Ramco Aviation Solution

Version 5.7.5

Enhancement Notification

Maintenance

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WHAT'S NEW IN ENGINEERING ORDER?

Enhancements in Manage Eng. Document

Reference: AHBF-9204

Background

The **Schedules** tab of the **Manage Eng. Document** screen must hold the capability to update schedules of already initialized tasks. Currently, modifications in the schedules of initialized tasks are not carried over to maintenance programs.

Change Details

A new process parameter "**Allow Initialized Schedules Update from Schedules tab?**" added under '—All Eng. Doc.—' entity of 'Eng. Doc. Type' entity type in **Common Master** business component will decide whether the system must update changes in schedules of initialized tasks from the **Schedules** tab of the **Manage Eng. Document** screen to maintenance programs. With this enhancement, users have the flexibility of resetting task schedules post task initialization through eng. documents.

The system behavior based on the value of the process parameter "**Allow Initialized Schedules Update from Schedules tab?**" is described below:

- **'0' (No):** In the **Initialize Eng. Doc. Schedules** screen, the task schedules do not get updated with modifications happening in the **Schedules** tab of the **Manage Eng. Document** Screen subsequent to initialization.
- **'1' (Yes):** In the **Initialize Eng. Doc. Schedules** screen, the task schedule information get updated from the **Schedules** tab of the **Manage Eng. Document** screen at all times.

For example, consider an eng. document task 'T1' whose schedules have been initiated via the **Initialize Eng. Doc Schedules** screen by a user. The user later revisits the **Schedules** tab of the **Manage Eng. Documents** screen and modifies task schedules of task T1.

- Modified task schedules information in the Schedules tab is carried over to the Initialize Eng. Doc Schedules screen, if the value of the process parameter "**Allow Initialized Schedules Update from Schedules tab?**" is '1'(Yes).
- Alternately, if the process parameter value is '0' (No), the **Initialize Eng. Doc Schedules** screen does not reflect any changes made to the schedule of task T1 in the **Schedules** tab of the **Manage Eng. Document** activity. In this setting, the **Initialize Eng. Doc Schedules** screen remains the final schedule auditing screen of eng. document tasks. This means for an initialized task, no schedule modifications are permitted from the **Schedules** tab of the **Manage Eng. Document** activity.

Exhibit 1: A new process parameter governs the schedules update of initialized tasks from Eng. documents

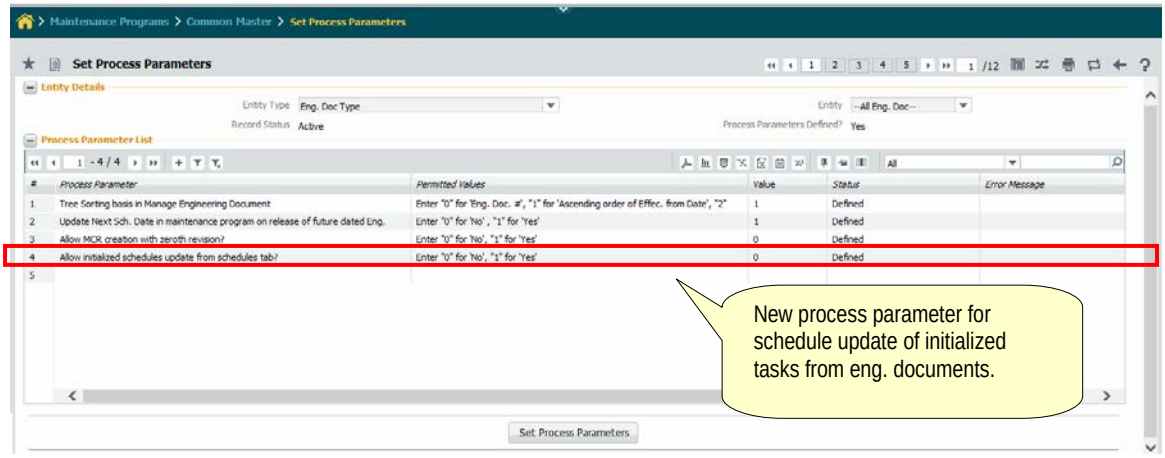
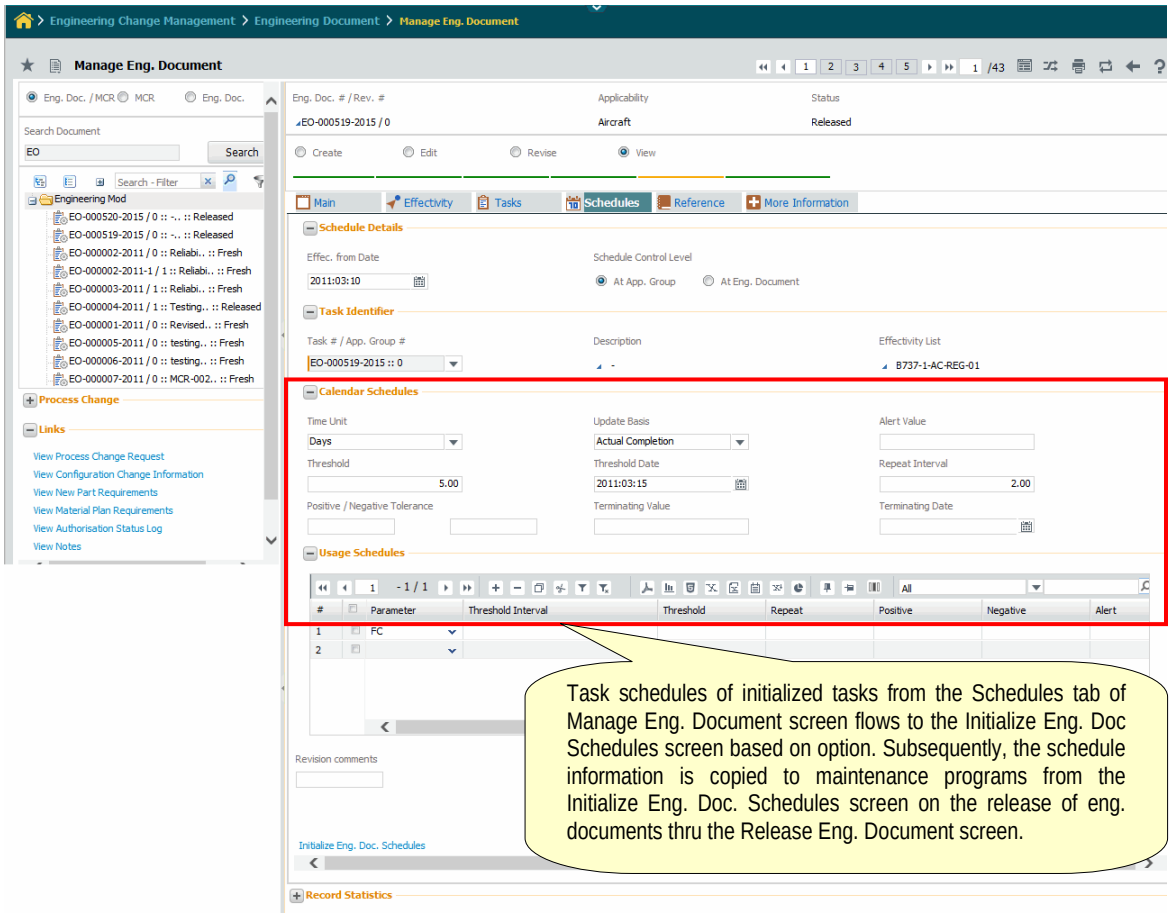


Exhibit 2: The schedules of already initialized tasks get updated from the **Schedules** tab of the **Manage Eng. Document** screen to the **Initialize Eng. Doc. Schedules** screen, if "**Allow Initialized Schedules Update from Schedules tab?**" is '1'(Yes).



