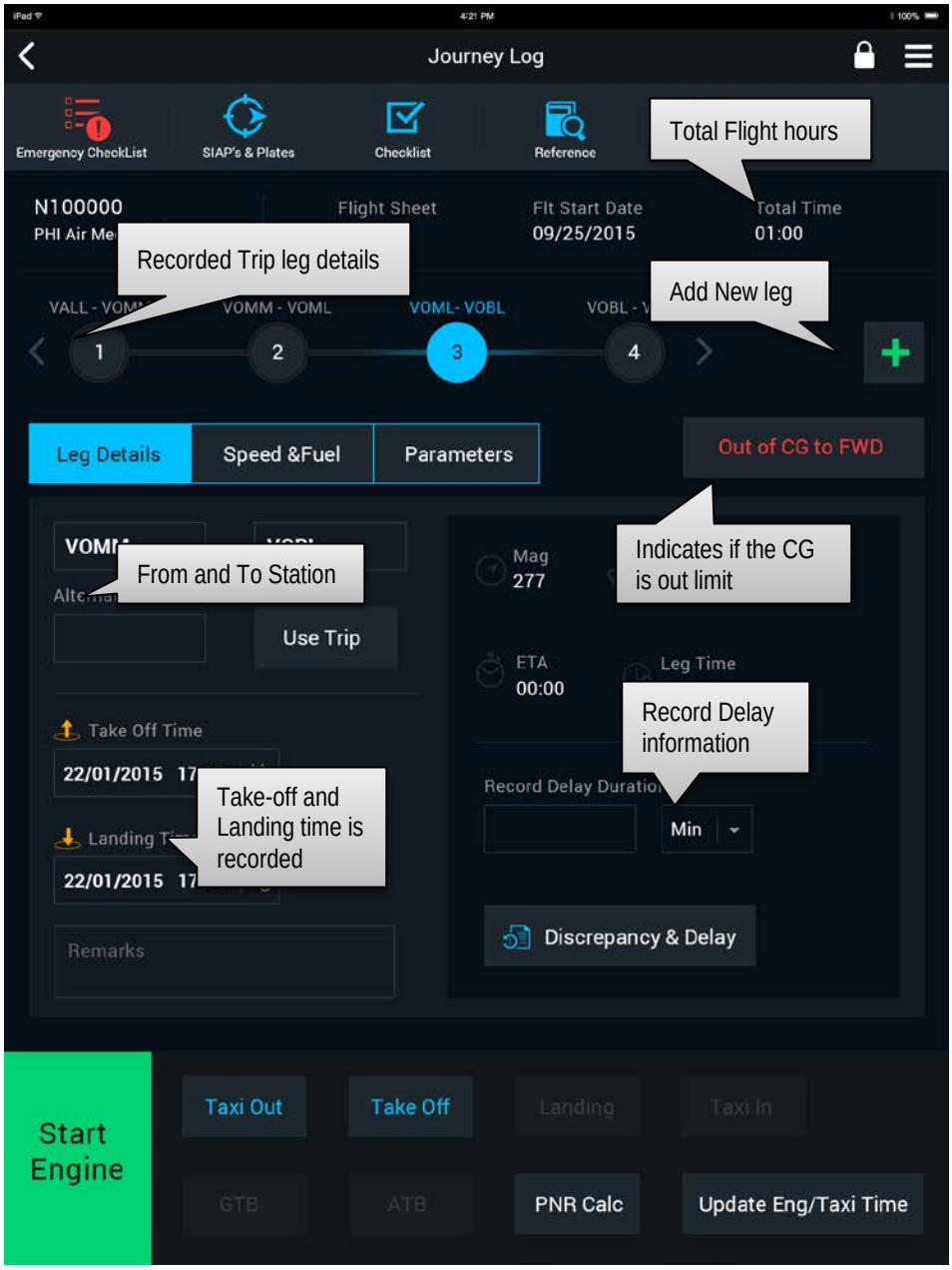


Journey Log

Record Journey leg details

The complete in-flight operations are recorded using the Flight log screen. The flight route that is planned during the flight planning is used under leg details tab. The Pilot will be able to manually key in the destination as required.

The CG limits will also be indicated for the pilot to understand the state of the aircraft. The Live action buttons provided on the bottom of the screen aids the pilot to record the Takeoff and Landing timing easily. Any Discrepancy and delay information can also be recorded from this screen

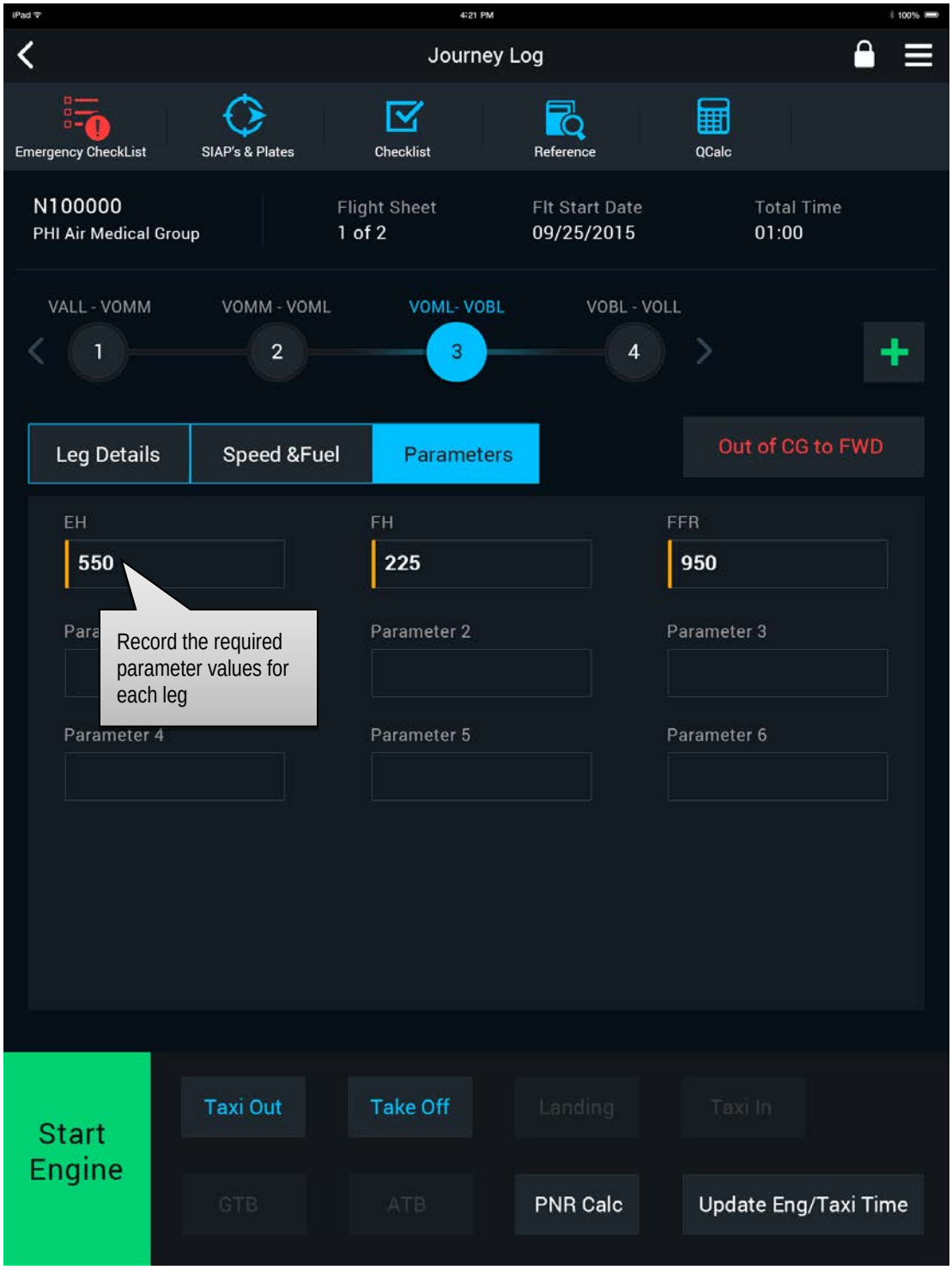


Record Speed and Fuel details

Based on the aircraft set-up that's carried out in the EFB Central, the number of tanks are illustrated in the Speed and Fuel tab. Total number of tanks with the respective fuel value either the required fuel for the trip or fully loaded (Max) fuel is clearly indicated. The Speed details provided in the flight planning screen is also listed as part of this tab.

Record Parameter details

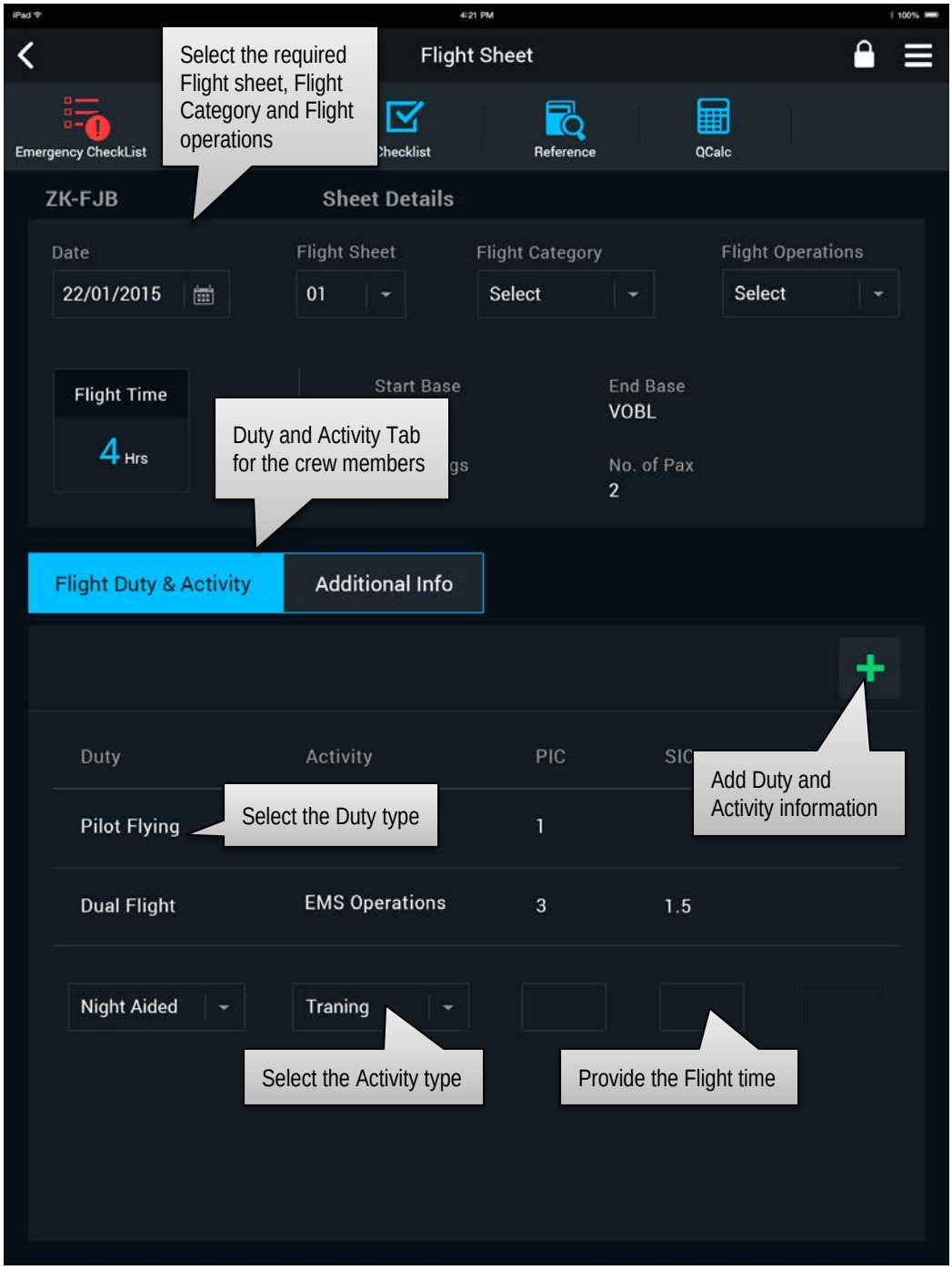
Based on the type of operation performed during the flight the parameter values can be updated using the Parameter tab. The leg level parameters can be updated accordingly.



Flight Sheet

Record Pilot Duty & Activity information

The Pilot Duty and Activity screen acts as a digital logbook to the pilot. The Duty and activity performed during the flight operation is recorded. The Pilot will be able to select the type of Duty i.e, Pilot in command or Co-pilot/Crew and record the activity that he/she has performed during the flight.



Journey Details

Record journey details

After completing a successful flight the aircraft parameters are to be updated and any modification to the flight sheets are to be carried out. The Journey details screen helps pilot/flight operation team to do so. If there were any maintenance related activities that has taken place before the flight that can also be recorded.

Update Journey parameter details

Based on the flight operation the parameter values can be updated using the Update Journey parameters tab. List of all the parameters are available for the aircraft and based on the journey group each parameter could be updated.

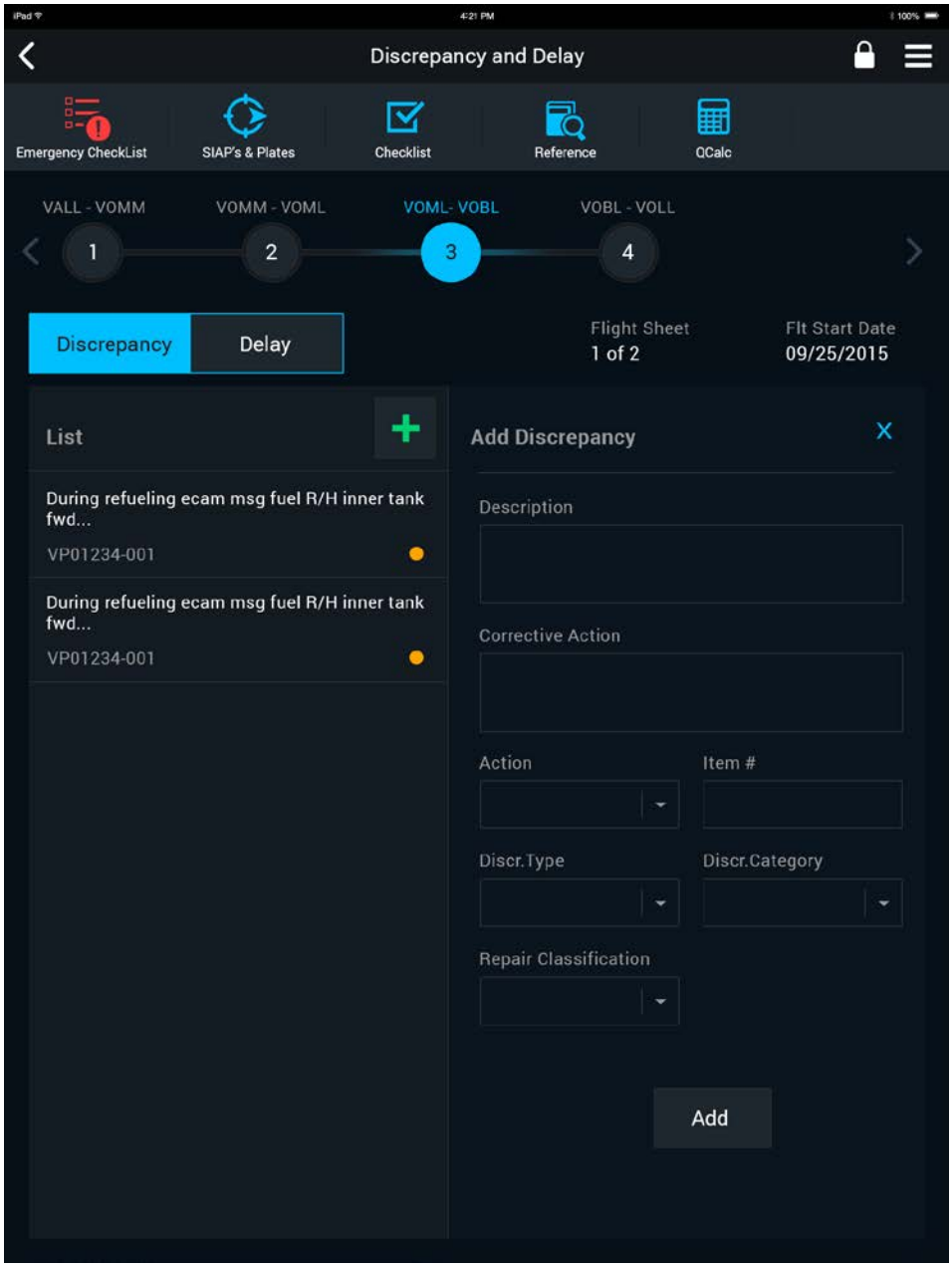
Modify Flight sheets

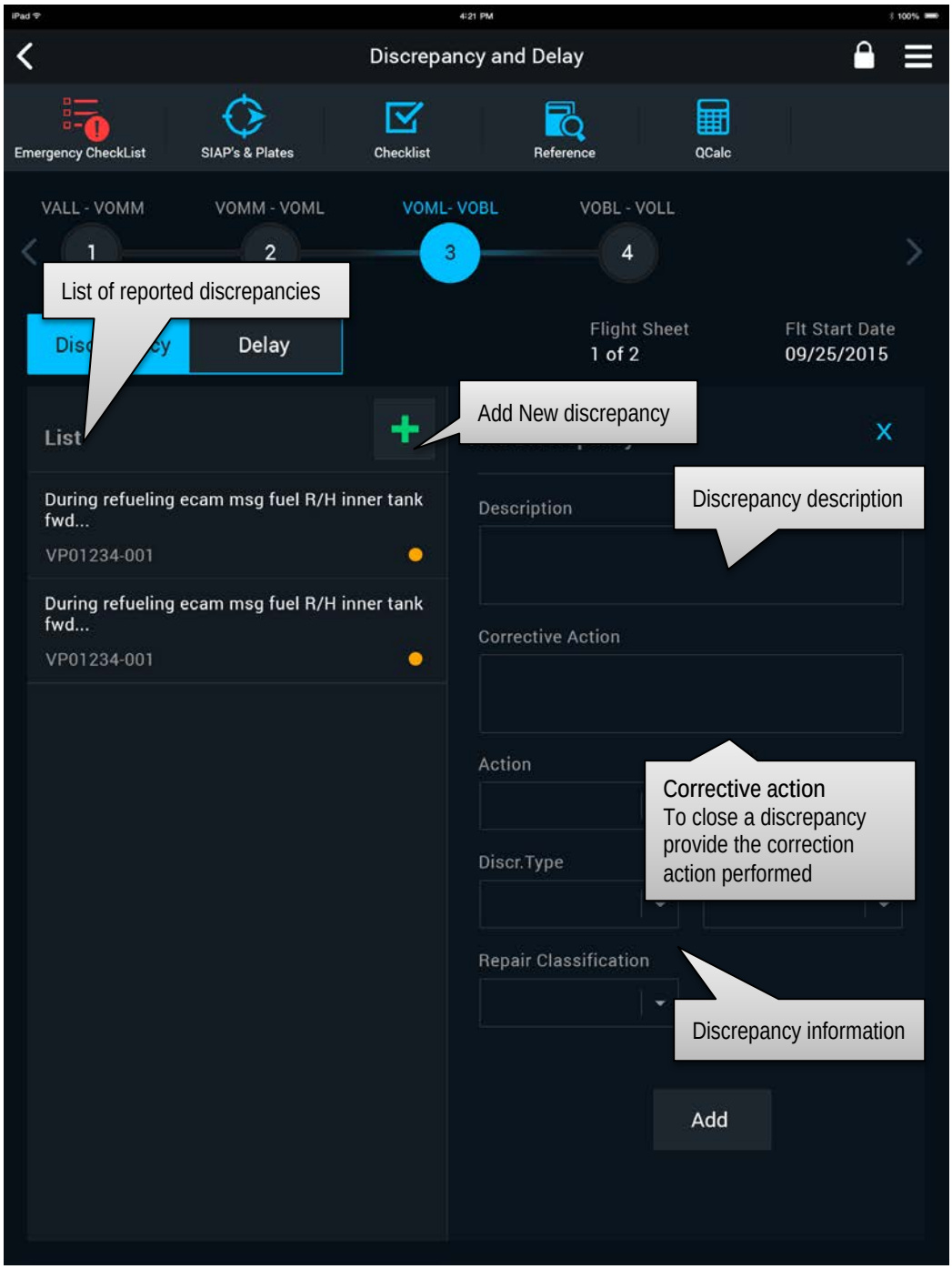
When having multiple flight sheets the modification of leg details helps the pilot/flight operations team to organize the details accurately. The list of leg details are available for the user to move it across to another flight sheet accordingly. Leg details could be moved between different flight sheets recorded on the same date.

Discrepancy and Delay reporting

Record Discrepancy

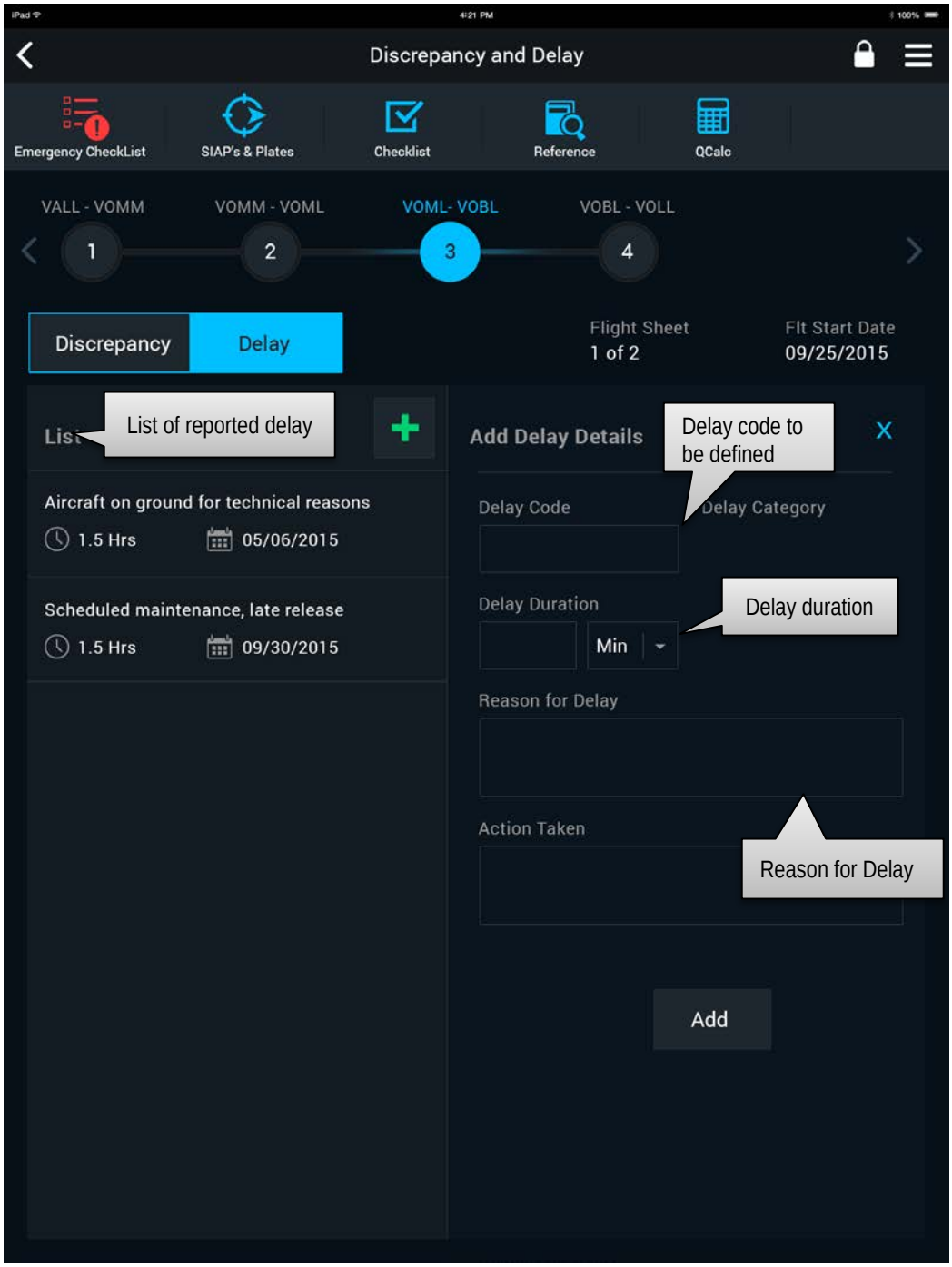
All the Pilot reported discrepancies (PIREP) can be recorded using the Discrepancy tab. Description of the discrepancy along with the required type could be mentioned to easily record a discrepancy. The Pilot could even close a discrepancy by providing the corrective action performed and sign-off using the license number.




Discrepancy and Delay
Emergency CheckList
SIAP's & Plates
Checklist
Reference
QCalc
VALL - VOMM
VOMM - VOML
VOML- VOBL
VOBL - VOLL
1
2
3
4
List of reported discrepancies
Delay
Flight Sheet
1 of 2
Flt Start Date
09/25/2015
List
Add New discrepancy
During refueling ecam msg fuel R/H inner tank fwd...
VP01234-001
During refueling ecam msg fuel R/H inner tank fwd...
VP01234-001
Description
Discrepancy description
Corrective Action
Action
Corrective action
To close a discrepancy provide the correction action performed
Discr.Type
Repair Classification
Discrepancy information
Add

Record Delay information

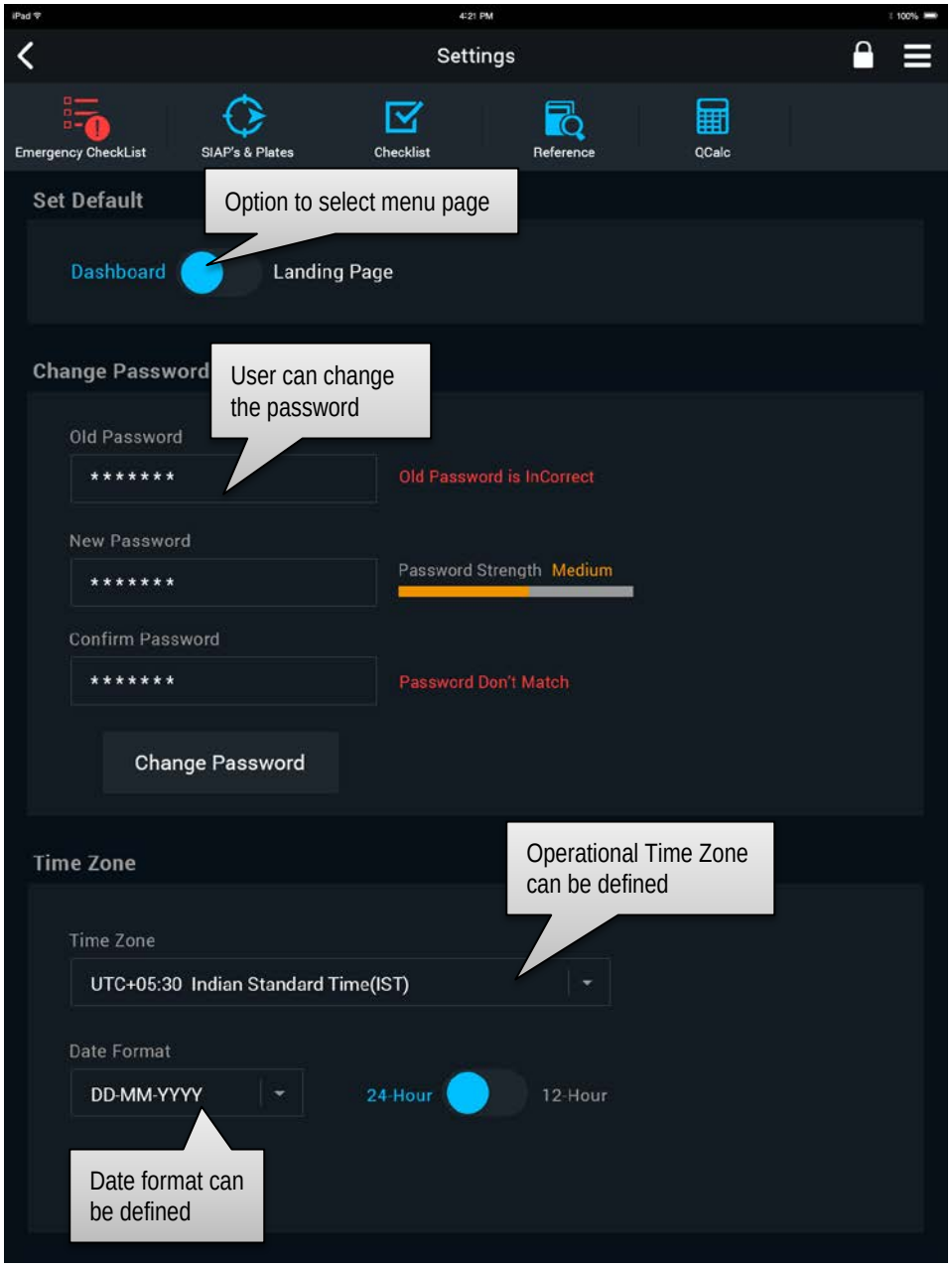
Even the operational delay information can be recorded using the delay tab. Using the pre-defined delay codes the user can easily mention the type of Delay and the duration of delay. The reason of delay is mandatory to be recorded if there was action taken against the delay that can also be recorded as a part of this screen.



Settings screen

Application and user settings

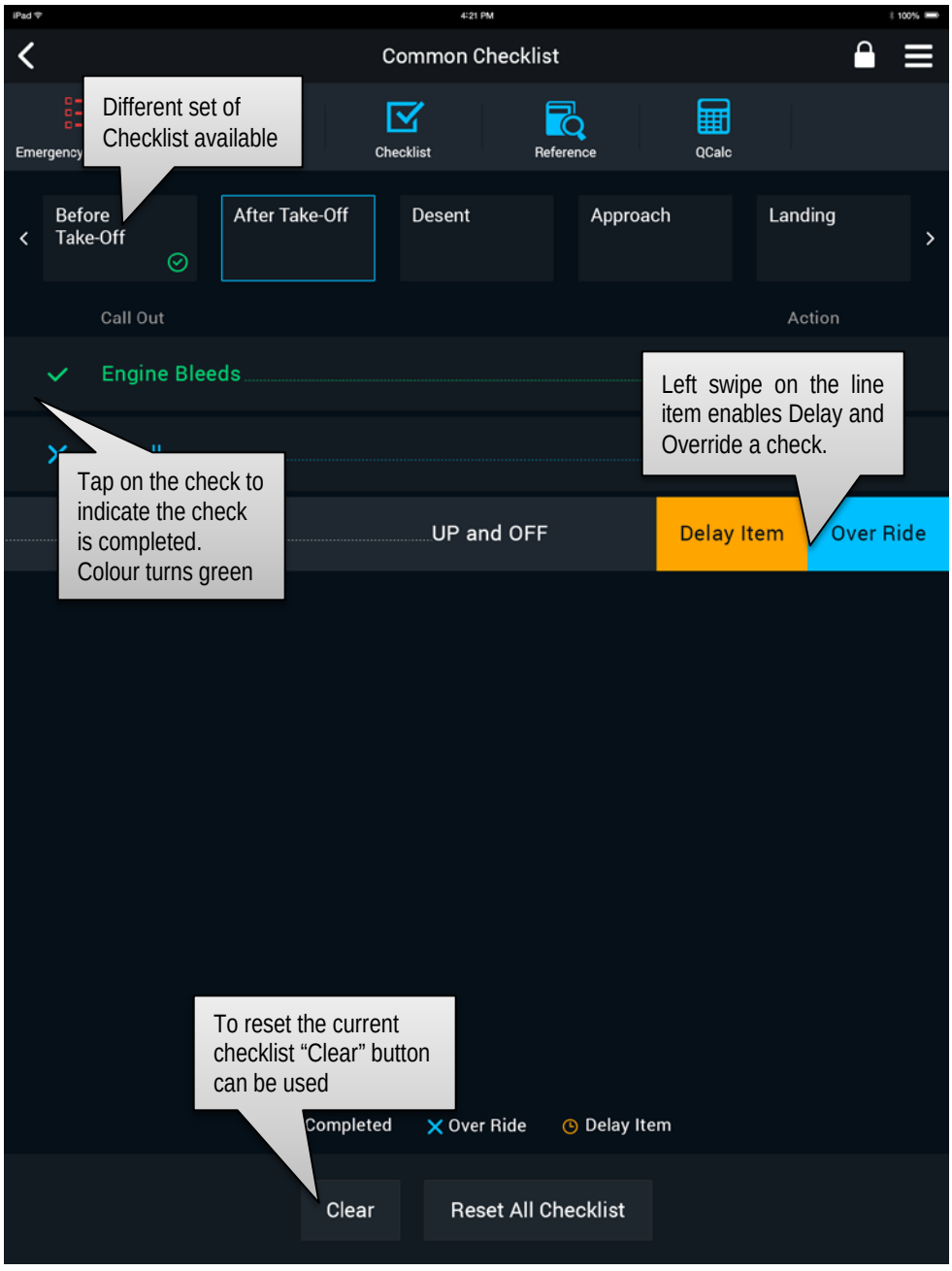
Product	FlyAnywhere
Screen name	Flight Sheet
Activity	Application and user settings
Role	Flight operations / Pilot



Checklist / Emergency Checklist

Checklist

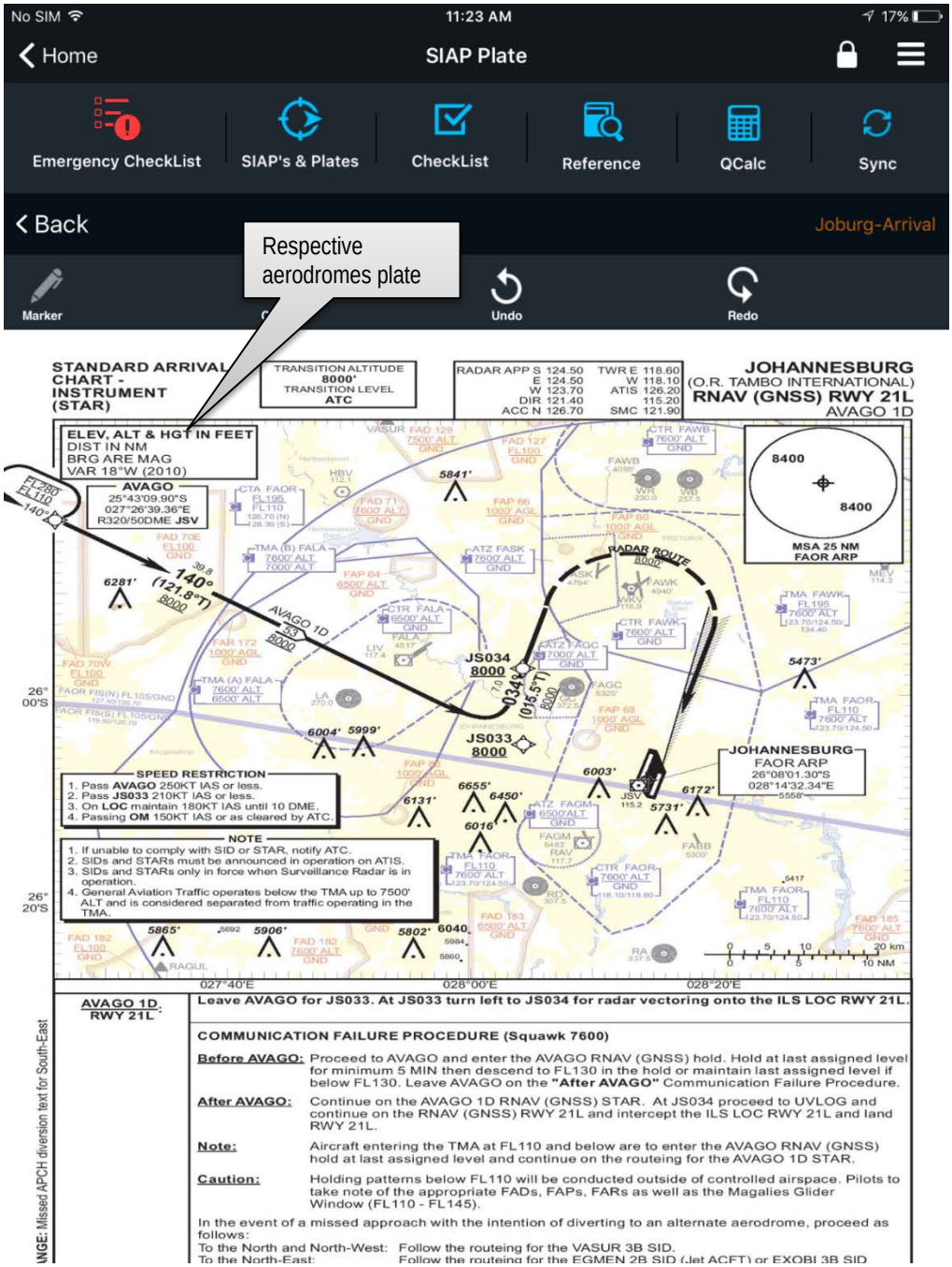
The physical checklist can be loaded to the application and the Pilot will be able to use the digital checklist for the daily routine flight operations. The Pilot can just tap the line items to indicate that the check is completed and the line items color changes to green. By swiping the line items to the left two other options can be accessed by the Pilot, to Delay or Override the check.



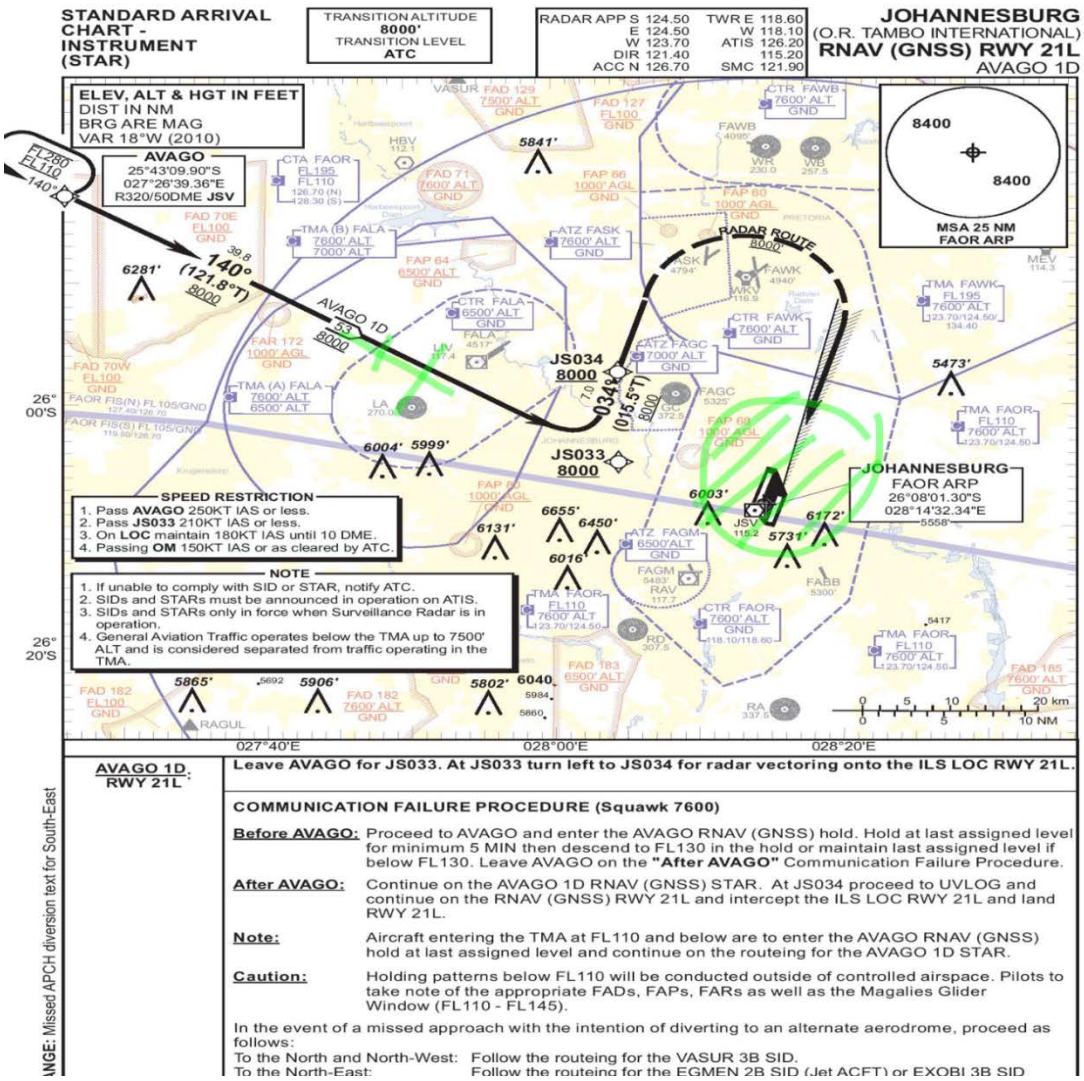
SIAP's & Plates

Approach and Departure plates

The SAIP's and Procedure plates can be loaded to the device and can be helpful to the pilot during the phases of flight. The digital plates can be zoomed in and out using simple finger gestures. A marker feature is available to write on the plate for reference.



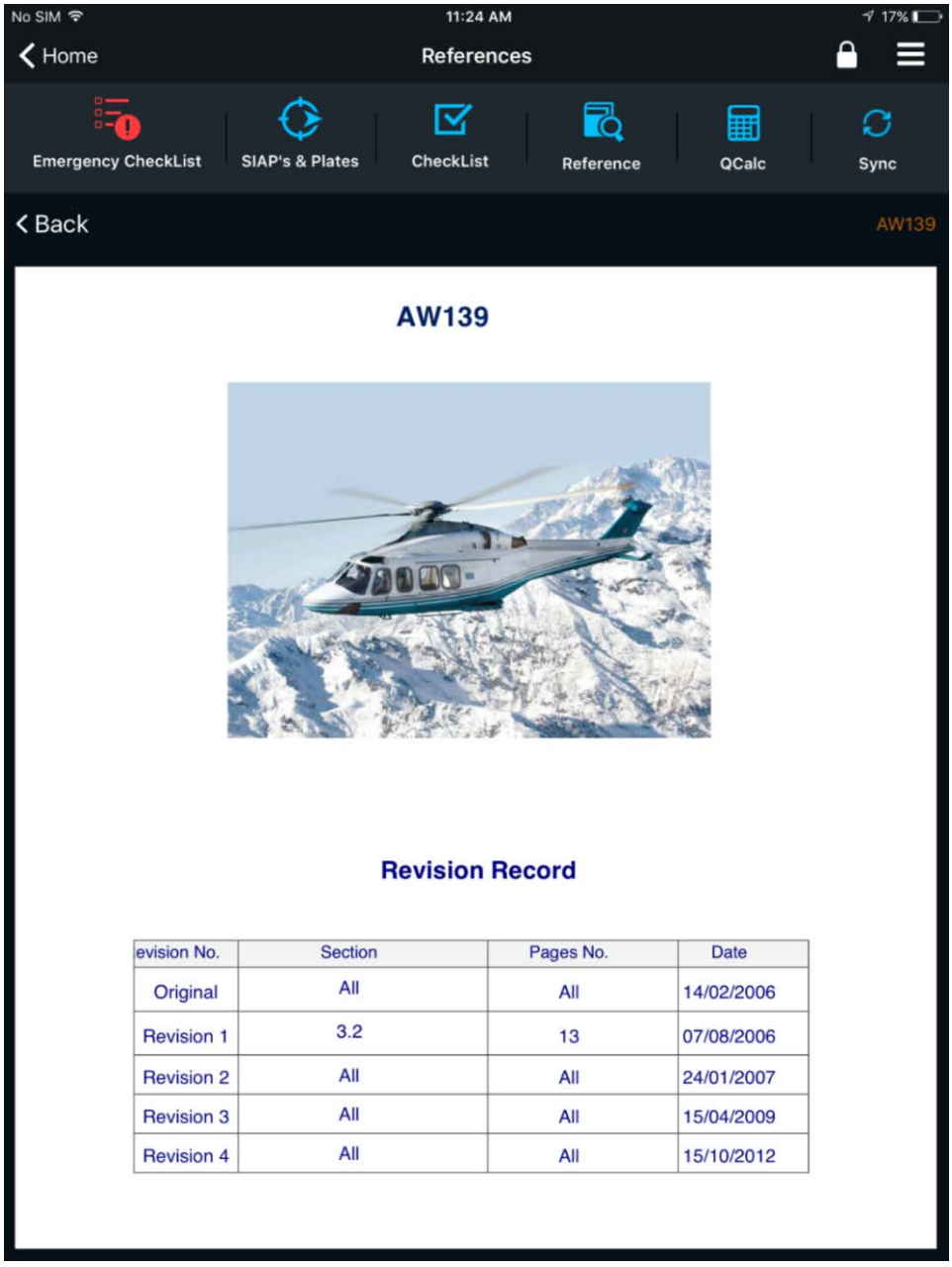
Marker feature can be enabled by taping on the Marker icon on the top. Clear icon allows the user to clear the marked content and Redo/Undo features are also available.



Reference

Reference documents

The Pilot will be able upload and store any documents that can be used to refer at any phase of the flight. Aircraft manual, Technical log, Maintenance manual, NOTAM's, MEL and CDL's etc. can be loaded as a part of the reference screen. Zoom in and out feature is also available with simple finger gestures.



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

WHAT'S NEW IN MECHANICANYWHERE?