The system behavior in conjunction with "**Action on Revision**" is illustrated in the below table:

Process Parameter value	Action on Revision	Schedule Type	Complied?	System behavior
0/No	Carry over compliance	One Time	Yes / No	Does not update task schedule changes in the "Initialize Eng. Doc. Schedules" activity.
1/Yes	Carry over compliance	One Time	Yes	Does not update task schedule changes in the "Initialize Eng. Doc. Schedules" activity.
1/Yes	Carry over compliance	One Time	No	Updates task schedule changes in the "Initialize Eng. Doc. Schedules" activity.
0/No	Carry over compliance	Recurring	Yes / No	Does not update task schedule changes in the "Initialize Eng. Doc. Schedules" activity.
1/Yes	Carry over compliance	Recurring	Yes / No	Updates task schedule changes in the "Initialize Eng. Doc. Schedules" activity.
0/No	Re-comply	One Time / Recurring	Yes / No	Does not update task schedule changes in the "Initialize Eng. Doc. Schedules" activity.
1/Yes	Re-comply	One Time / Recurring	Yes / No	Updates task schedule changes in the "Initialize Eng. Doc. Schedules" activity.

WHAT'S NEW IN INITIALIZE MAINT. PROG. & UPDATE COMPLIANCE ?

Ability to grant / control transaction rights in IMPUC based on options settings

Reference: AHBF-5128

Background

Initialize Maint. Prog. & Update Compliance screen allows user to perform various transactions like Work Compliance update, Schedule Information update. Once user has access to the IMPUC screen, user will be able to update the Work Compliance information and Schedule information on Aircraft Tasks & Tasks of components attached to Aircraft, components available in warehouse and components not available in warehouse and not attached to Aircraft - available in any receiving transactions.

Due to various business reasons like process controls, some users should be allowed to perform Work Compliance update only on components available in warehouse and not on components attached to Aircraft. Similarly user having access to record work compliance should not be allowed to update program schedule information.

Change Details

To address the above business need to grant transaction rights in IMPUC screen, a new process parameter has been added in the **Define Process Entities** to configure whether additional restriction is required in IMPUC screen usage.

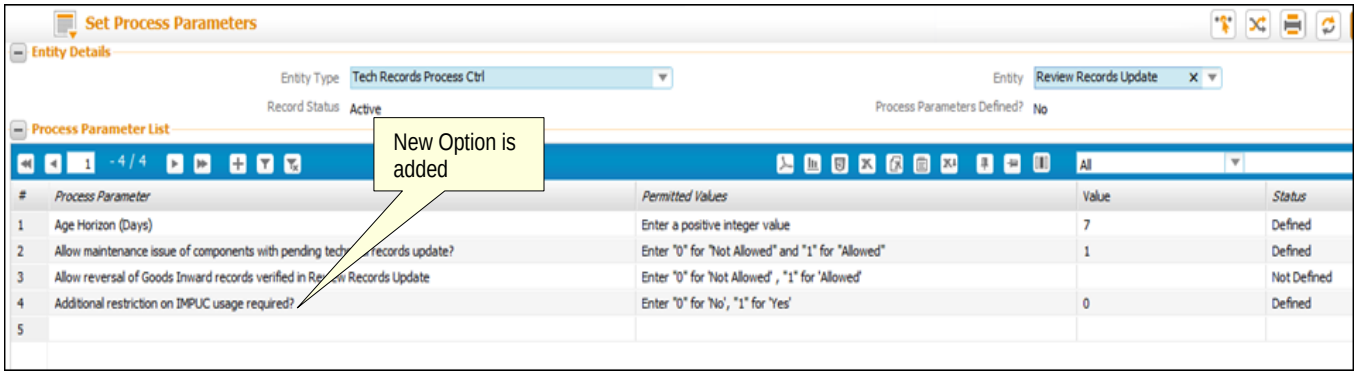
If this option is disabled, then existing IMPUC behavior will be retained.

If this option is enabled, system will check whether login user role has access rights to perform transactions in IMPUC screen or not. If does not have rights, then he / she will not be able to perform the transaction.

Access rights for the user role will be arrived based on following activity access rights.

Activity Name	Activity Desc	Access Granted	Remarks
ImpAllWrkComp	IMPUC_SysAct: Allow Work Compliance Update	User will be allowed to perform Work Compliance	Option work compliance will be available only if this activity is mapped to the user role
ImpAllPgSchUpd	IMPUC_SysAct: Allow Program Schedules Update	User will be allowed to update program schedule information	Option Update Schedule will be available only if this activity is mapped to the user role
ImpAllUpdAcAttComp	IMPUC_SysAct: Allow Update for A/C & Attached Components	User will be allowed to perform update on Aircraft Tasks and Tasks of Components attached to Aircraft	This activity needs to be mapped to allowed user role to perform compliance / schedule update for Aircraft Tasks and Tasks of Components attached to Aircraft
ImpAllUpdStckParts	IMPUC_SysAct: Allow Upd on Stocked Part Overriding WH rights	User will be allowed to perform update on Tasks of Components available in warehouse	This activity needs to be mapped to allow users to perform update on Tasks of components available in warehouse. If this activity is not mapped then user should have access to the warehouse where the component is currently available to perform Compliance / Schedules update
ImpAllUpdPartsNoStck	IMPUC_SysAct: Allow Update for Parts Not in Stock	User will be allowed to perform update on Tasks of Component not available in stock and not attached to Aircraft	This activity needs to be mapped to allow users to perform Compliance update / schedules update on Tasks of components that are not available in warehouse and not attached to Aircraft.

Exhibit 1: Set Process Parameters



WHAT'S NEW IN TECH RECORDS HUB?

Ability to Build and Update and Configuration information of an entire Aircraft / Component assembly in one go – Configuration Tab

Reference: AHBF-7430

Background

Tech Records personnel maintains various information like Configuration, Program, Parameter and Eng. Documents. To maintain this information in the system, user needs to navigate to various business components and activities and update / review these information which is a time consuming process.

To Build Configuration information of an entire Aircraft, user needs to build the configuration information of the Aircraft by providing the Position code details for the first level assembly and then initialize the first level positions through ARL / initialize and update configuration screen. Once the first level information is build user needs to build other levels of configuration level by level which is an iterative process.

Change Details

A new activity **Manage Aircraft / Component Records** is introduced under the **Technical Record** business component to facilitate Tech Records personnel to easily manage Technical records document information like Configuration, Program, Parameter and Eng. document from one place.

The Tech Records Hub facilitates user to perform updates on both Aircraft assembly or on a major component assembly.

Configuration Tab Features

Following features are supported in **Configuration** tab in Technical Records Hub in addition to the existing configuration features:

- Build Configuration and Attach components in one go
- Build & Initialize entire assembly in one go
- Exception Management
- Modify / Correct Position codes
- Delete Position codes
- Add Previously Deleted Position codes
- Provide Mfr. Date for new components
- Initialize TSN and CSN Values for new components
- Validate as a separate function

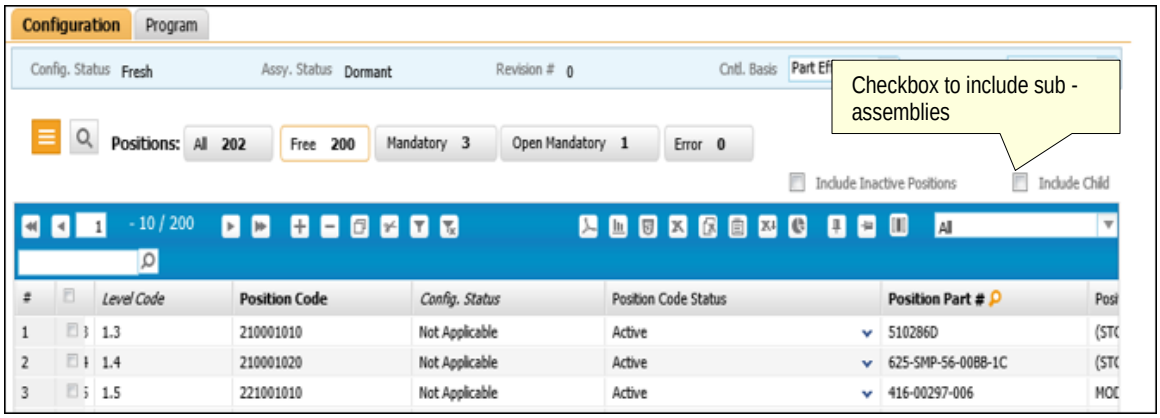
- Save entered information as Draft
- Straight Through Processing
    - Part Creation
    - Part Effectivity Definition
    - Alternate Part Definition

Build Configuration and Attach components in one go

With the new Tech Records hub, provision will be available for user to build configuration and update the installed part # serial information in one click. i.e. While updating the new position code information in the Aircraft / Component assembly, user will be able to update the installed Part # Serial # information.

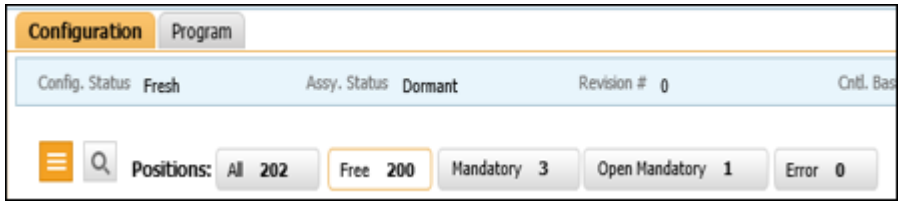
Build & Initialize entire assembly in one go

Provision will be available for user to Build & Initialize entire Aircraft / Component assembly. When check box 'Include Child' is checked, system will retrieve entire sub assembly information of the selected position code / record.



Exception Management

User will able to quickly review and retrieve exception information with the help of Exception Management button bars where exception information will be displayed along with Count of Exceptions.



Modify / Correct Position codes

If the position code information is wrongly entered, provision will be available to update the correct position code by modifying the existing position code information.

Delete Position codes

If an existing position code no longer needs to be tracked on an assembly, then that position code can be deleted from the assembly.

Note: Position code information can be deleted only if no component is attached to the assembly.

Add Previously Deleted Position codes

Provision will be available to add the previously deleted position codes if required.

Provide Mfr. Date for new Components

Provision will be available for user to specify Manufacturing date information for newly installed components.

Initialize TSN and CSN values

Provision will be available for user to initialize the TSN and CSN values for new components.

Validate

Provision will be available for user to validate and ensure that the entered information is correct prior to updating the information into system.

Save Draft

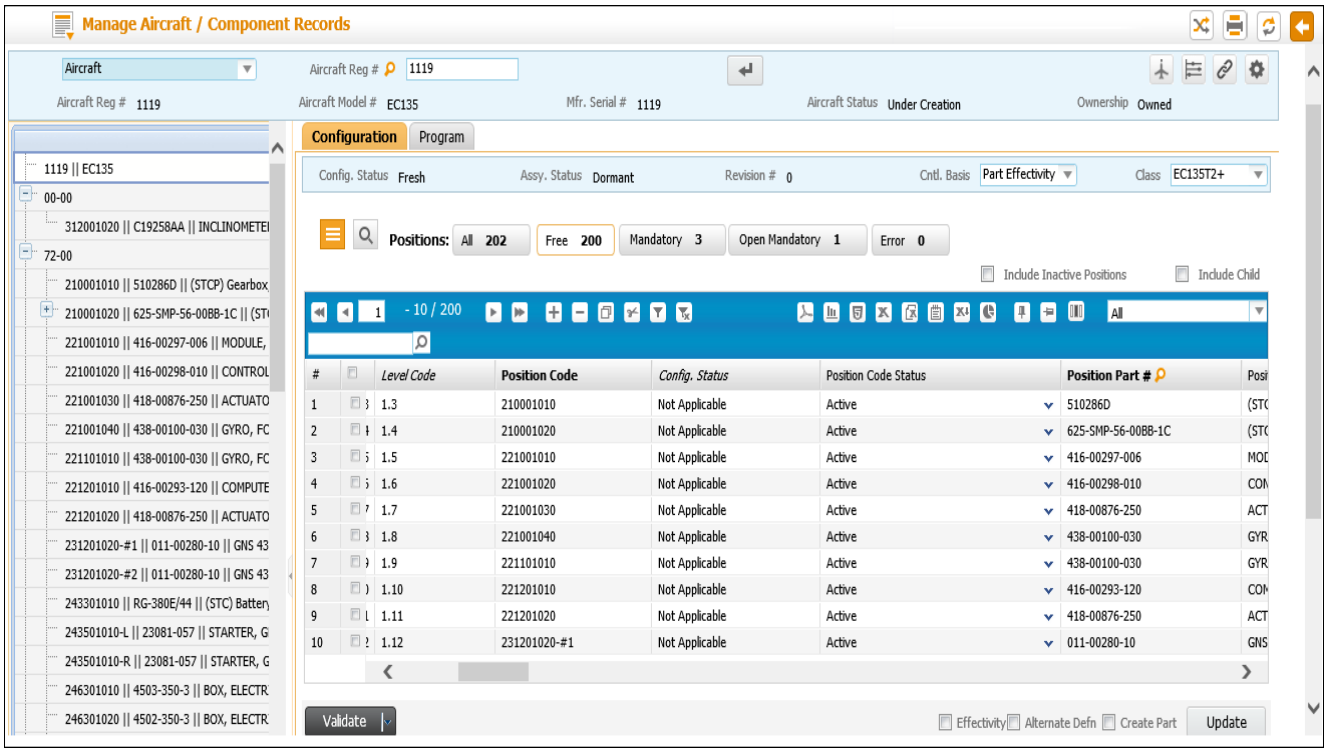
If the configuration information is not completely available, then user can use the Save Draft function to save the entered information. When Save draft is invoked system will not validate any information but save the entered information as Draft. User can retrieve the Draft information and proceed with any time.