Ability to provide an Electronic Log Card in MechanicAnywhere

Reference: AHBF-20011

Background

eLog allows you to quickly navigate a technical log in a screen without the need to jump between multiple list pages and screens. This not only enables the mechanic to quickly record his work and move on, but also provides an easy way to review and complete a Log Card.

Change Details

eLog is a new activity available as part of the MechanicAnywhere app. **eLog** can be launched from the hamburger menu.

eLog consists of the following pages:

1. eLog Search
2. eLog Main
3. Maint. / Pilot Defect Report
4. Cabin Defects
5. Maint. Events & Task
6. Preview & Acceptance

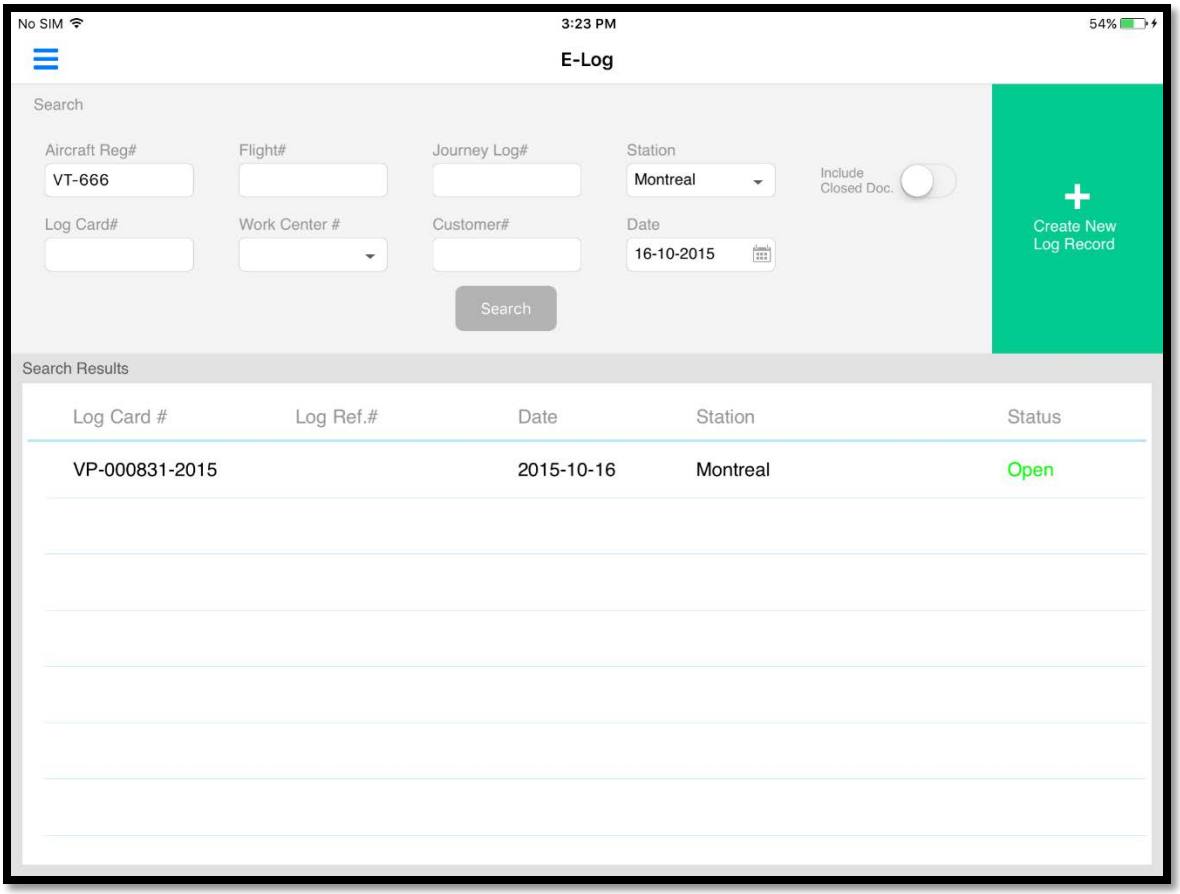
eLog Search

The first page to launch is the eLog Search page where you can search for a specific Log Card using the provided Search Criteria.

Note: If there are no search results available for the provided search criteria, the app will ask the user whether he wants to create a new log card and will automatically default the values used in the search criteria to create a new log card.

To create a new log card, tap on the "Create New Log Record" button in the top right of the search page. This will open the **eLog Main** page.

Exhibit – 1: eLog Search



eLog Main

eLog Main shows the details of the Log Card. This page can launch as a create page (when creating a new Log Card) or as a view page (when launched for an existing Log Card). The top section has the basic log card details while the bottom section has the flight details associated with the log card. You can change any information in this page and tap the Save button in the action bar.

You can also change the Log Card status using the Status button in the top right corner of the page. And if there's a flight planned for the current Aircraft in the next 2 hours or less, a minute countdown 'Time to Departure' will appear in the right section which counts from 120 min to 0 min.

Exhibit – 2: Create Log Card

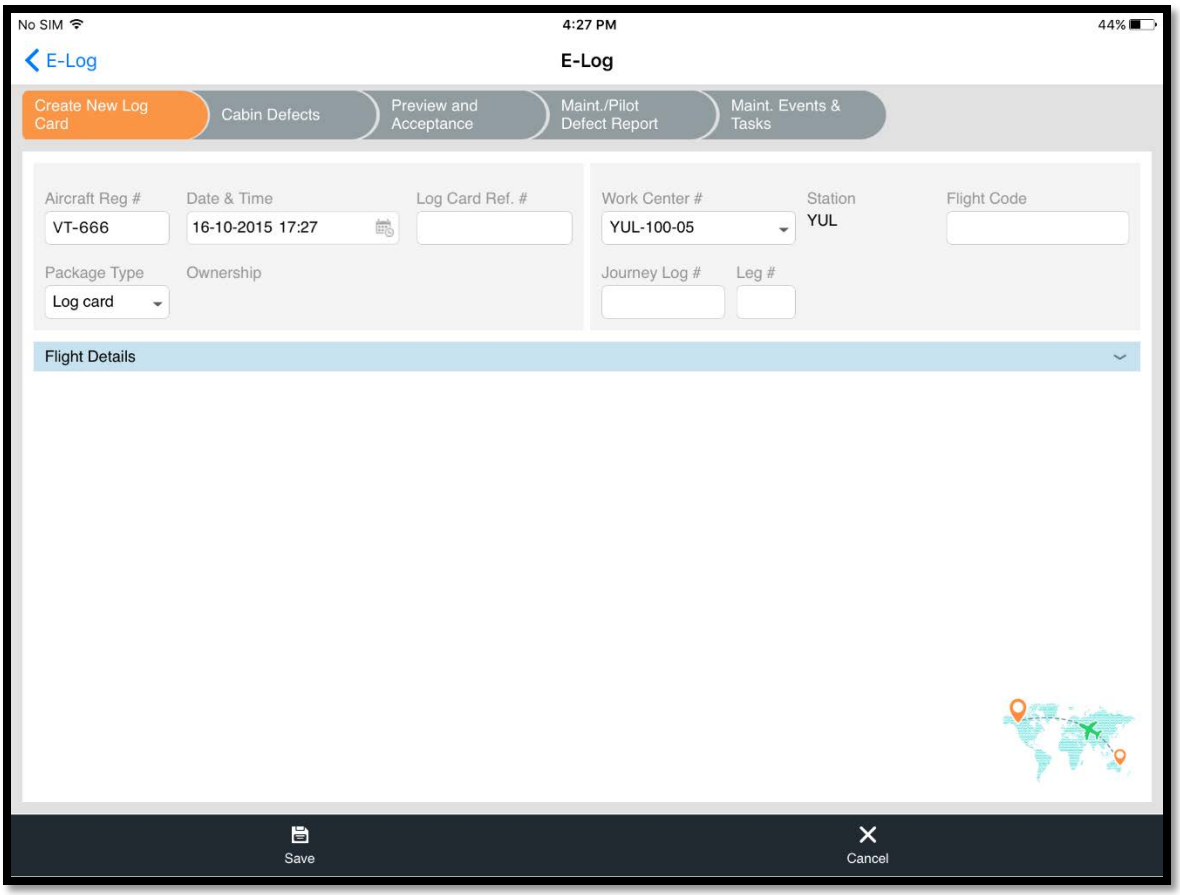
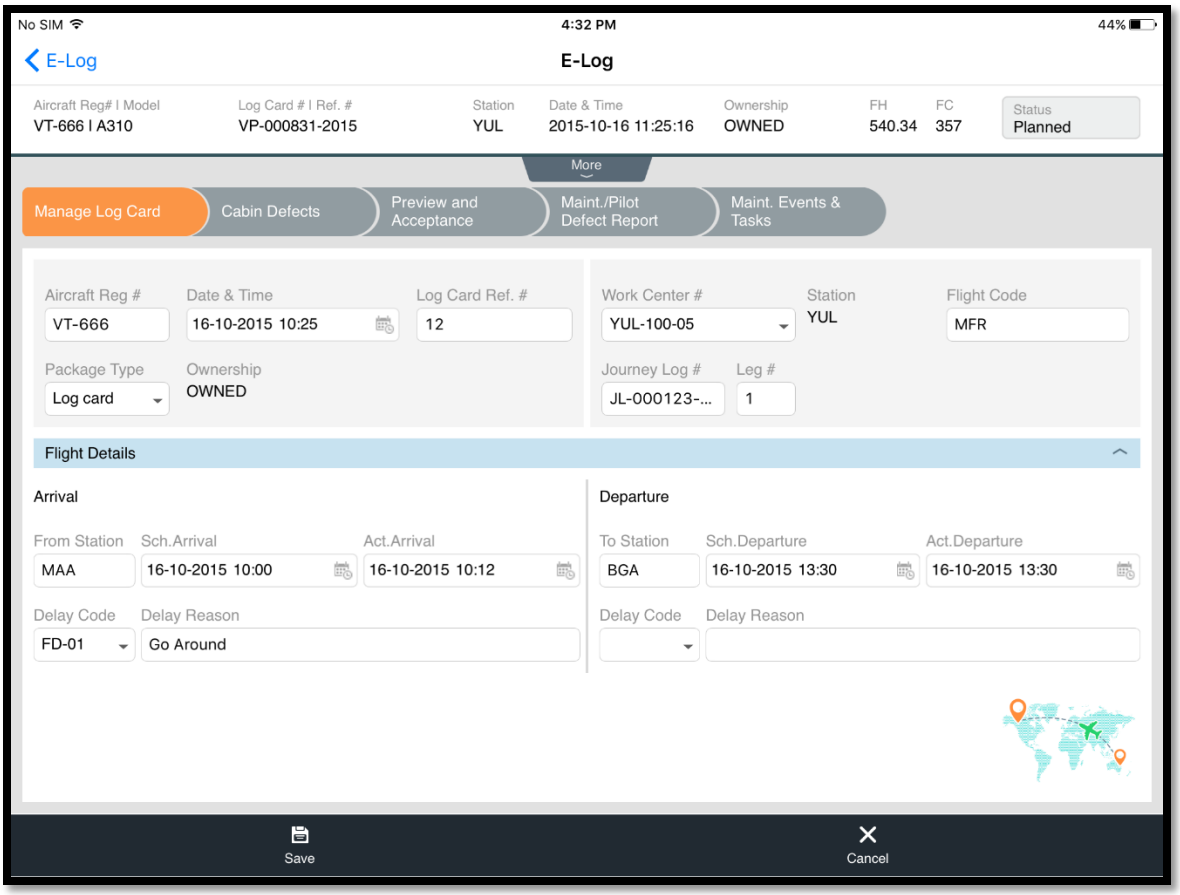


Exhibit – 3: Manage Log Card



Maint. / Pilot Defect Report

In this section, you can do the following actions:

a. Record a new Discrepancy with the Record Discrepancy Write-up button.

b. Add a previously deferred Discrepancy with the Total Deferred Discrepancy button.

c. See a list of reported Discrepancies in the current Log card in the left side with basic information of the same.

d. Tapping on a Discrepancy record in the list will show more details in the right side for that Discrepancy.

e. Edit the current Discrepancy by tapping on the edit icon next to the Discrepancy # in the right side.

f. Start / Stop clock against the Discrepancy.

g. Add New Corrective action with the Add button available next to the Corrective Action display.

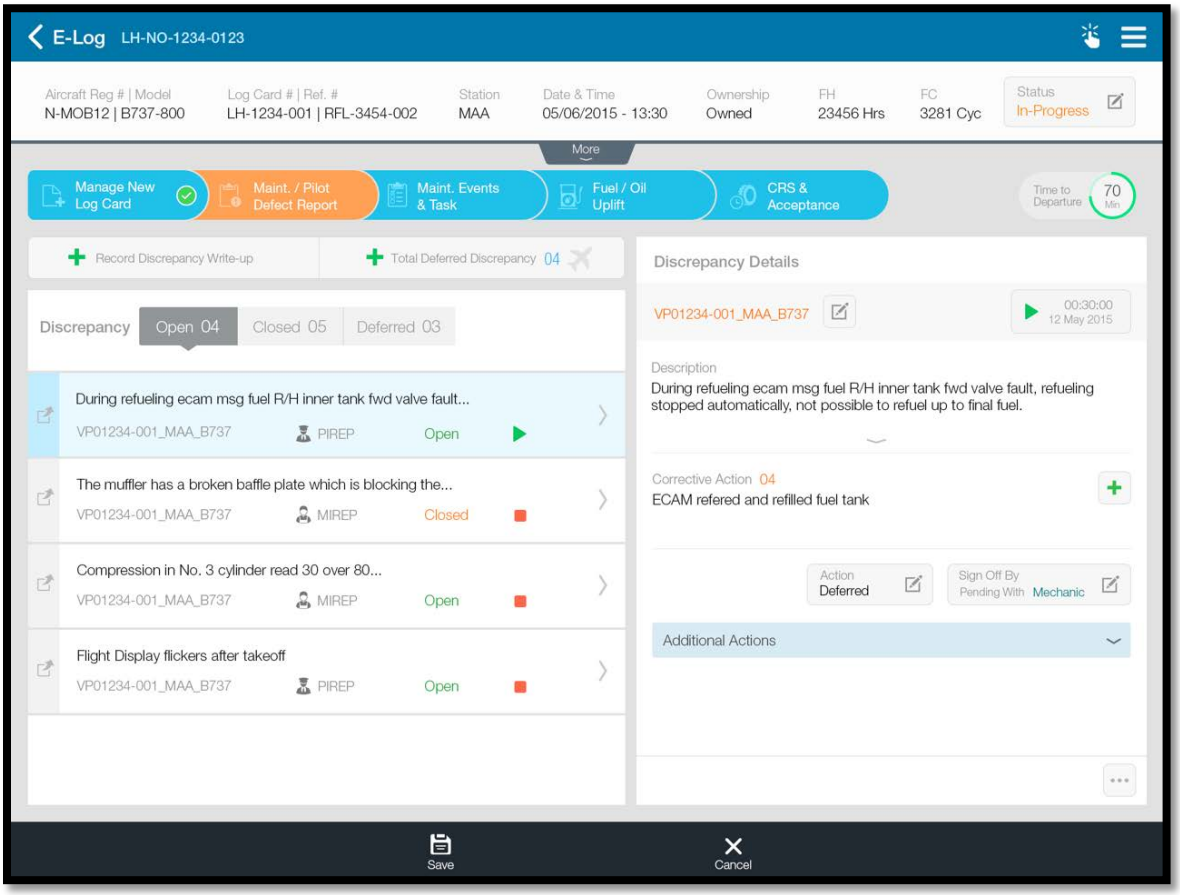
h. Change the status of the Discrepancy.

i. Sign-Off the Discrepancy.

j. View Material Requests count, Component Replacement count, Part Consumption count and Resources count for the current Discrepancy.

k. Add Photos against the current Discrepancy.

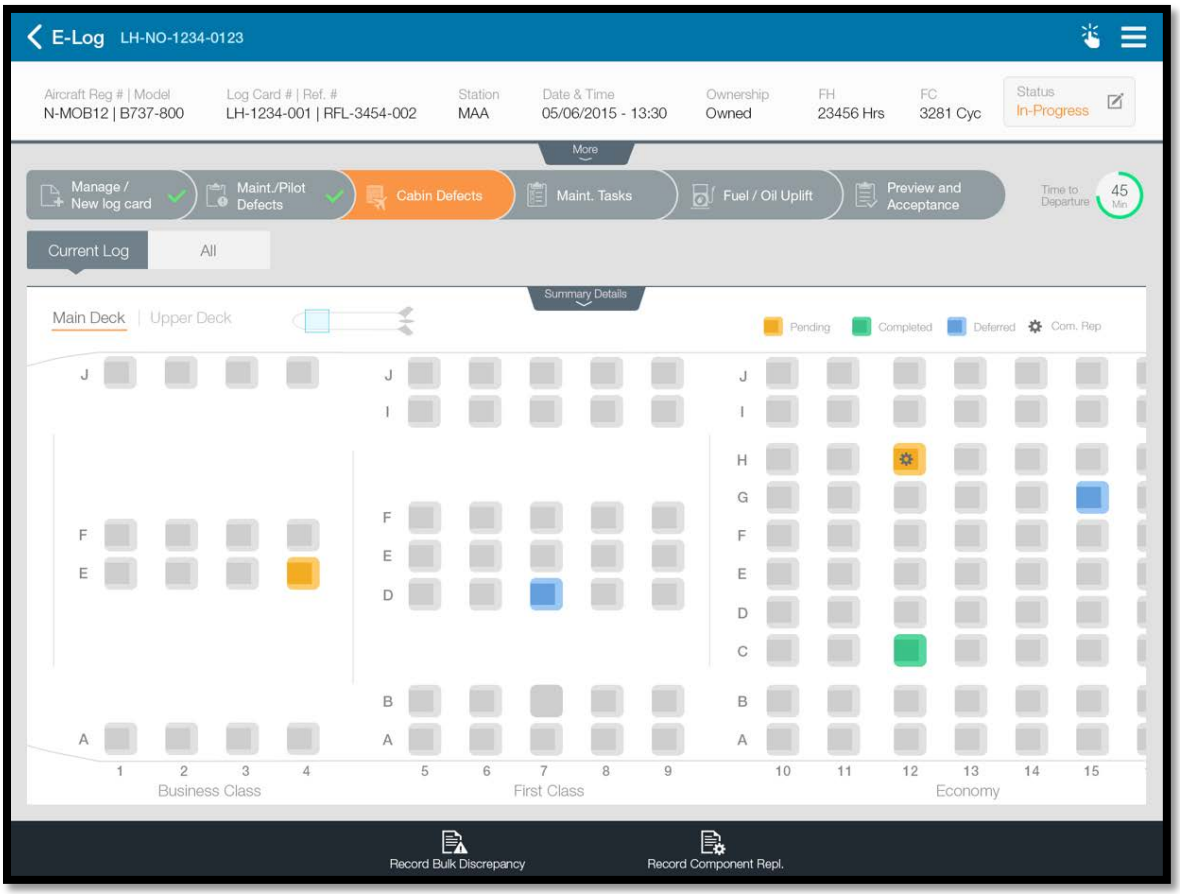
Exhibit – 4: Maint. / Pilot Defect Report



Cabin Defects

View the Cabin Layout of the aircraft (Layout Of Passenger Accommodation (LOPA)) and quickly report a Discrepancy or perform a Component Replacement on a specific Seat and track it to closure.

Exhibit – 5: Cabin Defects

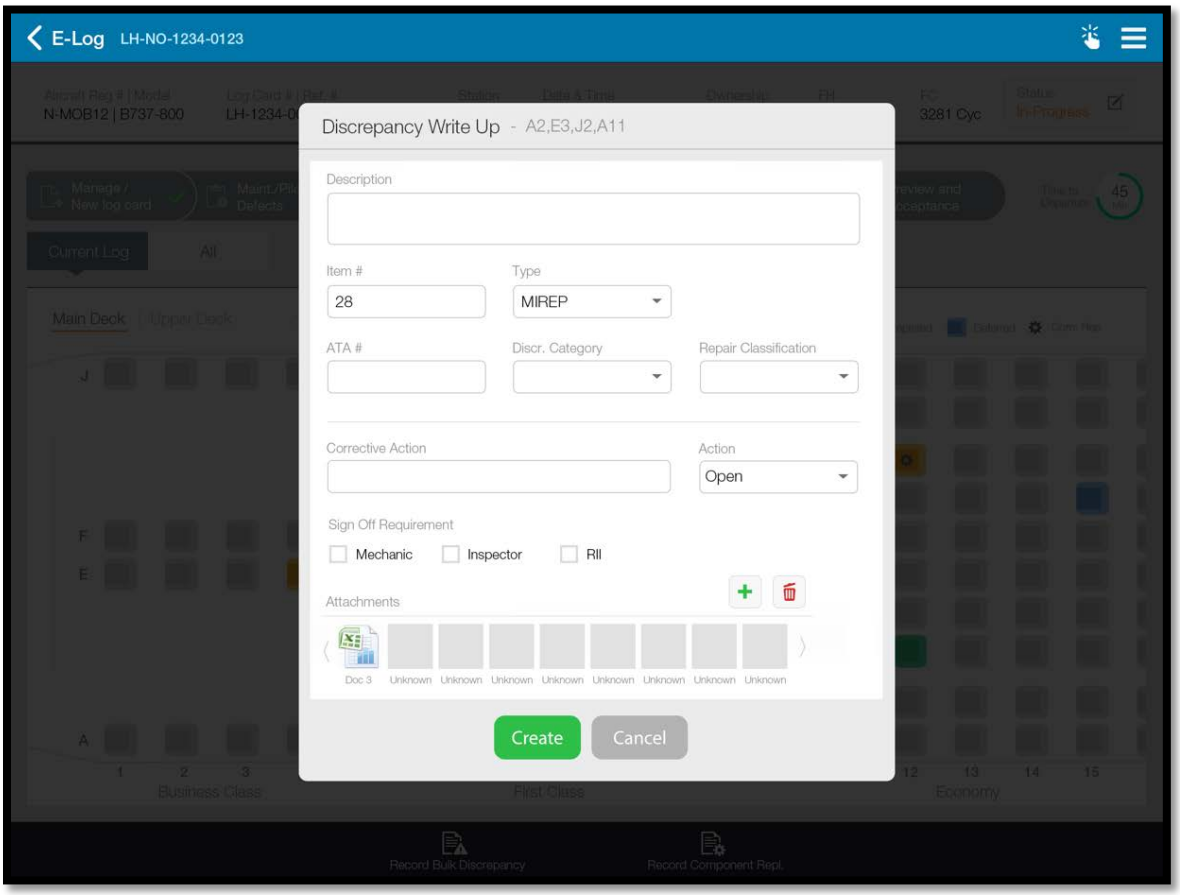


The top section allows you to select the deck to work on (Main Deck or Upper Deck). A preview panel is available beside that allows you to quickly change the current section of the aircraft that is being shown on the screen. To view Summary Details of all cabin defects in the current Log Card, swipe down or tap on the Summary Details tab. Here you can see count of Pending items against total items with respect to different Section Type.

Pending Discrepancies on a seat is highlighted by an Orange color. Clicking on the same will show a list of Discrepancies reported on that seat. Once all the Discrepancies are closed, the seat will show up in Green color. If there are deferred Discrepancies yet to be closed, the seat will show up in Blue color.

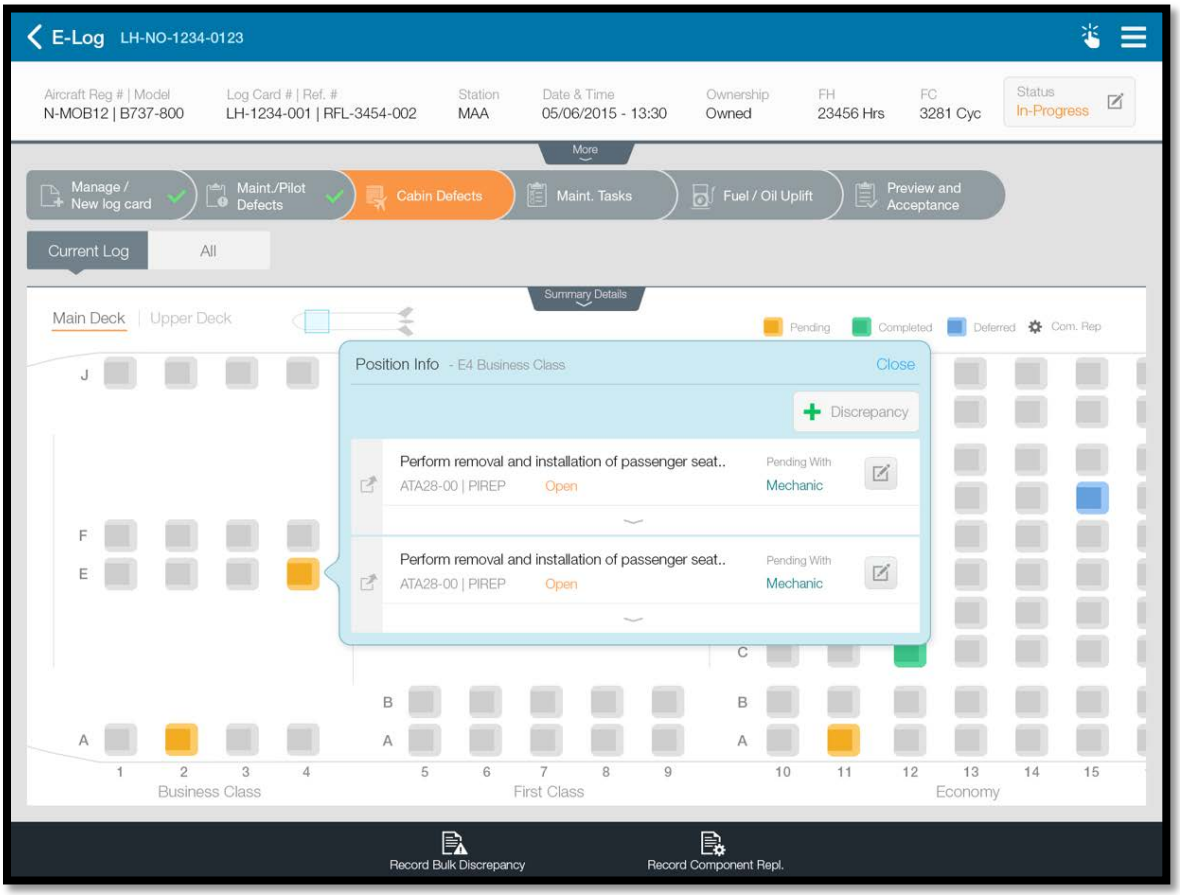
Clicking the Add New Discrepancy button in the Discrepancy List for an existing seat or clicking on an empty seat which has no Discrepancies reported, will automatically open the Discrepancy Write Up popup. Here you can create a Discrepancy for the current seat.

Exhibit – 6: Create Discrepancy



To record bulk discrepancies across multiple seats, click on the 'Record Bulk Discrepancy' in the bottom action bar and then select a few seats from the layout. Once you are done, click on the Confirm action bar button to open the Discrepancy Write Up popup. On click of Create, **eLog** will create individual Discrepancies for all the selected seats with the same Discrepancy Description that is provided appending the Seat Number along with the description.

Exhibit – 7: Discrepancy Info on a Seat



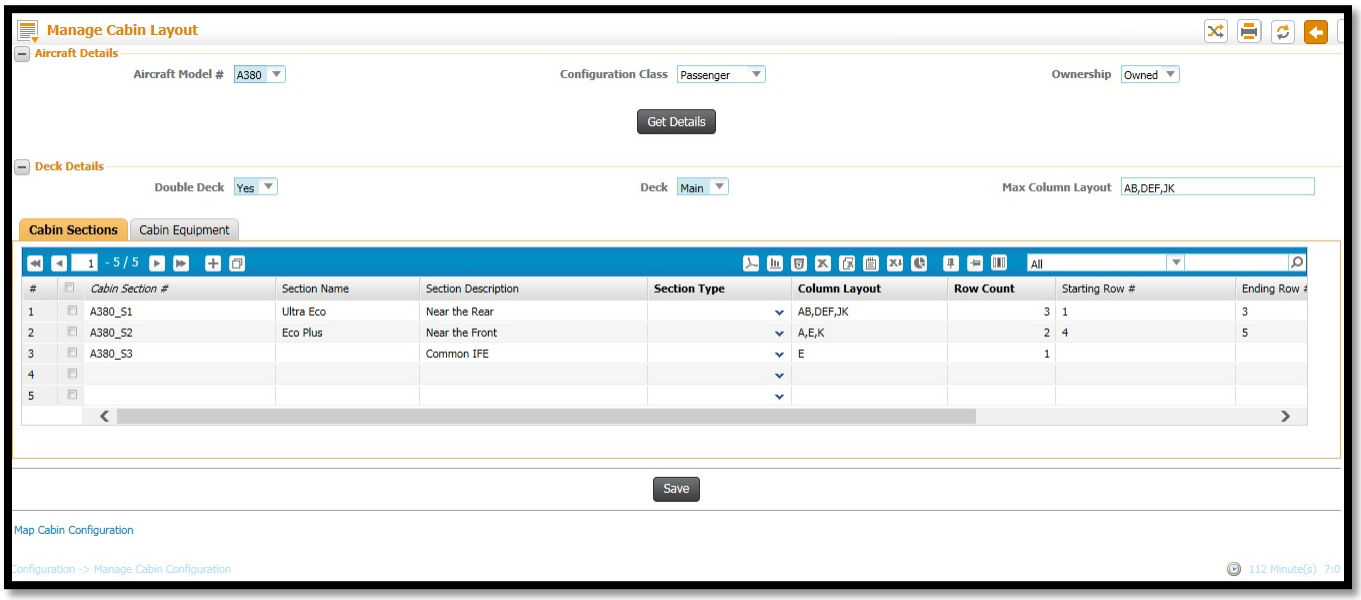
To record Component Replacement, click on the 'Record Component Repl.' in the bottom action bar and select a seat and click on Confirm. This will open up the Create Component Replacement page with all the details regarding the position and part defaulted. You can proceed to Confirming the Component Replacement transaction in that screen.

The cabin layout for different aircrafts can be configured in the Ramco M&E Application. Under **Configuration Management → Configuration → Manage Cabin Configuration**.

In the **Manage Cabin Layout** page, choose the **Aircraft Model #**, **Configuration Class**, **Customer** and click *Get Details*. Then select whether the configuration is a double deck or not, if yes, select the current deck for configuration. Provide the **Maximum Column Layout** in capital letters with commas indicating space between the seats for the aisles. *Example: AB,DEF,JK denotes a 2-3-2 seating arrangement.*

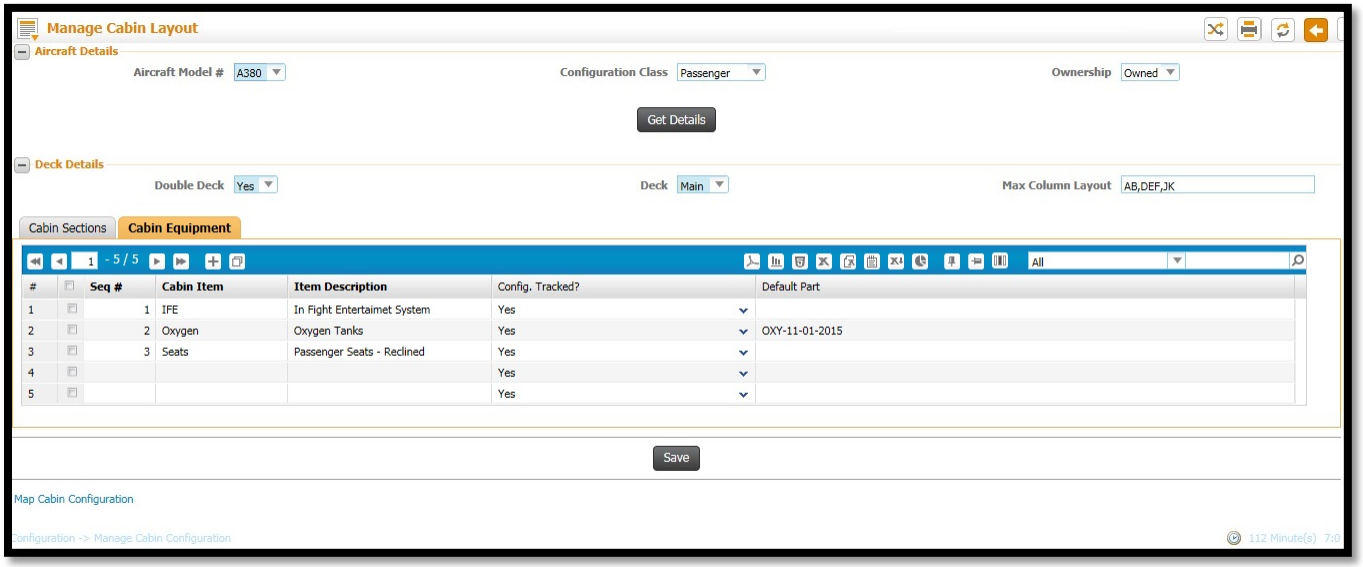
In the **Cabin Sections** tab, provide a **Section Name** and **Section Description** and choose **Section Type** (configured in the Configuration Quick Codes page). Type in the column layout with a capital letter and commas indicating the space between the seats for aisles. Enter the number of rows to define for the current section with **Starting Row #** and **Ending Row #**. If there are multiple sections, **Seq #** allows you to say which section should come first. Set **Numbered?** as 'Yes' for seats and 'No' for non-numbered items such as a Common In Flight Entertainment system that can have its own section but no numbering. **Has Exit?** allows you to set whether there are any exits in the front or the rear of the current section.

Exhibit – 8: Cabin Sections



In the **Cabin Equipment** tab, provide all possible equipment to be shown in the Cabin Defects page (example: IFE, Oxygen Tanks, and Seats). Set **Config. Tracked?**as 'Yes' if you want to track Component Replacements for those equipment. If this option is set as 'No', provide Default Part # in the next column.

Exhibit – 9: Cabin Equipment

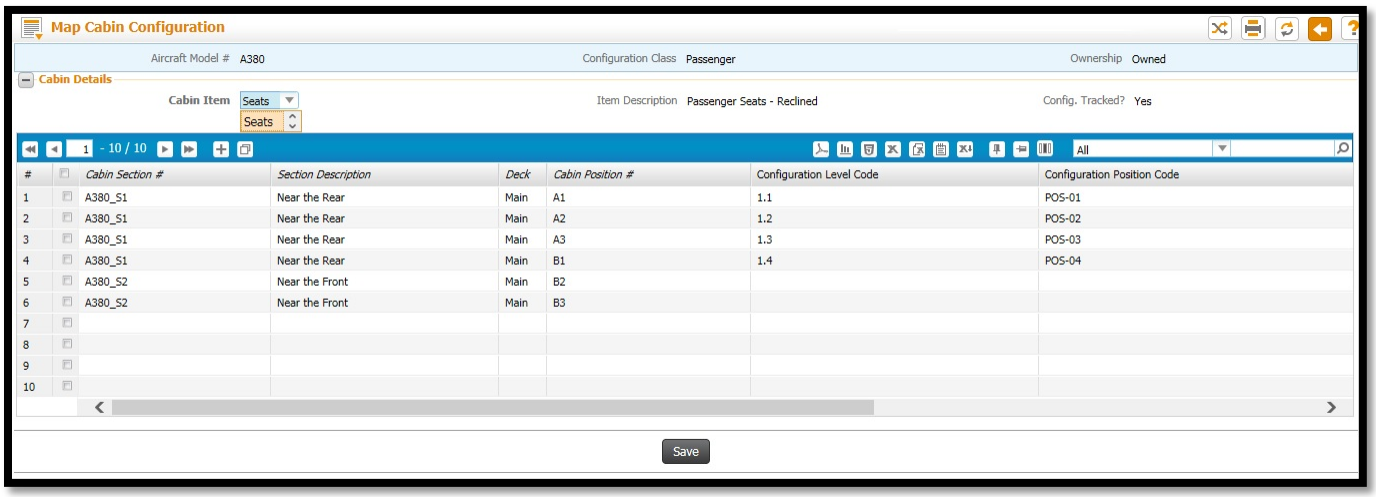


Once these are configured, launch the **Map Cabin Configuration** page via the link provided in the bottom of the page.

In the **Map Cabin Configuration** page, select a **Cabin Item** and provide either the **Configuration Level Code** or **Configuration Position Code** for each and every seat, if the selected Cabin Item is Config. Tracked (as set in the previous page). If there exists no configuration position for the seat, you can set **New Position?** as 'Yes' and provide a new Configuration Level Code and an existing Configuration Part # and system will automatically generate a new Configuration Position Code.

If Cabin Item is not "Config. Tracked", select if the item is applicable for each and every seat. System will automatically fetches the Default Part # from the previous page to load the **Standard Part #** but it can be changed for each seat, if required.

Exhibit – 10: Map Cabin Configuration



Maint. Events & Task

In this section, you can do the following actions:

l. Add Tasks to the Log Card with the Add Task button.

m. Create New Non Standard Task or add Existing Task from the Task Library.

n. See a list of planned Tasks and Non Standard Tasks in the current Log card in the left side with basic information of the same.

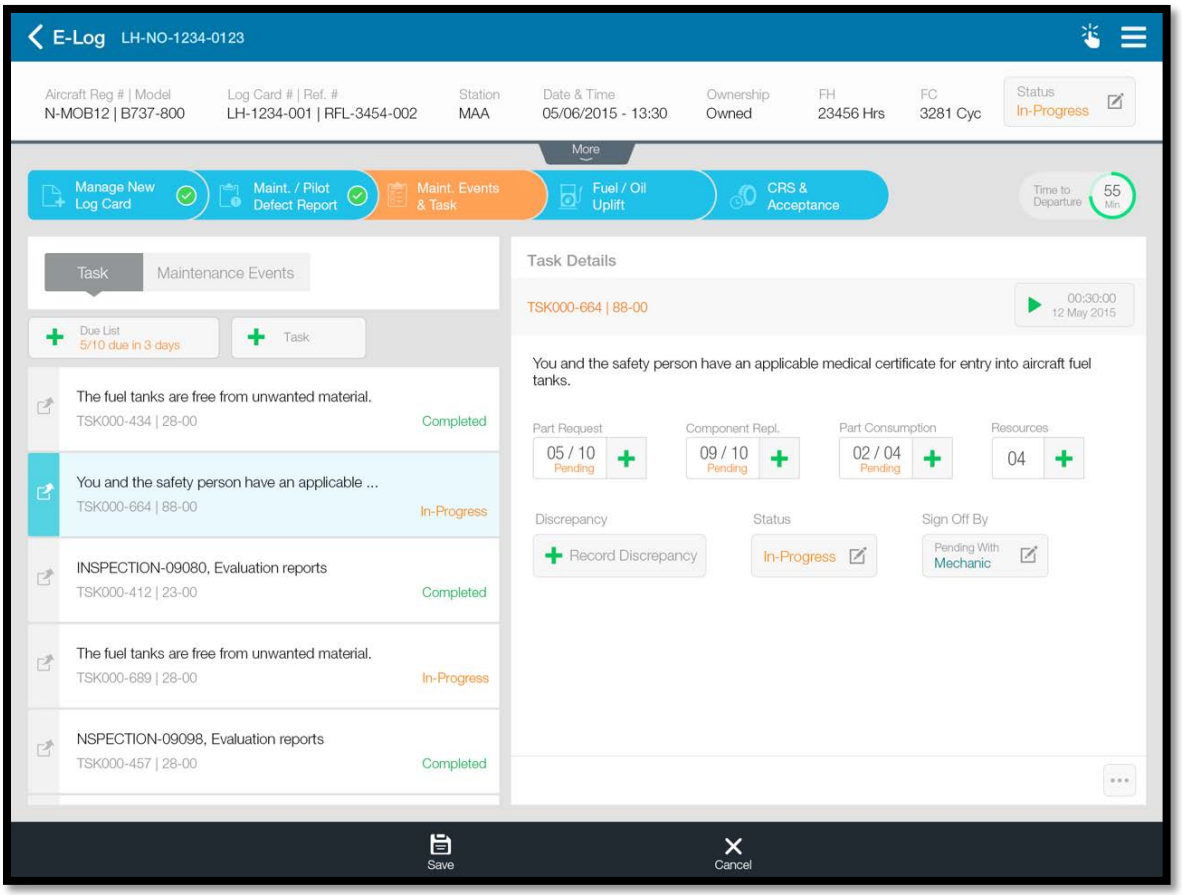
o. Tapping on a Task record in the list will show more details in the right side for that Task.

p. Start / Stop clock, Change Status, Sign-Off against the Task.

q. View Material Requests count, Component Replacement count, Part Consumption count and Resources count for the current Task.

r. Record New Discrepancy against the Task.

Exhibit – 11: Tasks

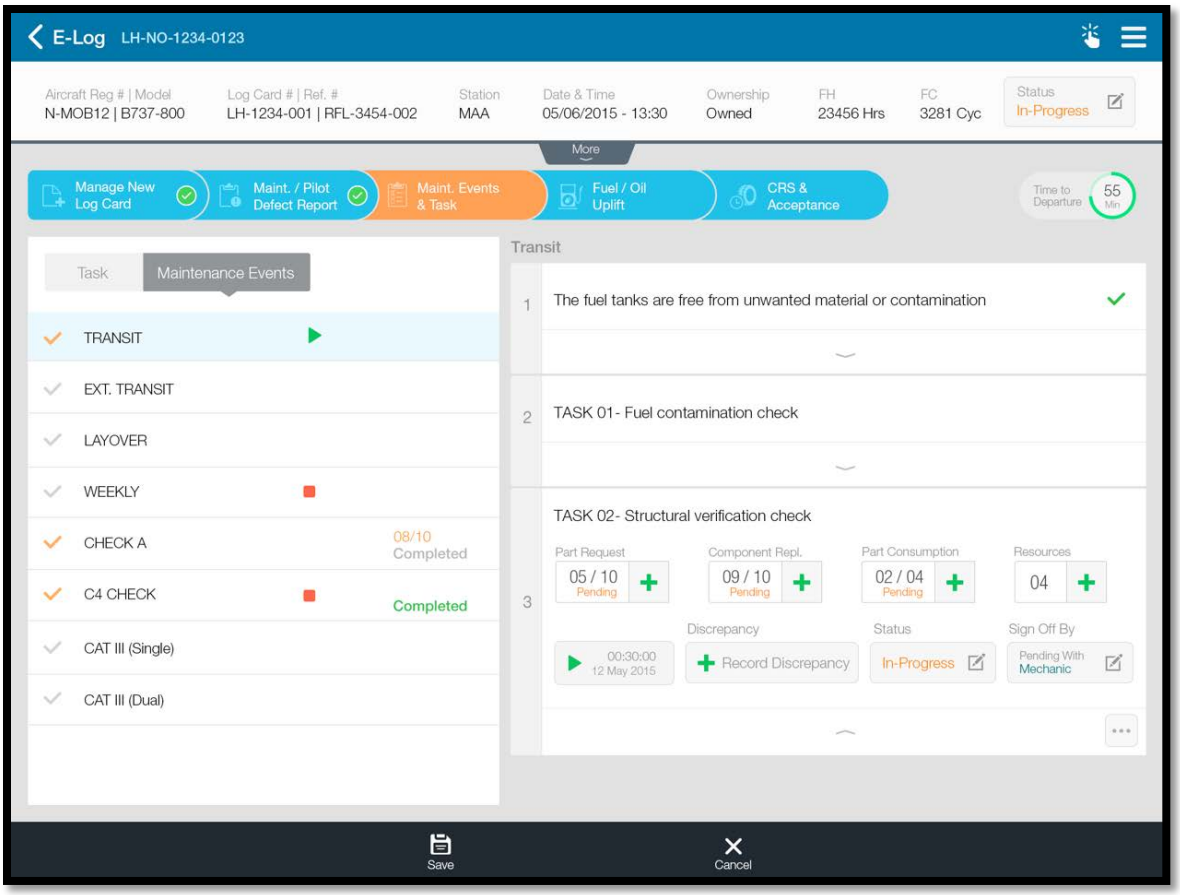


a. View Maintenance Events associated to the current Aircraft Model #.

b. Associate a Maintenance Event to the current Log Card.

c. Track and complete all the tasks in a Maintenance Event.

Exhibit – 12: Maintenance Event



Preview & Acceptance

This section provides an overall view of the Log Card with pending work information along with the ability to Sign-Off CRS and CRA.

The left section shows Pending work against the Total work count for the following:

s. Scheduled Task.