Note: Draft information will be available only within the Techrecords Hub screen for processing.

Straight Through Processing (STP)

Provision will be available for user to quickly Create Part Information, Update Effectivity Information and Define Alternate Information without navigating away from Technical Records hub interface. User will be able to perform STP based on user role access rights.

Exhibit 1: Tech Records Hub - Configuration tab



Ability to Create and Manage Aircraft and Component Programs – Program Tab

Reference: AHBF-10921, AHBF-10853, AHBF-9232, AHBF-10859

Background

The Aircraft Specific Program and Component Maintenance Programs are maintained in the system in order to perform scheduled maintenance activities on the Aircraft and Components respectively. Currently the user need to Create and Manage Aircraft Specific Program and Component Maintenance Program from different UIs. The Task definition and schedule definition for the program are maintained in different UIs. Also it involves complex navigation to many screens, in order to set up and maintain a maintenance program.

Through the 'Program' tab in **Manage Aircraft / Component Records** screen, the user can create and manage Aircraft Specific Program and Component Maintenance Program from a single UI. The Program for both Aircraft and for all the attached components can be created / modified in single go. This interface is a single point screen to setup all data pertaining to program. Using the 'Program' tab, Task definitions, Schedule definitions, Task Relationship and Effectivity definitions can be defined from the same UI. The technical records personnel can upload and validate the program data in a bulk manner thus simplifying the Aircraft/Component induction process.

Change Details

A new screen **Manage Aircraft / Component Records** to manage different logical functions such as Configuration, Program, Compliance, Parameter updates, Eng. Doc Compliance is being developed.

The user can set the context and work on the desired entity either an Aircraft or a Component. User can manage both Aircraft and Component Program from the 'Program' Tab. Both creation of new program and management of existing program for Aircrafts and Components are done from this screen.

Key Features:

1. Program Creation:

In the **Program** Tab, User can create Aircraft Specific Maintenance Program for the searched aircraft (Active or Under Creation) by simply associating it to the Aircraft Model Programs which are in 'Fresh' or 'Active' status and to the sub fleet against which the aircraft program schedules need to be forecasted. On association the user can create new Aircraft Specific Maintenance Program.

Component Maintenance Program for any component which is attached to the searched entity or for the searched component can also be created from the 'Program' Tab. By

providing the Part# and Serial#, Task # and Schedules the user can create Component Maintenance Program for multiple Part #/Serial # combination in one go.

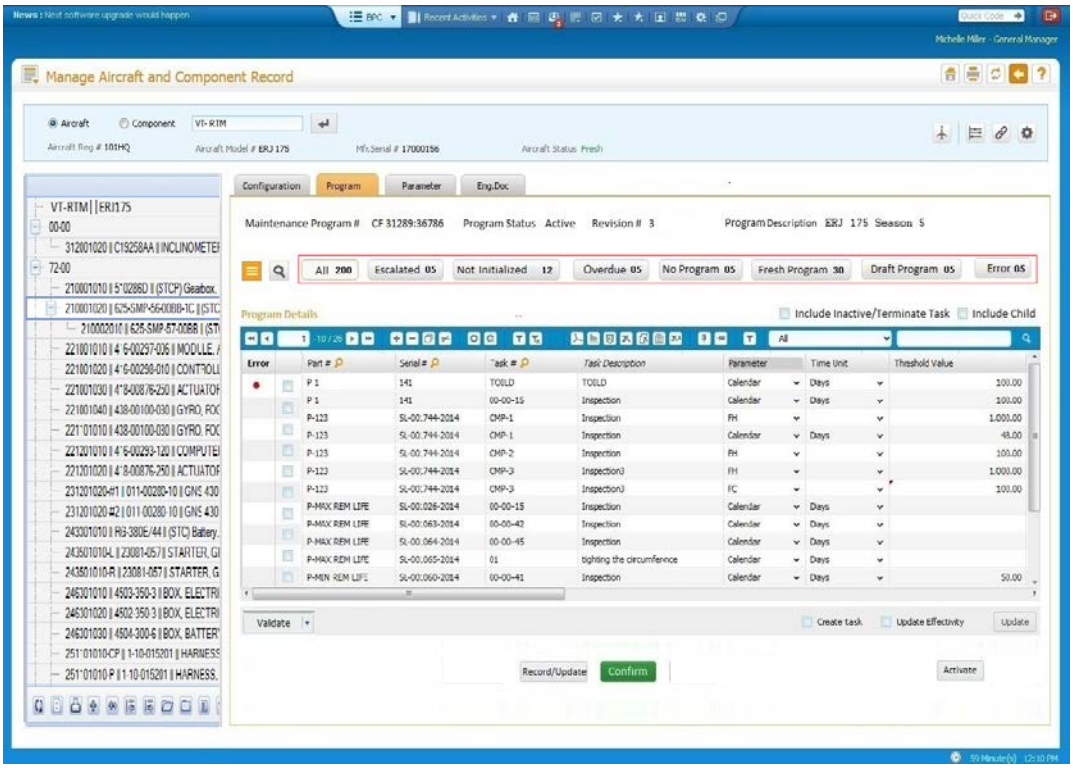
2. Managing Existing Program.

The user can both view and manage Aircraft Specific Maintenance Program and its attached Components' Component Maintenance Program at the same time or as a separate entity. In the 'Program' tab, the Task Attributes, Schedules, Relationship definition and Parent removal can also be defined or modified to manage the respective maintenance program. This will result in changes in the maintenance program and the forecasted maintenance schedules for the respective aircraft or component entity on activation of their respective programs.

3. Exception Button

The Exception button section facilitates identifying the exceptions that are present in the programs of aircraft or component and review of the same can be carried out by filtering the exceptions on clicking of exception button and correcting the exception data in the program.

Exhibit 1:



a. All: This exception button will show the count of all tasks that is present in the Aircraft Specific Program or the Component program. On click of this exception it will fetch all tasks present in the program to the multiline.

b. Escalated: This exception button will show the count of the tasks which have been escalated and have escalation references to it. On click of this exception the user can filter the escalated tasks and review the same.

c. Not Initialized: This exception button will show the count of the tasks in the program which are not initialized or schedules are not defined and the program Item type of the task is 'Block', 'Non Block' or 'Base'. On click of this exception the user can filter these tasks and initialize it one go.

   Note: If the Initiate/Reset By is set as 'Related Task Compliance' for the task and it is not initialized, it will be included in the exception only if none of the task in its task relation chain which is present in the program does not have schedules.

d. Overdue: This exception button will show the count of the tasks which have forecasted next schedules lesser than the current date or current value of the entity. On click of this exception the user can filter these tasks and review/modify the schedule values to set up the program for the aircraft or component

e. No Program: This exception button will show the count of the number of entities which does not have program definitions including the searched aircraft/component and the components attached to the searched entity. On click of this exception the user can filter out all the entities in the configuration which does not have program and can define the program for all these entities in one go by providing the tasks to the respective Part # and Serial # combination.

   Note: If the Aircraft does not have Aircraft Specific Maintenance Program, the system will show the count of No Program for this Aircraft also. On clicking, the system will ask the user to associate the Aircraft to Model Program to create Aircraft Specific Maintenance Program.

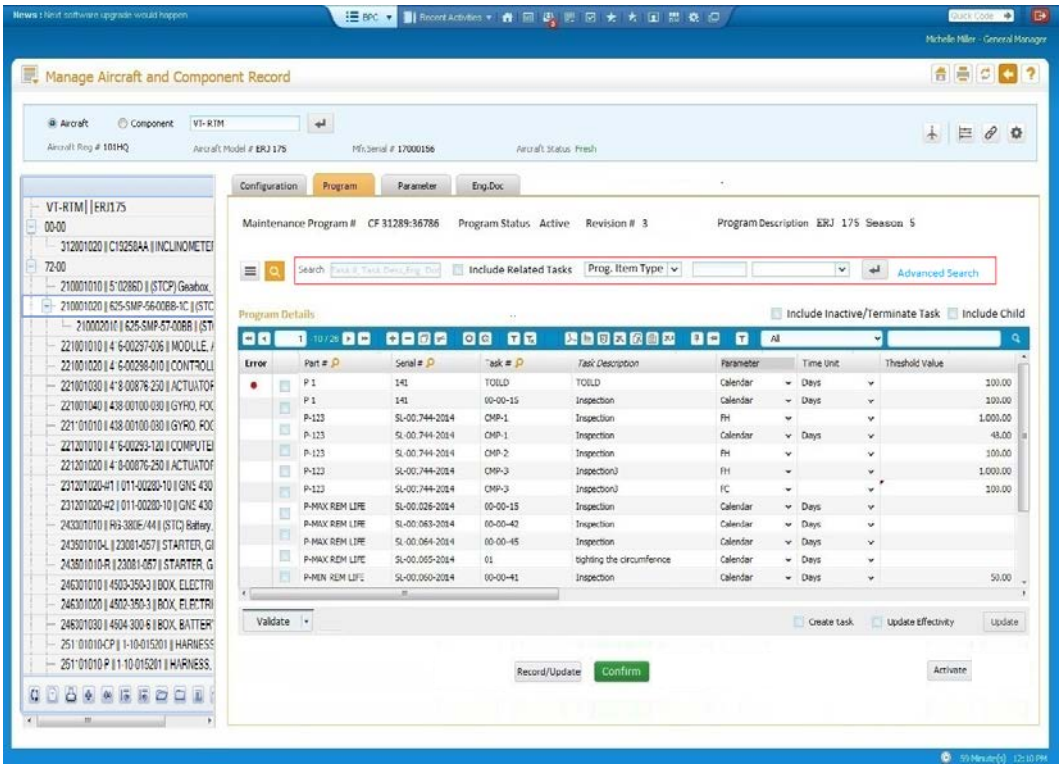
f. Fresh Program: This exception button will show the counts of the number of entities which have their program status in 'Fresh' including the searched entity. On click of this exception the system will fetch only those programs which are in 'Fresh' status to the multiline and user can modify the task attributes, Schedules, add tasks or delete tasks from the program in the same revision

g. Draft Program: This exception button will show the counts of the number of entities which have their program status in 'Draft' including the searched entity. On click of this exception the system will fetch only those programs which are in 'Draft' status to the multiline and user can view/modify all those tasks and schedules which have been saved previously and user can validate all the records before modifying the program to 'Fresh' status

h. Error: This exception button will show the counts of the number of tasks in the program which have data validation errors when performing 'Validate' action. On click of this exception the system will fetch only those tasks which have data validation error and the user can correct the data for all these tasks in one go for all the entities

4. Search

Exhibit 2:



a. Primary Search:

The search can be performed to retrieve the data in the multiline. The primary search is visible in the 'Program' tab itself. The Search can be performed on the following entities:

Task#, Task Desc, Eng. Doc #, MCR #, Zone #, Prog. Item type, Job Type, Schedule Status, Rem. Value

'Include Related Tasks' will fetch all the related tasks for the searched task #.