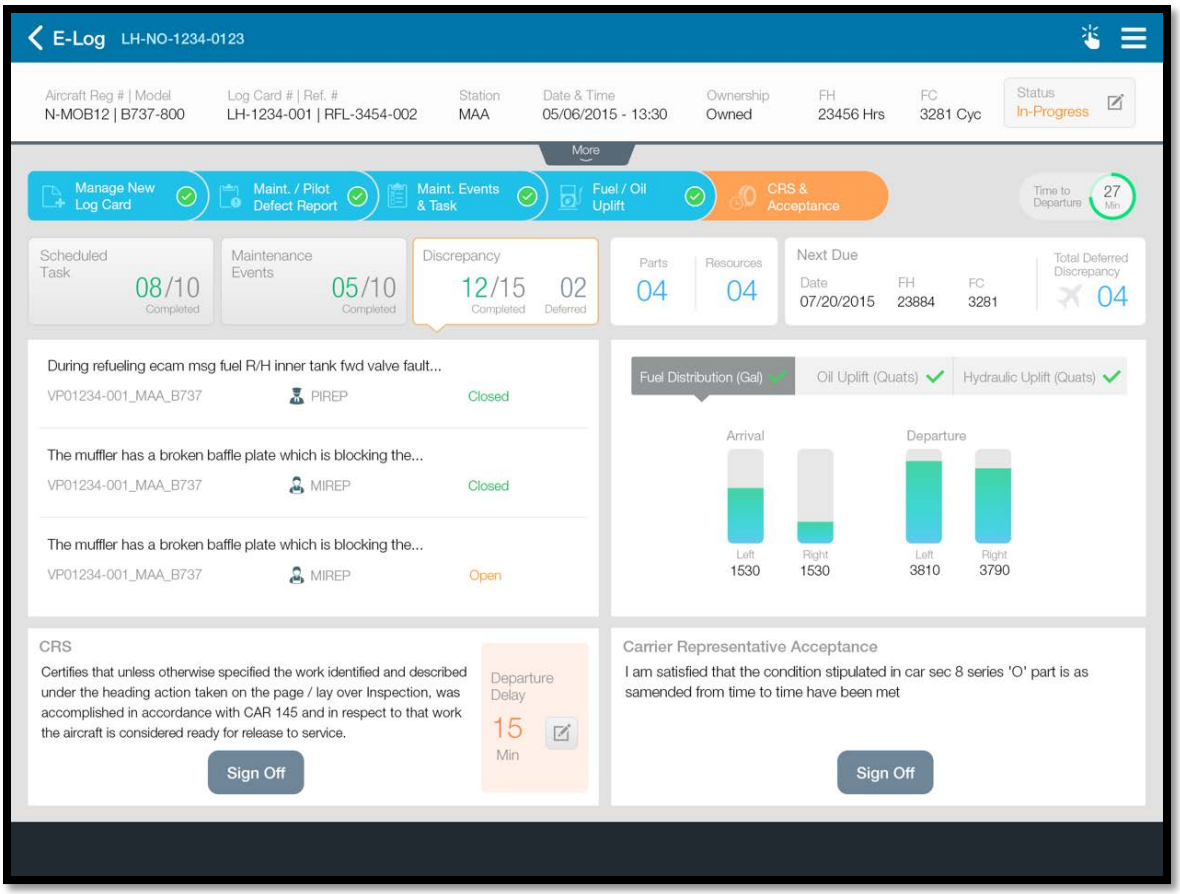
t. Maintenance Events.

u. Discrepancy.

Clicking on either of these options will load the list section below the options and show the list of pending items against the completed items. Clicking on the pending items will directly jump to the respective section for that Task/Maintenance Event/Discrepancy.

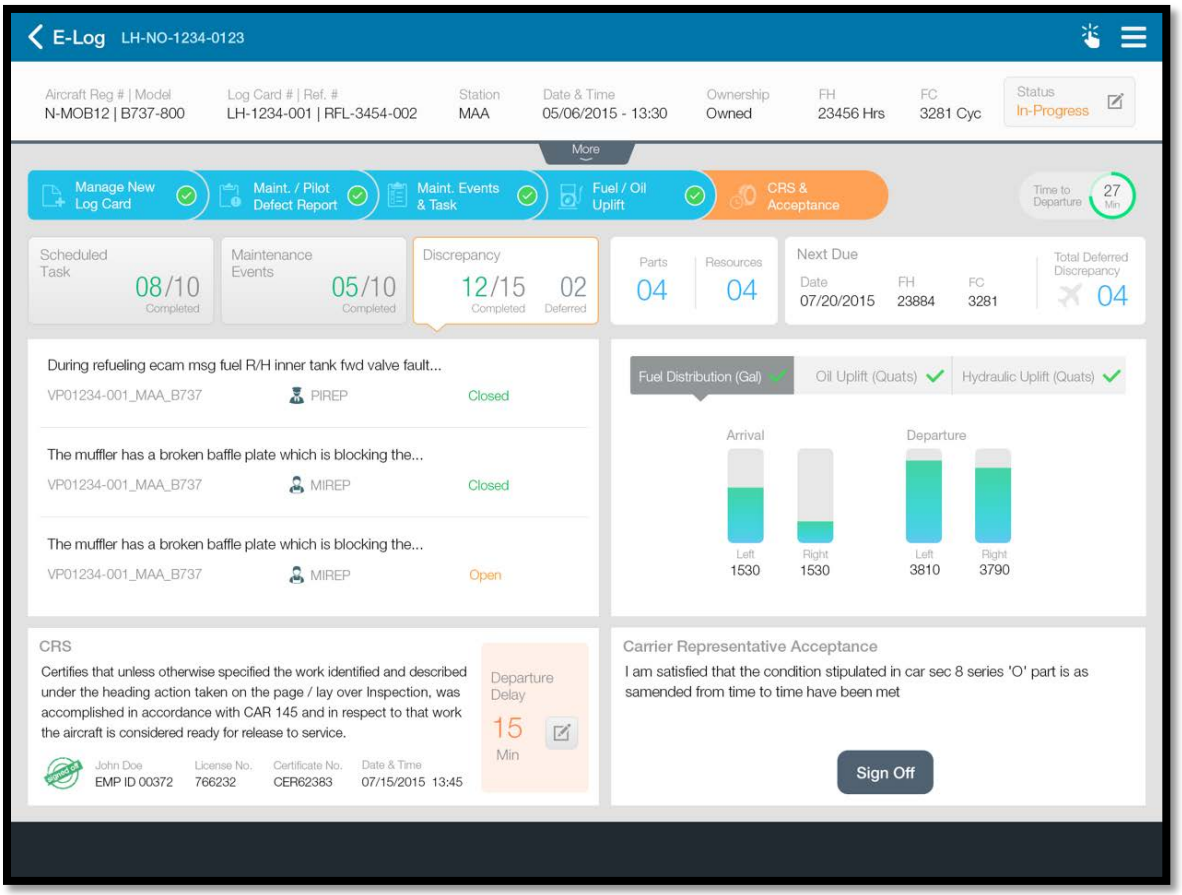
The right section shows Total Parts requested and Total Resource Reporting donefor the current Log Card. Also available is the view of the Next Due item with its Due Date, Due FH and Due FC along with the Total Deferred Discrepancy count.

Exhibit – 13: Preview & Acceptance



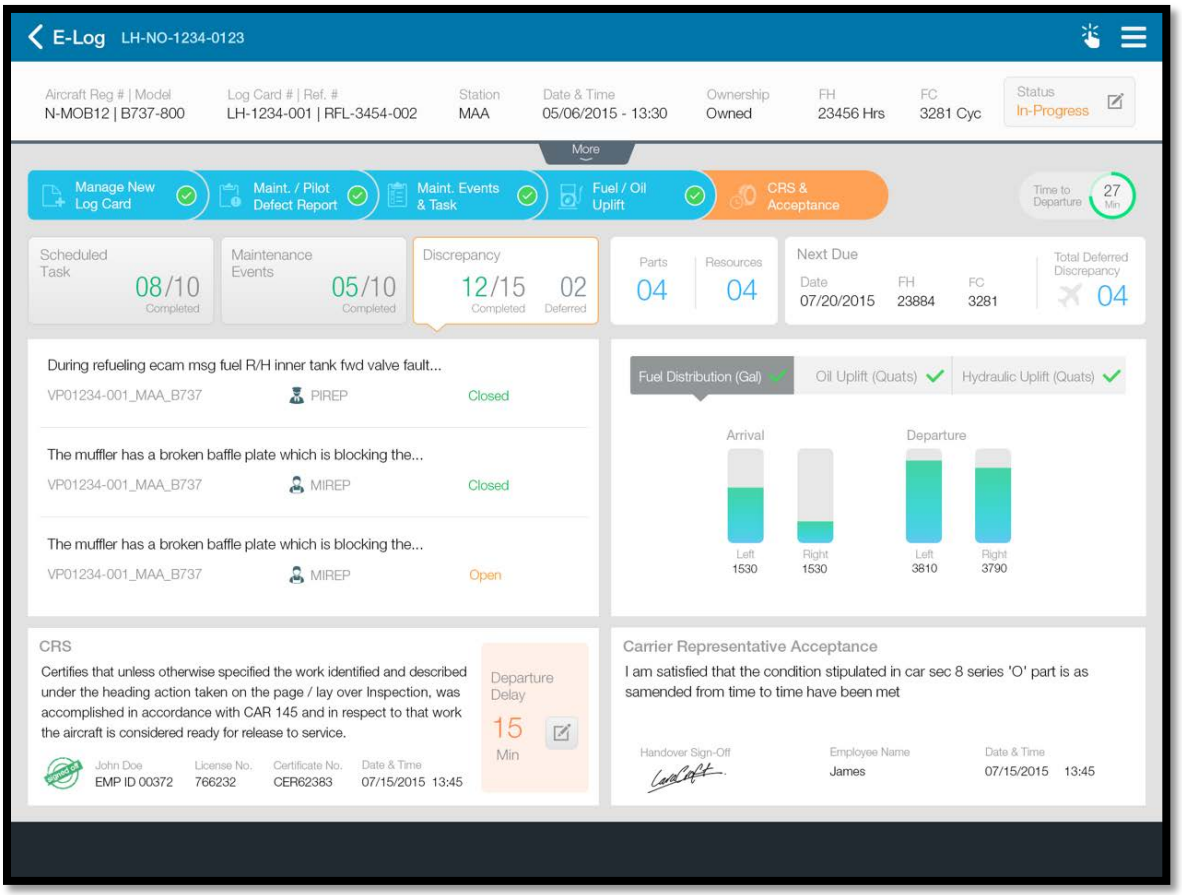
CRS is Certificate of Release to Service. When you Sign-Off CRS on eLog, it will automatically issue CoM certificate (Certificate of Maintenance) in the system. This is optional controlled by a Set Option in the Define Process Entities.

Exhibit – 14: CRS Sign-Off



CRA is Carrier Representative Acceptance. The Pilot or the person who is receiving the aircraft after the CRS is signed-off can do the acceptance sign-off. Signature of the person accepting the aircraft is captured on the touchscreen during sign-off. This is optional controlled by a Set Option in the **Define Process Entities** activity.

Exhibit – 15: CRA Sign-Off



Ability to Record Part Consumption and Returns in the Mechanic Anywhere App.

Reference: AHBF-20508

Background

Mechanic Anywhere is Ramco's answer to making aviation maintenance truly mobile. With a fresh, clean interface that is easy to navigate, performing maintenance activities has never been easier. Whether it is to see a Task Card quickly to perform repair or raise a Material Request or just track pending work items, **Mechanic Anywhere** will get the job done in just a few taps.

While completion of any execution document, user has to update the Consumed Parts that were used while execution and also return the excess parts that are left out after execution. The new screen 'Record Part Consumption and Return' in Mechanic Anywhere app facilitates user to review the parts that are consumed and also helps him to return the pending parts that were requested before.

Change Details

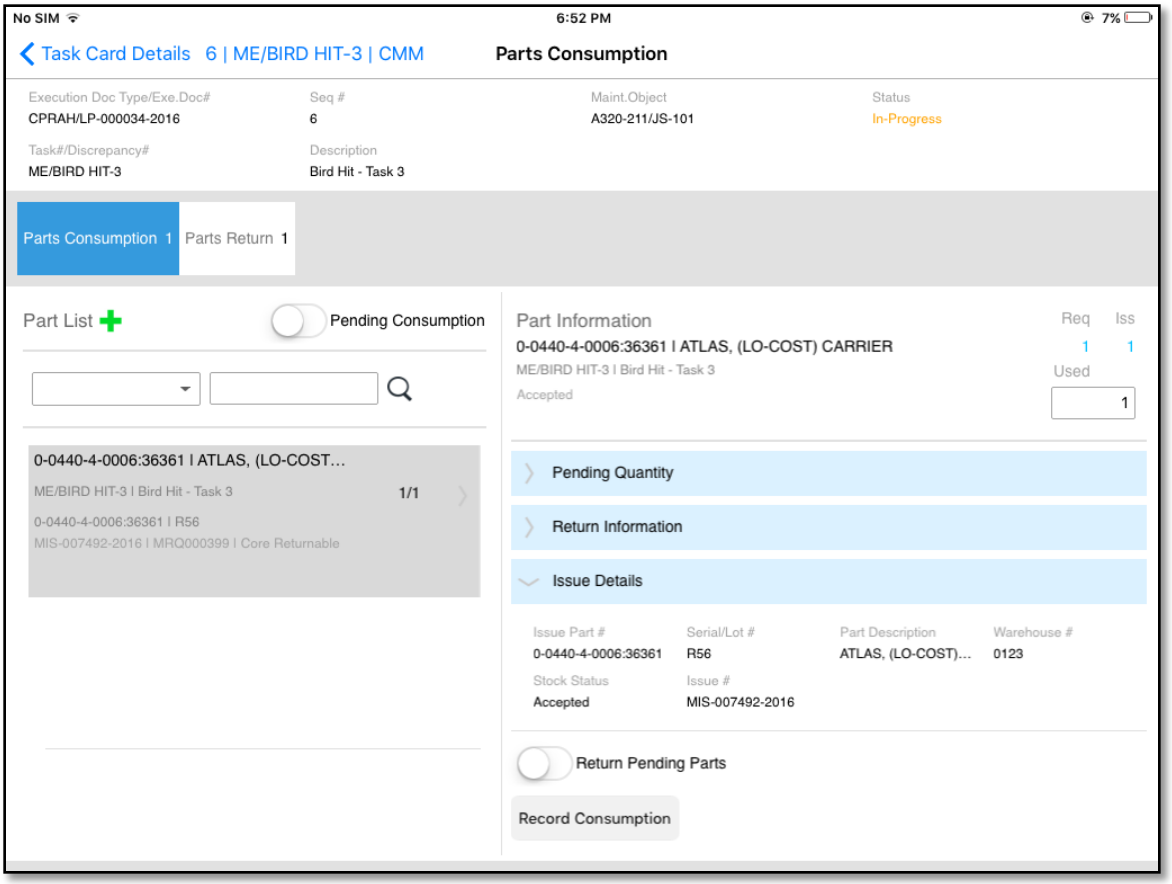
A new UI '**Record Part Consumption and Return'** is added in the Mechanic Anywhere App. The new UI can be launched from Task Card Screen & Discrepancy Card screen by clicking on icon '  '.

Record Part Consumption and Return screen lists all the parts that were issued and Removed against an Execution Document #. Basic details of the Execution Document will be displayed in the Top section. The middle section shows Part Consumption and Part Return tiles along with the count information. Clicking on either of the tile will load the list section below the tiles and shows the list of pending documents along with the completed documents against Execution Document #.

Part Consumption

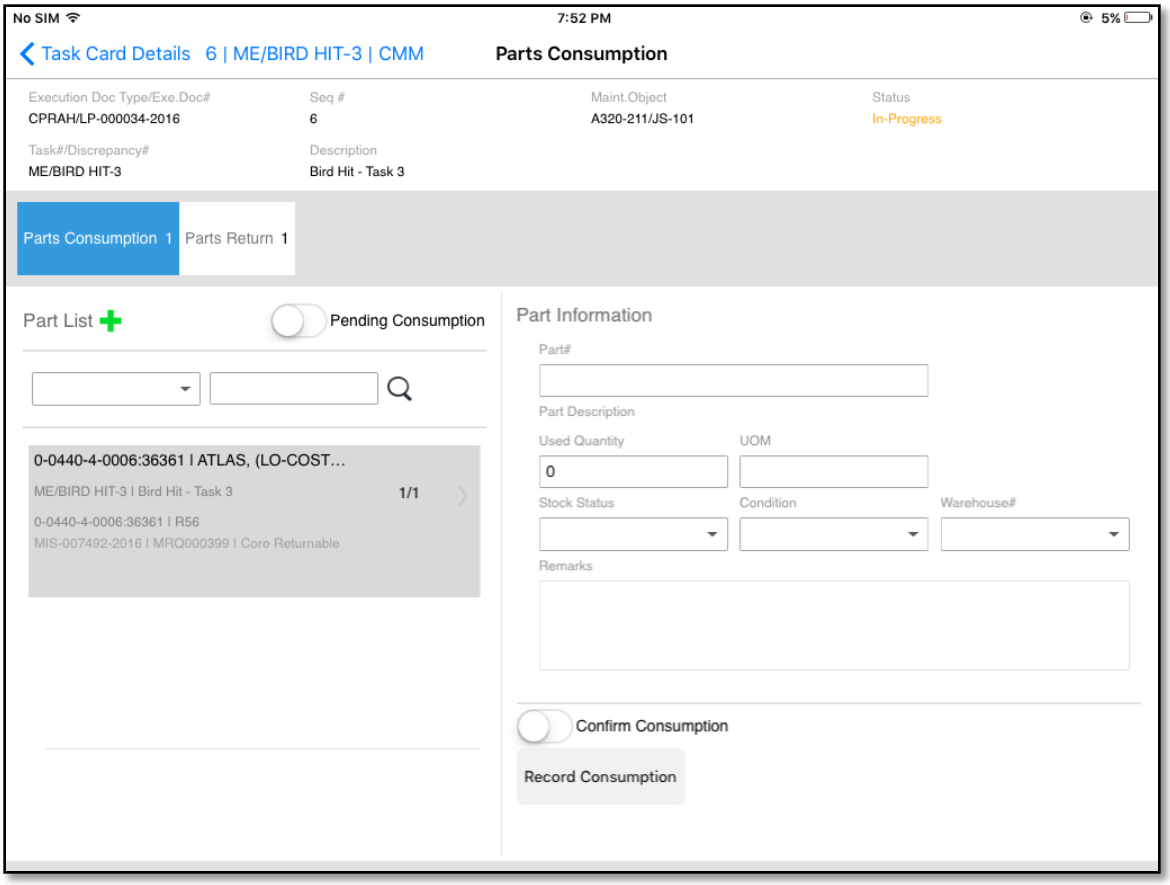
Part Consumption page will be launched by tapping a Part Consumption Tile. Part Consumption helps the user in retrieving the pending parts that needs to be consumed along with the already consumed Parts. The left side List Pane lists all the pending Parts and consumed Parts that were issued against Execution document. Clicking on any of the document in the list pane will display more details of the Issue document in the right side with the ability to edit the used quantity and Return Information. Whenever user clicks on Record Part Consumption will update the Consumption and also the Pending Return Quantity. If user tries to return the pending quantity then he has to enable the Return pending Parts button.

Exhibit 1: Identifies the “Part Consumption” information under Part Consumption and Return screen.



Direct Part Consumption will be reported by clicking on icon ‘+’. User will be allowed to report the consumed Parts.

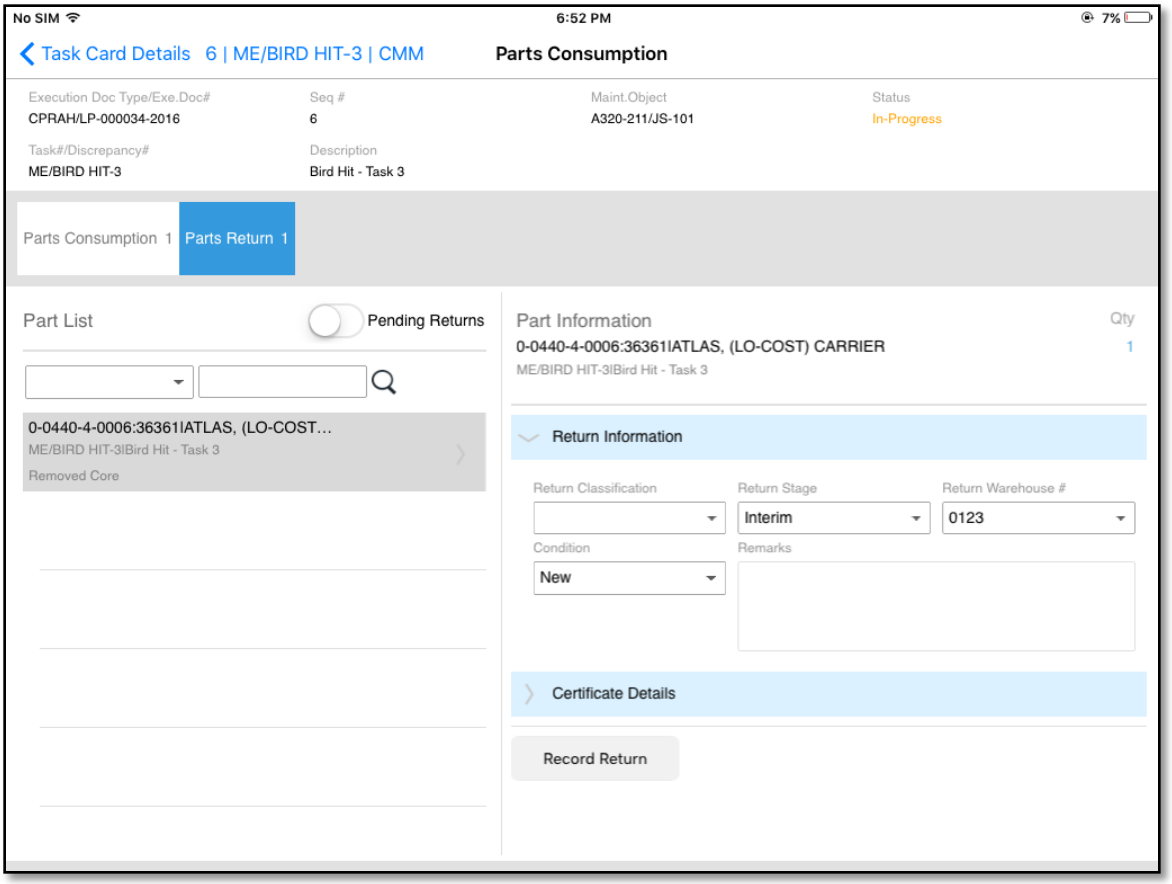
Exhibit 2: Identifies the “Direct Part Consumption” under Part Consumption and Return screen.



Parts Return

Parts Return page will be launched by tapping a Part Return Tile. Part Return helps the user in retrieving the pending Main Core & Removed Core parts that needs to be returned and also displays the Returned Parts. The left side List Pane lists all the pending Return Parts and also the Returned Parts against Execution document. Clicking on any of the document in the list pane will display more details of the Return document in the right side with the ability to edit the Return & Certificate Information. Whenever user clicks on Return parts will update the Return quantity.

Exhibit 3: Identifies the “Parts Return” Information under Part Consumption and Return screen.



WHAT'S NEW IN MAIL IT?

Ability to obtain Maintenance Due List for an Aircraft/ Component

Reference: AHBF-18231

Background

Operational efficiency is one of the key parameters that decide an organization's performance. High operational efficiency can be achieved by ensuring access of information anywhere and anytime. With the emergence of Smart Phones and other devices, the user can complete his work smoothly from wherever he is. No more logons to conventional ERP.

Ramco decided to use the availability of mail capability in everyone's hands to ensure faster operations in the enterprise and has arrived at "**Mail IT**". With the help of Mail-It, the user can now perform the work actions by sending a simple Email-based request to Ramco M&E.

In MRO Operations, the Planner might want to review and establish a plan to perform pending tasks on Aircrafts. Mail-It will help him to identify all pending tasks against each Aircraft, based on the due date or remaining values (FH, FC & Days). A provision is given to obtain **Maintenance Due List** for an Aircraft/Component through Mail-It feature.

Change Details

Pre-Requisites:

Pre-requisites (to be provided by IT Admin) for enabling Mail IT capability are as follows:

1. An Outlook Account should be configured for the RMTB server
2. An add-on, Inbox Monitor should be installed in this Outlook Account
3. Workflow Mailer application needs to be installed in the Server
4. Workflow Mailer application needs to be installed in the Server
    I. Application Database from where the data should be retrieved or work action should be performed.
    II. Outlook Account details of the RMTB Server.
5. Login user Email Id has to be mapped to the User Information activity under Administration Process Business Component.

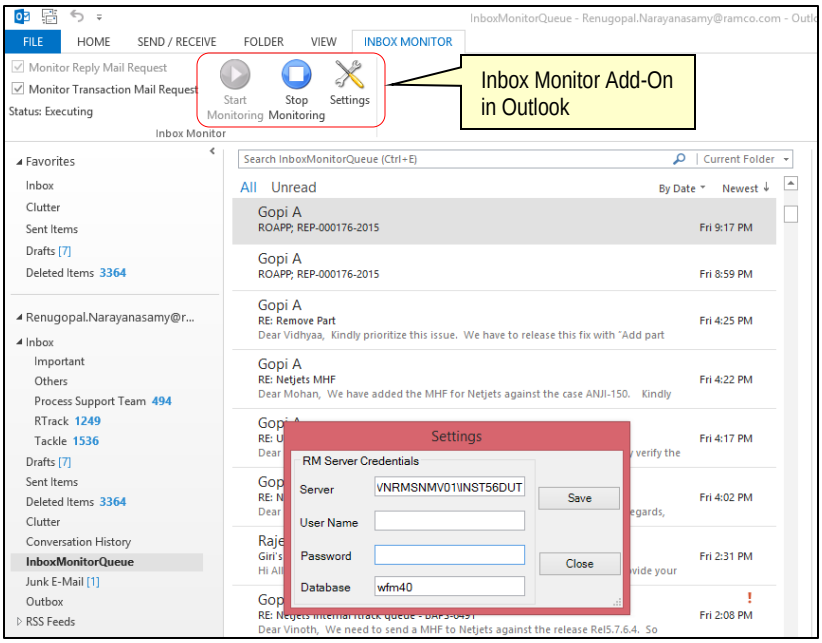
    Deployment Process → Administration Process → User Information.

Note:

If there are other mails that can be sent to the RMTB server other than those required for Mail IT capability, then define rules to move only the mails related to Mail IT capability to the Inbox Monitor folder.

The Inbox Monitor function should remain running for using the Mail IT capabilities.

Exhibit 1: Identifies the Inbox Monitor add-on in the Outlook account of the RMTB server



Feature Details:

Retrieval of Maintenance Due List using Mail-It capability for an Aircraft/Component, as illustrated below.

Ability to obtain Maintenance Due List for an Aircraft

This approach can be used by a planner to identify the pending tasks that needs to be performed on Aircraft based on the due days or Remaining Values (FH, FC & Days) through Mail IT capability.

Before the introduction of Mail IT, the user had to go to the **Aircraft Maintenance Due Report** screen, retrieve the Due List report for an Aircraft and then establish a plan to perform pending tasks on Aircrafts.

How it Works?

User needs to send a mail to the Outlook account of the RMTB server with the subject as "***DL-AC;Aircraft Registration Number***" for obtaining list of pending tasks on single Aircraft**.** This mail serves as a request mail for the retrieval of pending tasks list on the Aircraft. Similarly, the user can also access the Due List information for multiple aircrafts, in which case, the user has to send a mail with subject as "**DL-AC;Aircraft Registration Number1,Aircraft Registration**

Number 2". Also the user can retrieve the pending tasks list for All Aircrafts then planned, has to send a subject message as "***DL-AC;ALL***"

When this mail is processed, it will check if the Aircraft has pending tasks and also if the user has access rights to access the information, the requested information will be sent to the requestor.

Note:

1. *If any of the pending tasks are overdue, then it will be displayed in the red color and also underlined.*
2. *User can also use following alias names to retrieve Due list for an Aircraft*
    a. *DUELIST-ACREG;ACREG#*
    b. *DL-ACREG;ACREG#*

Exhibit 2: Identifies the mail sent with the details of the Aircraft Reg. #

Total pending tasks applicable for the Aircraft # - 1006 is 2 for the next 7 days

List of Pending Tasks # on Aircraft # -1006

A/C Reg #	Task # | Task Description	Remaining Details				Due At Details				Over Due Days
		FH	FC	Other values along with UOM	Days	FH	FC	Other values along with UOM	Date	
1006	C CHECK|CARRY OUT C CHECK	N/A	N/A		-73	N/A	N/A		2015-11-16 00:00:00.000	-73
1006	H CHECK|H Check	N/A	N/A		3	N/A	N/A		2016-01-31 00:00:00.000	3

Ability to obtain Maintenance Due List for a Component

This approach can be used by a planner to identify the pending tasks that needs to be performed on component based on the due days or Remaining Values (FH, FC & Days) through Mail IT capability.

How it Works?

User needs to send a mail to the Outlook account of the RMTB server with the subject as "***DL-COMP;Part Number,Serial Number***" for obtaining list of pending tasks on Component**.** This mail serves as a request mail for the retrieval of pending tasks list on requested Component.

When this mail is processed, it will check if the Component has pending tasks and if the user has access rights to access the information, the requested information will be sent to the requestor.

Note: User can also use following alias names to retrieve Due list for a Component

A. *DUELIST-COMP;PART#;SERIAL#*
B. *DL-COMPONENT;PART#;SERIAL#*

Ability to obtain Maintenance Due List for an Aircraft based on Rem. Value

This approach can be used by a planner to identify the pending tasks that needs to be performed on single/multiple Aircraft based on Remaining Values (FH, FC & Days) through Mail IT capability.

How it Works?

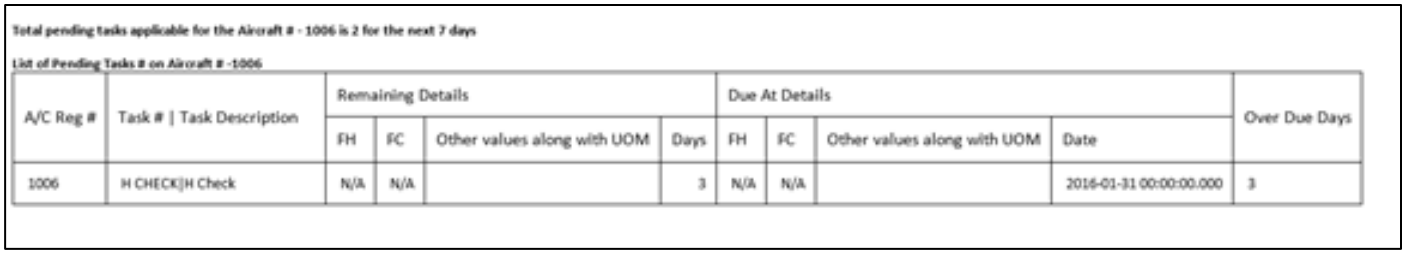
User needs to send a mail to the Outlook account of the RMTB server with the subject as "***DL-RV*;*<Value along with UOM (<10FH); Aircraft Registration Number***" for obtaining list of pending tasks that needs to be performed in Aircraft**.** This mail serves as a request mail for the retrieval of pending tasks list for the requested Aircraft. Similarly, the user can also access the Due List information based on Remaining values for multiple aircrafts, then user has to send a mail with subject as "**DL-RV;<*Value along with UOM (<10FH);* All**

When this mail is processed, it will check for Aircrafts having pending tasks and also if the user has access rights to access the information, then the requested information will be sent to the requestor.

Note: User can also use following alias names to retrieve Due list for an Aircraft based on Remaining Value

- *DUELIST-REM.VALUE;<VALUE UOM;AC REG#*
- *DL-REMAININGVALUE;<VALUE UOM;AC REG#*

Exhibit 3: Identifies the mail sent with the details of the Aircraft Reg # with Remaining Value <5 FH



Total pending tasks applicable for the Aircraft # - 1006 is 2 for the next 7 days

List of Pending Tasks # on Aircraft # -1006

A/C Reg #	Task # | Task Description	Remaining Details				Due At Details				Over Due Days
		FH	FC	Other values along with UOM	Days	FH	FC	Other values along with UOM	Date	
1006	H CHECK|H Check	N/A	N/A		3	N/A	N/A		2016-01-31 00:00:00.000	3

Other Mail IT Capabilities:

In addition to the above features, in general the Mail IT capability has the following options, which can be managed through configurable options introduced in the **Define Process Entities** activity of the **Common Master** business component under the Entity Type “Mail IT” and Entity “Common”.

1. Provision to send the reply mail to the users who are added in the CC/BCC list of the request mail
    - Process Parameter
        a) Allow automated replies to CC/BCC List in Mail
        b) If the value is set as ‘Yes’, the reply mail with the document details will be sent to users who are kept in the CC or BCC list in the request mail
2. Provision to restrict the time limit for processing of same request (to avoid spam mails sent to the RMTB server)
    - Process Parameter
        a) Set Time limit to process same set of queries
        b) If any value is defined for this parameter, the request mail with the same subject cannot be sent in the given time interval
    - Limitations:
        a) The mail reply to the contacts mentioned in BCC is not supported in this release
        b) Note: This feature involves commercials and is not available for all customers. Please contact your Ramco Account Manager.

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

WHAT'S NEW IN MAINTENANCE TASK?

Ability to automatically retrieve repair scheme definitions for primary tasks in the Maintain Repair Scheme screen

Reference: AHBF-18743

Background

Currently, after launching the **Maintain Repair Scheme** screen it is required that the user clicks the **Get Details** button to retrieve the repair scheme definitions for the primary task. It would enhance usability, if the system could automatically retrieve the repair scheme definition on launch of the screen via link.

Change Details

Now with this enhancement, the **Maintain Repair Scheme** screen, if launched using the link from the **Maintain Task Relationship** screen, will automatically retrieve and display the repair scheme definition pertaining to the primary task in the multiline. This eliminates an additional action of click of the **Get Details** button in most cases.

Exhibit 1: Identifies the **Maintain Repair Scheme** link in the **Maintain Task Relationship** screen

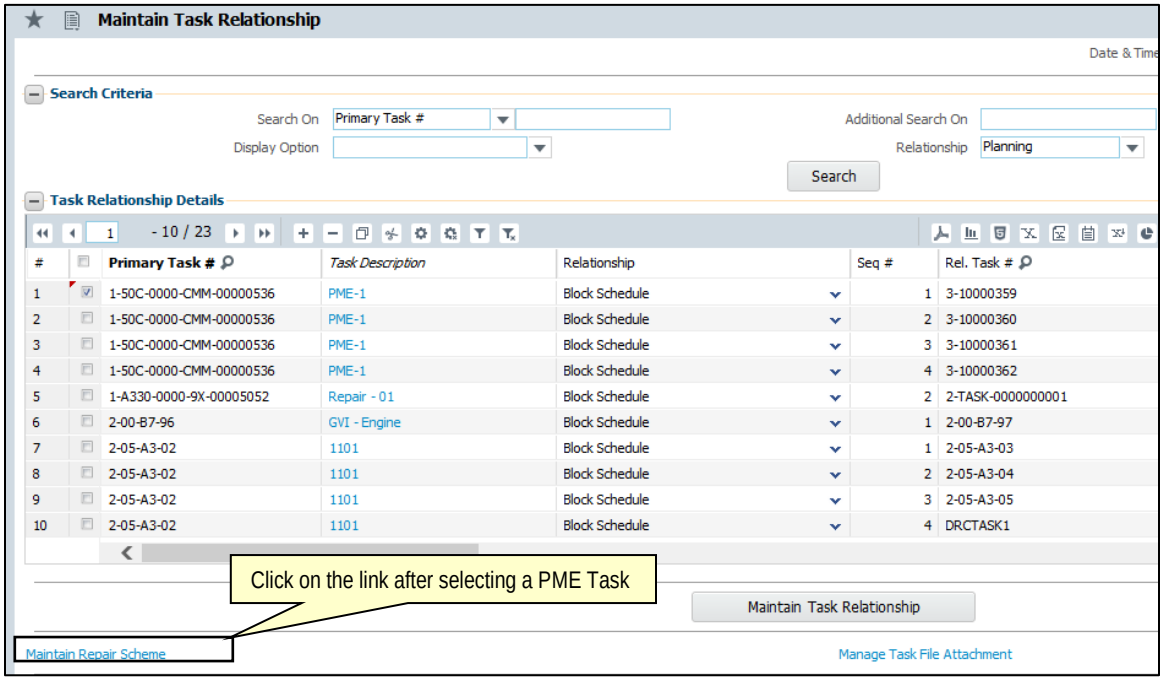
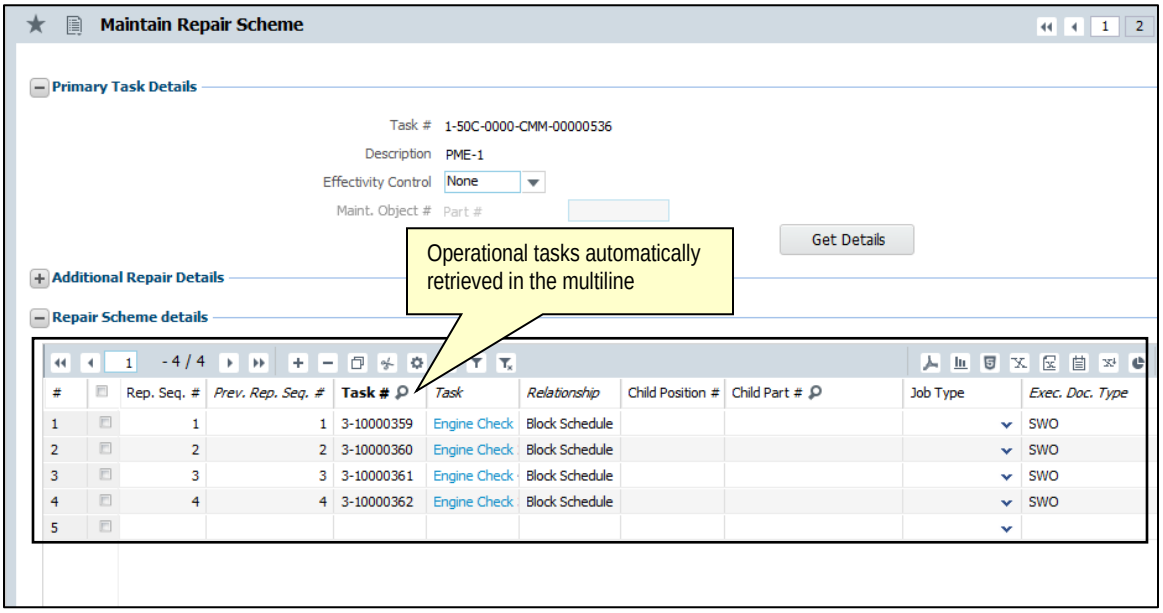


Exhibit 2: Identifies automatic retrieval of the Repair Scheme definition for the primary task in the **Maintain Repair Scheme** screen



Ability to increment occurrence tracking parameter

Reference: AHBF-16901

Background

Aircraft tires are subjected to continuous wear and tear during landing. Hence tire replacement has become a routine job during line maintenance activities. The number of landings-per-tire can vary due to factors like weather, hard landings, cross-wind landing, anti-skid action, and rough or damaged runway surfaces. For certain aircraft models, regulations enforce additional inspection checks on associated landing gear assemblies based on number of tire changes.

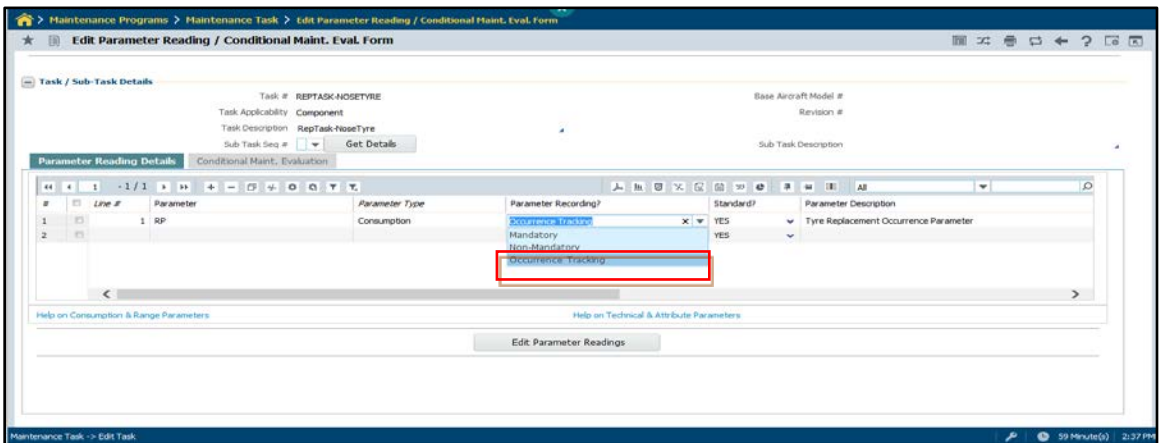
In such scenarios, the system must have the capability to identify parameters that can track maintenance based on number of occurrences (tire replacement activity). Upon performing a tire replacement task, the occurrence tracking parameter must get incremented that can subsequently trigger other inspection tasks available in the maintenance program.

This capability is scalable to other scenarios in which maintenance activities are triggered based on number of occurrences.

Change Details

This enhancement brings capability to trigger maintenance jobs based on number of instances or occurrences. The drop-down list value **Occurrence Tracking** in **Parameter Recording?** of the **Edit Parameter Reading/Conditional Maint. Eval. Form** screen has been introduced to achieve this capability. **Parameter Recording?** can be set as **Occurrence Tracking** only for inheritable parameters with Parameter Type 'Consumption'.

Exhibit 1: New value **Occurrence Tracking** in the **Parameter Recording?** drop-down list box.



Data Modeling

Occurrence tracking of maintenance activities can be achieved only with standard data model. Refer the below-given procedure that illustrates how to model data for occurrence tracked maintenance activities.

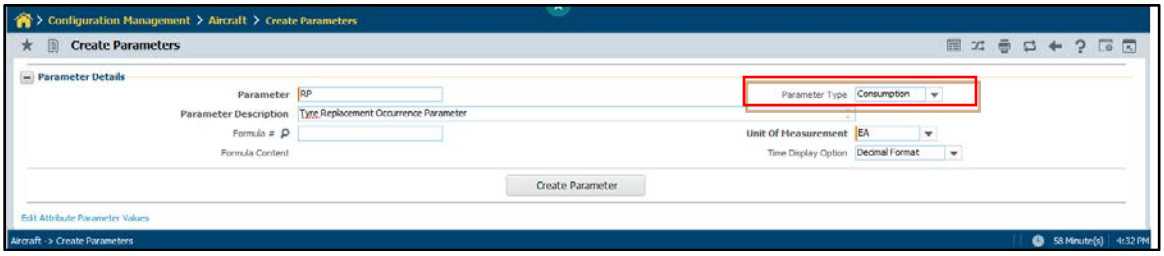
Illustration Scenario: Wheel Servicing

Perform respective scheduled NDT inspections at specific Tire change numbers.

1) At Nose Landing gear tire change numbers 5, 10, 15, 20
   - Perform Eddy Current inspection on Wheel Hub
2) At Nose Landing gear tire change numbers 25 and every tire change thereafter
   - Perform Liquid Penetrant inspection on Wheel Hub
3) At Nose Landing gear tire change number 30 and every tenth tire change thereafter
   - Perform UV inspection on Wheel Hub

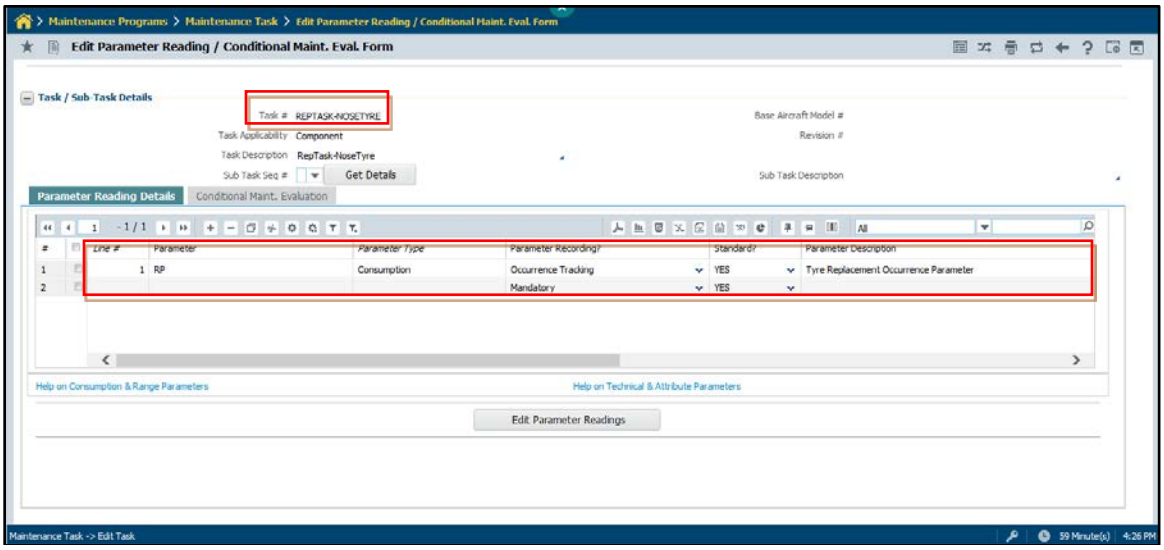
Step 1:

Create a Parameter ‘RP’ with Parameter Type ‘Consumption’ in Aircraft business component.



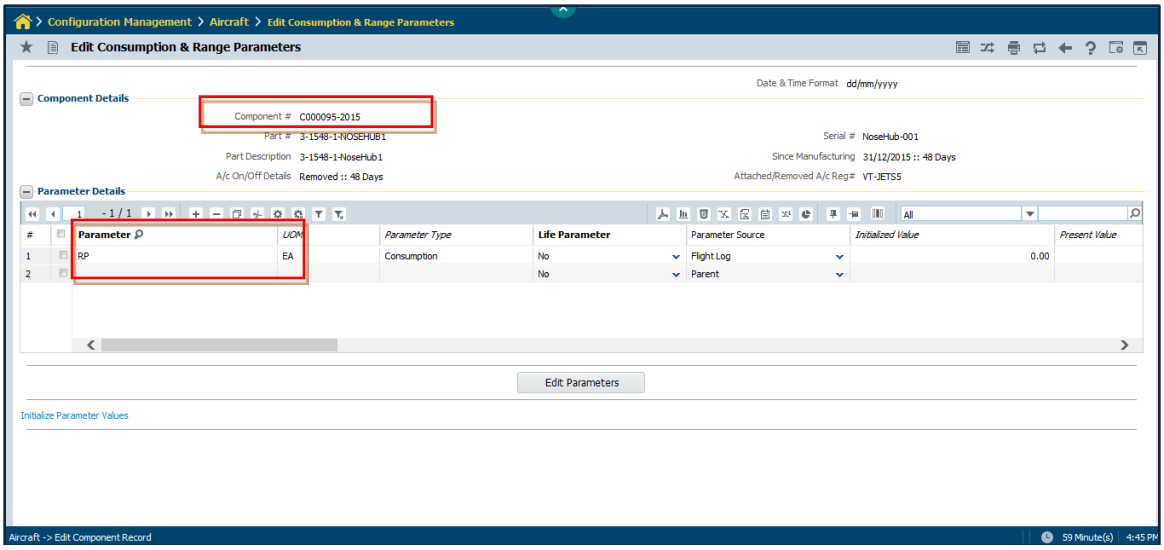
Step 2:

Create a Tire replacement task (Task #: RepTask-NoseTyre) in the **Maintenance Task** business component. Map parameter 'RP' as Occurrence Tracking in the **Edit Parameter Reading/Conditional Maint. Eval. Form**' screen.



Step 3:

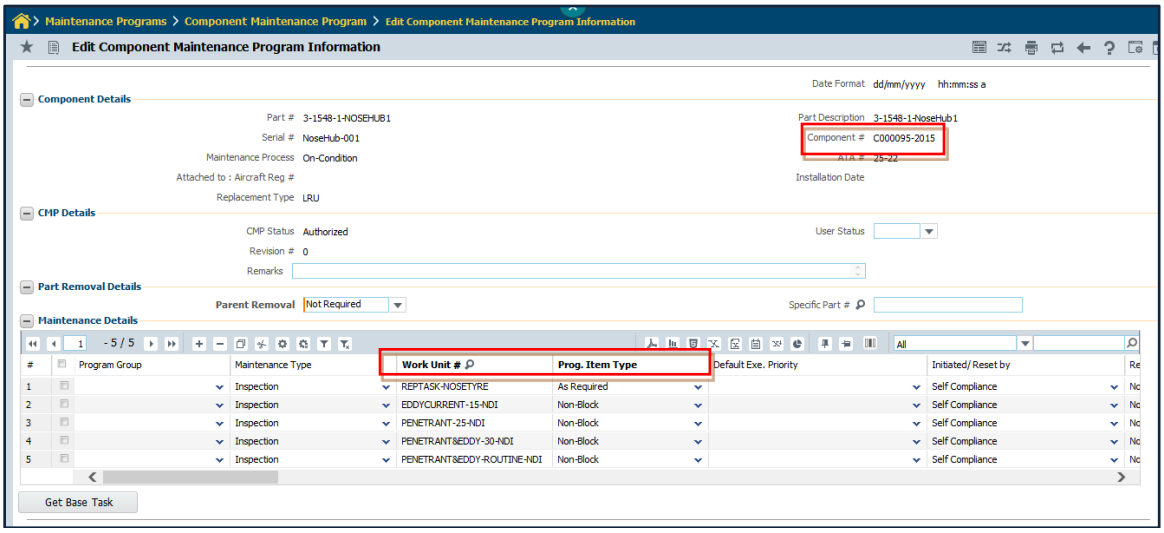
Map the occurrence tracked parameter 'RP' as Consumption parameter of Wheel Hub (Say Component #: C000095-2015)



Step 4:

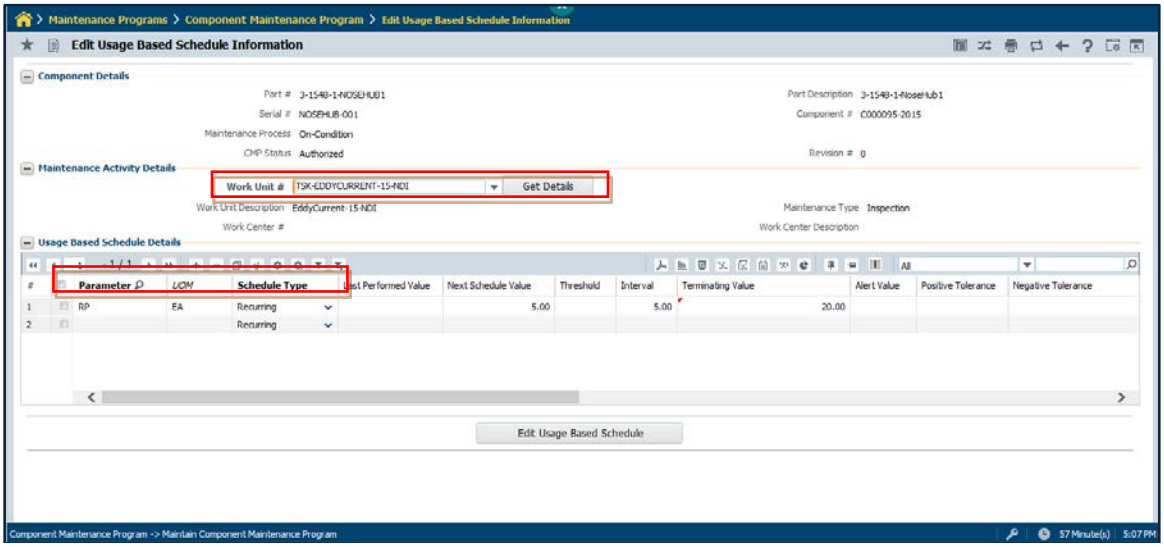
In Component Maintenance Program of Wheel Hub (Component #: C000095-2015):

1) Maintain 'Prog. Item Type' of Tire replacement task (here Task #: RepTask-NoseTyre) as 'As Required'.



2) Map Occurrence Tracking Parameter 'RP' to tasks that need to be triggered based on number of tire replacements. In current scenario, define below schedules for respective inspection tasks:

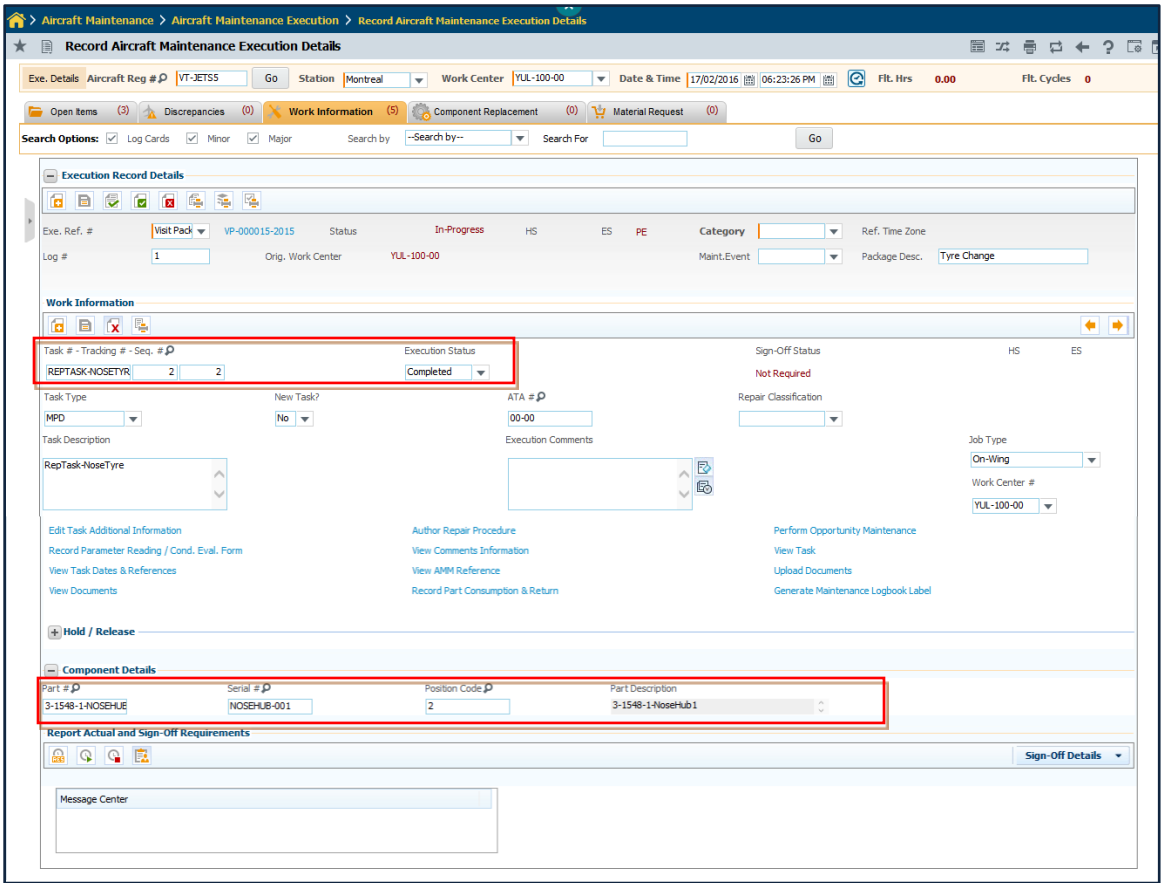
Task #	Schedule Type	Threshold	Interval	Terminating Value
EddyCurrent-15-NDI	Recurring		5	20
Penetrant&Eddy-30-NDI	Recurring	25	1	30
UV Inspection-NDT	Recurring	30	10	



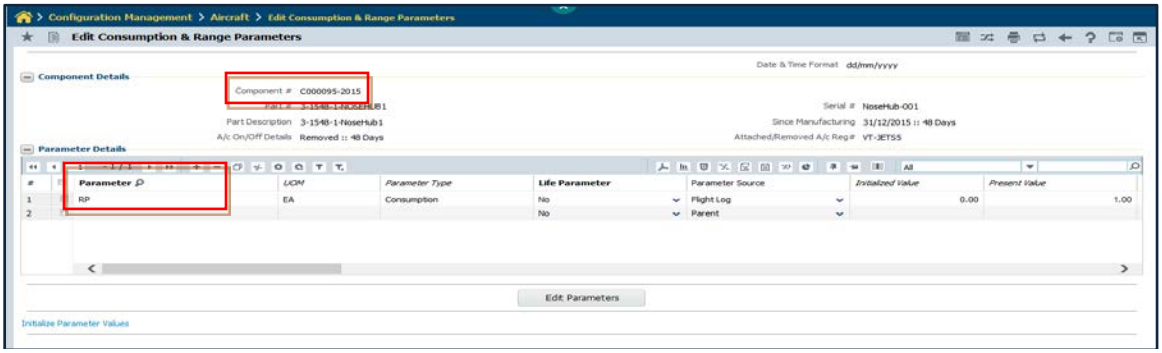
How it works?

1) Comply the Tire Replacement tasks (Task #: REPTASK-NOSETYRE) from any of the following screen:

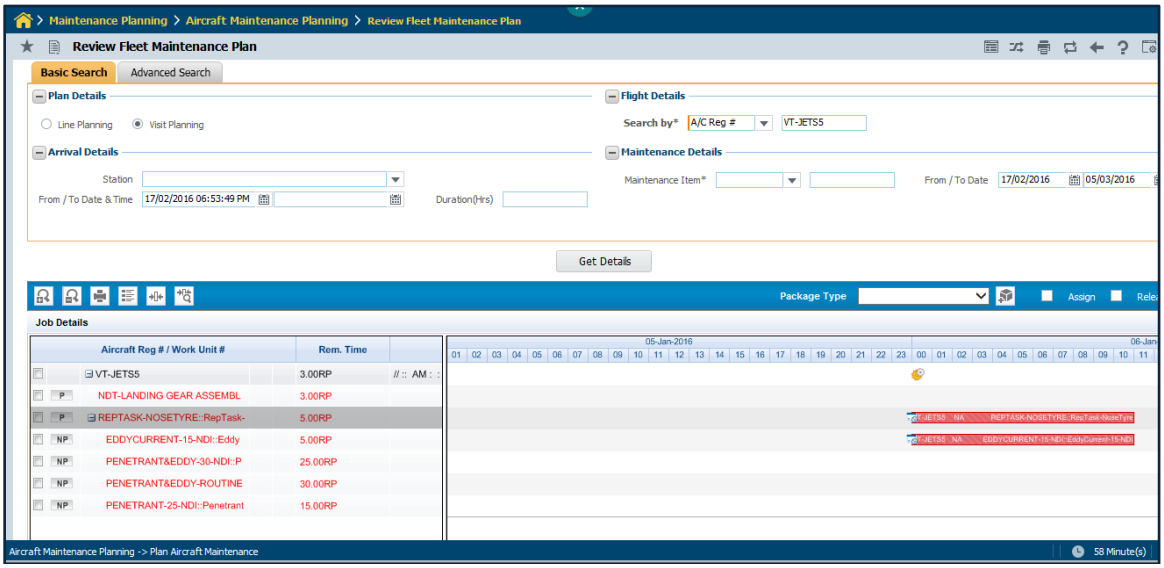
   - Record Aircraft Maintenance Execution Details screen
   - Record Shop Execution Details
   - Initialize Maint. Prog. & Update Compliance



2) Occurrence tracking parameter 'RP' will get incremented by value "1" for associated Components.



3) Associated tasks with same occurrence tracking parameter mapping in respective maintenance program will get triggered based on occurrence.



Note: This enhancement not only covers the tire replacement scenario but can also be used to satisfy the following needs through proper modelling:

I. Trigger another Task based on the number of compliance of one task.

II. Terminate another Task based on the number of compliance of one task.

III. Self-terminate the task based on the number of its compliance.

WHAT'S NEW IN CONFIGURATION?

Ability to inactivate Sub-components upon inactivation of Parent

Reference: AHBF-17841

Background

If an aircraft is sold or returned after the lease period, the aircraft record is inactivated. In this period, if the aircraft has met with an accident or if there is any undesirable incident, it is required that the operator freeze the aircraft records & transactions. In such cases, in addition to the aircraft record all the attached components including the sub-component records needs to be automatically inactivated. Similarly, if a major assembly like Engine or a composite assembly is inactivated; all the sub-assemblies are required to be inactivated.

Currently, sub-assemblies are not inactivated automatically when the parent is inactivated. This results in record inconsistencies. Further, users need to review manually to check if the component is attached to an inactive parent and determine the applicability of engineering document, etc.

Change Details

With this enhancement, sub-components of a parent assembly will get automatically inactivated / activated based on the process parameter as explained below.

1) Freeze Aircraft Record

Set Process Parameter (Common Master)	
Entity Type	Aircraft Entry
Entity	Aircraft
Process Parameter	Update Record Status of the attached Components as "Inactive" on Freeze of Aircraft Record?
Permitted Values	Enter "0" for 'No', "1" for 'Yes'
Default value	0 (No)
System behavior based on process parameter value	
1 (Yes)	Upon Freezing the Aircraft Record, system will update the Record Status of all attached components in Aircraft configuration as 'Inactive'.
0 (No)	Upon Freezing the Aircraft Record, system will not update the Record Status of attached components in Aircraft configuration as 'Inactive'.

Freezing of Aircraft Record can happen from the following business activities:

- Update Aircraft Status & Condition
- Occurrence Processing
- Configuration (Transfer of Aircraft)

2) Unfreeze Aircraft Record

Set Process Parameter (Common Master)	
Entity Type	Aircraft Entry
Entity	Aircraft
Process Parameter	Update Record Status of the attached Components as "Active" upon Unfreeze of Aircraft Record?
Permitted Values	Enter "0" for 'No', "1" for 'Yes'
Default value	0 (No)
System behavior based on process parameter value	
1 (Yes)	Upon unfreezing the frozen Aircraft Record, system will update the Record Status of all inactive attached components in Aircraft configuration as 'Active'.
0 (No)	Upon unfreezing the frozen Aircraft Record, system will not update the Record Status of inactive attached components in Aircraft configuration as 'Active'.

Unfreezing of Aircraft Record can happen from the below business activity:

- Update Aircraft Status & Condition

3) Inactivate Aircraft Record

Set Process Parameter (Common Master)	
Entity Type	Aircraft Entry
Entity	Aircraft
Process Parameter	Update Record Status of the attached Components as "Inactive" upon inactivation of Aircraft Record?
Permitted Values	Enter "0" for 'No', "1" for 'Yes'
Default value	0 (No)
System behavior based on process parameter value	
1 (Yes)	Upon updating Record Status of Aircraft Record as 'Inactive', system will update the Record Status of all active attached components in aircraft configuration as 'Inactive'.
0 (No)	Upon updating Record Status of Aircraft Record as 'Inactive', system will not update the Record Status of all active attached components in aircraft configuration as 'Inactive'.

Inactivation of Aircraft Record can happen from the below business activity:

- Update Aircraft Status & Condition
- Edit Aircraft Record

4) Reactivate Aircraft Record

Set Process Parameter (Common Master)	
Entity Type	Aircraft Entry
Entity	Aircraft
Process Parameter	Update Record Status of the attached Components as "Active" upon activation of an inactive Aircraft Record?
Permitted Values	Enter "0" for 'No', "1" for 'Yes'
Default value	0 (No)
System behavior based on process parameter value	
1 (Yes)	Upon updating Record Status of Aircraft Record as 'Active', system will update the Record Status of all inactive attached components in aircraft configuration as 'Active'.
0 (No)	Upon updating Record Status of Aircraft Record as 'Active', system will not update the Record Status of all inactive attached components in aircraft configuration as 'Active'.

Reactivation of Aircraft Record can happen from the below business activity:

- Edit Aircraft Record

5) Inactivate Component Record

Set Process Parameter (Common Master)	
Entity Type	Component Entry
Entity	Component
Process Parameter	Update Record Status of the attached Sub-components as "Inactive" upon inactivation of Parent Component Record?
Permitted Values	Enter "0" for 'No', "1" for 'Yes'
Default value	0 (No)
System behavior based on process parameter value	
1 (Yes)	Upon updating Record Status of Component Record as 'Inactive', system will update the Record Status of all active attached components in component configuration as 'Inactive'
0 (No)	Upon updating Record Status of Component Record as 'Inactive', system will not update the Record Status of active attached components in component configuration as 'Inactive'

Inactivation of a component record can happen from the below business activity:

- Edit Component Record

Integration services where Record Status of a Component Record gets updated from ‘Active’ to ‘Inactive’. For example, during confirmation of Issue document referring an Exchange Purchase Order, system will inactivate the sub-assemblies of issued Part. Hereafter inactivation of sub-components will be governed based on value set in above set option.

6) Reactivate Component Record

Set Process Parameter (Common Master)	
Entity Type	Component Entry
Entity	Component
Process Parameter	Update Record Status of the attached Sub-components as "Active" upon activation of an inactive Parent Component Record?
Permitted Values	Enter "0" for 'No', "1" for 'Yes'
Default value	0 (No)
System behavior based on process parameter value	
1 (Yes)	Upon updating Record Status of Component Record as 'Active', system will update the Record Status of all inactive attached components in component configuration as 'Active'.
0 (No)	Upon updating Record Status of Component Record as 'Active', system will not update the Record Status of inactive attached components in component configuration as 'Active'.

Reactivation of component record can happen from the below business activity:

- **Edit Component Record**

Integration services where Record Status of a Component Record gets updated from ‘Inactive’ to ‘Active’. For example, during Goods Receipt of an ‘Inactive’ Component #, Record Status of Component # will automatically get updated as ‘Active’. Now reactivation of sub-components can be controlled based on above set option.

Additional Changes

This enhancement also brings in the capability to remove components from Inactive aircraft using **Record Component Replacement Details** screen of **Component Replacement** business component.

Set Process Parameter (Common Master)	
Entity Type	Aircraft Entry
Entity	Aircraft
Process Parameter	Allow component removal from "Inactive" Aircraft?
Permitted Values	Enter "0" for 'No', "1" for 'Yes'
Default value	0 (No)
System behavior based on process parameter value	
1 (Yes)	Select Part # screen in Record Component Replacement Details activity will fetch Position Codes of Aircraft Reg. # with Record Status "Inactive". Hence user can perform Component Replacement transactions for Aircraft Reg. # with Record Status "Inactive" from Record Component Replacement Details screen.
0 (No)	Select Part # screen in Record Component Replacement Details activity will not fetch Position Codes of Aircraft Reg. # with Record Status "Inactive". Hence user cannot proceed Component Replacement transactions for Aircraft Reg. # with Record Status "Inactive" from Record Component Replacement Details screen.

Exhibit 1: The **Select Part #** screen of the **Record Component Replacement Details** screen listing Position Codes of inactive Aircraft Reg. # based on process parameter value**.**

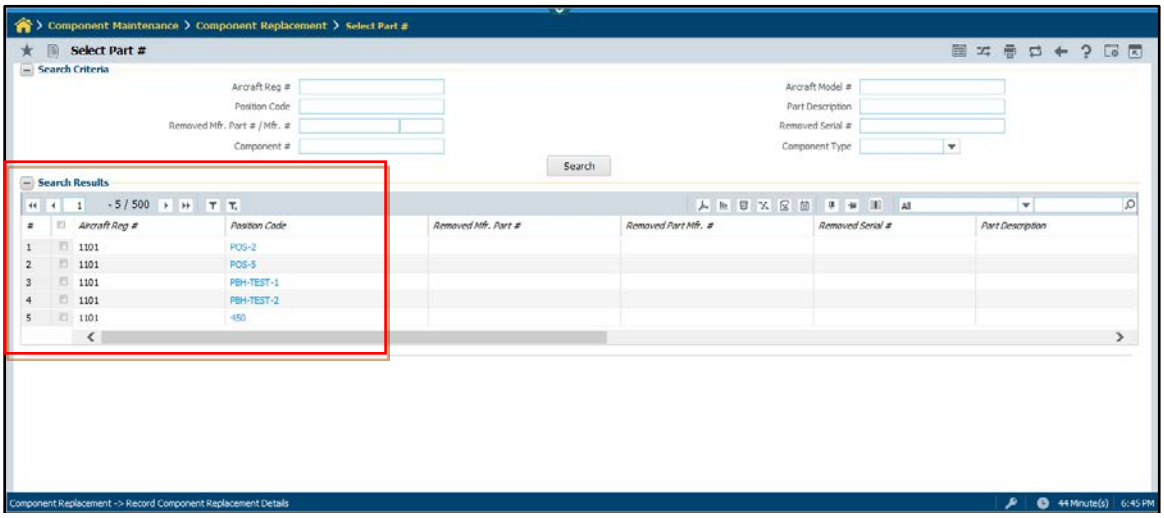
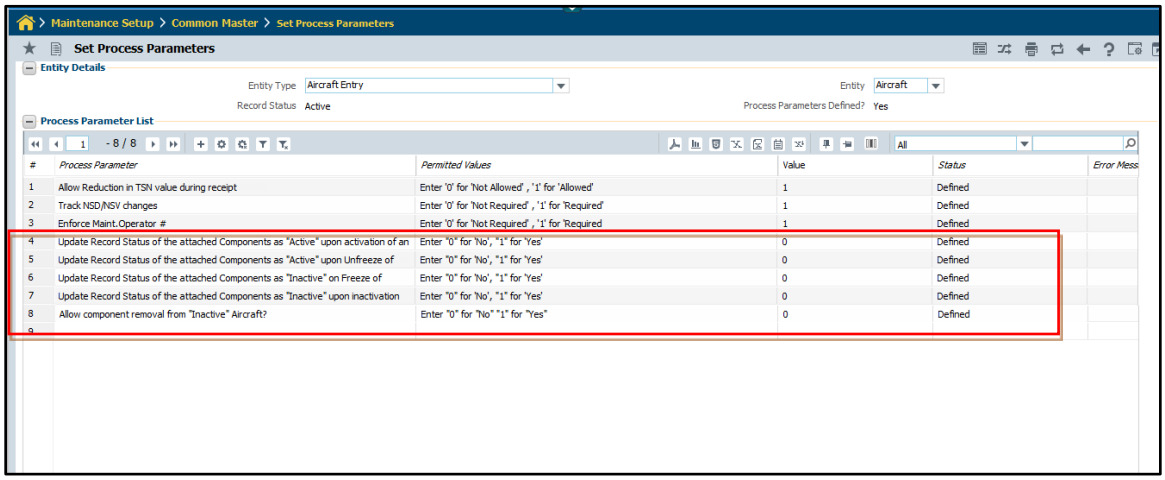
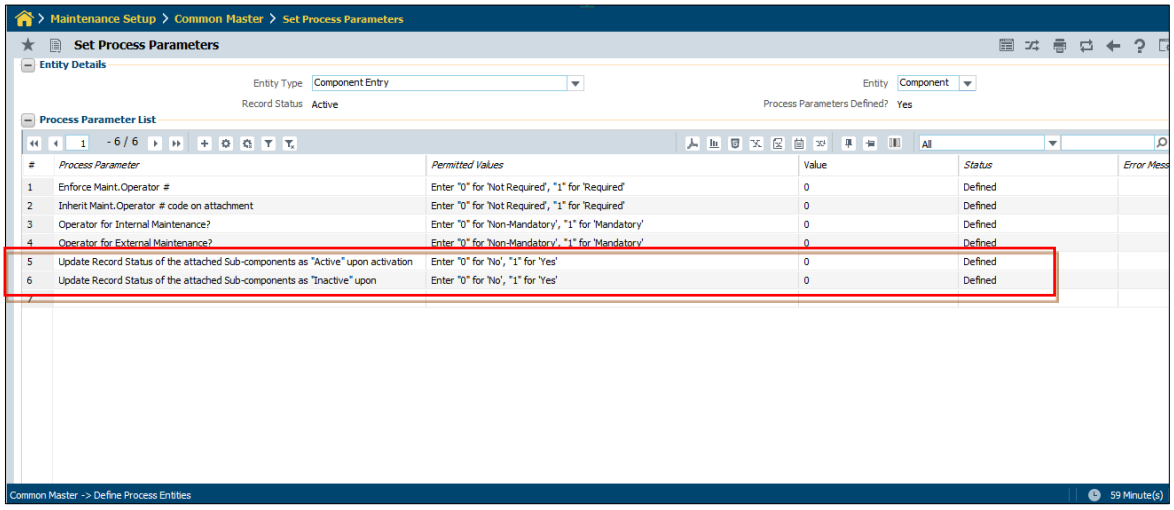


Exhibit 2: New process parameter introduced in the **Set Process Parameters** screen





Note: A new scheduler "AC_NHA_Status_Inherit_BATCH_Sp" has been provided to process and inactivate / activate the component records as applicable. It is recommended that the scheduler be configured to run once in a day preferably when operations are minimal.

WHAT'S NEW IN AIRCRAFT MAINTENANCE PLANNING?

Ability to highlight Block task if it has Base task(s) that are Overdue

Reference: AHBF-18936

Background

Currently in the **Review Fleet Maintenance Plan** screen, Base Tasks that are overdue are highlighted in Red color. However, there is no visibility of a Block task, if it has overdue Base tasks under it. In order to catch the attention of the planner, it is required that a Block task too be displayed in Red color, if it has one or more overdue Base tasks.

Change Details

In order to display the Block task in Red color in the **Review Fleet Maintenance Plan** screen when it has overdue Base tasks a new process parameter is added as explained below in the **Define Process Entities** screen.

Set Process Parameter (Common Master)	
Entity Type	Maintenance Planning
Entity	Aircraft Maint. Planning
Process Parameter	Display Block Task in "RED" colour when there is an Overdue Base Task?
Permitted Values	Enter "0" for 'No' , "1" for 'Yes'
Default value	0 (No)
System behavior based on process parameter value	
Value: 0 (No)	Block task will not be highlighted if one or more Base tasks under it are overdue.
Value: 1 (Yes)	Block task will be highlighted in Red colour if one or more Base tasks under it are overdue.

Note: If schedules are overdue for Block task, system will display the same in Red color irrespective of above process parameter.

Exhibit 1: Identifies the new Entity Type **Maintenance Planning** and Entity **Aircraft Maint. Planning** in the **Define Process Entities** screen

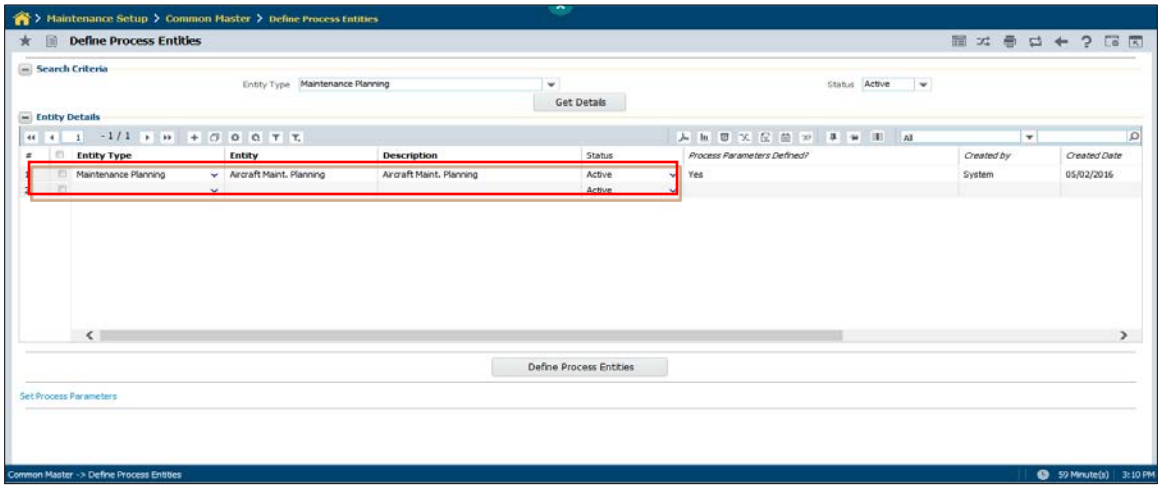


Exhibit 2: Identifies the new process parameter introduced in the **Set Process Parameters** screen

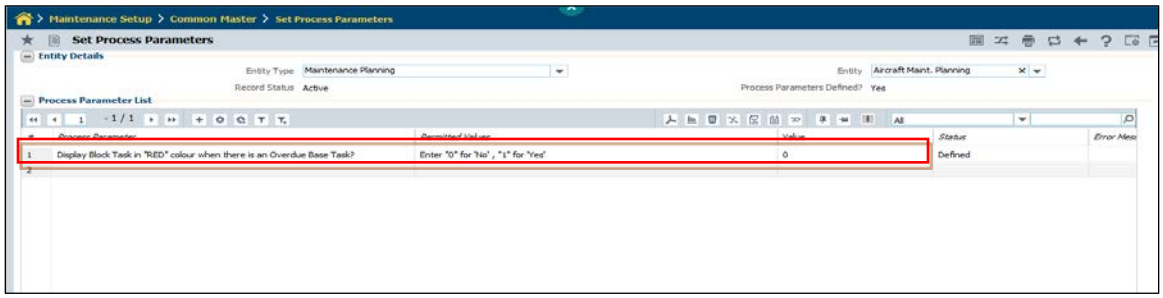
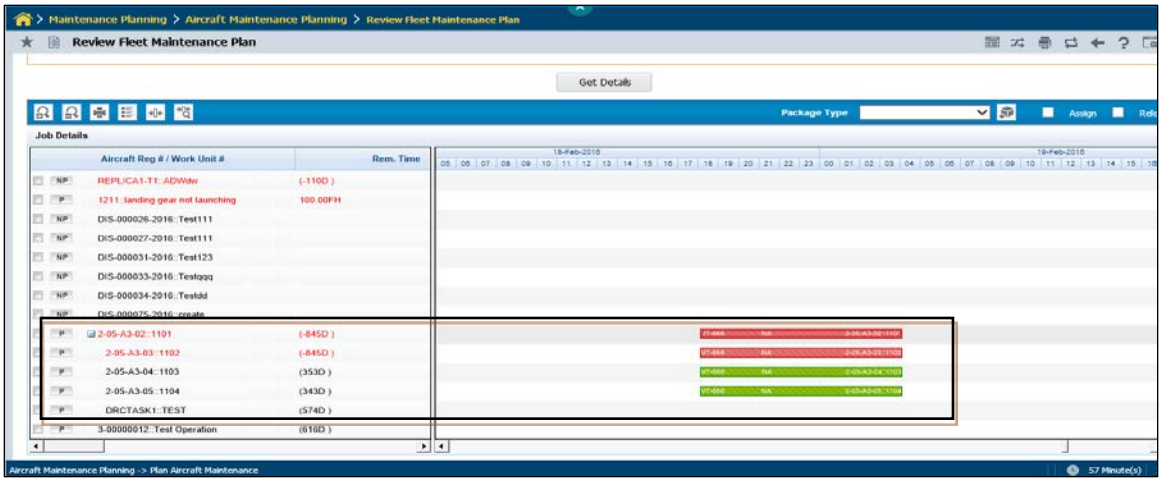


Exhibit 3: Identifies Block task highlighted in Red as one of the Base task is overdue



Enhancement in the Package search logic in Plan Aircraft Maintenance

Reference: AHBF-18935

Background

Currently, in the **Review Fleet Maintenance Plan** screen, if the AME Ref. # package is searched by providing **From/To Date**, the system doesn't consider those packages where Package Start Date is earlier than the specified **From Date** and Package End Date is later than the specified **To Date**. Business needs to retrieve packages that were operational between **From/To Date** specified irrespective of Package Start Date and Package End Date as long as it falls within the specified date range.

Change Details

In the **Package Details** Gantt, if the user searches for packages by providing **From Date** & **To Date** those packages that are operational within the specified date range will be retrieved and displayed.

Exhibit 1: Illustrates the modified aircraft package search logic in the **Review Fleet Maintenance Plan** screen

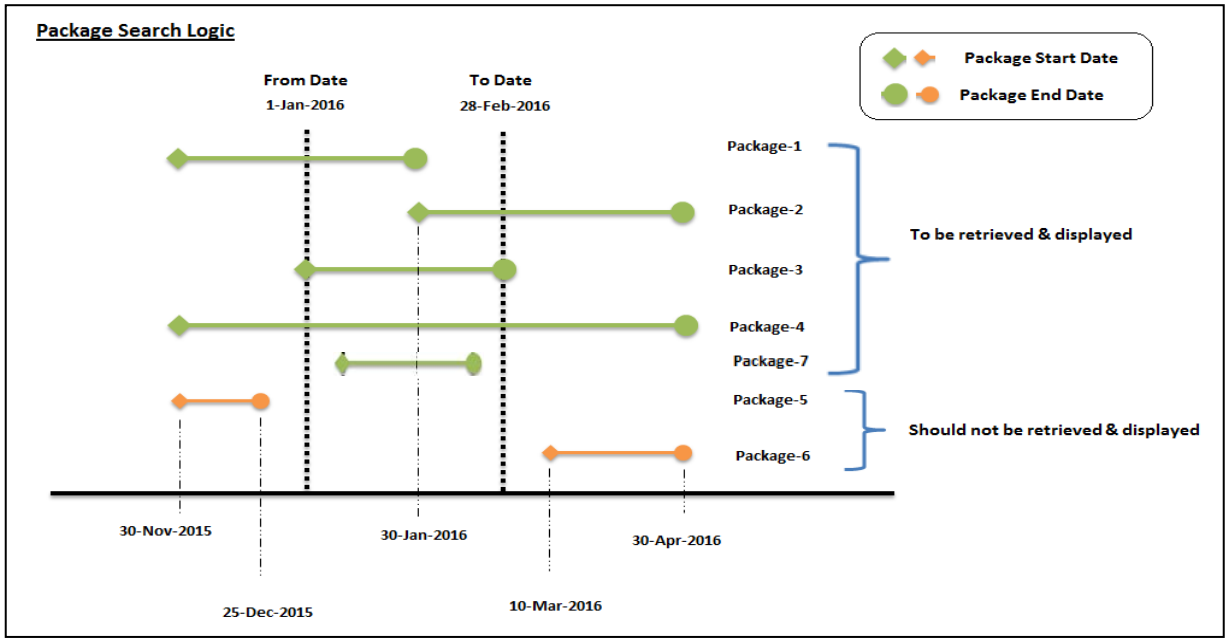
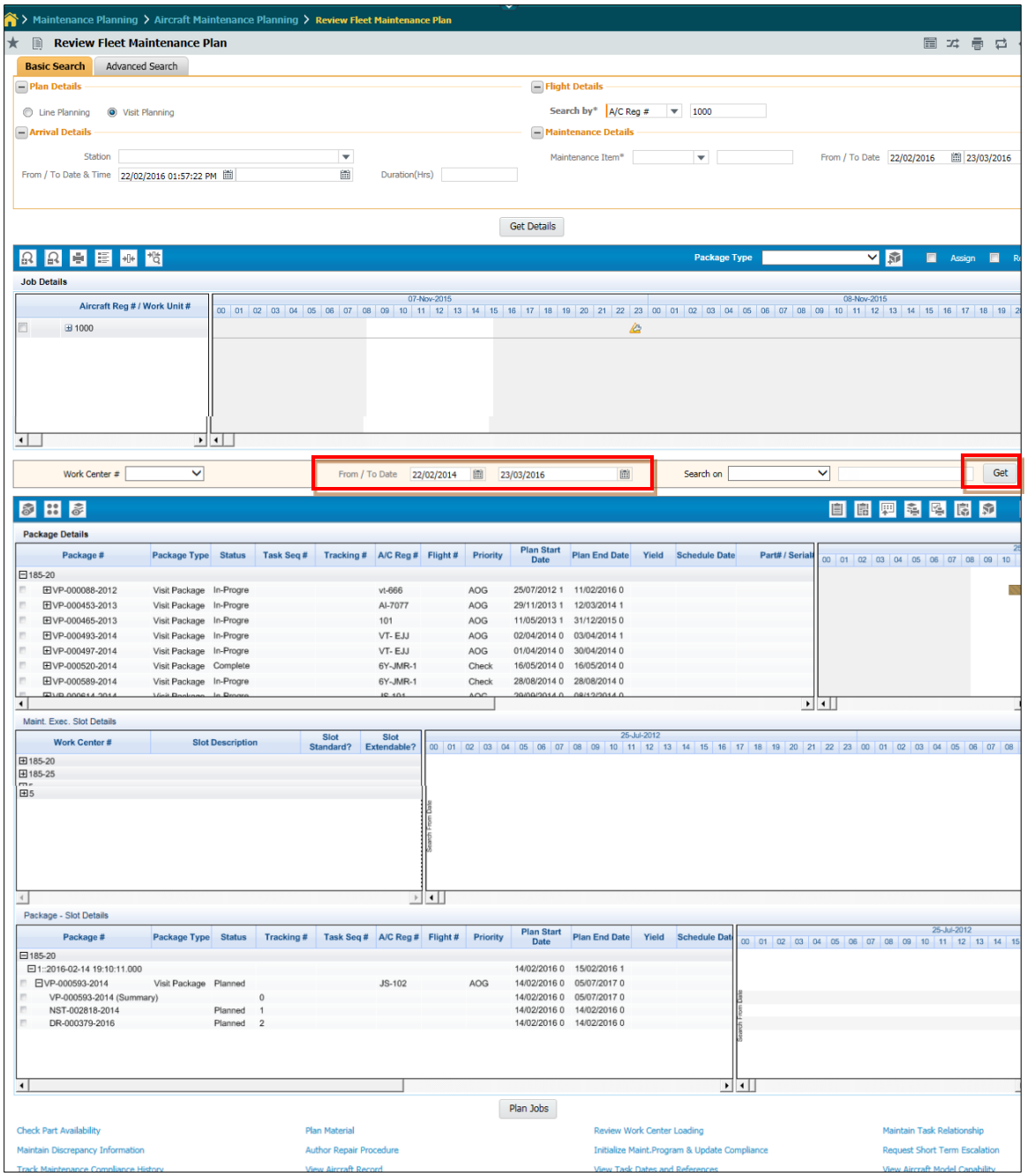


Exhibit 2: Identifies **From/To Date** for which search logic has been modified in the **Review Fleet Maintenance Plan** screen**.**



WHAT'S NEW IN ENGINEERING ORDER?

Auto-embodiment of effectivity in Engineering Documents

Reference: AHBF-18156

Background

When an engineering document is released, it is not necessary that the range mentioned in the effectivity for applicable Aircraft or Component is available in the system. It is possible that the Aircraft or Component can be inducted at a later point in time. To evaluate the effectivity manually is cumbersome and chances of missing it are high. Business need is to automatically evaluate effectivity of Eng. Doc during induction of aircraft / components.

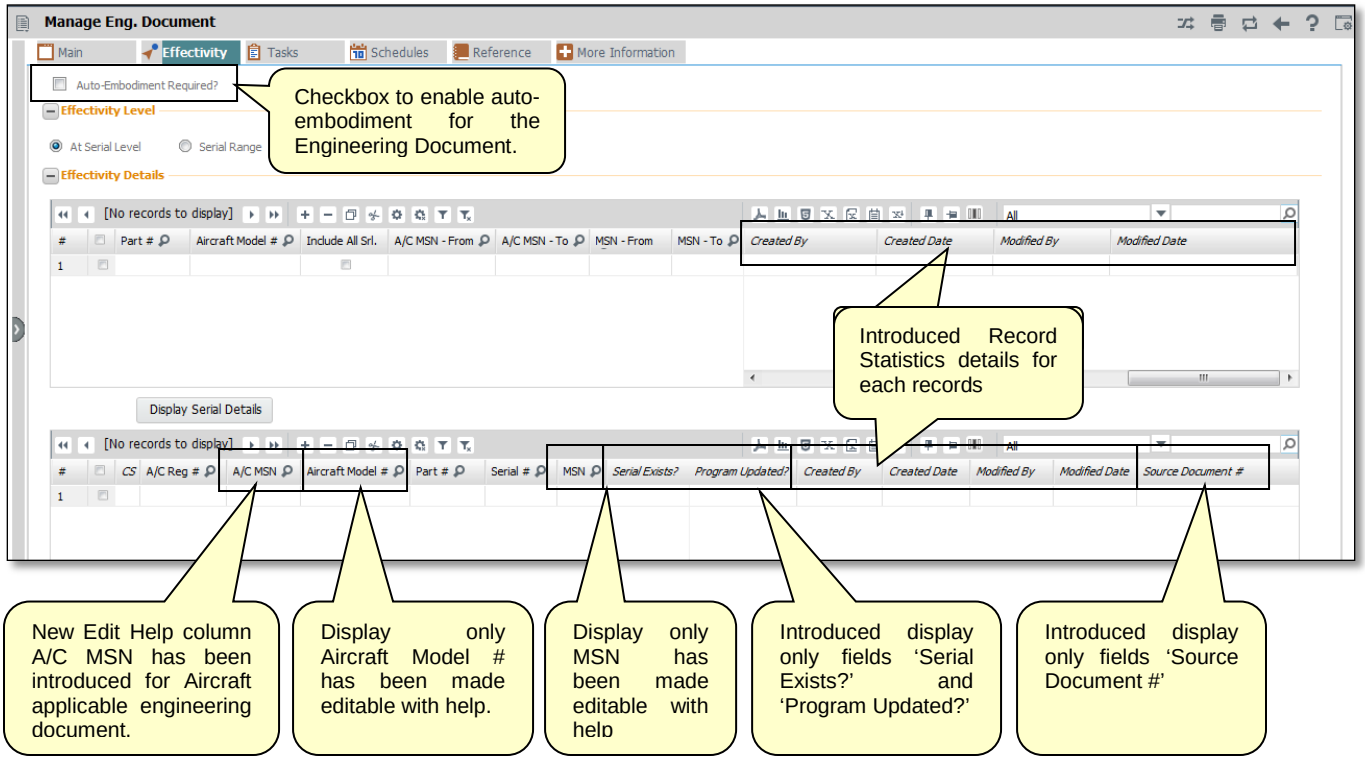
Change Details

This enhancement brings the capability to automatically update effectivity of engineering documents when aircrafts / components are inducted or activated in the system. Auto-embodiment of applicable Engineering Documents will be triggered during the following actions.

#	Actions	System behavior
1	Association of Aircraft to an active Maintenance Program	On association of Aircraft to an active Maintenance Program, system checks for all applicable Engineering Documents effective to the aircraft and subsequently updates respective Aircraft Maintenance Program.
2	On reactivation of Aircraft Maintenance Program	On activation of inactive Aircraft Maintenance Program, system checks for all applicable Engineering Documents that were not updated during the time when program remained inactive and updates the Maintenance program automatically.
3	On reactivation of Aircraft Record	On activation of an inactive Aircraft record, system checks for all applicable Engineering Documents that were not updated during the time when Aircraft record remained inactive and updates respective Aircraft Maintenance program automatically.
4	On creation of Component Record	On creation of component record, system checks for all applicable Engineering Documents effective to the component and updates respective Component

#	Actions	System behavior
		Maintenance Program. **Note:** If Part Program does not exist, a new Component Maintenance Program will be generated in Authorized status with respective EO tasks.
5	On reactivation of Component Record	On activation of an inactive component record, system checks for all applicable Engineering Documents that were not updated during the time when the Component record remained inactive and updates respective Component Maintenance program automatically.