b. Advanced Search

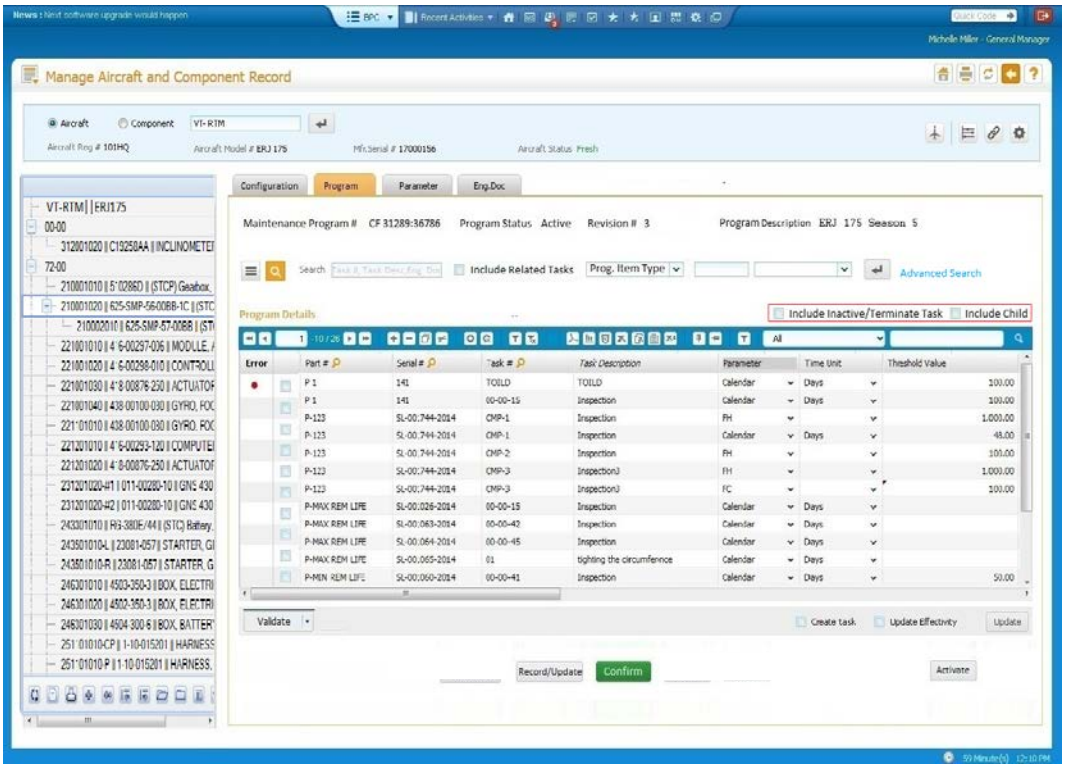
The search can be performed to retrieve the data in the multiline. The advanced search is available as pop-up screen. The search can be performed on the following entities.

Task #, Task Desc., Task Type, Task Category, Part #, Serial #, Component #, ATA #, Zone #, Prog. Item Type, Schedule Status, Job Type, MCR #, Eng. Doc Type, Eng. Doc #, Maintenance Process, Rem. Value and Include Related Task.

5. View Filters

The View Filter enables the user to view the program data for the searched entity and for its attached component in an organized and in hierarchical manner.

Exhibit 3:



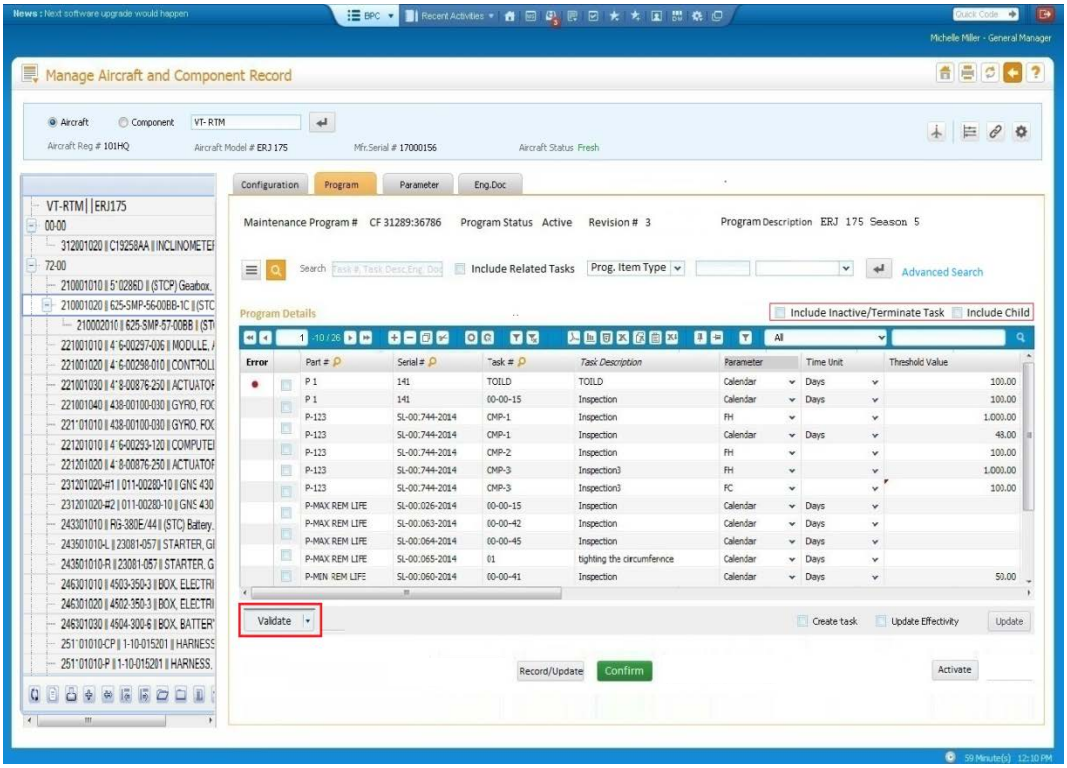
a. Include Inactive/Terminated Task: On enabling this filter the system will fetch the Inactive and Terminated Tasks also from the program. This view enables the user to review the tasks which have been terminated due to schedule execution or tasks made inactive due to specific reasons.

b. Include Child: On enabling this filter the system will fetch the programs of the components which are attached to the searched entity. This view enables the user to review all the programs across the configuration in one go.

Note: On selection of these filters the exception button counts will change to include Inactive and Terminated tasks and Child Program.

6. Special Actions

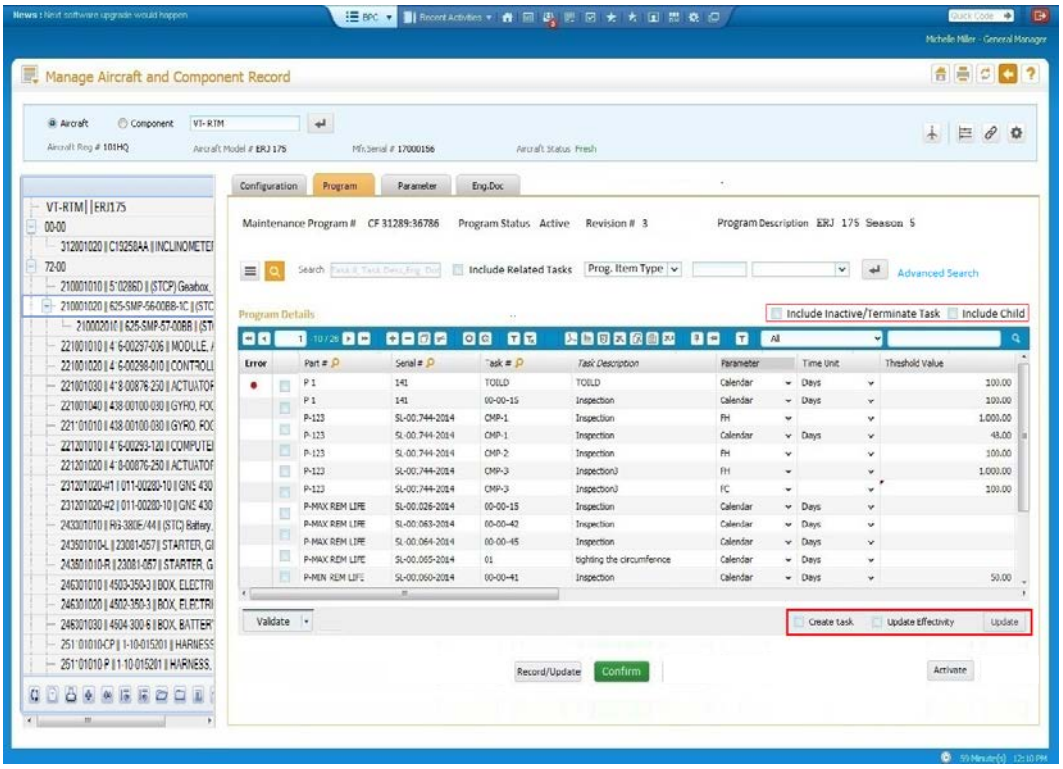
Exhibit 4:



User can validate the entered data correctness by using Validate button. The system will throw validation errors if the entered data is incorrect/wrong. The errors can be viewed in the 'Message Center' where multiple errors are concatenated and displayed. For Easier Identification of Error Records, an Error Image is provided in the multiline to indicate error records.

7. Quick Task Creation and Effectivity Definition:

Exhibit 5:



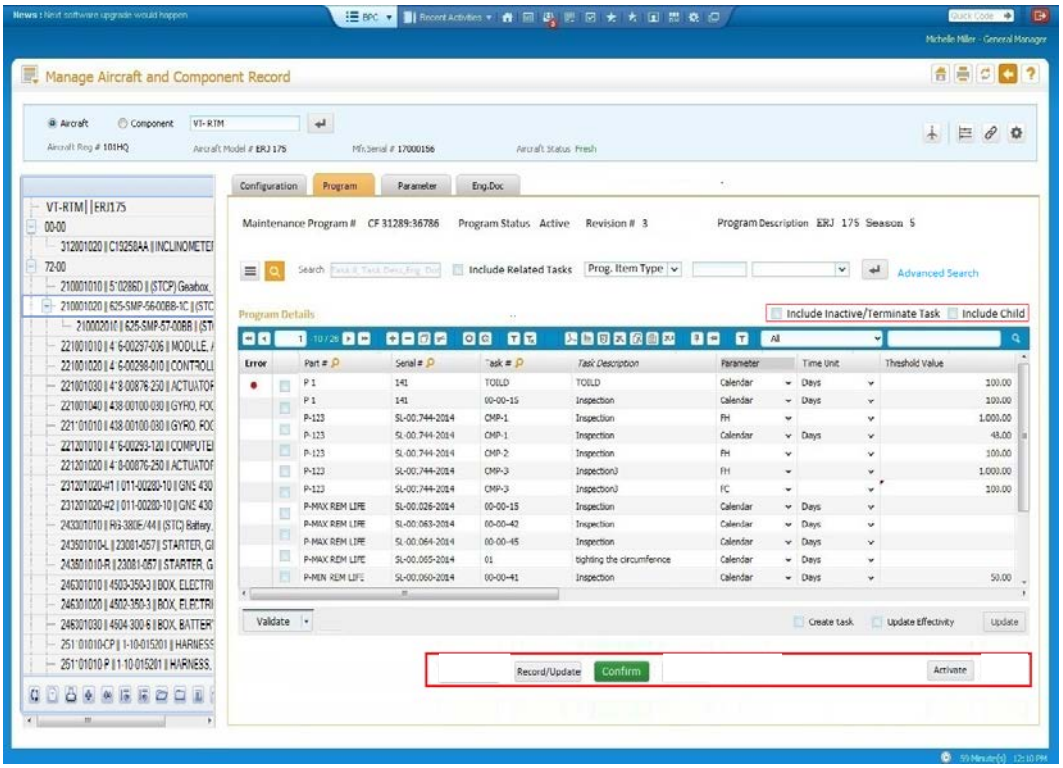
When a new Aircraft/Component is inducted and program is being setup for the same, the tasks to be defined in the program may not already available/inducted into the system. Using the 'Create Task' the user can create tasks quickly from the 'Program' Tab itself by providing the Template part from which the task attributes need to be copied to the newly created tasks. The tasks created from the 'Program' Tab are created in 'Active' status.

For the newly added task or for newly created task in the 'Program' tab the user can quickly update the effectivity definitions using the 'Update Effectivity' feature. This will stop the user from navigating to **Manage Task Effectivity** UI to define effectivity on modification of program.

8. Program Transaction

The transaction of both the Aircraft and Component Program can be done with the same transaction buttons.

Exhibit 6:



a. Record/Update: This transaction button will enable the user to validate and save all the entered data to the program. This transaction will validate for data correctness. This transaction will change the status of both Aircraft Specific Program and Component Specific Program to ‘Fresh’ status.

b. Confirm: This transaction is specific to the Aircraft Specific Program. This transaction will validate and confirm the Aircraft Specific Program so that it is ready for Activation (to be forecasted). This transaction will change the status of Aircraft Specific Program to ‘Confirm’ status.

c. Activate: This transaction will activate both the Aircraft Specific Program and the Component Program. On activation the program will be ready to be forecasted. This transaction will change the status of the Program to ‘Active’.