Exhibit 1: Changes in Manage Engineering Document screen (Effectivity tab)



#	Changes	Remark
1	New check box **Auto-embodiment Required?** has been introduced in Effectivity tab.	During Auto-embodiment of effectivity, system will only consider documents that have this checkbox checked.
2	New Edit Help column **A/C MSN** has been introduced in Serial Level effectivity multiline for Aircraft applicable engineering document.	With this field, system allows definition of EO effectivity with manufacturer serials (MSN) that are not yet available in the system. On creation of Aircraft record with same MSN and Aircraft Model # combination, effectivity details in Engineering Document will get updated with respective Aircraft Reg. # if 'Auto-embodiment Required?' checkbox is selected in the document. **Note:** This column will be visible for Engineering Document with Applicability 'Aircraft'
3	Display only **Aircraft Model #** has been made editable with help	This field facilitates user to enter Aircraft Model # manually if MSN does not exist in the system. System mandates user to provide this information if MSN # alone is provided (without A/C Reg. #) **Note:** System retrieves the Aircraft Model info automatically if valid Aircraft Reg. # is provided.
4	Display only column **MSN** has been made editable with help for Component / Engine applicable engineering document.	With this field, system allows definition of EO effectivity with manufacturer serials (MSN) that are not yet available in the system. On creation of Component record with same MSN and Part # combination, effectivity details in Engineering Document will get updated with respective Serial # if 'Auto-embodiment Required?' checkbox is selected in the document. **Note:** This column will be visible for Engineering Document with Applicability 'Component' or 'Engine'.
5	New column **Serial Exists?** has been added at Serial Level multiline of engineering document.	System displays the values "Yes" or "No" under the 'Serial Exists?' column **No**: If Aircraft MSN or MSN defined in effectivity tab does not exist in system. After auto-embodiment of effectivity, the value will be displayed as 'Yes'. **Yes**: If Aircraft MSN or MSN defined in effectivity tab

#	Changes	Remark
		already exist in system.
6	New column **Program Updated?** has been added at Serial Level multiline of engineering document.	Program Updated? field in serial level effectivity details represents whether maintenance program of respective Aircraft / Component is updated during current revision of Engineering Document. System displays the values “Yes” or “No” under the ‘Program Updated?’ column. **No**: If task information is not updated in respective Maintenance Program of Aircraft / Component during current revision of Engineering Document. **Yes**: If task information is updated in respective Maintenance Program of Aircraft / Component during current revision of Engineering Document.
7	**Record Statistics** details are introduced in Serial level and Serial Range details of Effectivity.	**Created by:** System displays Login user who has defined respective effectivity for first time. Please note that this field will display value ‘System’ in serial level effectivity details if effectivity got added automatically after auto-embodiment. **Created Date:** System displays the date on which effectivity got defined for first time. **Modified by:** System displays Login user who has modified respective effectivity information recently. **Modified Date:** System displays the date on which effectivity got modified recently.
8	New column **Source Document #** has been added at Serial Level multiline of engineering document.	System displays the source document of respective Component.

Illustration of Auto-embodiment feature

Engineering Documents with Applicability ‘Aircraft’

1. Release an Engineering Document with MSNs not available in system and ‘**Auto-Embodiment Required?’** checkbox selected.
2. Create an Aircraft record with one of the MSN – Aircraft Model # combination.

3. Effectivity details in EO will get updated with Aircraft Reg. #. **Created by** field will get updated as ‘System’ for the record.
4. Associate the Aircraft to an ‘Active’ Maintenance Program. Engineering Document information will automatically get updated in respective Aircraft Specific Maintenance Program. **Program Updated?** field in Engineering Document will display ‘Yes’ for respective revision after update.

Engineering Document with Applicability ‘Component’ / ‘Engine’

1. Release an Engineering Document with MSNs not available in system and **Auto-Embodiment Required?** checkbox selected.
2. Create a Component record with one of the MSN – Part # combination.
3. Engineering Document information will automatically get updated in respective Component Maintenance Program. **Program Updated?** field in Engineering Document will display ‘Yes’ for respective revision after update.

WHAT'S NEW IN COMPLIANCE TRACKING & CONTROL?

Anility to find discrepancies reported against source task or discrepancy

Reference: AHBF-17825

Background

Aircraft Maintenance organizations are constantly looking for efficient methods to find information on open discrepancies following the execution of tasks. This kind of information is needed for instance, if the user has to extend the interval of a given task depending on the number or frequency or type of defects open even after task execution to decide whether the system is reliable or to extend the interval.

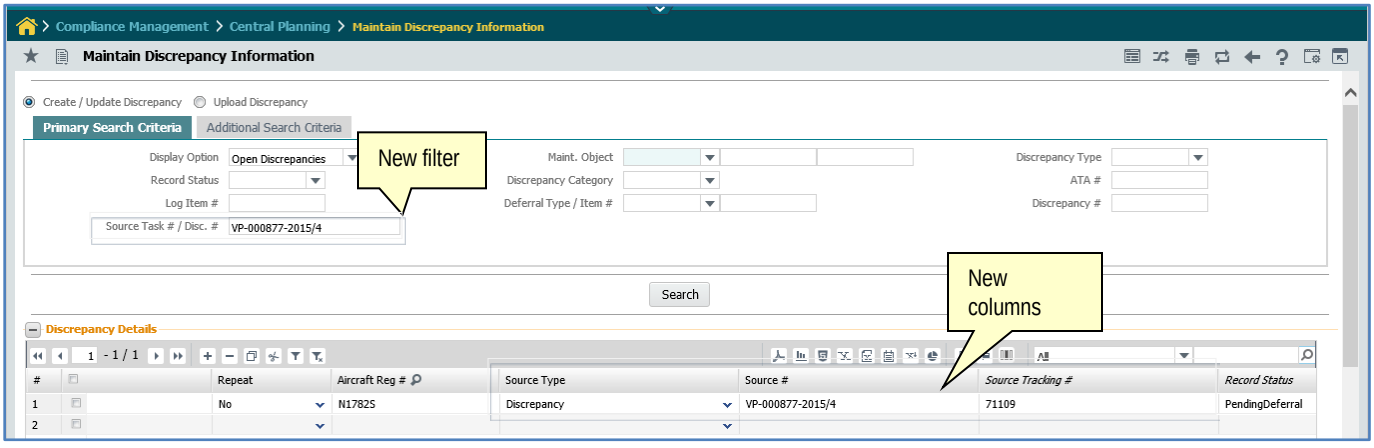
This enhancement brings the ability to find all/open discrepancies reported against **Source Task #/Discrepancy #** in the **Maintain Discrepancy Information** screen of **Compliance Tracking & Control** business component.

Change Details

The following filters have been introduced in the **Maintain Discrepancy Information** screen in the **Compliance Tracking & Control** business component:

- Source Task #/ Disc. # (Primary Search Criteria section)
- Source Type (Discrepancy Details multiline section)
- Source # (Discrepancy Details multiline section)
- Source Tracking # (Discrepancy Details multiline section)

Exhibit 1: Identifies the new filters in the **Maintain Discrepancy Information s**creen



Source Task # / Disc. #:

The **Source Task #/Disc. #** filter in the **Primary Search Criteria** section of the **Maintain Discrepancy Information** screen facilitates filtering of discrepancies reported against a specified source task/discrepancy. The **Source Task #/Disc. #** filter will support pre, post and embedded wild card search.

Source Type:

The **Source Type** drop down in the **Discrepancy Details** multiline will be loaded with the following values;

- Task
- Discrepancy

*For new or modified records, **Source Type** must not be blank, if **Source # is entered.***

Source #:

Source # is the code identifying the source of the discrepancy.

- If **Source Type** is selected as 'Task', Task # specified must be a valid task in in the interacting **Maintenance Task** business component.
- If S**ource Type** is selected as 'Discrepancy', Discrepancy # entered is a valid discrepancy in the interacting **Discrepancy Processing** business component.

Note:

*I. **Source #** is mandatory, if **Source Type** is provided by users.*

*II. Modification of **Source Type** and **Source #** will be restricted and is governed by a backend option that can be enabled based on specific requests.*

.

Source Tracking #:

Source Tracking # of the source task/discrepancy in the related Aircraft Maintenance Execution/Shop Work Order will be retrieved and displayed in the Source Tracking # column.

WHAT'S NEW IN STRUCTURAL DAMAGE REPORT?

Ability to generate Damage Report from Manage Damage Charts

Reference: AHBF-18725

Background

The User can mark damage points on Aircraft/Component charts in the **Manage Damage Charts** activity but that required a *Damage Report* to be first generated from the **Manage Damage Report** activity to proceed with the marking.

As part of this enhancement, the user can mark damage points on a Chart and system itself will generate a *Damage Report* while saving the damage points in the **Manage Damage Charts** activity.

Change Details

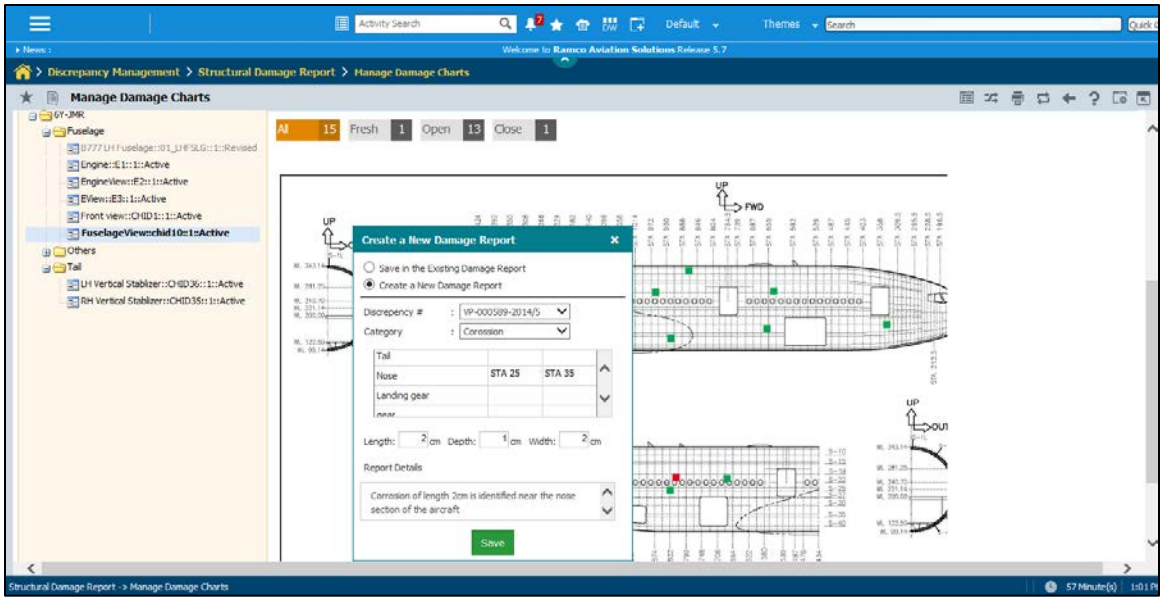
A new popup **Create a New Damage Report** has been provided which can be accessed by double clicking on a Chart. User can select **Create a New Damage Report**, provide all the necessary information to generate a Damage Report and save the marked point against it or select 'Save' in the **Existing Damage Report** to save the marked point against an existing Damage Report.

A new tree node named 'Other Charts' is added which lists all the unaffected charts specific to the Aircraft/Model or Part/Component. If a point is marked on an unaffected chart, the same will be considered as an affected chart.

The following scenarios are explained in detail below:

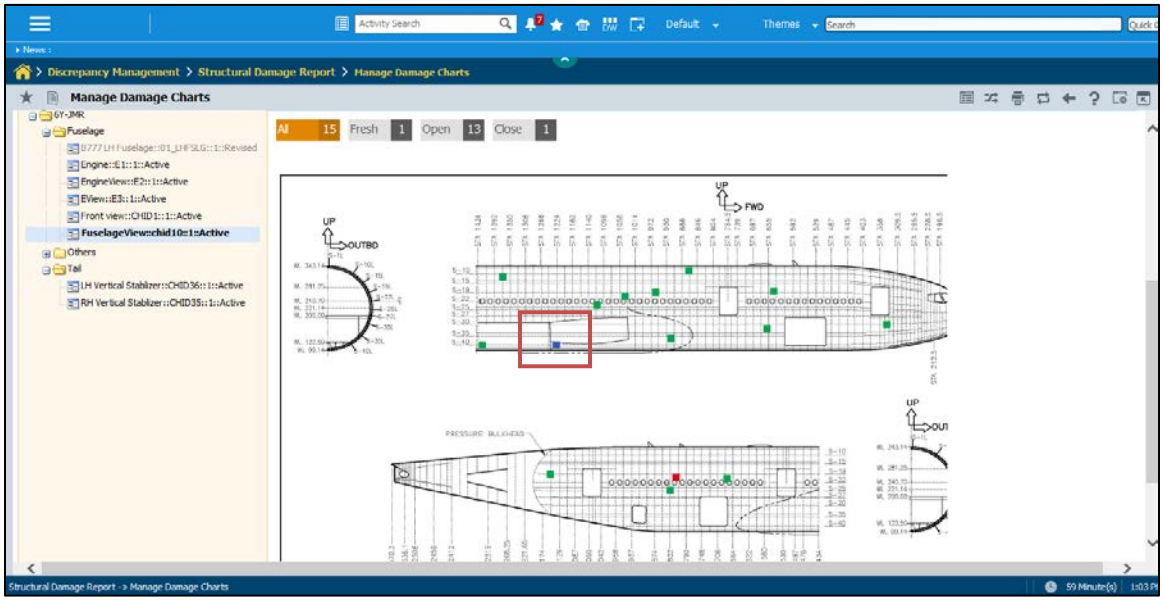
1. Create a New Damage Report.
2. View Damage Points.
3. View Damage Report #.
4. View/Edit Damage Details.

Exhibit 1: Create a New Damage Report



- Double click on the chart to launch the **Create a New Damage Report** popup.
- Select “Create a New Damage Report” from the radio button
- Select the Discrepancy # on which the Damage Report to be created
- Select the Category from the Combo, and enter the other Damage Location and Dimension details
- Click on ‘Save’ to generate a new damage report

Exhibit 2: View Damage Points

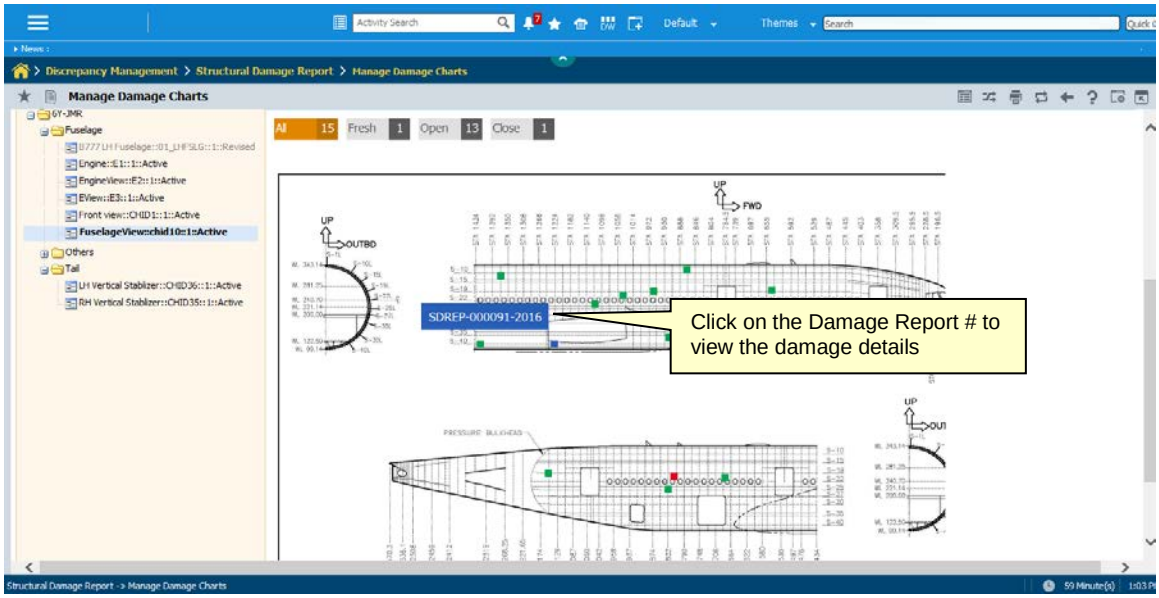


- Created damage report will be classified as Fresh i.e., the damage report created at that instance and indicated in the “Blue” color.
- Chart displays all the damage points marked against the selected chart.

Note: Below are the color codes for Open and Closed Damage Reports:

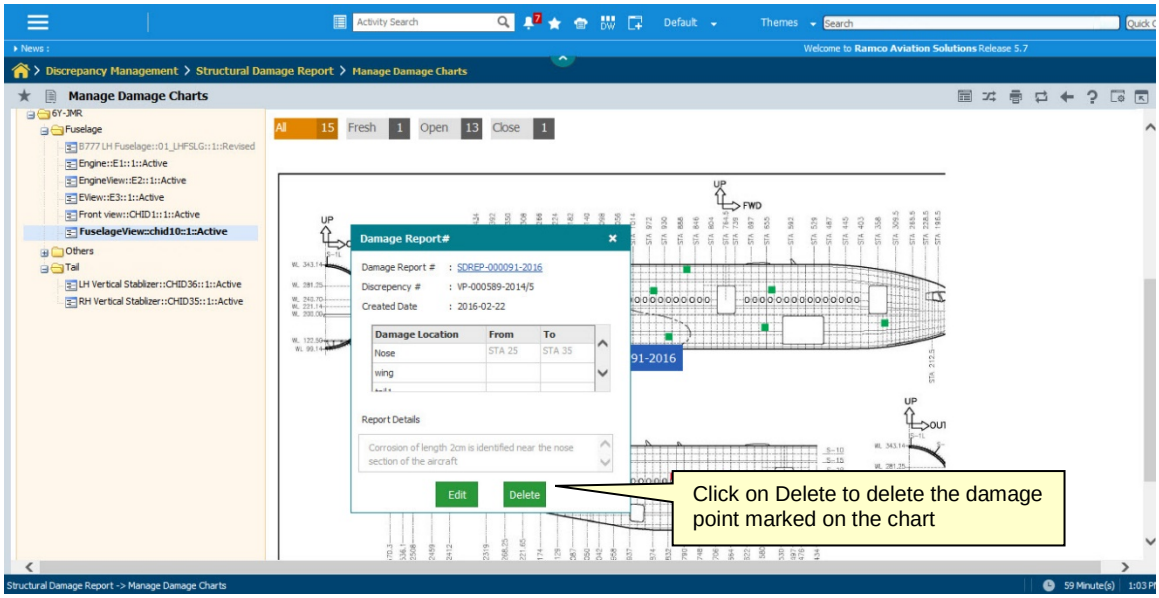
- *Open - Damage Report in Fresh, Assessed, and Confirmed will be indicated in Green color.*
- *Closed - Damage Report in Closed status will be indicated in Red color.*

Exhibit 3: View Damage Report #



- Mouse over on the damage point to view the Damage Report #
- Click on the Damage Report # to view the damage details.

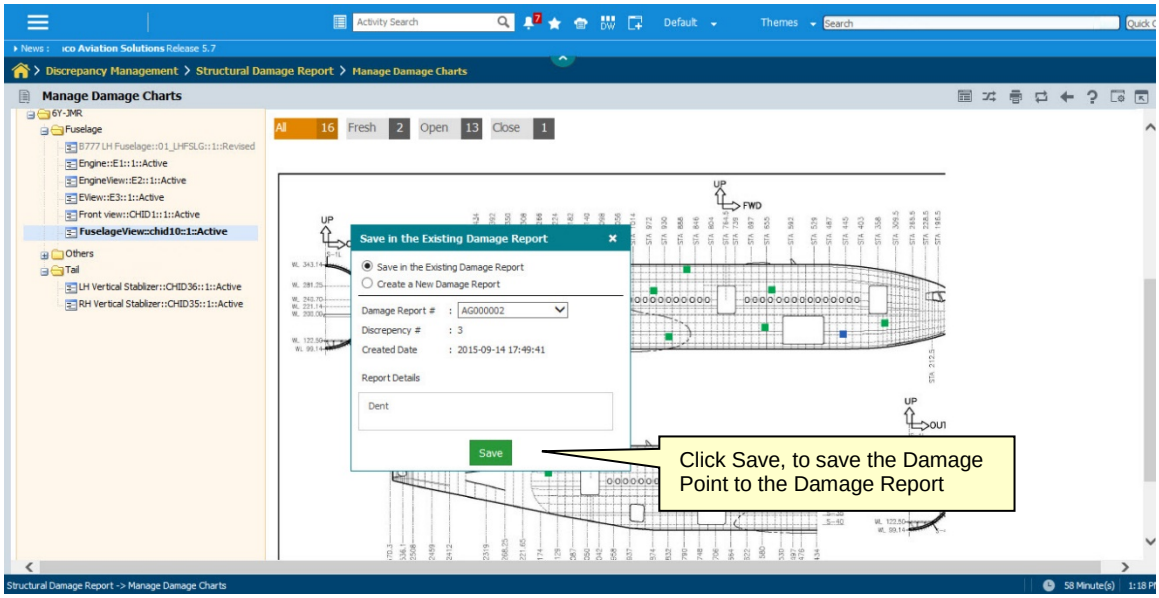
Exhibit 4: View/Edit Damage Details



- Click on “Edit” to modify the details.
- Click on “Delete” button to delete the damage points

.

Exhibit 5: Save to an existing Damage Report



- Double click on the chart to launch the popup.
- Select “Save in the Existing Damage Report” from the combo.
- Select the Damage Report # from the combo to which the damage points to be marked on the chart.

Note: Damage Report # combo loads all the Damage Reports which are in Open status.

WHAT'S NEW IN DISCREPANCY PROCESSING?

View part requirements against discrepancy in View Discrepancy Information screen

Reference: AHBF-16766

Background

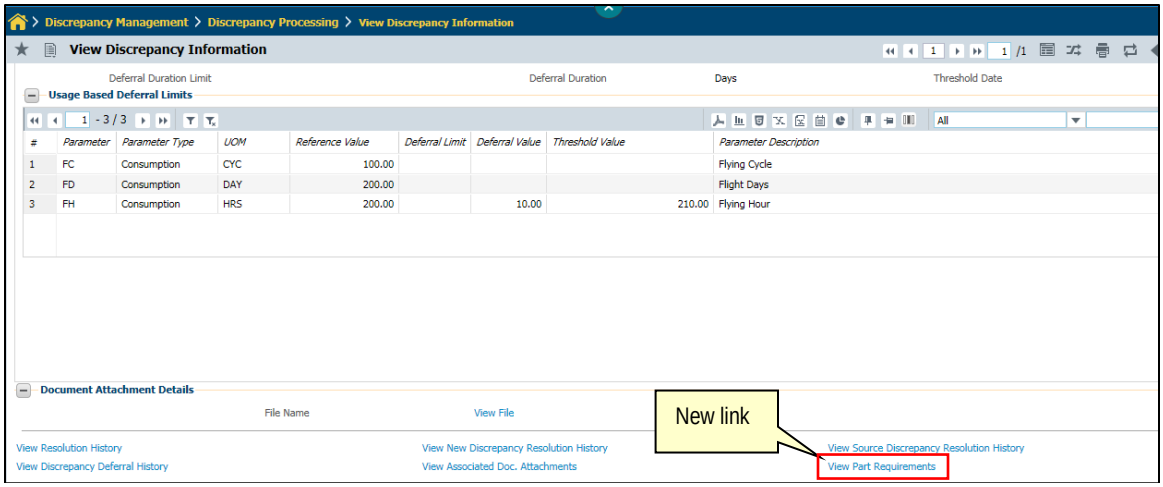
Part requirements can be raised against discrepancies. However, currently there is no provision to view the part requirements once the discrepancies are closed.

This enhancement brings improvements in the **View Discrepancy Information** screen of the **Discrepancy Processing** business component to enable viewing of part requirements for a discrepancy.

Change Details

A new link **View Part Requirements** has been added in the **View Discrepancy Information** screen. On clicking the link, the user will be able to see the details of all the part requirements for the selected discrepancy.

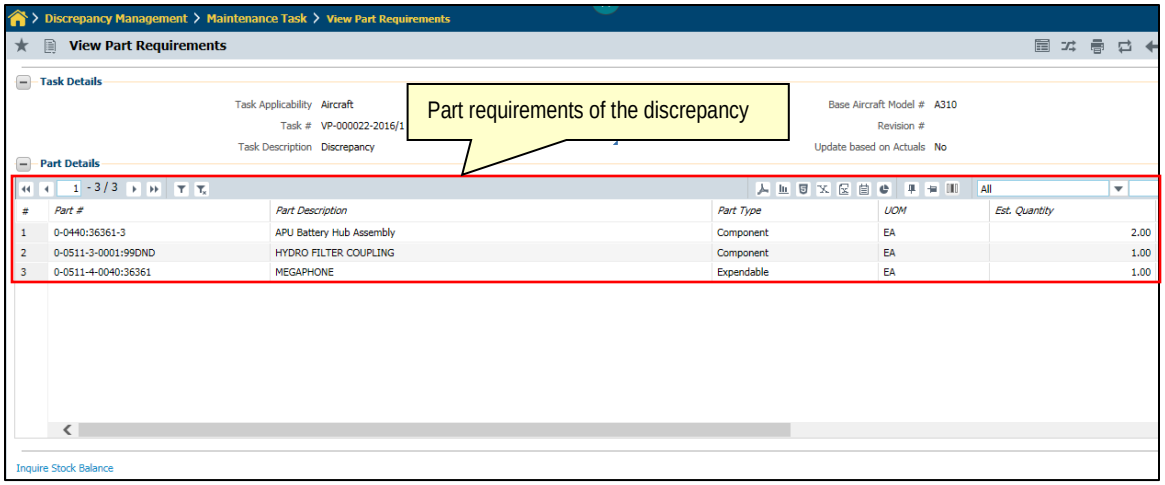
Exhibit 1:



#	Parameter	Parameter Type	UOM	Reference Value	Deferral Limit	Deferral Value	Threshold Value	Parameter Description
1	FC	Consumption	CYC	100.00				Flying Cycle
2	FD	Consumption	DAY	200.00				Flight Days
3	FH	Consumption	HRS	200.00		10.00	210.00	Flying Hour

On click of the **View Part Requirements** link, details including Part #, Part Description, Part Type, UOM, Est. Quantity and Need frequency for each part required for the selected discrepancy are displayed as follows.

Exhibit 2:



#	Part #	Part Description	Part Type	UOM	Est. Quantity
1	0-0440:36361-3	APU Battery Hub Assembly	Component	EA	2.00
2	0-0511-3-0001:99DND	HYDRO FILTER COUPLING	Component	EA	1.00
3	0-0511-4-0040:36361	MEGAPHONE	Expendable	EA	1.00

WHAT'S NEW IN AIRCRAFT MAINTENANCE EXECUTION?

Ability to authenticate user during sign -off

Reference: AHBG-484

Background

Regulations governed by various regulatory authorities like FAA, EASA etc., enforce that only certified persons carry out maintenance of Aircraft. Once the maintenance task is completed it needs to be signed-off by respective Mechanic/Inspector, and the record needs to be maintained for audit purposes.

Single factor authentication replies on one factor i.e., the knowledge to set strong password and remember it. Also password needs to be protected from many threats; carelessly discarded password in sticky notes, social engineering exploits etc. Considering the sensitive nature of Aircraft maintenance and stringent regulatory requirements, Airline / MRO Organizations require the system to enforce a second level of authentication while performing critical activity of task Sign-Off.

Change Details

This enhancement brings the capability to additionally authenticate the User with **PIN** during task/discrepancy sign-off in **Aircraft Maintenance Execution** business component. As per the policies of the organization it is possible to configure the second level of authentication with 'Login Password' or 'PIN' or both 'Login password' and 'PIN' during sign-off action.

Following new business activities are introduced as part of the enhancement:

Business Component	Business Activity	User Interface
Smart Card Interface	Configure Dual Authentication	Configure Dual Authentication
Smart Card Interface	Set/Change PIN	Set/Change PIN
Smart Card Interface	Administer Dual Authentication	Administer Dual Authentication

Configure Dual Authentication

Introduced to configure dual authentication for the following actions in Aircraft Maintenance Execution business component.

Application Group	Entity	Action
Desktop	Aircraft Maintenance Execution	Sign-Off

Application Group	Entity	Action
Desktop	Aircraft Maintenance Execution	Void task

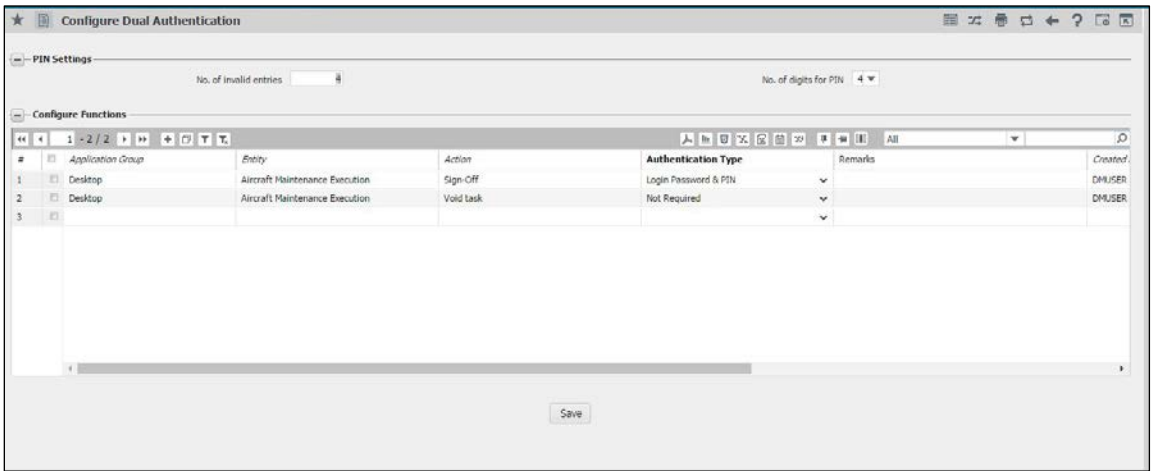
Authentication Type selected governs the type of authentication required for the respective action.

Authentication Type	Remarks
PIN	System will enforce authentication using PIN while performing the action
Login Password	System will enforce authentication using Login Password while performing the action
Login Password & PIN	System will enforce authentication using Login Password and PIN while performing the action
Not Required	System will not enforce authentication using Login Password or PIN while performing the action

The **Configure Dual Authentication** screen also facilitates to set the following information:

- **No. of invalid entries:** Account Status of Employee # will be 'Locked' if the number of attempts during authentication exceeds the value specified.
- **No. of digits for PIN:** User will be allowed to configure the number of digits for PIN. System will allow setting values from 4 to 8. Modification of values in this field is restricted if PIN is already created.

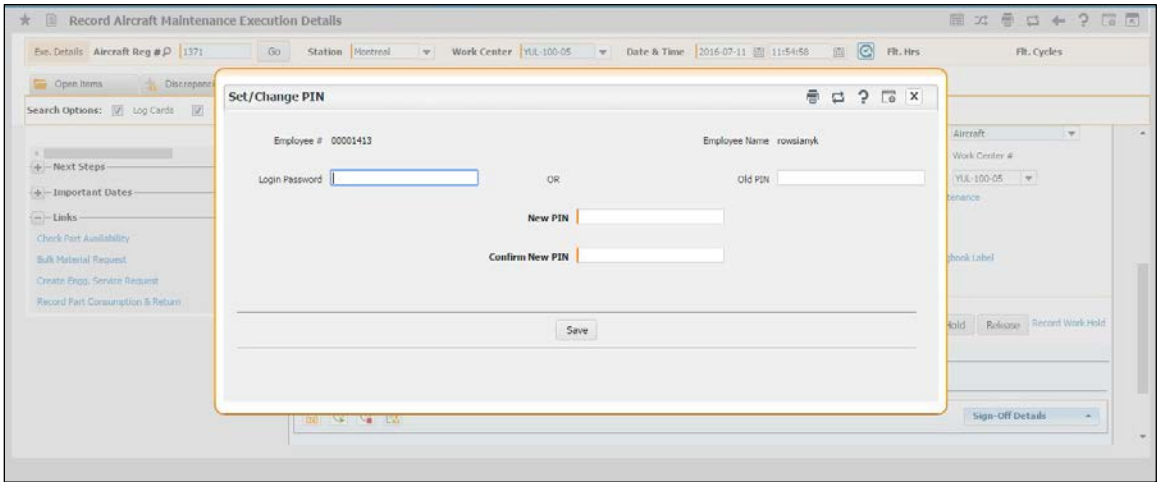
Exhibit 1: Configure Dual Authentication screen



Set/Change PIN

This activity facilitates user to set the PIN for the first time using Login Password. PIN can also be modified later as required using Login Password or Old PIN. If user account is locked based on the no. of incorrect attempts, then it can be released by the administrator using the **Administer Dual Authentication** screen.

Exhibit 2: The **Set/Change PIN** screen launched as pop-up from Record Aircraft Maintenance Execution Details



Note:

a. Set/Change PIN screen can be launched only if Authentication Type is set either as 'PIN' or 'Login Password & PIN' in Configure Dual Authentication.

b. PIN can only be set or changed by the Employee him/herself.

c. If PIN is not set, during Sign-Off, system will automatically launch the Set/Change PIN screen to facilitate setting up the PIN from the following screens:

- Record Aircraft Maintenance Execution Details
- Record Sign-Off & Work Completion

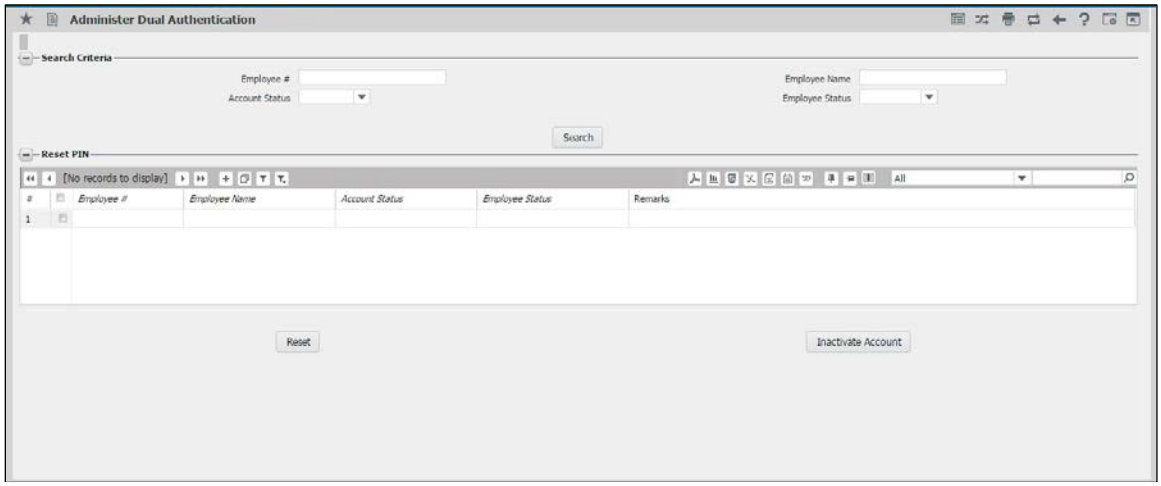
Administer Dual Authentication

This activity facilitates the administrator to manage following,

- Inactivate the Account Status of the Employee # if required
- Release an Employees account when the Account Status is 'Locked'.

Note: Once the Account Status is reset, Employee # will be forced to set a PIN for him/herself.

Exhibit 3: Administer Dual Authentication screen



Note:

a. *Administer Dual Authentication screen can be launched only if Authentication Type is set either as 'PIN' or 'Login Password & PIN' in Configure Dual Authentication.*

b. *Employees who has set PIN will only be listed in the screen*

c. *It is recommended that Admin roles / Supervisors are provided with the access for Administer Dual Authentication screen*

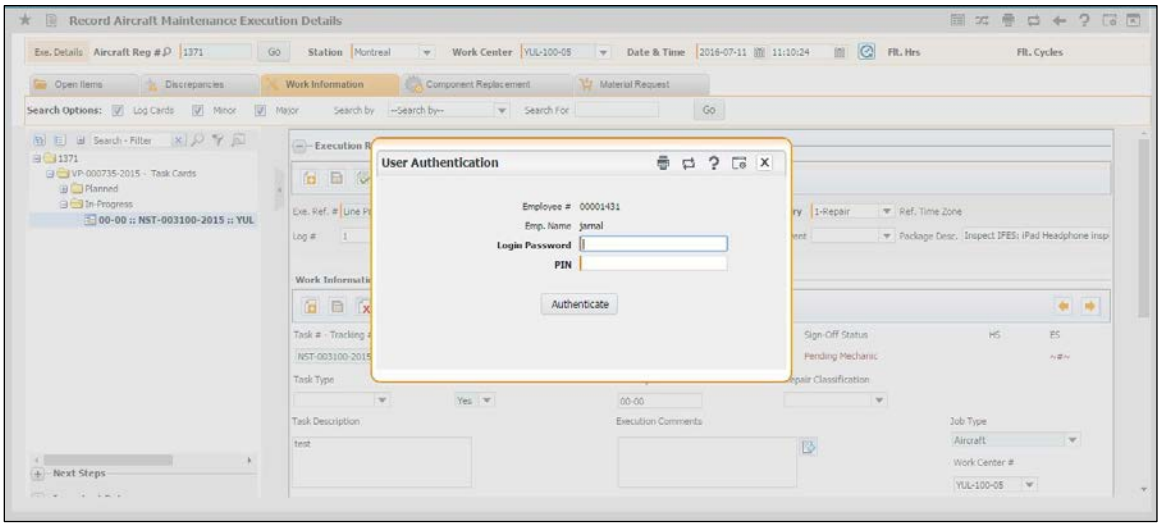
User Authentication

User Authentications screen facilitates user to authenticate sign-off or void action during Aircraft Maintenance Execution with PIN or Login Password or both as configured. User Authentication screen will launch as a pop-up while performing following actions during Aircraft Maintenance:

- **Save (Task)** - Work Information TAB (Record Aircraft Maintenance Execution Details screen)
- **Save (Discrepancy)** - Discrepancy TAB (Record Aircraft Maintenance Execution Details screen)
- **Record Sign-Off & Work Completion** (Record Sign-Off & Work Completion screen)

Once user authenticates with correct Login Password and/or PIN credentials as required, system will update the Sign-off Status of Task/Discrepancy. If number of incorrect attempt of PIN # goes beyond 'No. of invalid entries' defined in the **Configure Dual Authentication** screen, system will change the Account Status of Employee # as 'Locked', thus restricting the Employee to perform Sign-Off until the Administrator releases it.

Exhibit 4: User Authentication screen as pop-up from **Record Aircraft Maintenance Execution Details** screen



Note:

a. *Login Password field will not be displayed if **Authentication Type** is set as 'PIN'*

b. *PIN field will not be displayed if **Authentication Type** is set as 'Login Password'*

c. *Both Login Password and PIN fields will be displayed if **Authentication Type** is set as 'Login Password & PIN'*

Conditions to launch Dual Authentication screens as pop-up

Set/Change PIN screen will prompt as pop-up if,

- Sign-Off Requirements is defined for Task/Discrepancy in Package
- Valid Employee # is furnished in respective fields of Mechanic, Inspector or RII with sign-off status Pending with Mechanic, Inspector or RII
- Dual Authentication is enabled for Sign-Off or Void action
- PIN is not set for Employee #

User Authentication screen will prompt as pop-up if,

- Sign-Off Requirements is defined for Task/Discrepancy in Package
- Valid Employee # is furnished in respective fields of Mechanic, Inspector or RII with sign-off status Pending
- Dual Authentication is enabled for Sign-Off or Void action
- PIN is set for Employee #

Need Date logic change for the MR generated upon modification of work center in AME

Reference: AHBG-57

Background

Currently, when work center is changed in AME, existing material requests are short closed and new material requests are created, if the associated warehouse is different for the work center. In this process, 'Need Date' is updated with the Current Date for the newly generated material requests. Business need is to set the Need Date as the 'Planned Start Date' of the corresponding tasks.

Change Details

Logic to set the 'Need Date' when MR's are recreated from AME is modified as follows:

- If 'Plan Start Date' of the task is a future date, then the 'MR Need Date' will be set as the 'Plan Start Date' of the task.
- If 'Plan Start Date' of the task is a past date, then the 'MR Need Date' will be set as the current date.

Above logic is implemented in the following actions.

#	Scenario	Screens / Actions
1	Manual MR generation	• Record Aircraft Maintenance Execution Details screen - Material Request Tab • Plan Material
2	Auto-generated MR	• Create / Release Packages • Record Aircraft Maintenance Execution Details screen – Work Information, Discrepancy and Component Replacement Tab • Edit Work Estimates (Confirm Estimates) • Upload Documents (Upload)
3	MR re-creation after short closure	**Primary Work Center Change** • Edit Package Additional Information screen • Create/Release Package **Task Work Center Change** • Record Aircraft Maintenance Execution

#	Scenario	Screens / Actions
		Details screen – Work Information • Edit Package Additional Information screen **<u>Plan Start Date modifications</u>** • Review Fleet Maintenance Plan
4	Association of Log Card discrepancies to Package	• Review Fleet Maintenance Plan • Create/Release Package • AME task tab (Save)

Improved visibility of 'Available Qty' in the MR tab of AME

Reference: AHBG-59

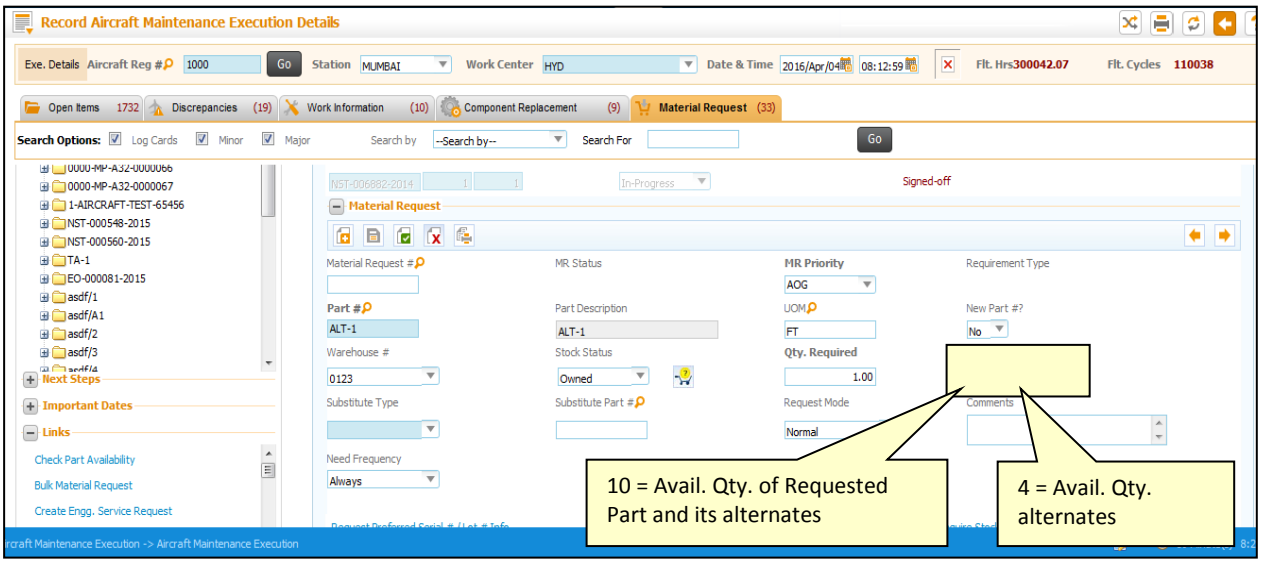
Background

Currently, **Available Qty** displayed in the **Material Request** tab of **Record Aircraft Maintenance Execution Details** screen includes alternates based on an option. However, it is not explicitly indicated in the screen so that the user is aware of alternates being included.

Change Details

The part quantity breakup of **Available Qty** of requested part will now be displayed for the benefit of users.

Exhibit 1: Illustrates display of **Available Qty**.



Note: *Alternates will be included in Available Qty. under following conditions, if:*

- *Value for the process parameter 'Include alternate parts and stock status for display of Available Qty.' is set as 1 (Yes) against Entity Type 'Package Type' in Define Process Entities.*
- *Substitute Part # is specified for Requested Part # during Material Request in Record Aircraft Maintenance Execution Details screen though the above option is set as 0 (No).*

Ability to restrict display of Discrepancy folders in the tree section in AME based on access rights

Reference: AHBG-289

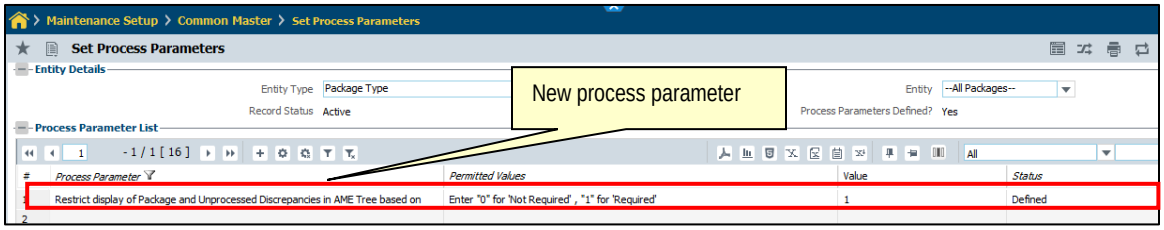
Background

At the international line stations, line maintenance activities can be handled by 3rd party agents. They will have access to the AME screen. System should not display the Deferred and Unprocessed discrepancies on the Aircraft for such roles as there is a possibility that the information will be misused. So, for the 3rd party agent roles, system should only display the folders “Major” and “Minor” (as applicable based on Work Center access) in the AME Tree. In other words, folders “Package Discrepancies” and “Unprocessed Discrepancies” should not be displayed for the 3rd party agent roles.

Change Details

This enhancement brings improvements in the **Aircraft Maintenance Execution** business component to restrict display of Discrepancy folders in the tree section in AME based on access rights. A new role should be created for the 3rd party agents. A new set option “Restrict display of Package and Unprocessed Discrepancies in AME Tree based on access rights” will be provided with permitted values as Not Required (default) & Required. A new system activity “Display Package and Unprocessed Discrepancies in AME Tree” will be provided.

Exhibit 1: Identifies the new process parameter in **Set Process Parameters** screen

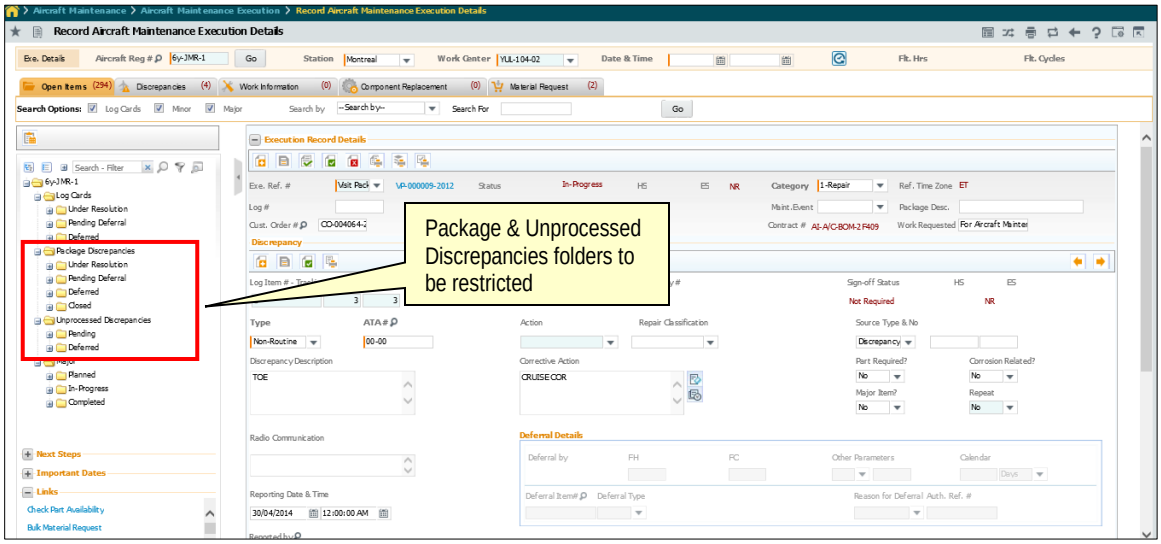


A new process parameter **Restrict display of Package and Unprocessed Discrepancies in AME Tree based on access rights** is added in the **Common Master** business component under the Entity Type ‘Package Type’ & in the Entity ‘—All Packages—‘. The permitted values are ‘0’ for 'Not Required', ‘1’ for 'Required’.

If the process parameter is set as ‘0’ (Not Required), restricting the Package and Unprocessed Discrepancies folders in AME Tree will not be based on system activity mapping to the user role. If the process parameter is set as ‘1’ (Required), restricting the

Package and Unprocessed Discrepancies folders in AME Tree will be based on the system activity mapping to the user role.

Exhibit 2: Record Aircraft Maintenance Execution screen



- When the set option '**Restrict display of Package and Unprocessed Discrepancies in AME Tree based on access rights**' is set as 'Not Required', the "Package Discrepancies" and "Unprocessed Discrepancies" along with its sub-folders will be displayed
- When the set option '**Restrict display of Package and Unprocessed Discrepancies in AME Tree based on access rights**' is set as 'Required' & the system activity is mapped to the login user role, the "Package Discrepancies" and "Unprocessed Discrepancies" along with its sub-folders will be displayed
- When the set option '**Restrict display of Package and Unprocessed Discrepancies in AME Tree based on access rights**' is set as 'Required' & the system activity is not mapped to the 3rd party agents role, the "Package Discrepancies" and "Unprocessed Discrepancies" along with its sub-folders will not be displayed
- AME Tree build and display logic has been modified so that the folders "Package Discrepancies" and "Unprocessed Discrepancies" along with its sub-folders will not be displayed if the login role is mapped to the new system activity
- Only the folders "Major" or "Minor" as applicable based on Work Center mapping will be displayed

WHAT'S NEW IN COMPLIANCE TRACKING AND CONTROL & SHOP WORK ORDER?

Ability to restrict user from requesting for materials from a warehouse based on warehouse-user mapping

Reference: AHBF-17863

Background

Currently, in the **Plan Materials** and **Record Shop Execution Details** screens, system does not restrict the user from requesting for parts from a warehouse to which the user is not having access. At times, material request are incorrectly raised on a different warehouse from the above screens leading to maintenance delays waiting for parts. Business need is to restrict requesting for parts from a warehouse, if the user is not mapped to the warehouse from **Plan Materials** and **Record Shop Execution Details** screens.

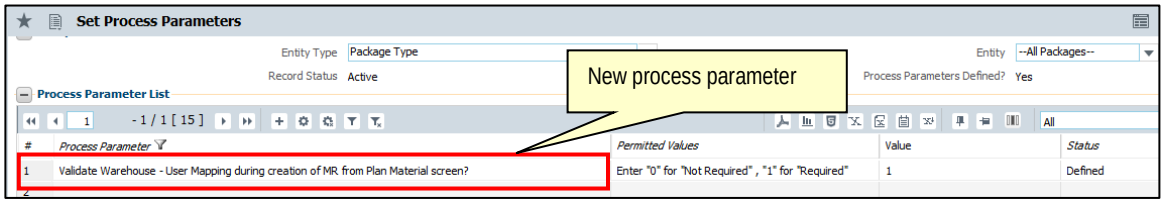
Change Details

This enhancement brings improvements in the **Plan Materials** screen of **Compliance Management** business component & in the **Record Shop Execution Details** screen of **Shop Work Order** business component to restrict the creation & modification of Material Requests against warehouses to which the user is not mapped.

Two new process parameters are added to configure this enhancement, based on which the system restricts/allows the user to generate material request & edit part requirements for any warehouse or only for the warehouse to which the user is mapped.

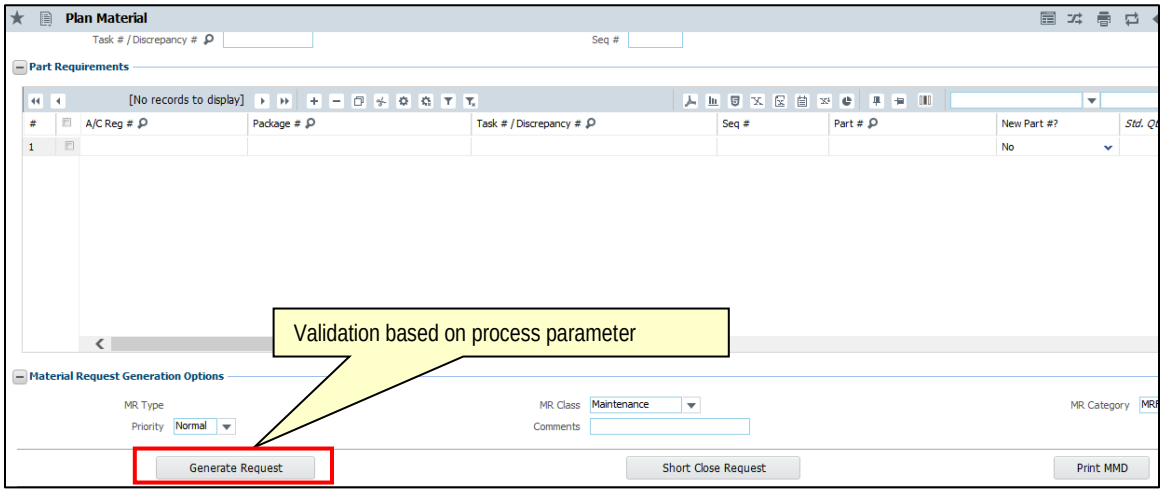
A new process parameter **Validate Warehouse - User Mapping during creation of MR from Plan Material screen?** is added under the Entity Type **Package Type** & Entity **--All Package--**. Permitted values are: '0' for 'Not Required' and '1' for 'Required'.

Exhibit 1: Identifies the new process parameter for Entity Type **Package Type** & Entity **--All Package--**.



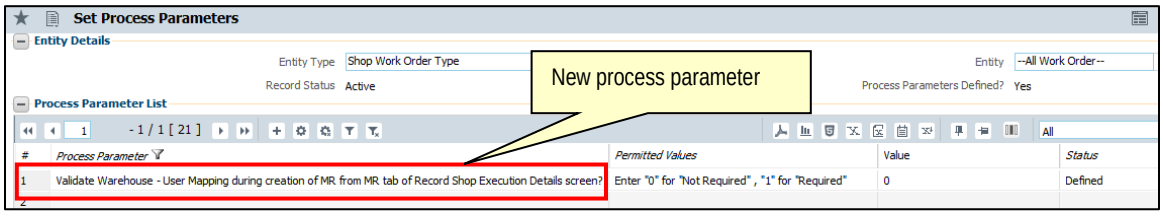
If the process parameter **Validate Warehouse - User Mapping during creation of MR from Plan Material screen?** is set as '1' (Required), when the user generates the material request, the system checks if the user has mapping to the warehouse on which the request is raised. If the user does not have mapping, the system does not allow the user to generate the material request. If the process parameter is set as '0' (Not Required), the system does not restrict the user and allows generation of MR from a warehouse to which the user is not mapped.

Exhibit 2: Identifies the new validation added based on the new process parameter in **Plan Material** screen



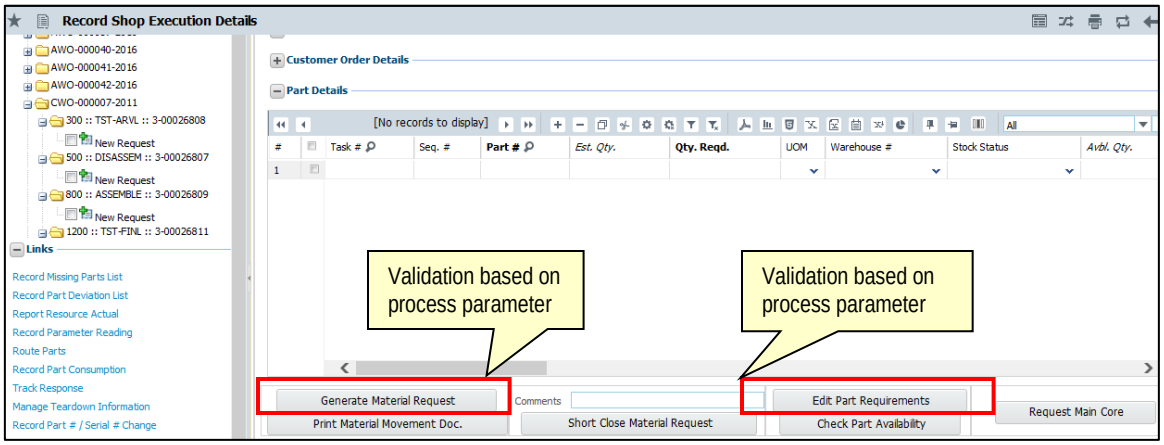
A new process parameter **Validate Warehouse - User Mapping during creation of MR from MR tab of Record Shop Execution Details screen?** is added under the Entity Type **Shop Work Order Type** & Entity **--All Work Order—**. Permitted values are: '0' for 'Not Required' and '1' for 'Required'.

Exhibit 3: Identifies the new process parameter for Entity Type **Shop Work Order Type** Entity **--All Work Order--**.



If the process parameter **Validate Warehouse - User Mapping during creation of MR from MR tab of Record Shop Execution Details screen?** is set as '1' (Required) and if the user attempts to generate the material request or modify the part requirements, the system verifies whether the user has mapping to the warehouse on which the request is raised. If the user does not have mapping, the system will not allow the user to generate the material request or modify part requirements. If the process parameter is set as '0' (Not Required) the system does not restrict the user and allows generation/modification of material request even on a warehouse to which the user is not mapped.

Exhibit 4: Identifies the validations added based on the new process parameter in **Record Shop Execution Details** screen



WHAT'S NEW IN COMPONENT MAINTENANCE PLANNING?

Ability to display part quantity to be shipped against Exchange/PBH Exchange POs in the Route Unserviceable Components / Parts screen

Reference: AHBF-19018

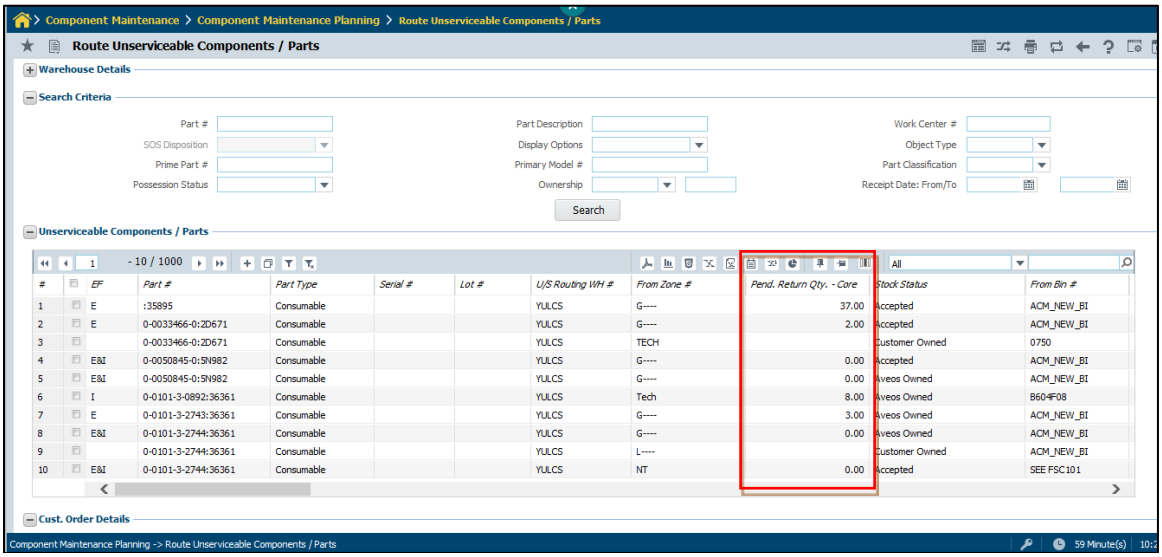
Background

Unserviceable parts removed and returned from aircraft / components are routed for internal or external repair from the **Route Unserviceable Components / Parts** screen. As some of these parts are required to be shipped to supplier as Core against 'Exchange' PO, it is required that pending core quantity for exchange is prominently available.

Change Details

New column **Pend. Return Quantity - Core** in the **Route Unserviceable Components / Parts** screen will now display the quantity that needs to be shipped to the supplier as Core against 'Exchange' PO.

Exhibit 1: Identifies the new column added in the Route Unserviceable Components / Parts screen



Pend. Return Quantity. – Core is derived for a part based on its ownership as explained below:

1. **Internal Stock:**

   Pend. Return Quantity. – Core will display the total quantity of pending cores to be shipped to the supplier against Exchange PO (PO Type 'Exchange'). The quantity displayed will also include pending cores of alternate parts (one way and two ways).

   Pend. Return Quantity. – Core will display '0', if no pending core quantities exist for parts in internal stocks.

2. **PBH Stock:**

   Pend. Return Quantity. – Core will display the total quantity of pending cores that must be shipped to the supplier against the Exchange PO (PO Type 'PBH Exchange'). The quantity displayed will also include pending cores of alternate parts (one way and two ways).

   Note 1:
   For both PBH and Internal Stock, **Pend. Return Quantity. – Core** is based on Alternate Type defined in the Exchange PO.

   - If Alternate Type of the part in Exchange PO is set as 'Not Allowed', the pending core quantity will display against the same part # in the **Route Unserviceable Components / Parts** screen.
   - If Alternate Type of a part in Exchange PO is set as 'Specific Alternate', the pending core quantity will display against the same part # or the specific alternate Part # in the **Route Unserviceable Components / Parts** screen.
   - If Alternate Type of a part in Exchange PO is set as 'Allowed', the pending core quantity will display against the same part # or any of its alternate part # in the **Route Unserviceable Components / Parts** screen.

   Note 2:
   For Supplier Stock other than 'PBH' and for Customer Stock, Pend. Return Quantity. – Core will display no value as these stocks cannot be shipped to supplier as Core against 'Exchange' or 'PBH Exchange' PO.

WHAT'S NEW IN SHOP WORK ORDER?

Ability to view Root, Intermediate and Leaf level Tasks in a hierarchical way in the tree in RSED screen

Reference: AHBG-2

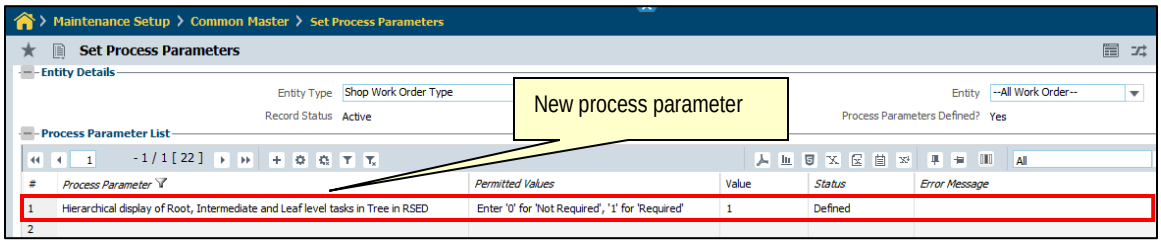
Background

At present, in Record Shop Execution Details screen, the user needs to select the execution tasks individually in the Work Actuals tree & then transfer them for clock-in or sign-off. Business requirement is to have an ability to display the Root, Intermediate and Leaf level tasks in a hierarchical way & also to transfer the leaf level (execution) tasks corresponding to the Root or Intermediate task selected in the tree for bulk clock-in, sign-off, etc.

Change Details

This enhancement brings improvements in the **Record Shop Execution Details** screen in the **Shop Work Order** business component. A new process parameter '**Hierarchical display of Root, Intermediate and Leaf level tasks in Tree in RSED screen?'** is added with permitted values as Not Required (default) & Required.

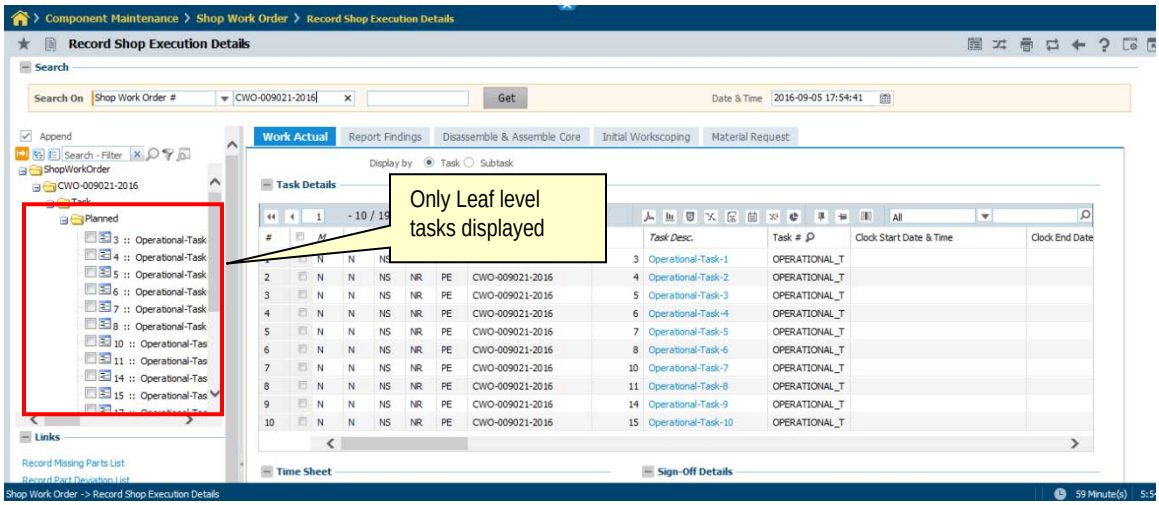
Exhibit 1: Identifies the new process parameter in **Set Process Parameters** screen



A new process parameter '**Hierarchical display of Root, Intermediate and Leaf level tasks in Tree in RSED screen?'** is added in the **Common Master** business component under the Entity Type 'Package Type' & in the Entity '—All Work Order—'. The permitted values are '0' for 'Not Required', '1' for 'Required'.

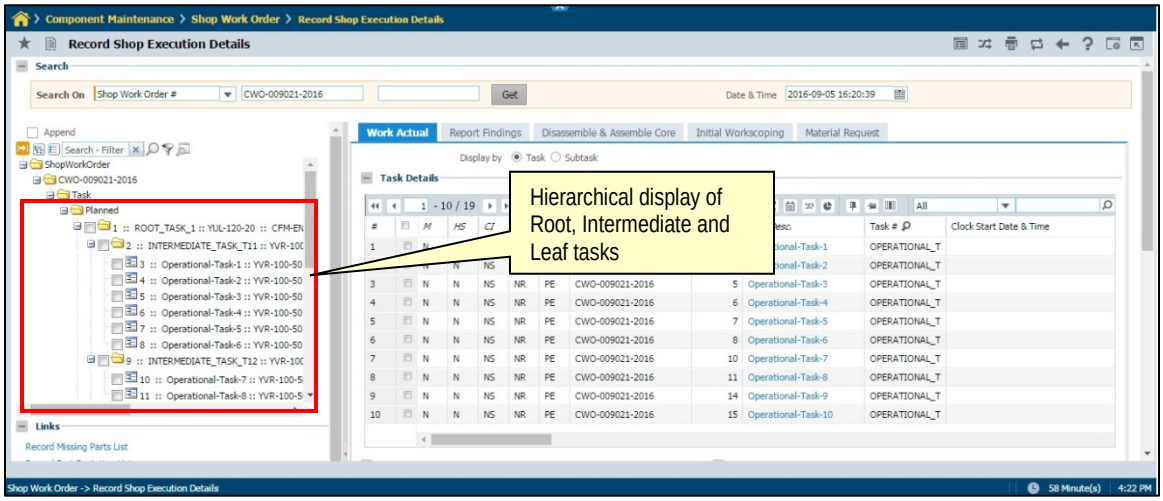
If the process parameter is set as '0' (Not Required), the exiting functionality is retained (i.e.) the Work Actuals tree displays only the execution (Leaf) tasks. If the process parameter is set as '1' (Required), then the Work Actuals tree displays the Root, Intermediate and Leaf level tasks in the Hierarchy.

Exhibit 2: Record Shop Execution Details screen – With set options as 'Not Required'



When the process parameter '**Hierarchical display of Root, Intermediate and Leaf level tasks in Tree in RSED screen?'** is set as '0' (Not Required), only the Leaf (Execution) tasks are displayed in the Work Actuals tree

Exhibit 3: Record Shop Execution Details screen – With set options as 'Required'



When the process parameter '**Hierarchical display of Root, Intermediate and Leaf level tasks in Tree in RSED screen?'** is set as '1' (Required), then the Root, Intermediate and Leaf (Execution) tasks are displayed in the hierarchy in the Work Actuals tree. The hierarchy is based on the definitions provided in the Repair Scheme Definitions.

When one or more Root or Intermediate tasks are selected in the tree, all the leaf level tasks under the tasks selected in the tree will be retrieved in the multiline in the Work Actuals tab to facilitate sign-off etc.

The logical grouping of the Root & Intermediate tasks will be based on the status of the execution tasks under them. The status of the Root or Intermediate Tasks can be any one or more of Planned, In-progress or Completed status depending upon the status of all the operational tasks under it

Ability to record removal / attachment of new serial in one go during Disassembly & Assembly

Reference: AHBF-16905

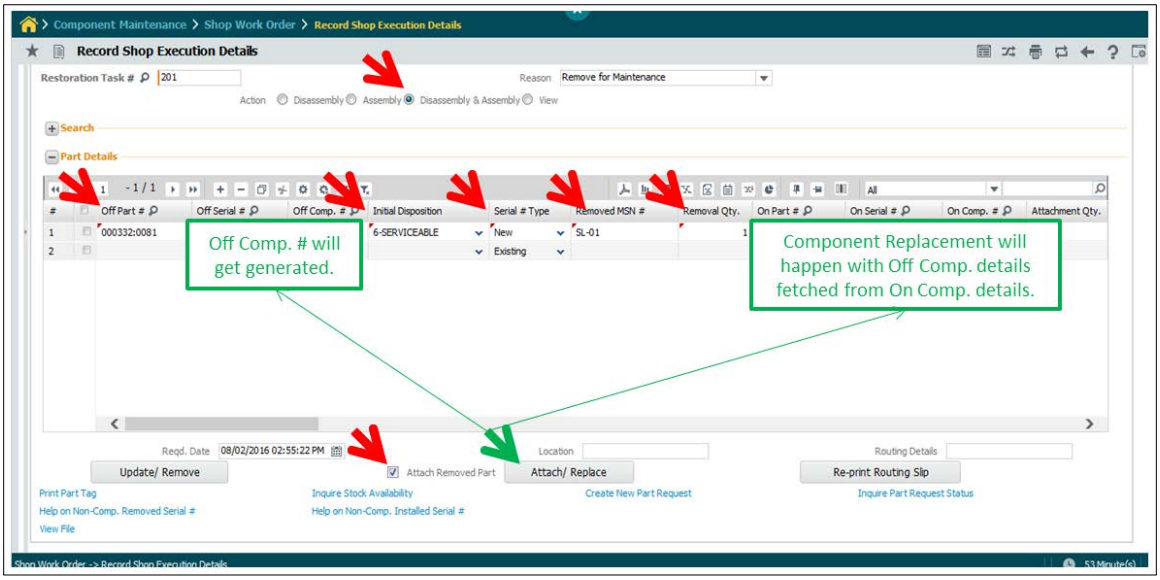
Background

The **Record Shop Execution Details** screen facilitates disassembling & assembling of sub-assemblies of the parent component. While recording disassembly & assembly information for new manufacturer serials (non-configuration tracked serials) using the 'Attach Removed Part' functionality, the system forces the user to enter the 'On Component' details. However, the business requirement is to automatically derive the 'On Component' details based on the already specified 'Off Component' information.

Change Details

With this enhancement, at the time of Disassembly & Assembly being recorded for a new MSN (for non-configuration tracked parts) in the **Record Shop Execution Details** screen using 'Attach Removed Part' functionality, the system will automatically update the 'On Component' details.

Exhibit 1: The user can perform Disassemble & Assemble transaction for new MSN by furnishing the following mandatory information marked Red in illustration



*Note: The above transaction will process without interruption, if Initial Disposition chosen has the following values set for corresponding process parameters in the **Common Master** business component.*

Entity Type	Process Parameter	Value
Disposition Code	Removed Core Condition?	2 (Serviceable)
Disposition Code	Create Order on disposition?	0 (Not Required)

Ability to Schedule and Re-schedule tasks in a Work Order in order to meet committed delivery date

Reference: AHBF-18059

Background

This feature has been enabled as a part of **Plan Work Order** to facilitate Scheduling and Re-scheduling of tasks in the Customer Work Order and Internal Work Orders.

This feature will help the Planner to ensure the completion of tasks on time to deliver the part to the customer as committed. Initially, this helps in scheduling the dates for the tasks in the order of their execution and these tasks can also be Re-scheduled if Plan End date does not promise part delivery as committed to the Customer.

Change Details

With this new change, the user will be able to schedule the tasks added to the Work Order while in the planning stage itself. This will calculate and assign Planned Start and End dates for the tasks based on the sequence number of the tasks.

After scheduling, if the user finds that the Planned End Date of the Work Order, (which will be the latest Planned end date among the tasks in the Work Order) is beyond the Promised Delivery Date of the part (committed in the Customer Order), then the user can Reschedule the dates of the Tasks by adjusting the shortage of time equally across all the Tasks. Similarly, the user can also Reschedule to adjust any surplus duration when Promised Delivery Date is way past the Planned End Date.

In order to handle Start Date of Work Order, the user has been given a facility to choose whether the Work Order Planned Start Date needs to be updated with the TAT Start Date of the Customer Order. This will help track the Work Order progress against the communicated Turn Around Time in the Contract.

Important Points to be noticed

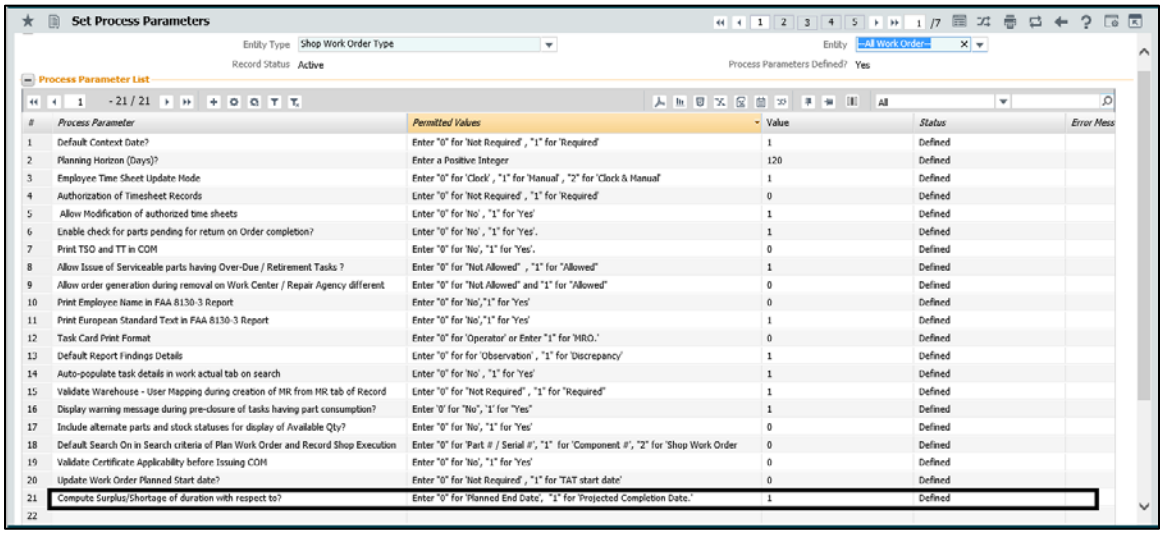
- Scheduling/Rescheduling has been enabled only for Shop Work Order.
- The feature enables scheduling of tasks in initial planning stages and also to manage Surplus and Shortage of duration encountered during execution.
- The user can choose whether the shortage or surplus needs to be calculated with respect to two different controls – Planned End Date and Projected Completion Date (Work Order) this can be set in the **Define Process Entities** screen.
- For a Customer Order based Work Order, the surplus/shortage in duration is with respect to the Promised Delivery Date communicated to the Customer.
- For an Internal Work Order, the driving date is the Target date and hence, this is used for the calculation of surplus/shortage in duration.

- Rescheduling can be done in both Cutomer Order based as well as Internal Work Order
- Two methods of Rescheduling has been provided.
    1. Dates can be simply re-arranged without handling the any surplus or shortage.
    2. Dates for tasks can be planned again based on the required adjustment in the duration.
- Rescheduling to manage any surplus/shortage of duration to meet committed date involves adjustment in the Estimated Elapsed Time of the Tasks in the Work Order.
- For a Customer Order based Work Order, the user can set to update the Planned Start Date of the Work Order with TAT Start Date.

Defining reference date for Surplus/Shortage calculation

The user can choose the reference date for calculation of Surplus/Shortage duration to meet committed delivery date. This can be done under the business process **Maintenance Setup**, business component **Common Master** and **Define Process Entities** activity, and the link **Set Process Parameters** for Entity type 'Shop Work Order Type' and Entity '—All Work Order—'.

Exhibit 1: Identifies the new process parameter addition under **Set Process Parameter** screen.



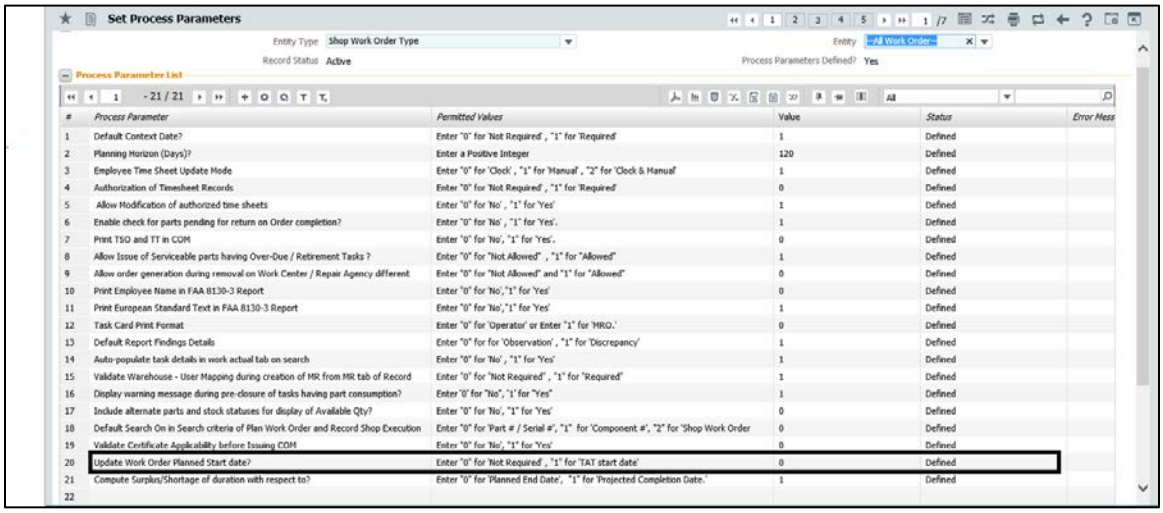
Process parameter **'Compute Surplus/Shortage of duration with respect to?'** can be set as follows:

- Yes - To compute Surplus/Shortage with respect to Planned End Date of the Work Order
- No - To compute Surplus/Shortage with respect to Projected Completion Date of the Work Order

Updating Work Order Start Date

The user can choose to update the Work Order Start Date by using the following Process parameter under the business process **Maintenance Setup**, business component **Common Master** and **Define Process Entities** activity, and the link **Set Process Parameters** for Entity type 'Shop Work Order Type' and Entity '—All Work Order—'.

Exhibit 2: Identifies the new process parameter under **Set Process Parameter** screen.



Process parameter '**Update Work Order Planned Start Date?**' can be set as follows:

- 'Not Required' – This will not update the Work Order start date with the TAT Start Date from Customer Order.
- 'TAT Start Date' – This will update the Work Order start date with the TAT Start Date from Customer Order

Scheduling of Tasks while planning

While a Planner is adding Tasks for a Work Order, the Planned Start Date of the first Task in sequence will get defaulted with the Work Order Planned Start Date. Then, according to the Estimated Elapsed Time of the Tasks, the Planned End of the Tasks will be computed. The Planned Start Date of a Task in sequence will be defaulted with the Planned End Date of the previous Task in sequence.

Exhibit 3: Identifies the Tasks in the Task details multiline in the **Plan Work Order** screen.

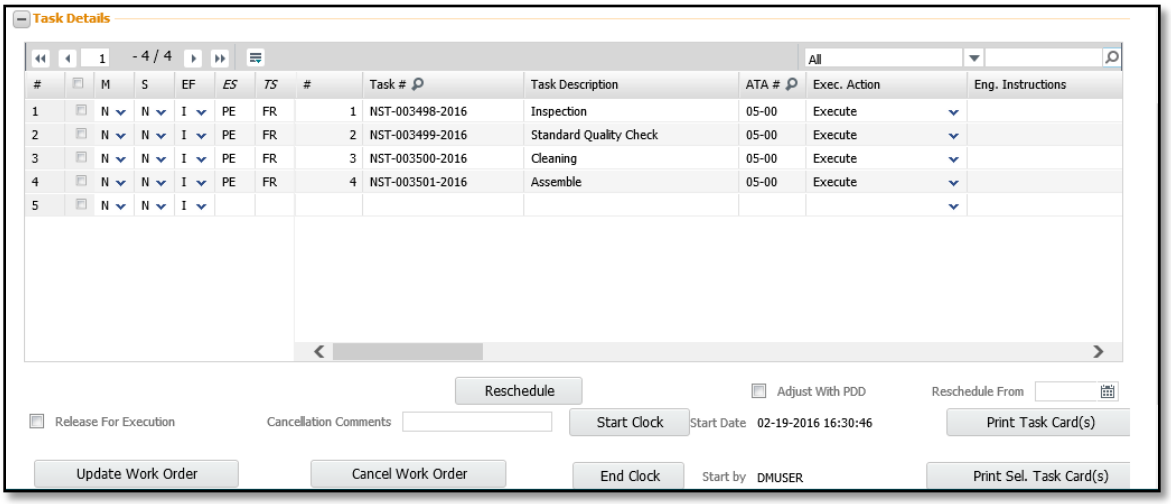


Exhibit 4: Identifies the Standard and Elapsed time of Tasks in the Task details multiline under the **Plan Work Order** screen

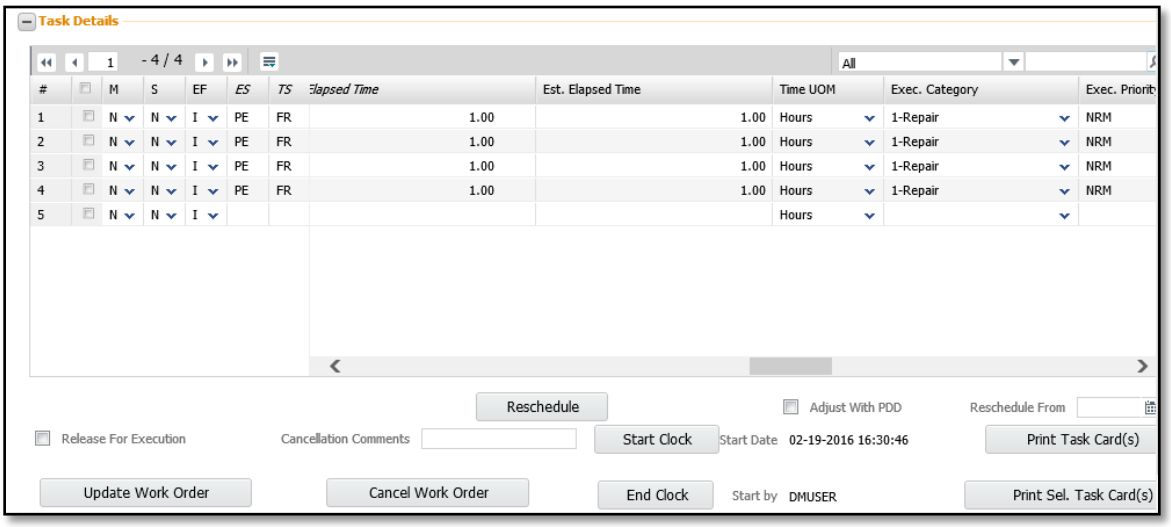
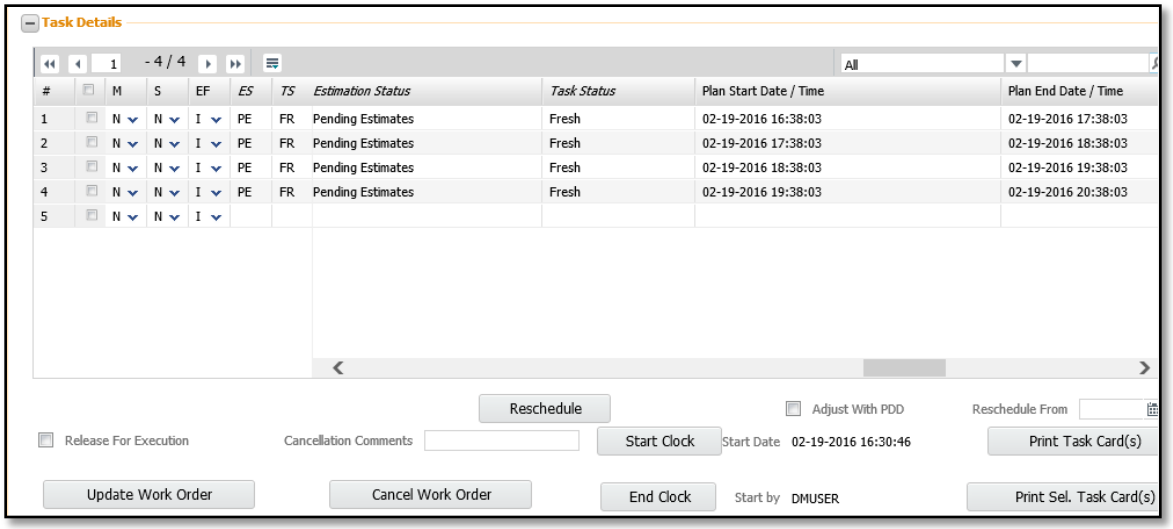


Exhibit 5: Identifies the Planned Start Date & Planned End Date of Tasks in the Task details multiline under the **Plan Work Order** screen.



Rescheduling of Tasks

When Tasks have been added to a Work Order, in case where the Planner notices any delay in task completion, this can be managed using the Reschedule button.

The 'Reschedule' button can perform two types of actions.

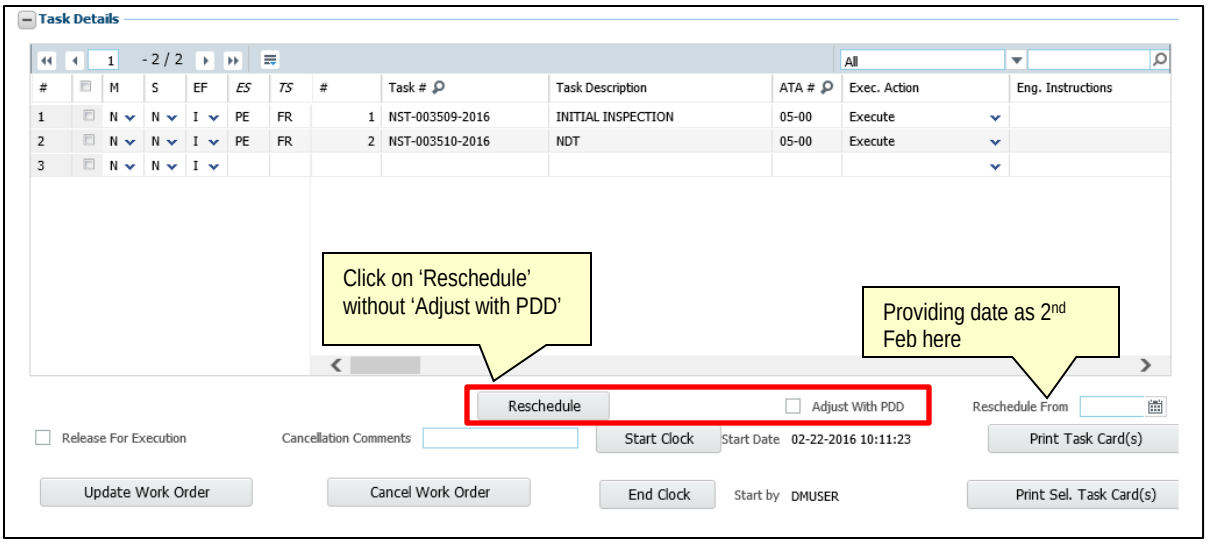
- Can re-arrange dates to match missed dates.

Example: Say there are two tasks in a Work Order SWO1; T1 and T2

Task#	Est. Elapsed Time	Planned Start Date	Planned End Date
T1	2 days	01-Feb	03-Feb
T2	2 days	03-Feb	05-Feb

Now if the Task T1 is going to be started only on 2nd February, the Tasks can be rescheduled by providing this date in the 'Reschedule From' field and without ticking the check-box.

Exhibit 6: Identifies the Reschedule along without Adjust with PDD in the Plan Work Order screen.



This will simply re-arrange the dates as shown below.

Task#	Est. Elapsed Time	Planned Start Date	Planned End Date
T1	2 days	02-Feb	04-Feb
T2	2 days	04-Feb	06-Feb

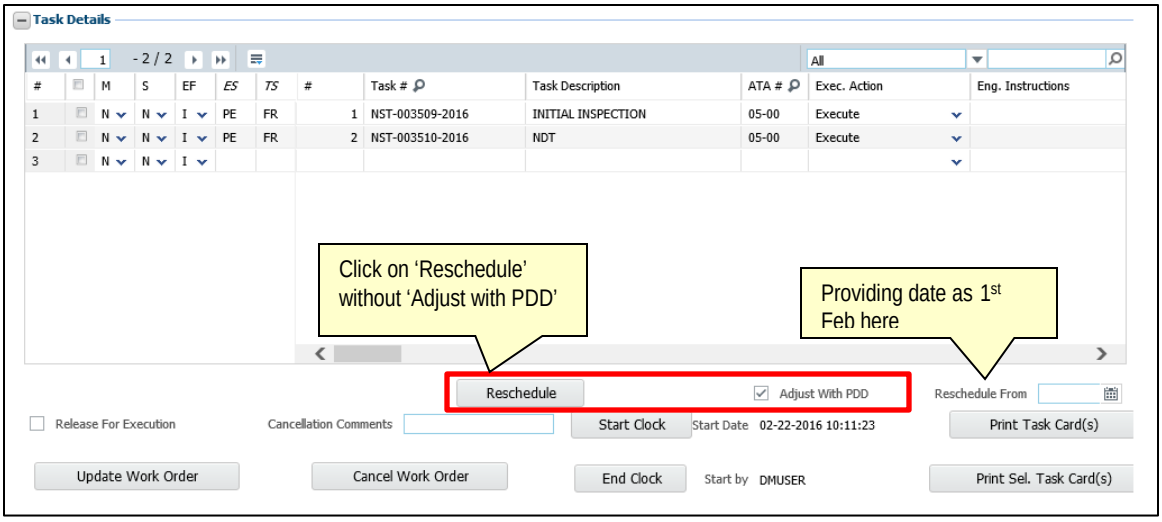
- Can adjust the duration allocated for each task to meet the committed date.

Example: Let's take the same tasks as above,

Task#	Est. Elapsed Time	Planned Start Date	Planned End Date
T1	2 days	01-Feb	03-Feb
T2	2 days	03-Feb	05-Feb

In the above, Work Order SWO1, the Planned End Date of the Work Order is 5th February. Now, if the Promised Delivery Date for the part is 3rd February, then the Mechanic has a shortage of 2 days to complete the tasks. This can be managed by ticking the check-box 'Adjust with PDD' and rescheduling the tasks.

Exhibit 7: Identifies the Reschedule along with Adjust with PDD in the Plan Work Order screen



This way, the shortage of 2 days will be adjusted equally managed among both tasks. Thus, dates will become,

Task#	Est. Elapsed Time	Planned Start Date	Planned End Date
T1	1 days	01-Feb	02-Feb
T2	1 days	02-Feb	03-Feb

Surplus and Shortage in duration can be managed for both Customer Order based as well as Internal Work Order.