Ability to view Component information from Tech Records Hub

Reference: AHBF-9466

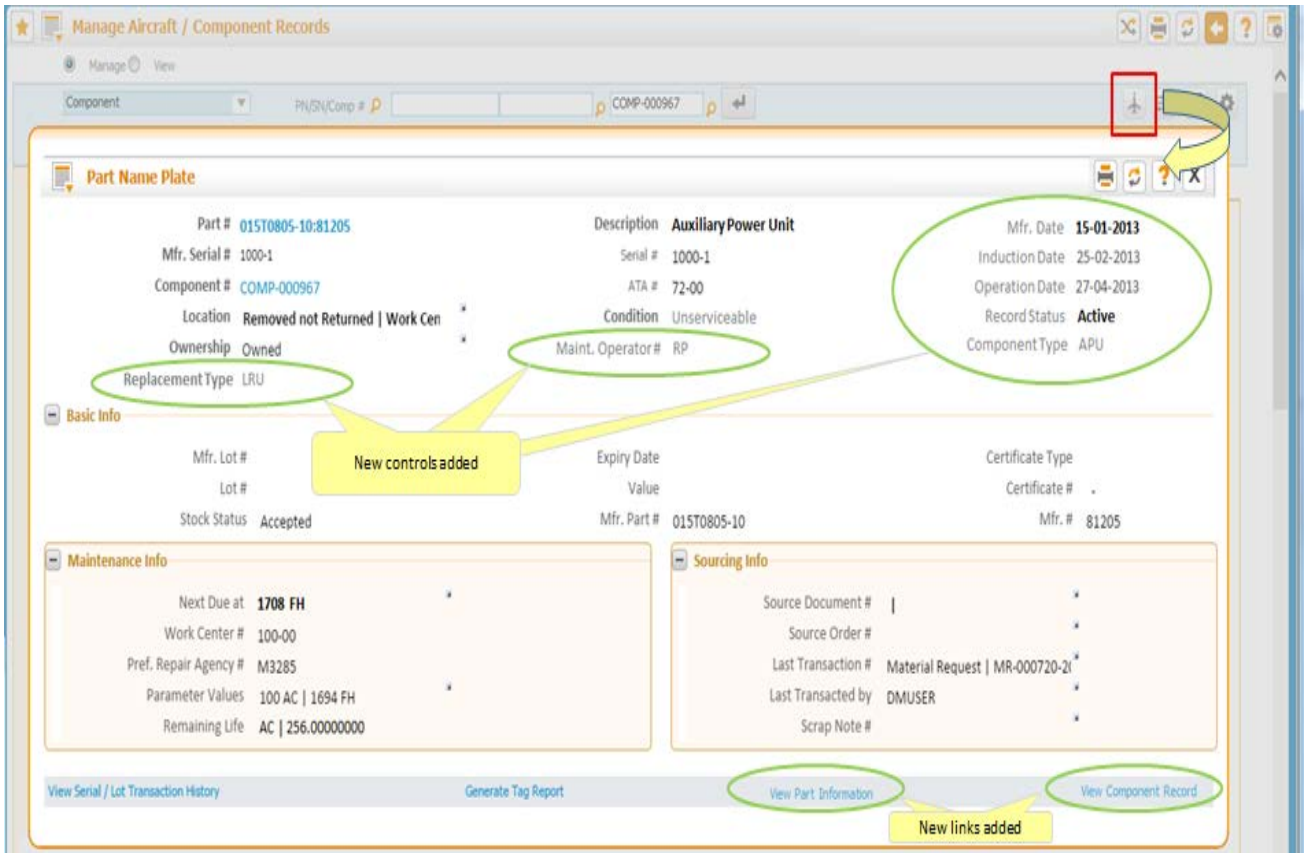
Background

Tech Records personnel working in the **Manage Aircraft / Component Records** screen on a Component Maintenance Object, may require information about the component like its Basic identifiers, Maintenance Info, Sourcing Info, Ownership, Record Status, etc.

Change Details

To facilitate this, the existing **Part Name Plate** screen is re-used to display the component information, by including additional display data as a separate section and including the links to view 'Part Information' & 'Component Record'. A link is positioned in the **Manage Aircraft / Component Records** screen as an image. On invoking this link, the 'Part Name Plate' screen can be launched as a pop-up. This additional information corresponding to the component is displayed only when the 'Part Name Plate' screen is launched with the Part Type as ‘Component’.

Exhibit 1: Part Name Plate screen displaying the component information



Ability to view historical events on Aircraft and Components in Timeline view

Reference: AHBF-7435

Background

For an Aircraft / Component, various events like Engine Replacement, Block Task Compliance, Component condition change occurs. Technical Records Personnel may require this historical event information for review / audit purpose.

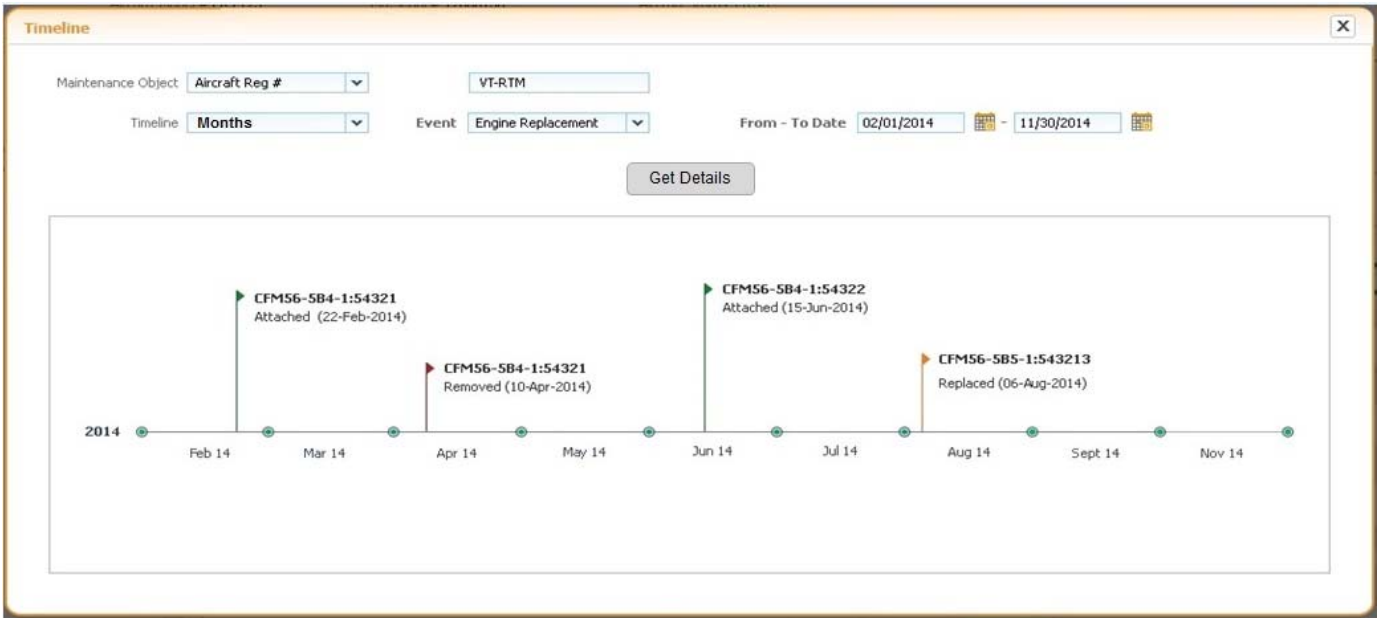
Today this information is spread across various screens and it would helpful if all the information can be viewed from one screen.

Change Details

A new concept Timeline is introduced in the product to cater to the above requirement. User will be able to view the following historical event information in timeline view.

Events applicable for Aircraft	Events applicable for Components
Engine Replacement	Movement History
Block Tasks	Engineering Change
Engineering Compliance	Engineering Compliance
Certificate of Maintenance	Condition Change
	Certificate of Maintenance

Exhibit 1: Event Timeline Sample



Note:

1. ***Commercial implications: Feature available only for specific customers.***
2. *The **Technical Records** Hub is a Beta Release feature and can be* used for *training / rollout activities. Production version will be available in 5.7.6 Release on 30Th Sep 2015.*

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