WHAT'S NEW IN COMPONENT REPLACEMENT?

Ability to view Non-Component Replacement (NCR) Documents

Reference: AHBF-17826

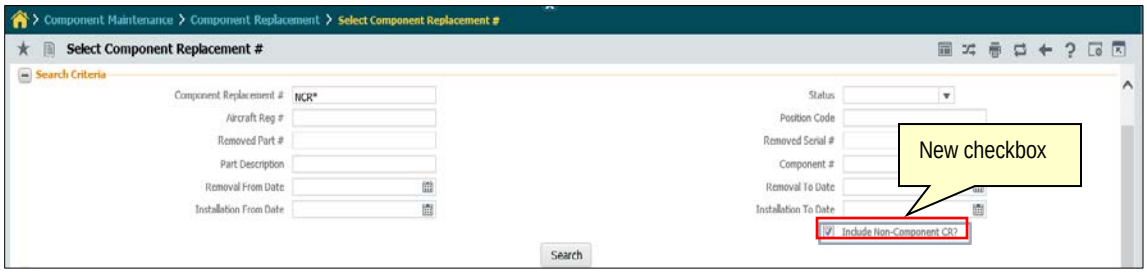
Background

Removal and replacement of non-component parts (NCR) can be recorded in AME and SWO transactions. However, there is no provision to view the NCR details from one place and hence the user is forced to traverse to the precise transaction, which is a usability issue. Business need is to enhance the **View Component Replacement Details** screen of the **Component Replacement** business component to view NCR details similar to the way it is managed for viewing of component replacements.

Change Details

The checkbox **Include Non-Component CR?** has been added in the **Search Criteria** section in the **Select Component Replacement #** screen of the **View Component Replacement Details** screen.

Exhibit 1: Identifies the new check box in the **Select Component Replacement #** screen



On click of **Search** by selecting the checkbox **Include Non-Component CR?**, the Non-Component Replacement # (NCR) transactions matching search criteria is retrieved and displayed. Users can then click the Non-Component Replacement # from the **Search Results** multiline to view the transaction details.

*Note: On click of **Search** without selecting the checkbox **Include Non-Component CR?**, the search results will display only the Component Replacement # transactions as per the existing functionality.*

Additional Change Details

In the **View Component Replacement Details** screen following fields have been added to display additional information pertaining to the CR/NCR transaction.

- **Removed MSN** (Removal Details section):
  - The Removed MSN for Component Replacement # is displayed, if Removed MSN exists for Component Replacement #.

- **Removed Mfr. Lot #** (Removal Details section):
  - The Removed Mfr. Lot # for Component Replacement # is displayed, if Removed Mfr. Lot # exists for Component Replacement #.

- **Removed Lot #** (Removal Details section):
  - The Removed Lot # for Component Replacement # is displayed, if Removed Lot # exists for Component Replacement #.

- **Removed Qty.** (Removal Details section):
  - The Removed Qty. for Component Replacement # is displayed.

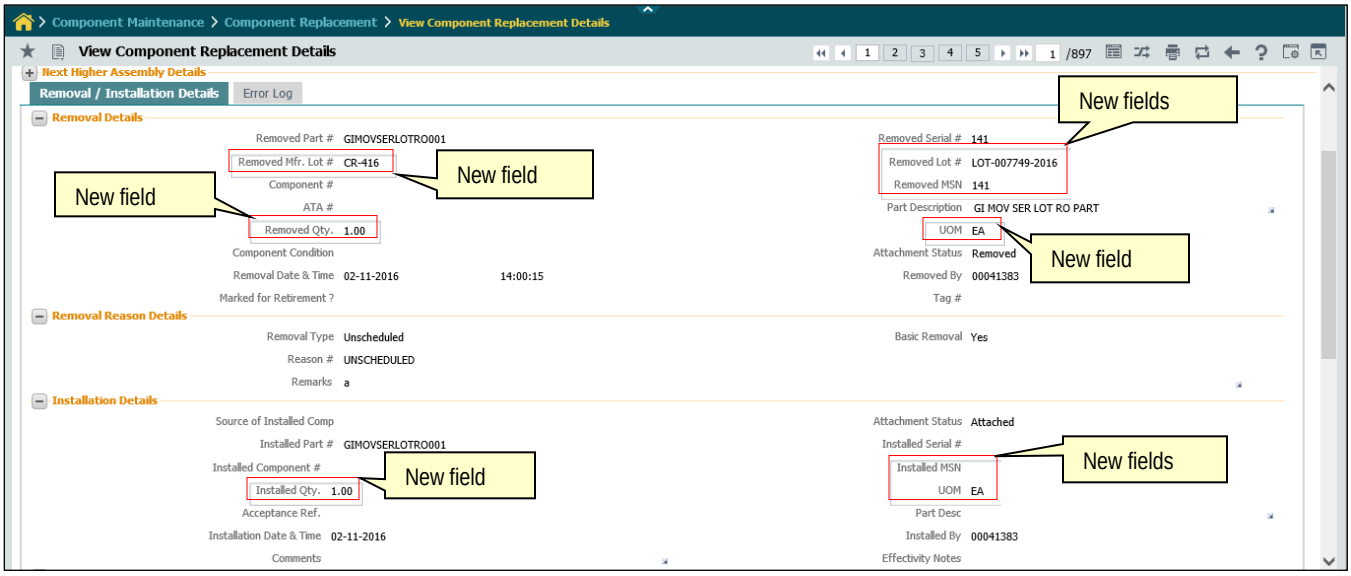
- **UOM** (Removal Details section):
  - Corresponding UOM of Removed Qty. is displayed.

- **Installed MSN** (Installation Details section):
  - The Installed MSN for Component Replacement # is displayed, if Installed MSN exists for Component Replacement #.

- **Installed Qty.** (Installation Details section)
  - The Installed Qty. for Component Replacement # is displayed.

- **UOM** (Installation Details section):
  - Corresponding UOM of Installed Qty. is displayed.

Exhibit 2: Identifies the new fields in the **View Component Replacement Details** screen



Print Part Tag:

Generation of part tags will be supported for Non-Component Replacement transactions similar to the Component Replacement transactions.

Note: The system will not support amendment of Non-Component Replacements.

WHAT'S NEW IN WORK MONITORING AND CONTROL?

Hierarchical printing of Shop Work Orders from Work Monitoring and Control

Reference: AHBF-18713

Background

Complex MRO organizations practicing standard Repair Schemes for their shop maintenance activities prefer to print task cards in the hierarchical format of the workscoping tasks. Organizations in which mechanics who comply Shop Work Order tasks through the **Manage Work Assignments and Reporting** screen also prefer to hierarchically print the **Shop Work Order** tasks from screen. Currently, hierarchical printing of Shop Work Order tasks is supported in following screens:

- Plan Work Order
- Record Shop Execution Details

Change Details

This enhancement enables user to print tasks in the shop work order based on the repair scheme definition of the workscoping task in hierarchical format from the **Manage Work Assignments and Reporting** screen.

Existing process parameter that governs printing task cards either in linear or hierarchical format from the **Shop Work Order** screens is re-controlling the printing format from the **Manage Work Assignments and Reporting** screen.

Existing Process Parameter:

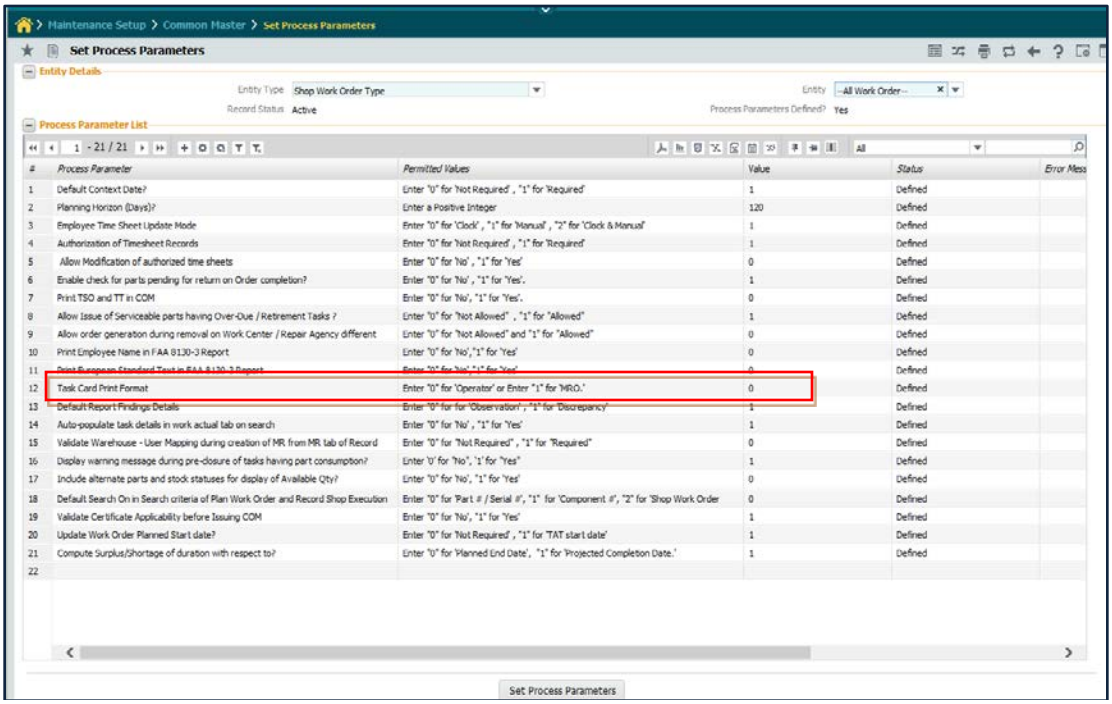
Entity Type: Shop Work Order Type

Entity: --All Work Order—

Process Parameter: Task Card Print Format

Permitted Value: Enter "0" for 'Operator', "1" for 'MRO'

Exhibit 1: Existing process parameter that governs printing format of task cards from the **Manage Work Assignments and Reporting** screen.



Now when the value for above parameter is set as '1' (MRO), the task card will be printed in the hierarchical format on click of the **Print Package/Selective Print** in the **Manage Work Assignments and Reporting** screen.

Exhibit 2: Print Package/Selective Print in the **Manage Work Assignments and Reporting** screen

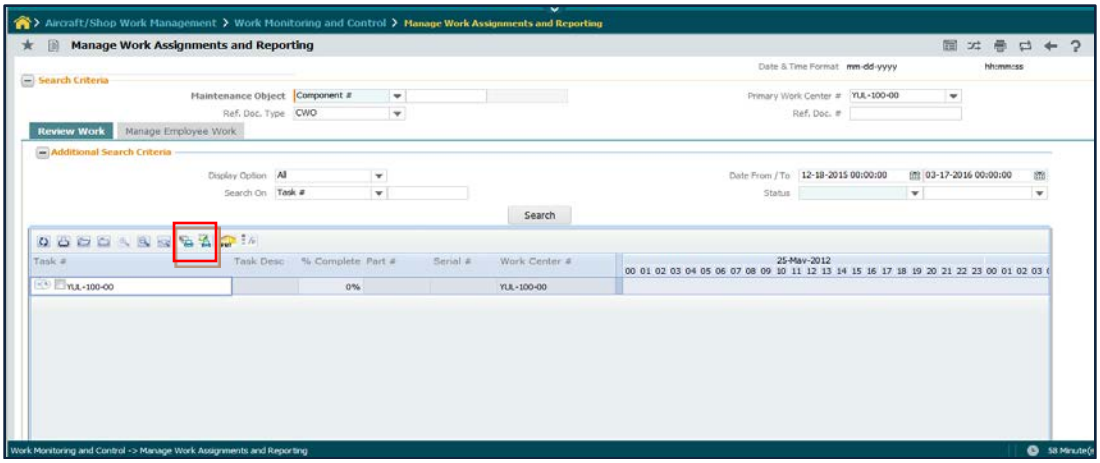


Exhibit 3: Package Print in linear format

Part #	F5508056420000:P7384	ramco	Tally # / Tracking #	1 / 1
Serial #	msl-2		Task #	03-STD-X00-00-000000000028255
Exec Doc #	CWO-000001-2012		Task Part #	F5508056420000:P7384
			Task Part Sl #	msl-2

Task Part# / SN / Position	F5508056420000:P7384 / msl-2
Parent Part# / SN / Position	F5508056420000:P7384 / msl-2
End Item Part# / SN / Position	

Execution Document # CWO-000001-2012		Start Date	5/25/2012
		End Date	9/15/2014
Task # 03-STD-X00-00-000000000028255		Work Center #	YUL-100-00
		Revision Details	Rev. # 1 Dt. 5/2/2006

Title	REPAIR

Main Task Details

Task Type	Category	ATA #	Maint. Manual Ref#	Source Doc #	Elapsed Hours	Man hours
URT	Routine	00-00		71-13-15	0.01	0.01

Access Panel

Access Panel

Zones

Zones

Exhibit 4: Package Print in hierarchical format

Work Instructions: OVERHAUL

Shop Copy

RAMCO SYSTEMS LIMITED2

84 SARDAR PATEL ROAD, TARMANI, CHENNAI, TAMILNADU, INDIA,600113MO

Customer Order #	CO-000028-2012	Customer #	400007	Customer Name	Customer 23
SWO #	CWO-000001-2012	Plan ID	01-OH-X00-00-015300	Task Type	OH
Engine Model	SLIDESLIP SECTION;SLIDESLIP SECTION;SLIDES	Part #	F5508056420000:P7384	Part Desc.	SLIDESLIP SECTION;SLIDESLIP SECTION;SLIDESLIP SECTION;SLIDESLIP SECTION;
Engine Serial #	msl-2	Serial #	msl-2		
Engine Visits	1	Qty.	1		

810000000066306

PLAN COMMENTS

SUBJECT

Sl #	Task #	Task Description
1	02-STD-X00-00-266408	DEC-SERV
2	02-STD-X00-00-206224	TST-ARVL
3	02-STD-X00-00-231976	INSPECT

1000 03-STD-X00-00-000000000359117

Ref Subject: 1

Work Center: YUL-100-00

Task Description: ASSEMBLE

Instructions: INSPECT UNIT, OVERHAUL AND ASSEMBLE (OH)

1200 03-STD-X00-00-000000000353157

Ref Subject: 1

Work Center: YUL-100-00

Task Description: TST-FINL

Instructions: TEST UNIT AND PERFORM FINAL INSPECTION (OH)

1600 03-STD-X00-00-000000000305145

Ref Subject:

Work Center:

WHAT'S NEW IN WORK MONITORING CONTROL & TIME TRACKING

Ability to restrict modification of authorized time bookings of tasks of AME document

Reference: AHBF-19778

Background

Timesheet entries booked against tasks in the Aircraft Maintenance Execution document once authorized can be modified even after authorization. Requirement is to restrict modification of authorized time bookings for tasks of Aircraft Maintenance Execution based on an option.

Change Details

This enhancement restricts modification of authorized time sheet entries for Aircraft Maintenance Execution (AME) document, in the Manage Work Assignments and Reporting screen.

A new process parameter "**Allow modification of authorized time sheets'** is added under the Entity Type **Package Type** & Entity **--All Package--** in the Activity 'Define Process Entities**'**. Permitted values are: '0' for 'No' and '1' for 'Yes'**. (Exhibit 1)**

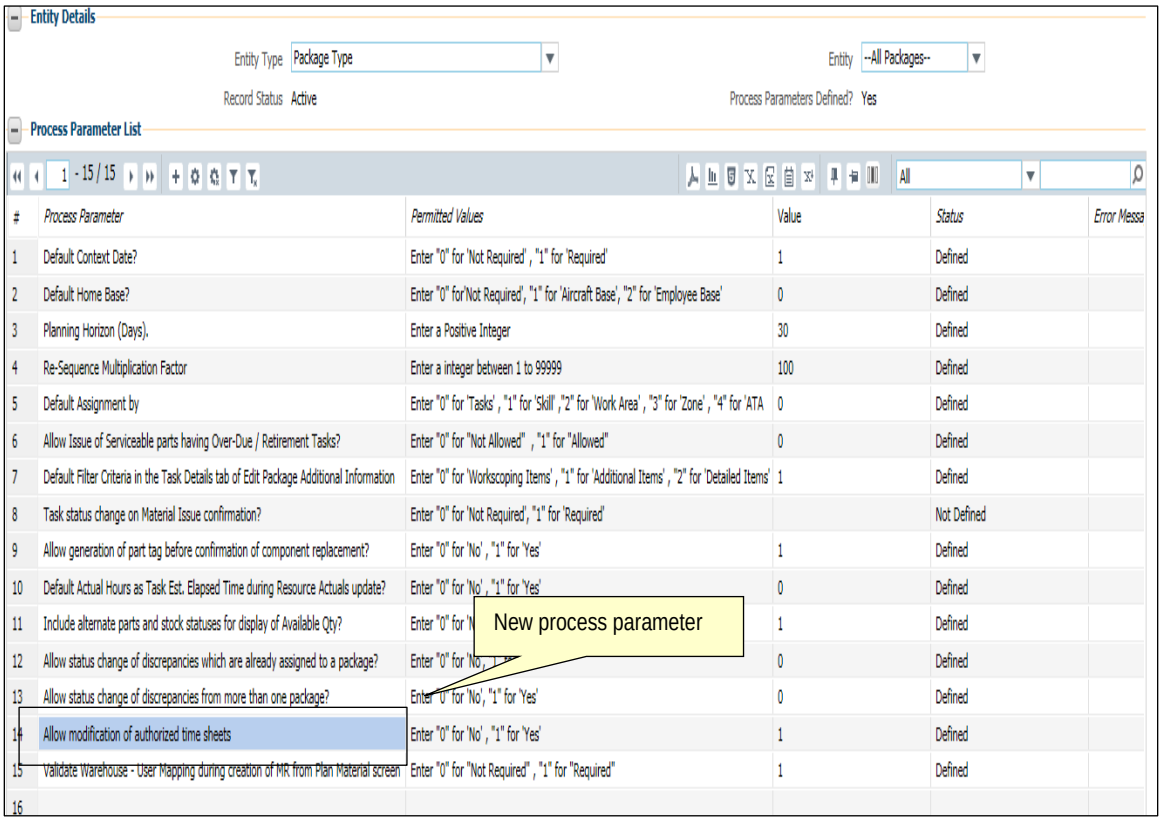
If the above Option "Allow modification of authorized time sheets" is set as "Yes", modification of time sheet records for AME document will be allowed even after authorization of time sheet (existing functionality).

If the option is set as "No", modification of time sheet records will be restricted post authorization. The restriction will be in the following screens:

a) Aircraft/Shop Work Management → Work Monitoring & Control → Manage Work Assignments & Reporting – Manage Employee Work tab **(Exhibit 2)**

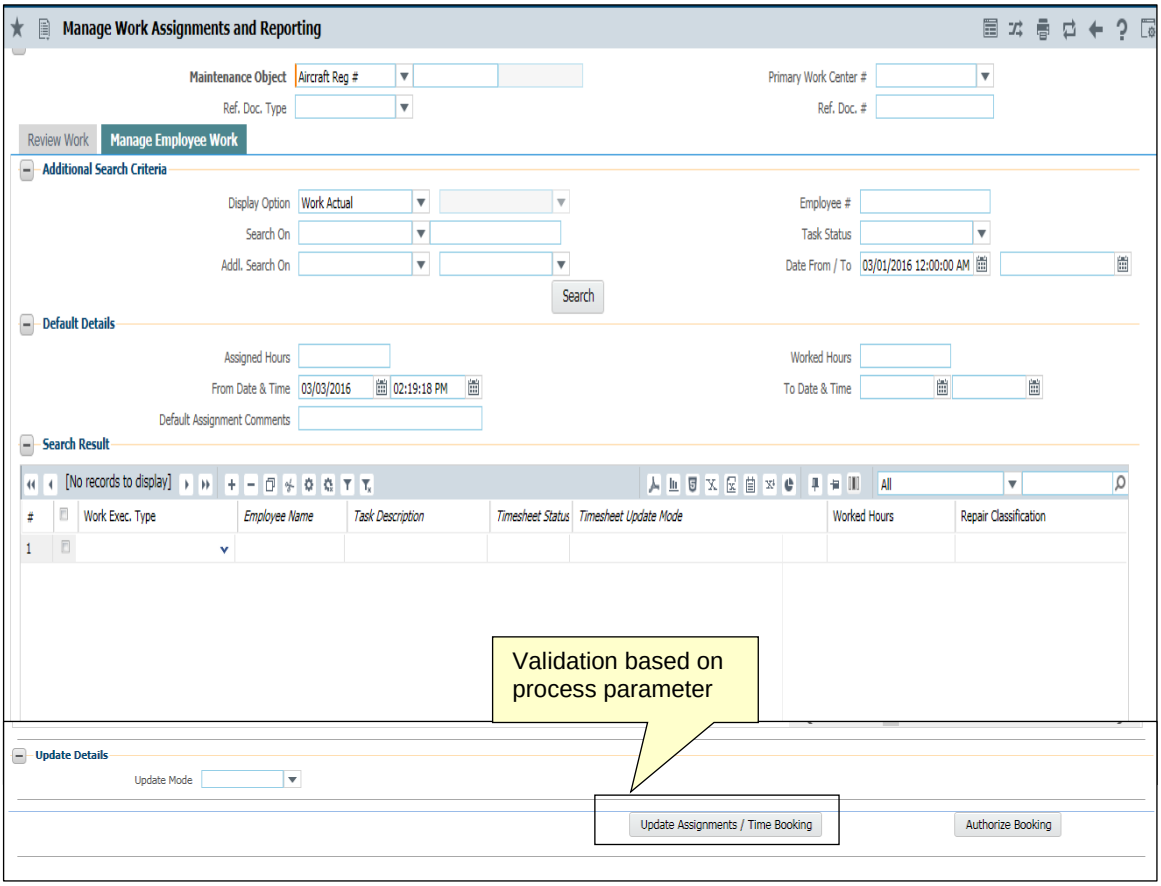
b) Time Tracker → Time Management → Authorize Time Records – Timesheet Details tab **(Exhibit 3)**

Exhibit 1: Identifies the new process parameter for Entity Type **Package Type** & Entity **--All Package--**.



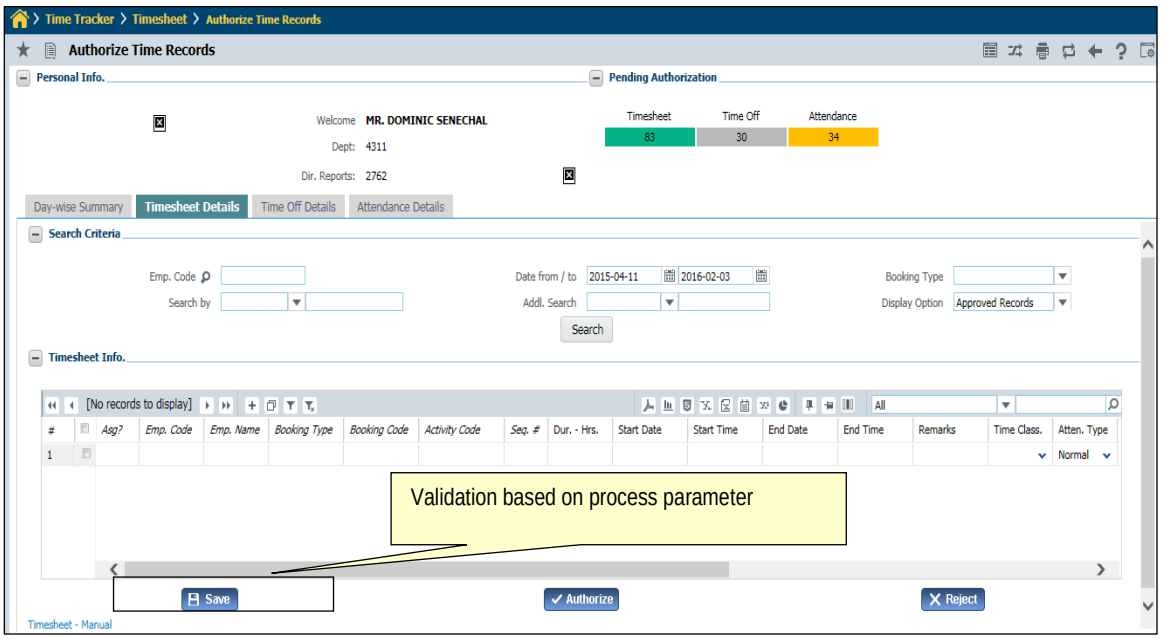
#	Process Parameter	Permitted Values	Value	Status	Error Messa
1	Default Context Date?	Enter "0" for 'Not Required' , "1" for 'Required'	1	Defined	
2	Default Home Base?	Enter "0" for'Not Required', "1" for 'Aircraft Base', "2" for 'Employee Base'	0	Defined	
3	Planning Horizon (Days).	Enter a Positive Integer	30	Defined	
4	Re-Sequence Multiplication Factor	Enter a integer between 1 to 99999	100	Defined	
5	Default Assignment by	Enter "0" for 'Tasks' , "1" for 'Skill' ,"2" for 'Work Area' , "3" for 'Zone' , "4" for 'ATA	0	Defined	
6	Allow Issue of Serviceable parts having Over-Due / Retirement Tasks?	Enter "0" for "Not Allowed" , "1" for "Allowed"	0	Defined	
7	Default Filter Criteria in the Task Details tab of Edit Package Additional Information	Enter "0" for 'Workscoping Items' , "1" for 'Additional Items' , "2" for 'Detailed Items'	1	Defined	
8	Task status change on Material Issue confirmation?	Enter "0" for 'Not Required', "1" for 'Required'		Not Defined	
9	Allow generation of part tag before confirmation of component replacement?	Enter "0" for 'No' , "1" for 'Yes'	1	Defined	
10	Default Actual Hours as Task Est. Elapsed Time during Resource Actuals update?	Enter "0" for 'No' , "1" for 'Yes'	0	Defined	
11	Include alternate parts and stock statuses for display of Available Qty?	Enter "0" for 'N	1	Defined	
12	Allow status change of discrepancies which are already assigned to a package?	Enter "0" for 'No' , "1"	0	Defined	
13	Allow status change of discrepancies from more than one package?	Enter "0" for 'No', "1" for 'Yes'	0	Defined	
14	Allow modification of authorized time sheets	Enter "0" for 'No' , "1" for 'Yes'	1	Defined	
15	Validate Warehouse - User Mapping during creation of MR from Plan Material screen	Enter "0" for "Not Required" , "1" for "Required"	1	Defined	
16					

Exhibit 2: Identifies the new validation added based on the new process parameter in



Work Monitoring Control Screen.

Exhibit 3: Identifies the new validation based on the parameter in **Authorize Time Records – Timesheet Details tab**



WHAT'S NEW IN QUALITY AUDIT MANAGEMENT?

Ability to attach documents as part of Quality Audit findings

Reference: AHBF-16903

Background

During Audit, auditors snap pictures of audit objects in order to provide a better understanding of the Audit report. Auditors also provide documents that act as references / evidence for the Audit report. By means of pictures and documents, the auditor provides more transparency to the audit report and thus legitimizes the audit findings.

This enhancement enables uploading documents and pictures against an Audit report in **Report Quality Audit Findings** screen & **View Quality Audit Report Information** screen of **Quality Audit** business component.

Change Details

Report Quality Audit Findings screen;

- A new link **Upload Documents** added in the **Record Quality Audit Findings** screen of the **Quality Audit** business component to upload documents against an Audit report.
- A new link **View Associated Doc. Attachments** added in the **Record Quality Audit Findings screen** of **Quality Audit** business component to view the attached documents against an Audit report.

View Quality Audit Report Information screen

- A new link **View Associated Doc. Attachments** added in the **View Quality Audit Report Information** screen of **Quality Audit** business component to view the attached documents against an Audit report.

Exhibit 1: Identifies the links added in the **Record Quality Audit Findings** Screen

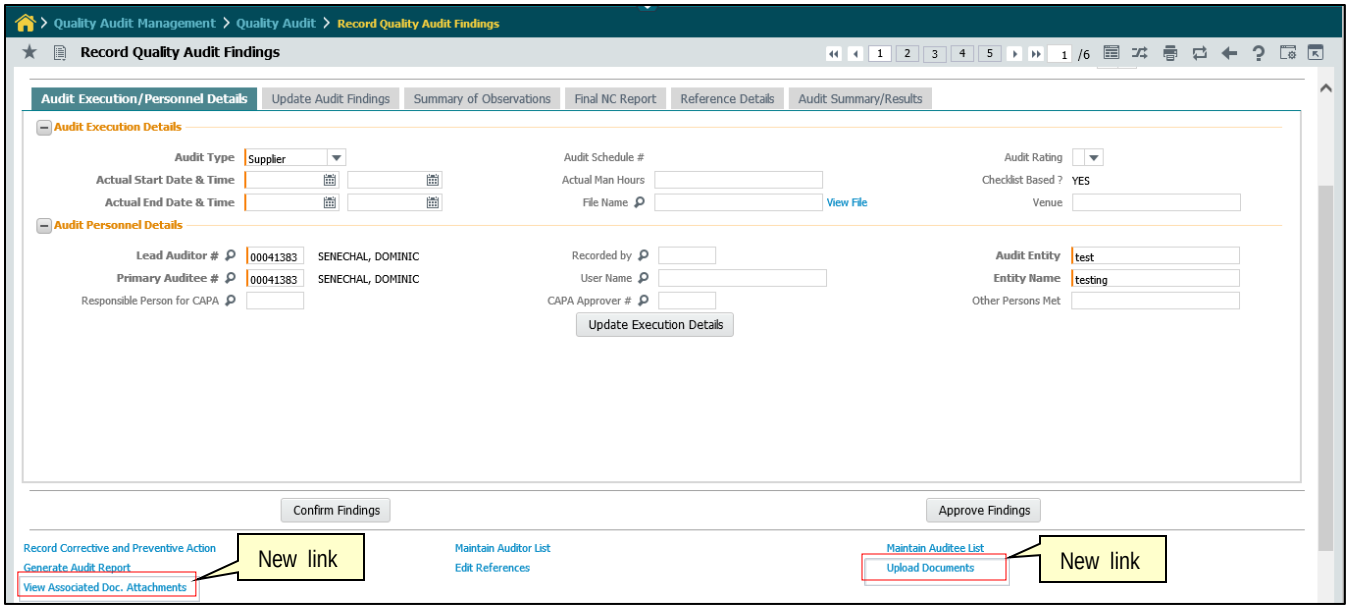
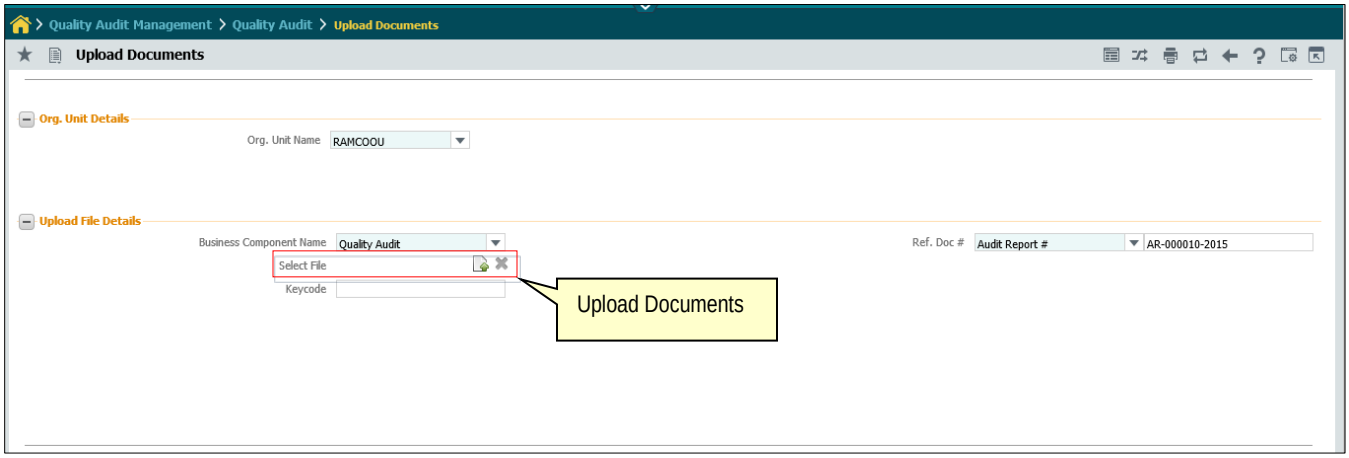
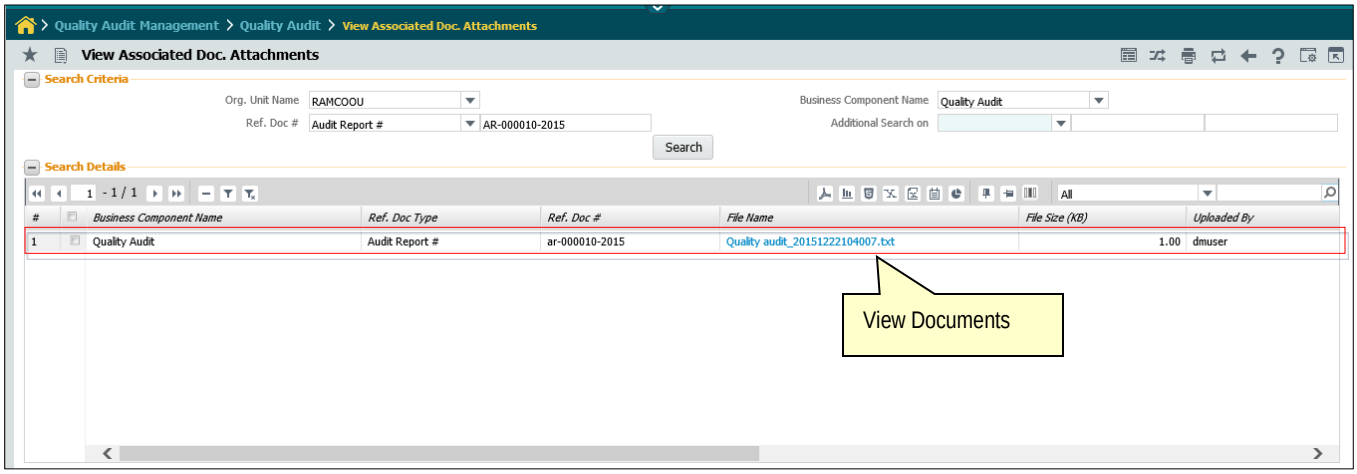


Exhibit 2: Identifies the **Upload Documents** screen launched for an Audit Report



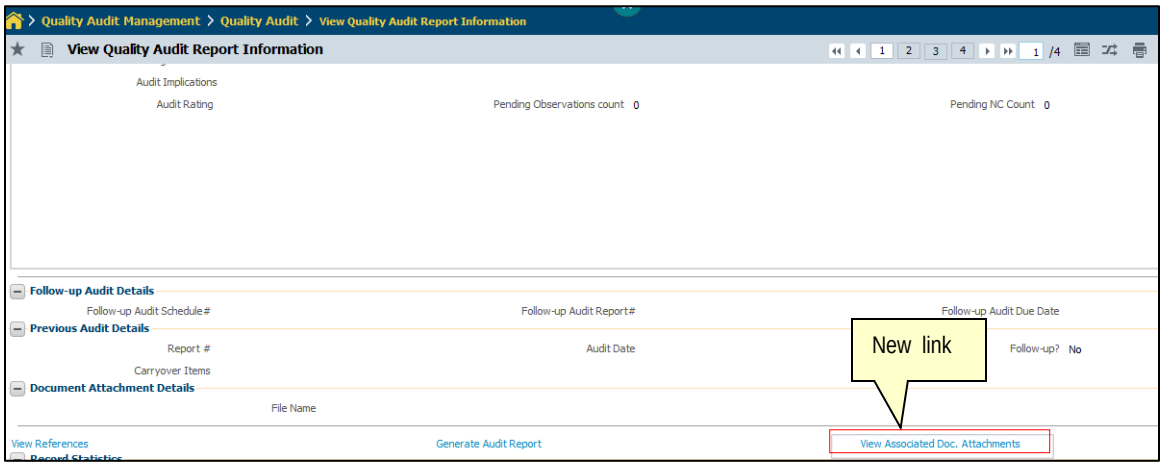
The screen now provides the ability to upload pictures and documents against an Audit Report. The business component name is defaulted as **Quality Audit**. The **Ref. Doc. #** is defaulted with **Audit Report #** for which the documents needs to be attached. Documents and pictures can be uploaded by clicking the **Select File** icon and providing the path for the file. The uploaded document can be removed by clicking the **X** button. The system automatically generates a keycode for a document. The user can however specify the keycode that will overwrite keycode allotted to the document by the system.

Exhibit 3: Identifies documents attached to an Audit Report (From **Record Quality Audit Findings** screen)



The screen provides the ability to view pictures and documents uploaded against an Audit Report. The business component name will be defaulted with **Quality Audit**. **Ref. Doc. #** is defaulted with the Audit Report # for which the documents are attached. On click of the **Search** button the documents and photographs attached for the Audit Report will be listed in the multiline. The contents of the uploaded documents can be viewed by clicking on the file name.

Exhibit 4: Identifies the link added in **View Quality Audit Report Information** screen



A new link **View Associated Doc. Attachments** is added in the **View Quality Audit Report Information** screen of **Quality Audit** business component to view attached documents against an Audit report.

WHAT'S NEW IN DATA REPLICATION – TRANSFER OF AIRCRAFT ?

Ability to Transfer Aircraft for Maintenance to another operating unit.

Reference: AHBF-19166

Background

In larger organizations spread across geographies with multiple operating units, one or more operating units that are certified for maintenance of aircraft or certain aircraft types could extend the service to other operating units. In an ecosystem of multiple operating units of the organization, it is required that when an aircraft is sent for maintenance to another operating units, all the relevant data of the aircraft, configuration, maintenance package etc., are transferred to the operating unit to facilitate smooth maintenance.

This enhancement brings the ability to automatically transfer aircraft and all the related aircraft data to another operating unit within the same organization. Without this enhancement, the entire process will need to be manually executed when aircraft is transferred from one operating unit (say OU2) to another maintenance unit (say OU3) that involves the following steps which is cumbersome.

1. Planner extracts the tasks and discrepancies and sends manually to OU3 along with aircraft
2. Aircraft record is manually created in OU3
3. Aircraft Maintenance Execution document is created in OU3 to execute the Task and Discrepancy received from OU2
4. Once the package is executed in OU3 the following information are then manually sent to OU2:
    a. Task compliance
    b. Discrepancy rectification
    c. Component replacement
    d. Parameter update
5. Technical Records Personnel in OU2 will manually update the information received from OU3 against the Aircraft.

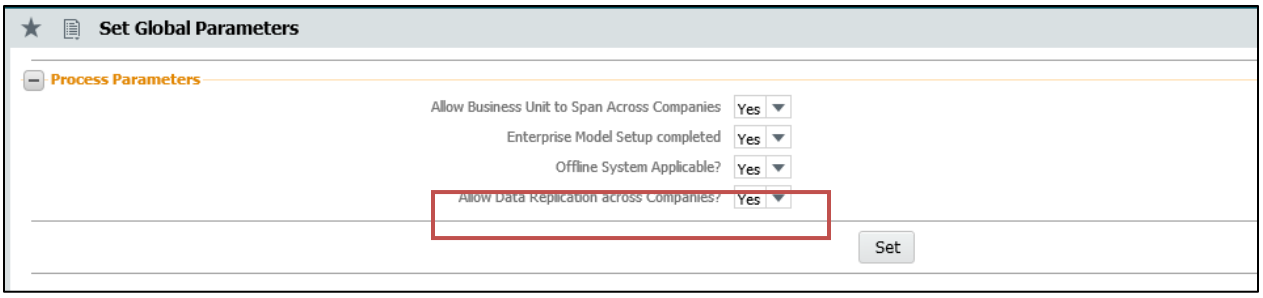
The above process is simplified (automated) with this enhancement in Data Replication to facilitate transfer of aircraft for maintenance.

Prerequisite

The following prerequisite need to be done to use this feature.

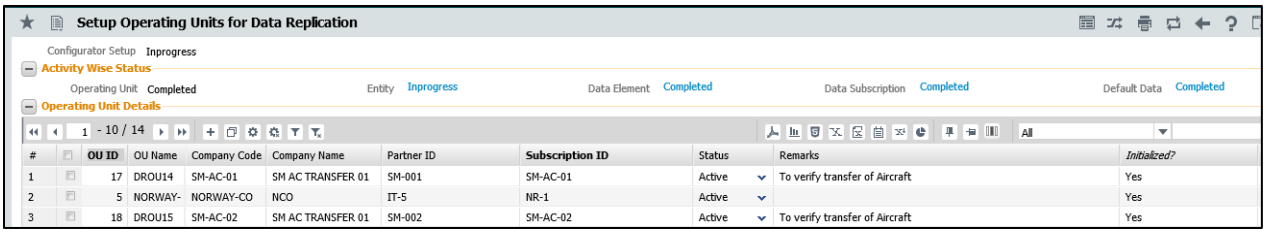
1. Data replication should be enabled. This can be enabled using the following navigation: Finance Setup > Installation Parameter Setup > Set Global Parameters

Exhibit 1: Identifies the global parameter for enabling data replication



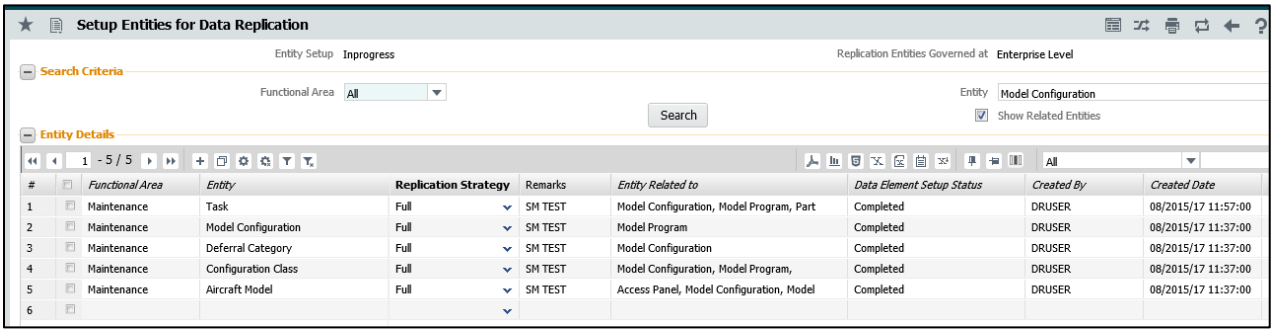
The operating units which are involved in the Aircraft Transfer should be part of Data sharing agreement. This can be defined in the **Set Operating Units for Data Replication** screen that could be navigated as follows: Data Replication > Central Data Replication Configuration > Setup Operating Units for Data Replication

Exhibit 2: Identifies the screen where operating units of the data sharing agreement is defined



2. Replication strategy for the major entities – Part, Task, Model Configuration, and Model Program should be set as “Full”. This can be defined in the **Setup Entities for Data Replication** screen that could be navigated as follows: Data Replication > Central Data Replication Configurator > Setup Entities for Data Replication

Exhibit 3: Identifies the screen where replication strategy is defined for various entities



Change Details

1. Process parameter additions – Following process parameter are added at Package Type level in the Set Process Parameters screen

    a. **External Jobs?** – To identify whether the package created for the aircraft is for external jobs (task and discrepancy of package are actually executed outside the operating unit).

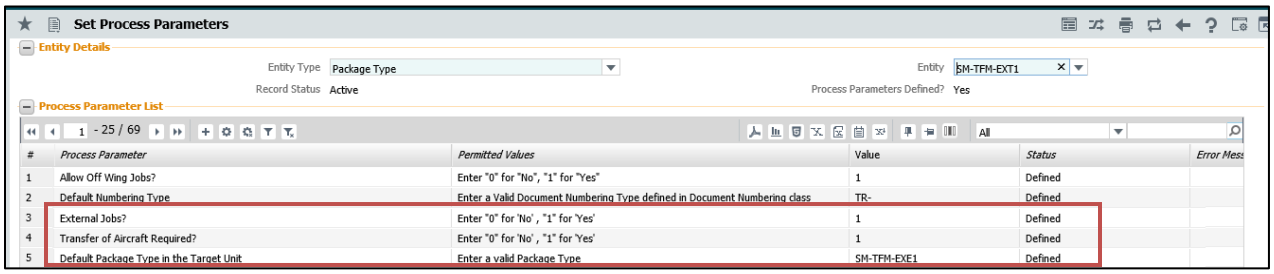
    b. **Transfer of Aircraft Required?** – To identify whether the aircraft record needs to transferred to another operating unit to carry out maintenance activities.

Note: This value can be set as "Yes" only if the process parameter 'External Jobs?' Is set as yes for package type selected.

    c. **Default Package Type in the Target Unit?** – To identify the package type with which the Aircraft Maintenance Execution document to be created in the Target Operating unit (operating unit where the maintenance activity is to be carried out).

Note: Value can be entered for this process parameter only if the process parameter 'Transfer of Aircraft required?' Is set as yes for the package type selected.

Exhibit 4: Identifies the new process parameters added



2. Define OU3 as a Supplier # in OU2 having the Partner ID of the Company of OU3.
    a. *OU3 is the operating unit where maintenance of Aircraft will be done*
    b. *OU2 is the operating unit that sends the Aircraft and data to OU3*
    c. *Partner ID is system generated unique identifier of Company.*

Exhibit 5: Identifies the Partner ID in **Edit Company** screen

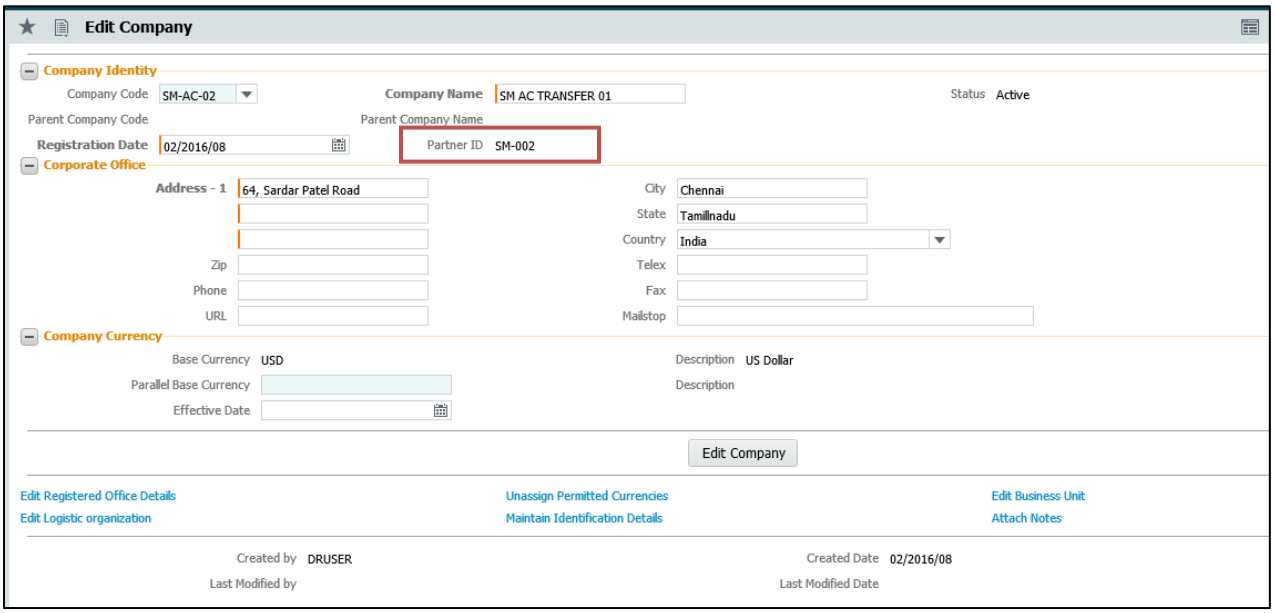
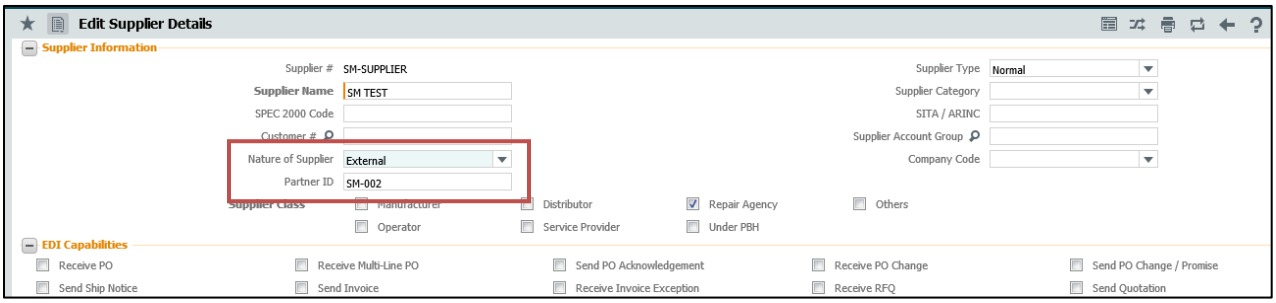
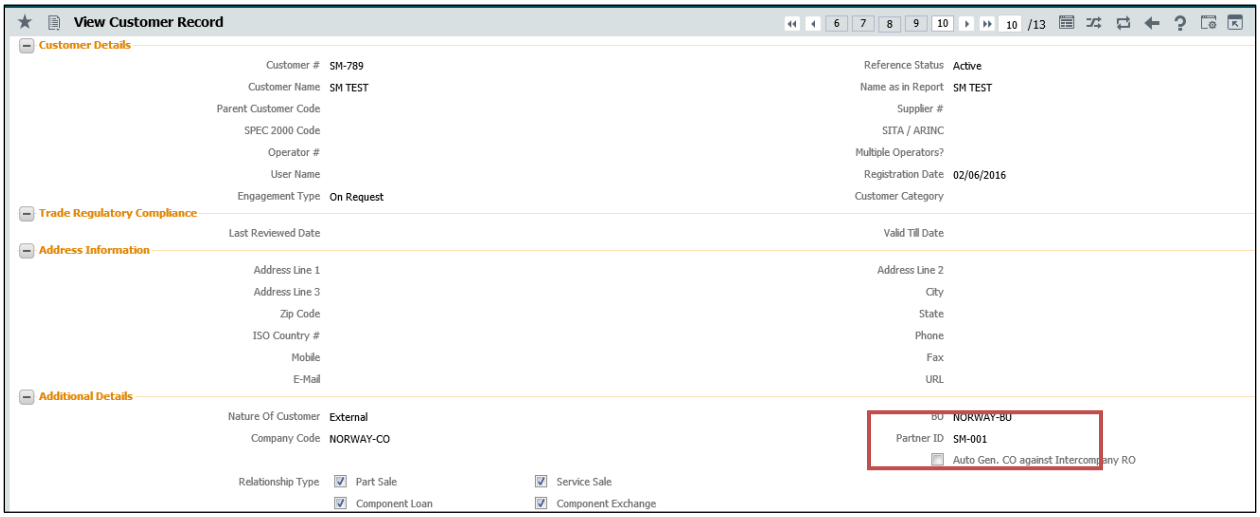


Exhibit 6: Identifies the Partner ID in **Edit Supplier Details** screen



3. Define OU2 as a Customer # in OU3 having the Partner ID of the Company of OU2.

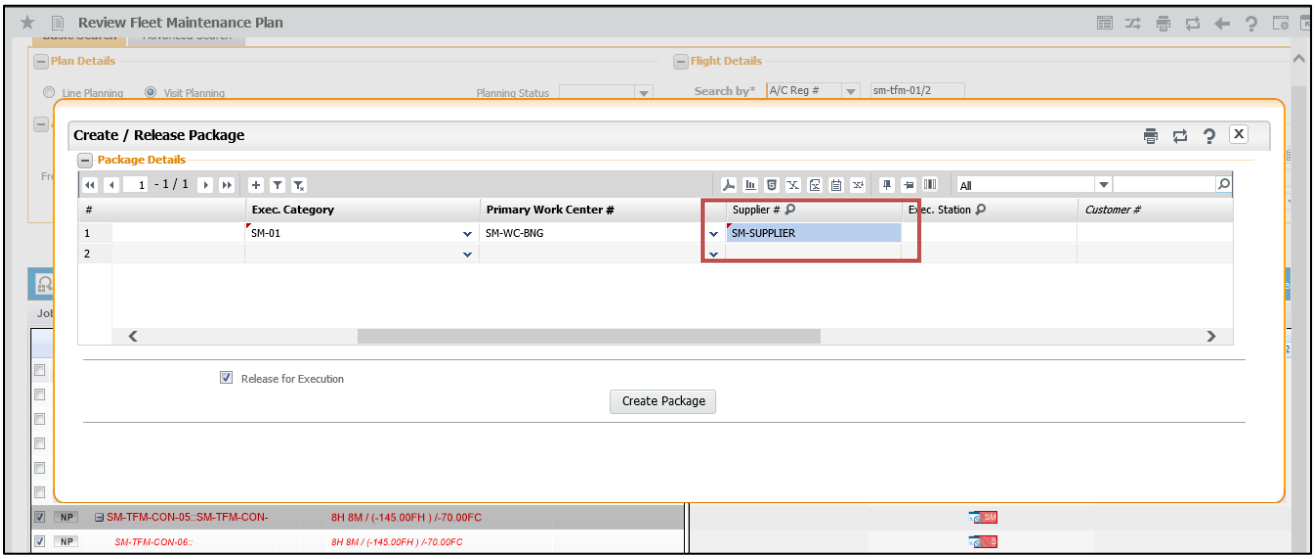
Exhibit 7: Identifies the Partner Id in **View Customer Record** screen



4. Contract should exist in OU3 for the above customer.

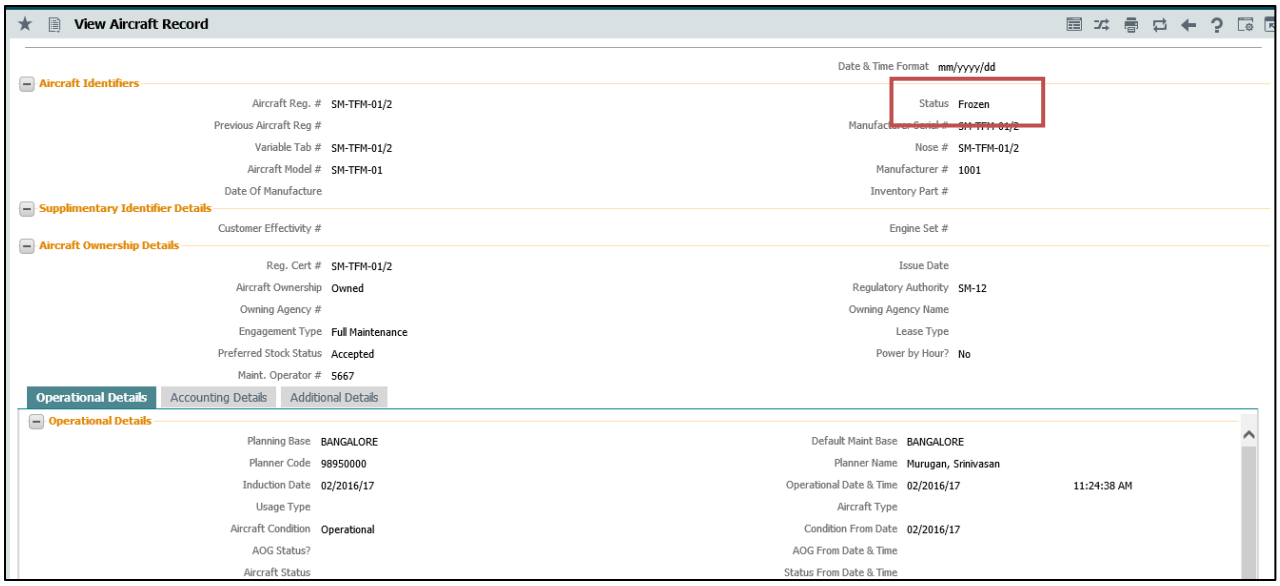
5. Planner will create package selecting the Task and discrepancy that needs to be executed by the Aircraft maintenance operating unit i.e., OU3. Package to be created with package type having process parameter '*Transfer of Aircraft Required?*' selected as "Yes". New control Supplier # is added in Create / Release Package screen, User will be forced to select the Supplier # while releasing packages having 'Transfer of Aircraft Required?' selected as "Yes". Enter the Supplier # having valid partner id and participating in data sharing arrangement.

Exhibit 8: Identifies the changes in **Create / Release Package** screen



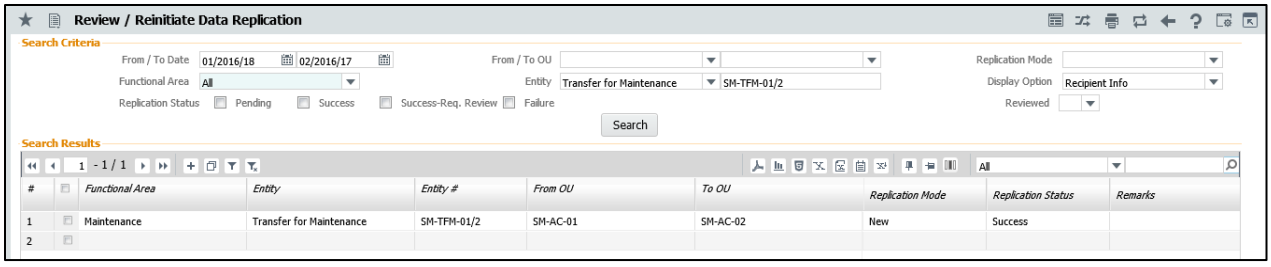
6. Status of the Aircraft record will be changed to Frozen, when the execution document is released for maintenance to another operating unit, so that not transaction is allowed for the Aircraft until it is received back from Maintenance.

Exhibit 9: Identifies the status in **View Aircraft Record** screen



7. Once the execution document is released, transfer of Aircraft Data from OU2 to OU3 is initiated. The status of the transfer can be viewed in **Review / Reinitiate Data Replication** screen.

Exhibit 10: Identifies the **Review / Reinitiate Data Replication** screen when status of aircraft data transfer can be reviewed



8. Aircraft master record is created in the maintenance unit (OU3), Ownership of the Aircraft is updated as Customer, with Customer mapped to Partner Id of the OU2 as the owning agency. Configuration of the Aircraft from OU2 is updated in the Aircraft record created in OU3.

Exhibit 11: Identifies the replication of Aircraft record in OU3

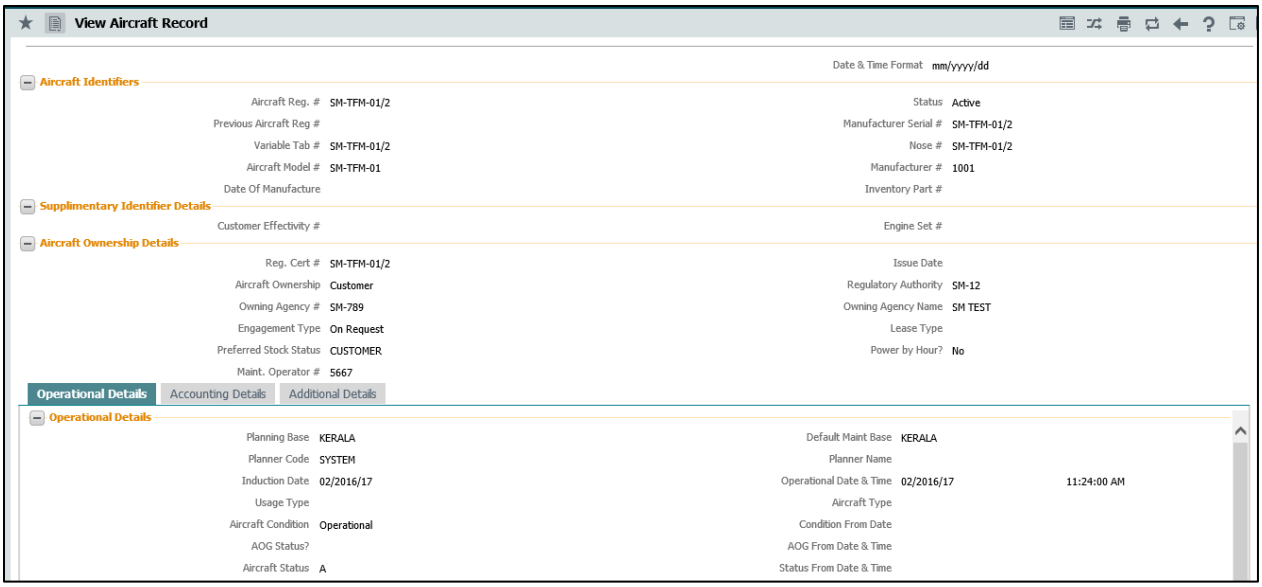
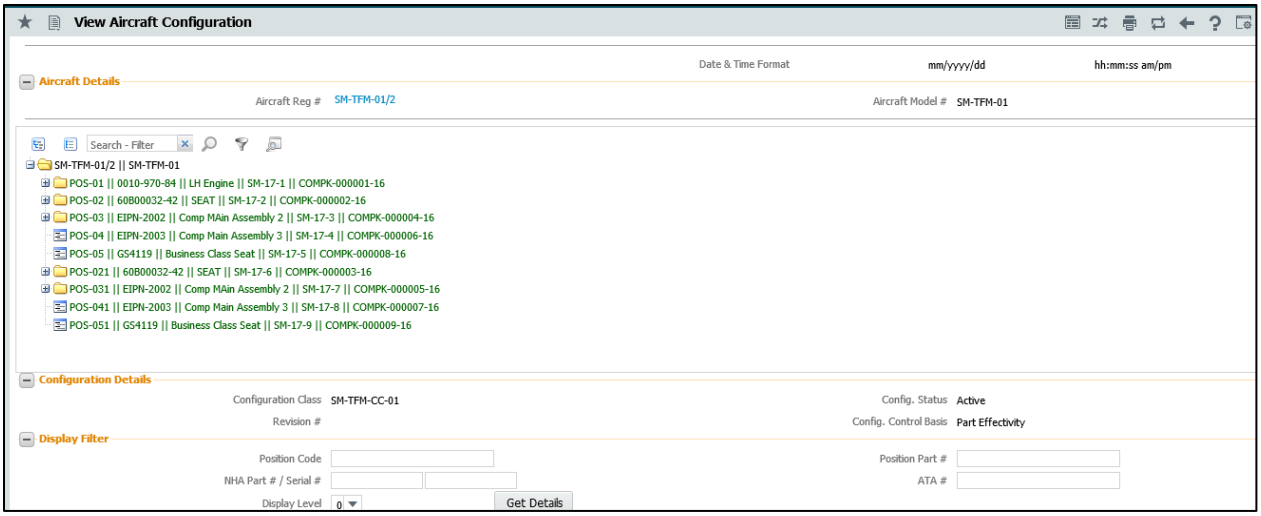
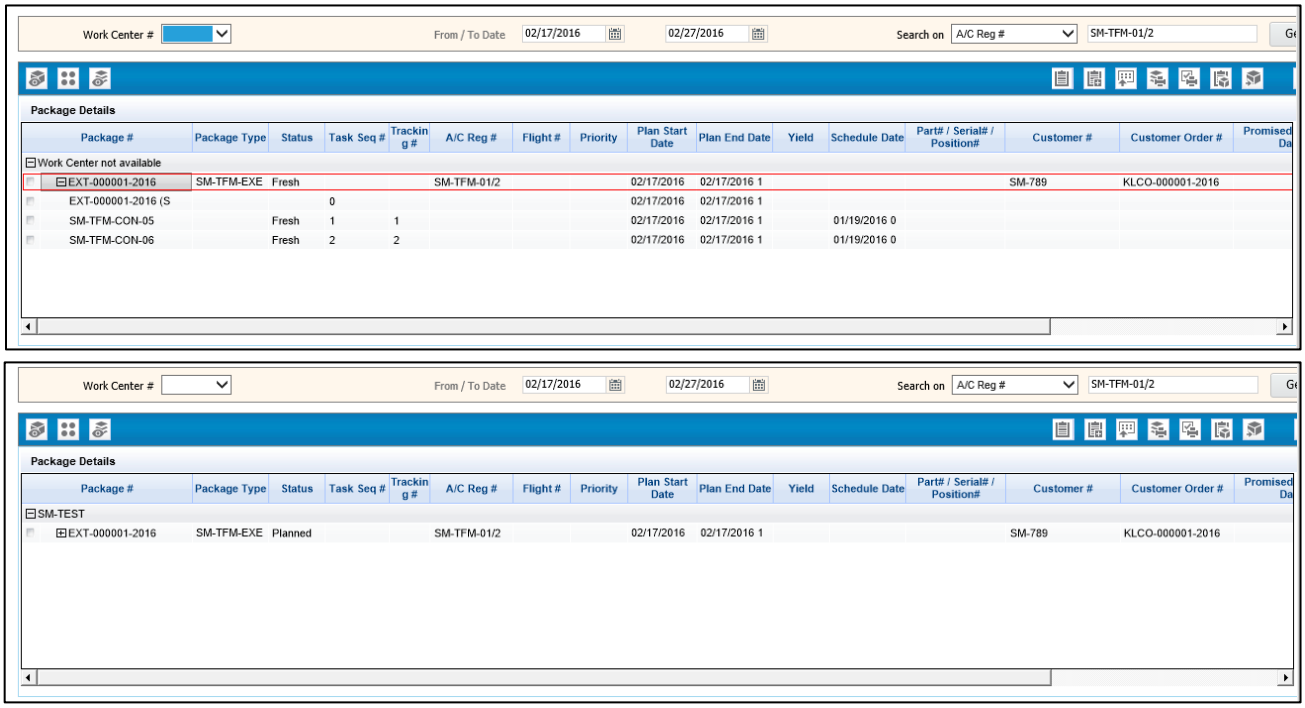


Exhibit 12: Identifies the replication of Aircraft Configuration information in OU3



9. Aircraft Maintenance execution document is automatically generated in OU3 in 'Fresh' status. Planner can review and release the package for maintenance execution.

Exhibit 13: Identifies the Aircraft maintenance package that is automatically created for the Aircraft record in OU3



10. Aircraft maintenance is executed and completed in OU3.

Exhibit 15: Identifies the **Record Aircraft Maintenance Execution Details** screen in OU3

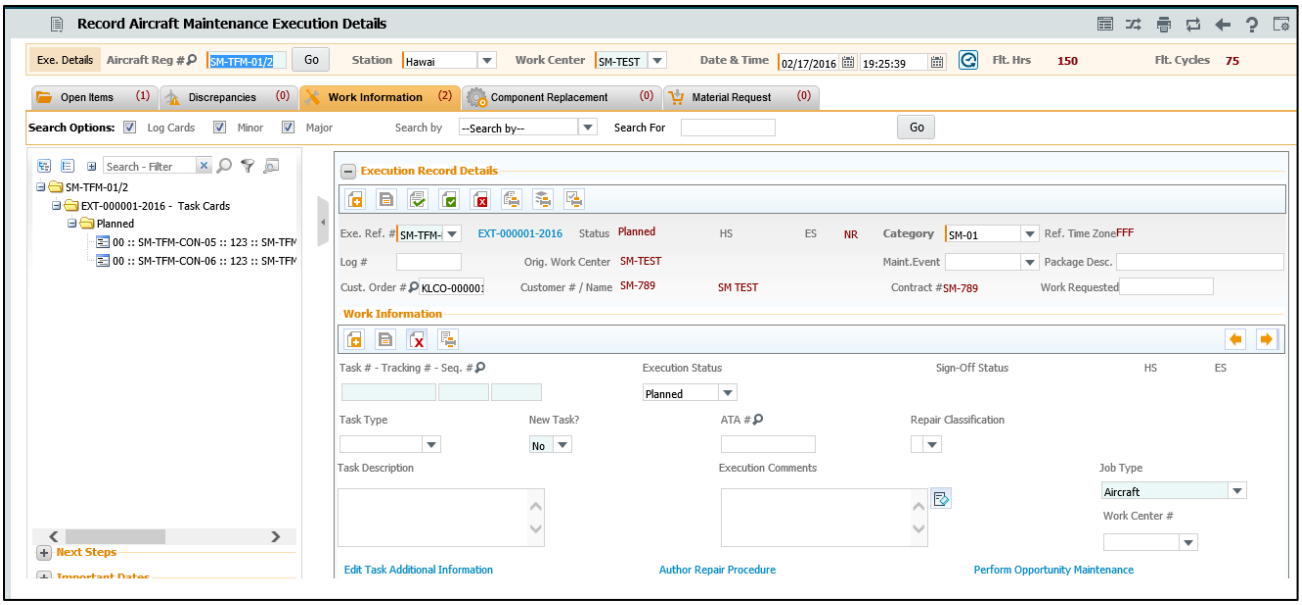
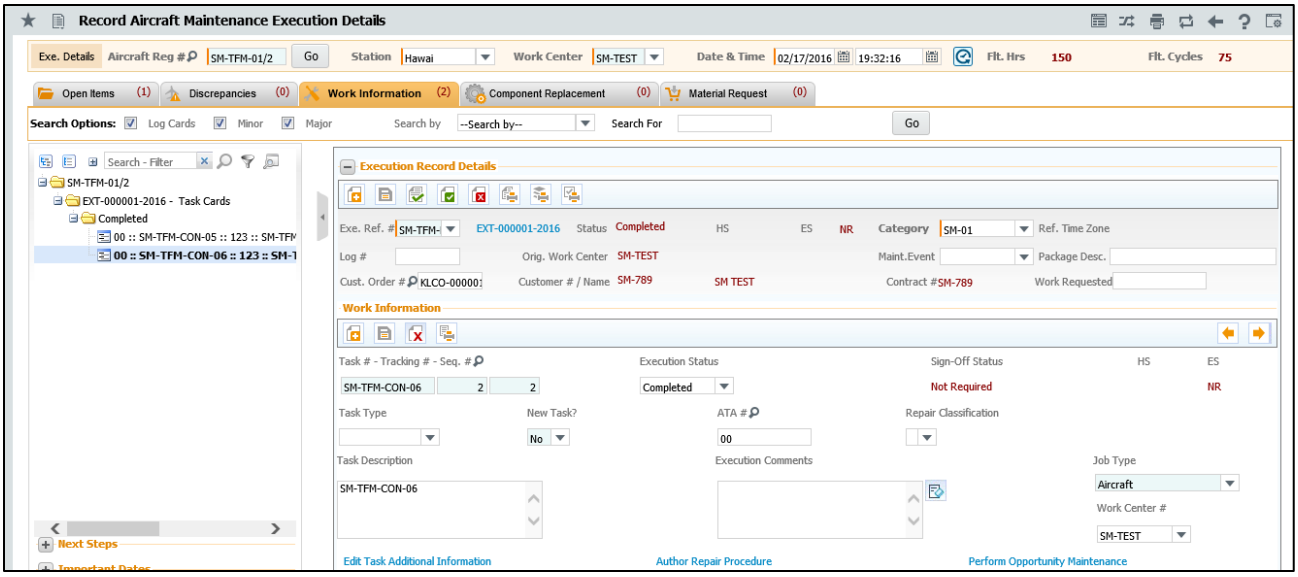
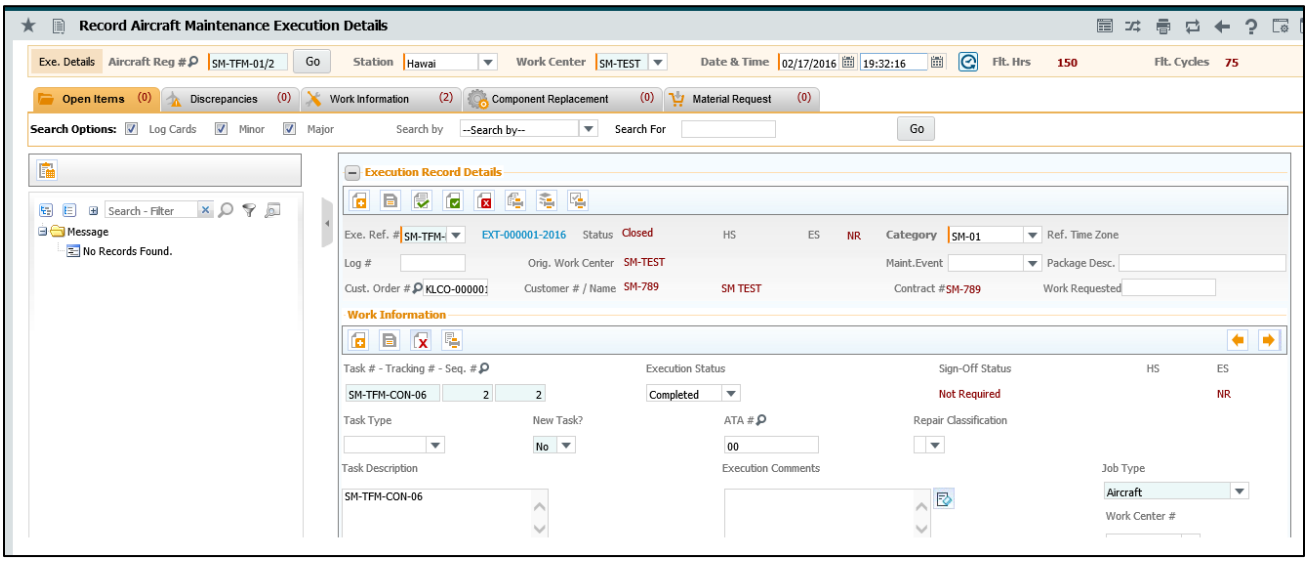


Exhibit 16: Identifies the **Record Aircraft Maintenance Execution Details** screen in OU3 where the Package is “Completed”



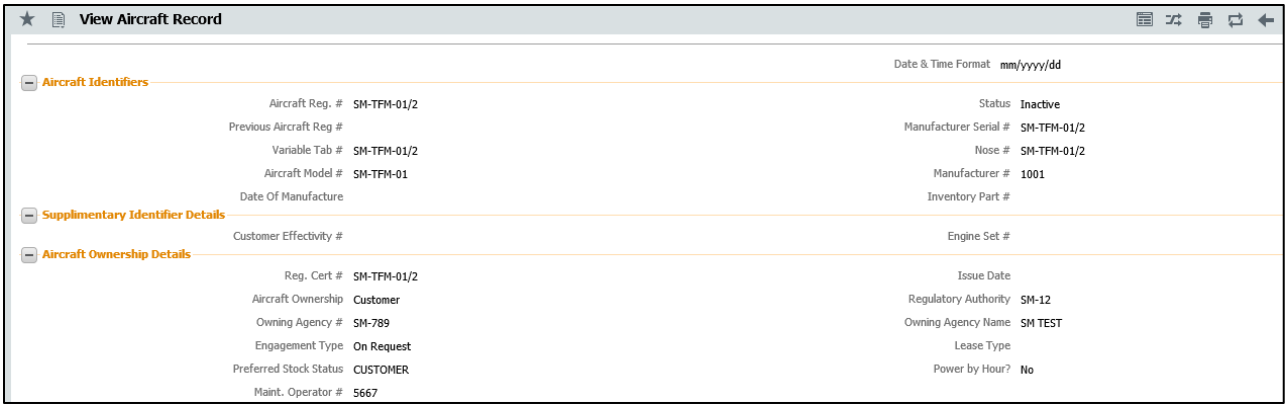
11. After review the package is closed in OU3.

Exhibit 17: Identifies the **Record Aircraft Maintenance Execution Details** screen in OU3 where the package is “Closed”



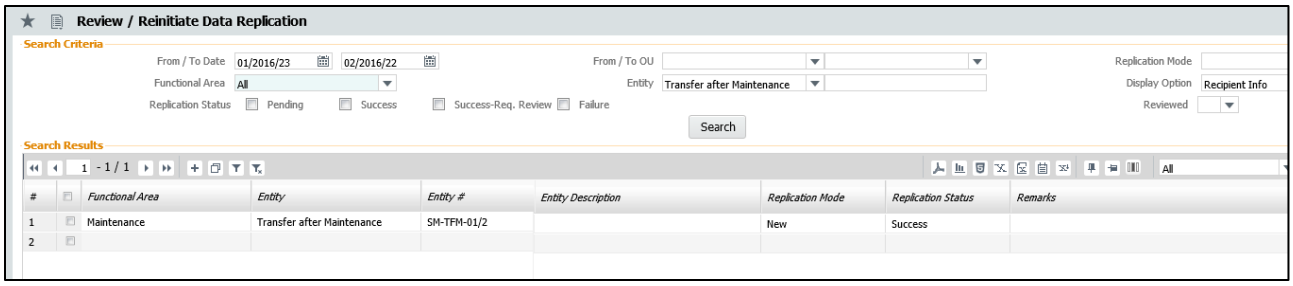
12. Once the package is closed, the Aircraft record is automatically inactivated in OU3 and transfer of maintenance execution details is initiated from OU3 to OU2.

Exhibit 18: Identifies that Aircraft record is inactivated in OU3 once the package is "Closed"



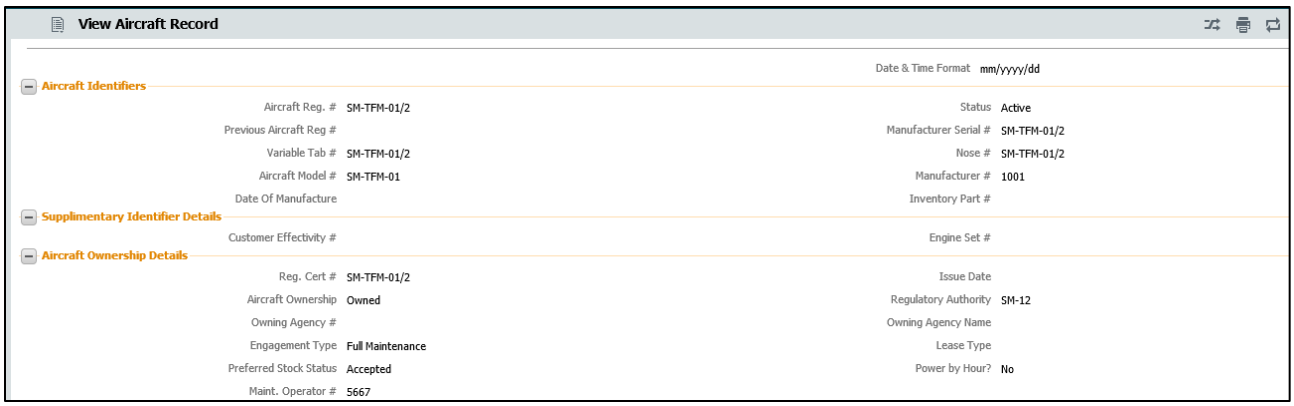
13. The status of the transfer of Aircraft from OU3 to OU2 can be viewed in **Review / Reinitiate Data Replication** screen.

Exhibit 19: Identifies the **Review / Reinitiate Data Replication** screen when status of Aircraft data transfer can be reviewed



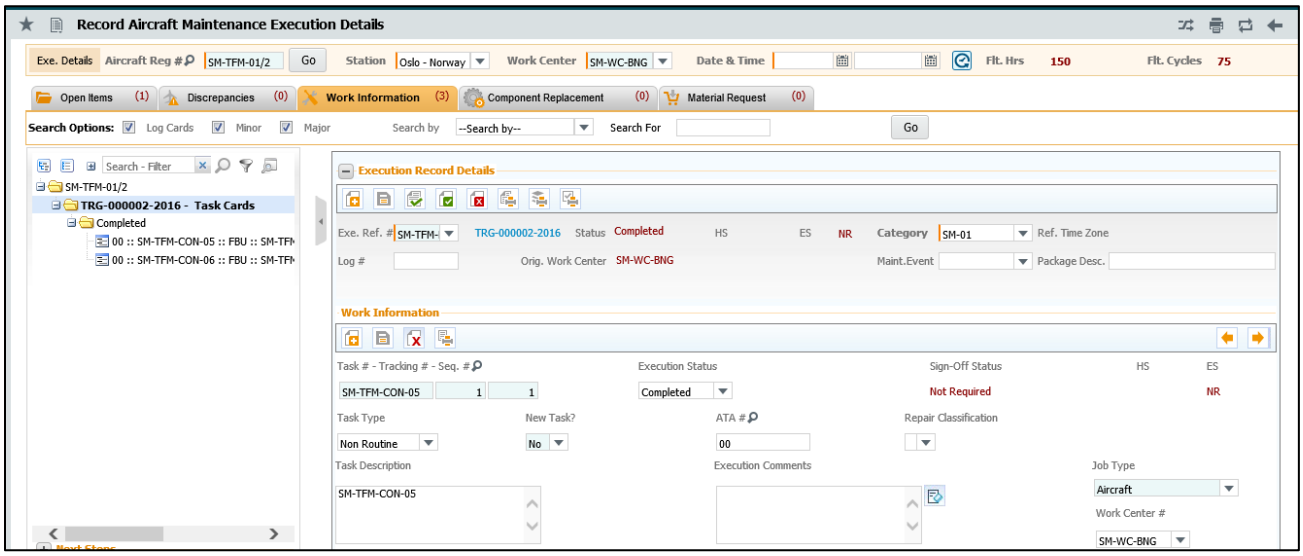
14. The status of the Aircraft record is automatically changed from "Frozen" to "Active" in OU2

Exhibit 20: Identifies that Aircraft status is updated as “Active” in OU2



15. The package in OU2 is automatically updated with the Task compliance information and package status is changed to “Completed”.

Exhibit 21: Identifies the package status automatically updated as “Completed” in OU2



Note: User to review the package in OU2 and close the same.

Ability to Transfer Aircraft for Operations to another operating unit

Reference: AHBF-19166

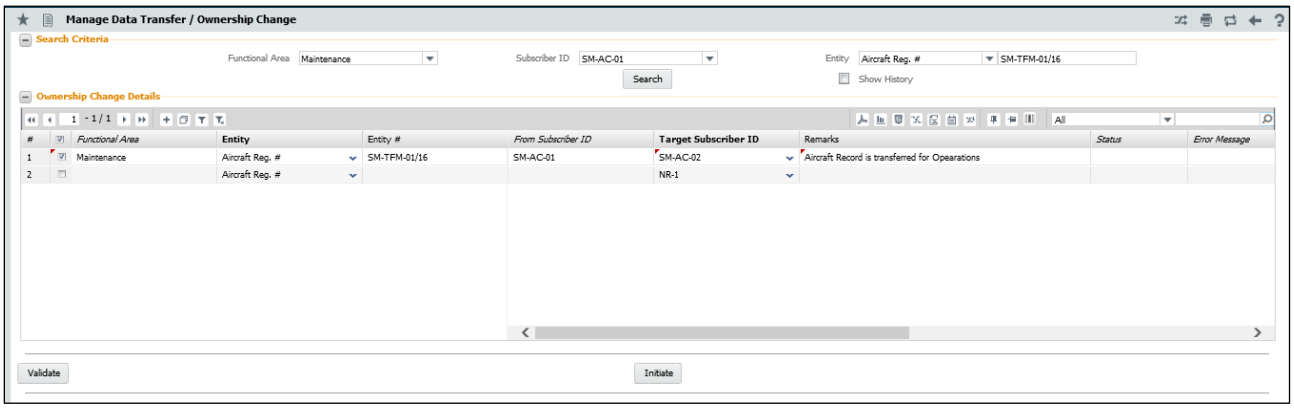
Background

This enhancement brings the ability to transfer an aircraft to another operating unit within the same organization for operational needs. Unlike transfer of aircraft for maintenance where the aircraft comes back after maintenance, when an aircraft is transferred for operations it's considered that the aircraft will be available in the operating unit for a longer time period.

Change Details

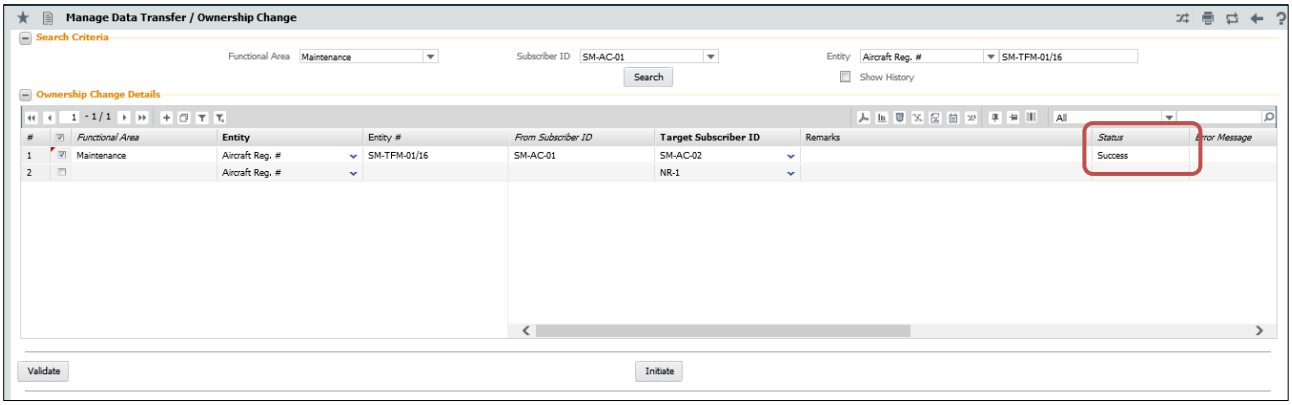
1. New activity **Manage Data Transfer / Ownership Change** is added under **Data Replication Review** business component
    a. User can search and select the Aircraft record that needs to be transferred for operations
    b. Select the target operating by selecting the Target Subscriber ID.
    c. Use the validate button to validate if the Aircraft record is eligible for transfer
    d. Use the initialize button to initiate the Aircraft record transfer to another operating unit.

Exhibit 22: Identifies the **Manage Data Transfer / Ownership Change** screen



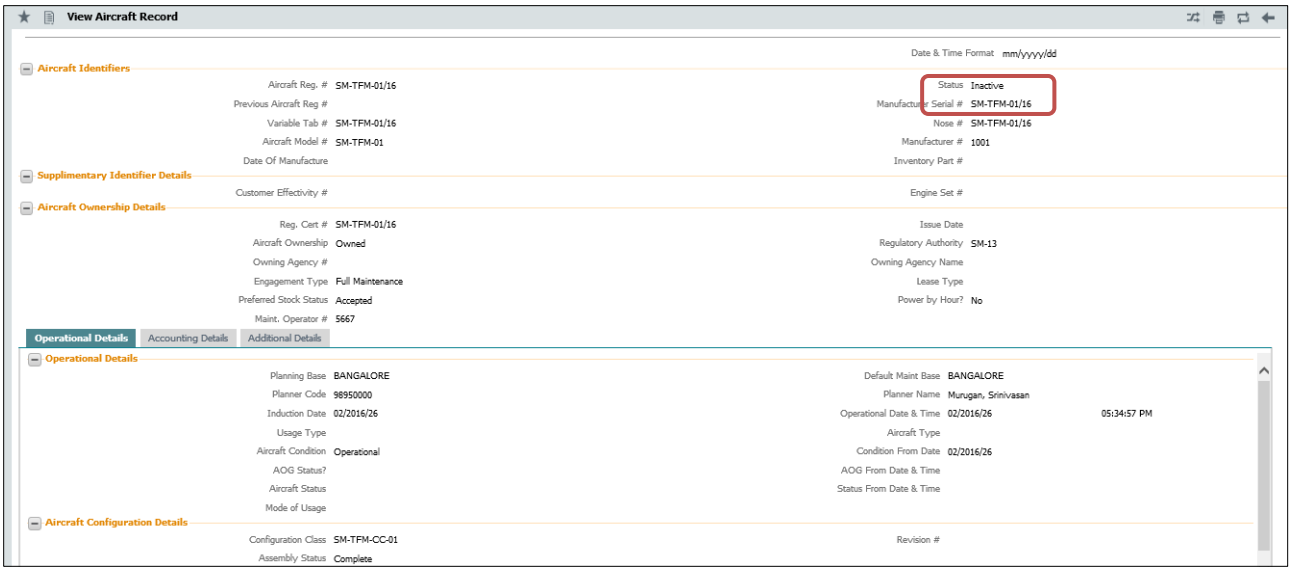
2. The status of the Transfer is displayed in the status column.

Exhibit 23: Identifies the status displayed in **Manage Data Transfer / Ownership Change** screen



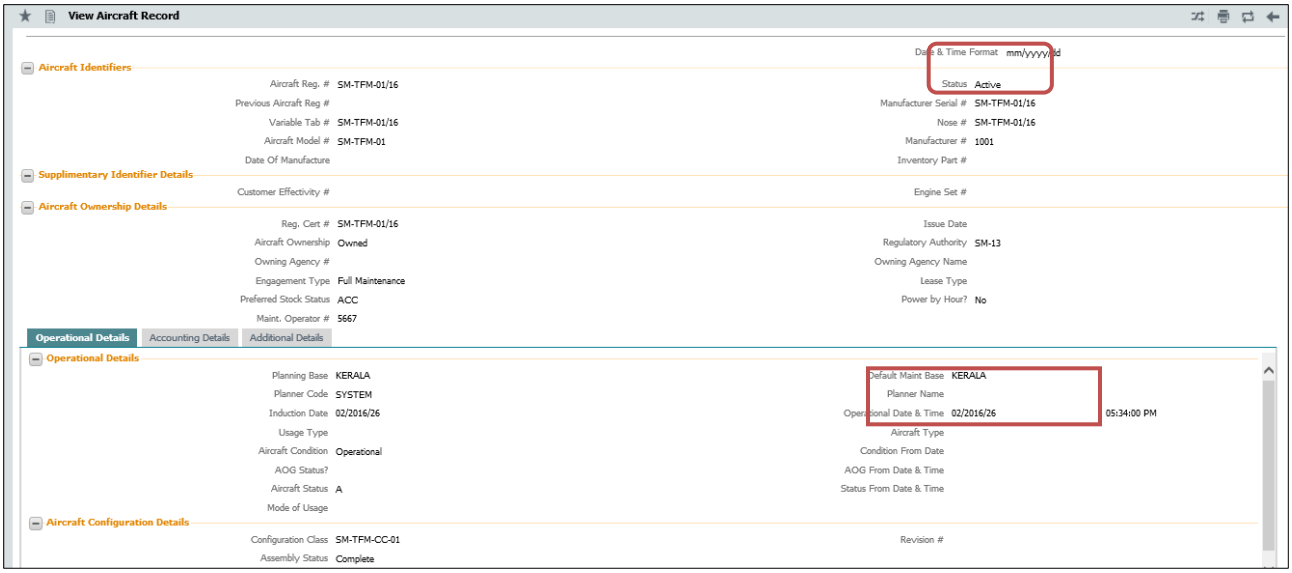
3. Once the Aircraft record is transferred, the status of the Aircraft record is changed to “Inactive” in the OU from where the Aircraft is sent (OU2 for example)

Exhibit 24: Identifies the status of Aircraft changed to Inactive in OU2



4. The Aircraft record is created in active status in the target operating unit i.e., operating unit that receives the Aircraft (OU3 for example)

Exhibit 25: Identifies the Aircraft record creation in target operating unit OU3



5. Along with the aircraft main information, following information is also replicated and updated in the target operating unit.
    a. Parameter value of Aircraft and its attached component
    b. Configuration information of Aircraft and its attached component
    c. Program information of Aircraft and its attached component

Note: Post replication of all the above data of the Aircraft, operating unit that has received the aircraft can carry out operations / transactions on the Aircraft.

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

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