RAMCO AVIATION SOLUTION
VERSION 5.9

# USER GUIDE

# CONFIGURATION MANAGEMENT

# ABOUT THIS MANUAL

This manual briefly describes the basic processes and functions in Ramco Aviation Solution.

## WHO SHOULD READ THIS MANUAL

This manual is intended for users who are managing the Aviation industry processes and are new to Ramco Aviation Solution. This manual assumes that the user is familiar with the Aviation Industry nomenclatures and systems based software.

## HOW TO USE THIS MANUAL

Ramco Aviation Solution provides extensive Online Help that contains detailed instructions on how to use the application. Users are suggested to use this manual for specific references, along with the Online Help. This manual contains enough information to help the users perform the basic tasks and points toward the Online Help for more detailed information.

## HOW THIS MANUAL IS ORGANIZED

The User Guide is divided into 2 chapters and index. Given below is a brief run-through of what each chapter consists of.

Chapter 1 provides an overview of the entire **Configuration Management** business process. The sub processes are explained in the remaining chapters.

Chapter 2 focuses on the **Aircraft & Component Configuration Management** sub process.

Chapter 3 dwells on the **Technical Record Management** sub process.

The Index offers a quick reference to selected words used in the manual.

## DOCUMENT CONVENTIONS

- The data entry has been explained taking into account the "Create" business activity. Specific references (if any) to any other business activity such as "Modify" and "View" are given as "Note" at the appropriate places.
- Boldface is used to denote commands and user interface labels.
  Example: Enter Company Code and click the Get Details pushbutton.
- *Italics* used for references.
  Example: See Figure 1.1.
- The ✎ icon is used for Notes, to convey additional information.

## REFERENCE DOCUMENTATION

This User Guide is part of the documentation set that comes with Ramco Aviation Solution. The documentation is generally provided in two forms:

- The Documentation CD in Adobe® Systems' Portable Document Format (PDF).
- Context-sensitive Online Help information accessible from the application screens.

## WHOM TO CONTACT FOR QUERIES

Please locate the nearest office for your geographical area from **www.ramco.com** for assistance.

# 1 INTRODUCTION

**Aircraft life cycle management**

In the aviation industry, entities for which maintenance activities have to be planned, monitored and analyzed, or for which qualitative and quantitative performance attributes need to be tracked, can be identified as one of the following types:

i) Aircraft

ii) Component

The **aircraft** is the primary entity defined in the system to which components can be attached, whereas components are the building blocks for the systems in the aircraft. Induction of these maintainable entities necessitates:

i) Identifying **Parameters**, the indicators that help in monitoring the condition or usage of the assets.

ii) Defining **Aircraft Model**, a type or design of aircraft.

iii) Defining **Zones**, the areas depicting the three dimensional identification of each location in the aircraft.

iv) Identifying **ATA chapters**, the categorization of aircraft systems as identified by the Air Traffic Association.

**Configuration management and control**

'Configuration' essentially refers to the structure of an aircraft. It represents the various components present in the aircraft and the positions where these can be fitted. Aircraft are composite objects constituted by innumerable major assemblies, sub-assemblies and components. The original configuration of an aircraft or a major assembly can undergo modifications during its operating life. Adequate control over the configuration of an aircraft and component is extremely important in achieving the designed operating efficiency and reliability of the overall system.

**Configuration Management** is the business process that aims at defining and managing configuration of maintenance assets. **Aircraft & Component Configuration Management**, the sub process covers the induction of the component and configuration control requirements for both aircraft as well as for components.

The **Technical Record Management** sub process provides a centralized hub which facilitates Tech Records personnel to easily manage Technical records document information like Configuration, Program and Compliance from a single screen. This simplifies the aircraft induction process and reduces the processing time for induction and maintenance of aircraft / component records.

The sub process enables the user to perform Straight Through Processing (STP) whereby user can quickly Create Part Information, Update Effectivity Information and Define Alternate Information for the part without navigating away from Technical Record interface, based on user role access rights.

# 2 AIRCRAFT & COMPONENT CONFIGURATION MANAGEMENT

The airline industry is characterized by the prevalence of a large number of similar maintainable assets – large fleets of identical aircraft (model and make), and similar components, which can be interchanged across models. 'Configuration' essentially refers to the structure of an aircraft. It represents the various components present in the aircraft and the positions where these can be fitted.

The configuration control and management process enables you to

i) Induct an aircraft and all its sub-assemblies or components

ii) Build up respective configurations and approve them

iii) Revise the approved configurations

Aircraft business component enables you to define aircraft and its components in the organization. Also the various entities associated to the aircraft and components such as ATA chapters, Zones and Parameters can be identified.

Configuration business component enables you to define configuration for the aviation assets such as aircraft and components. It also aids in defining position-based rules for the part numbers and identifying MEL or CDL items for configuration.

# 2.1 SETTING UP COMMON MASTERS FOR AIRCRAFT AND COMPONENT CONFIGURATION MANAGEMENT

Regulatory authorities are statutory bodies responsible for the laying down, implementing and monitoring of standards regarding air-worthiness of the aircraft, safety operations of the aircraft, certification of air operators and formulation of aviation legislation. The "Common Master" business component allows you to define regulatory authorities, which can be associated to the aircraft.

## 2.1.1 Defining regulatory authority codes

1. **Select** Create Regulatory Authority Codes under Common Master business component.
2. **Provide** a unique code for the **Regulatory Authority** and **Description**.
3. **Furnish** the **Address** and **Country** details.
4. **Click** Create Reg. Auth. Record pushbutton

# 2.2 DEFINING AIRCRAFT ENTITIES

You can create the various entities associated with aircraft such as aircraft model, manufacturer, zones and ATA chapters. In addition to this, you can define various parameters that help in monitoring the life of aircraft and components. The various possible values that a parameter can assume, is also identified during parameter definition.

## 2.2.1 Defining quick codes

Quick codes act as additional qualifiers for a business entity or document. Quick codes can assume user provided values, which can be used to categorize or group an entity or document. You can define quick codes to satisfy your organization's specific needs, especially with respect to unique characteristics of aircraft or components.

For example, the usage of aircraft can be categorized as "Passenger", "Cargo" and "Combi" etc. These categories are called Quick Codes. Similarly you can categorize aircraft, model, aircraft group, manufacturer and other aircraft and component details. These quick codes are typically useful in viewing summary details and report generation.

1. Select **Create Quick Codes** under **Aircraft** business component. The **Create Quick Codes** page appears. *See Figure 2. 1.*

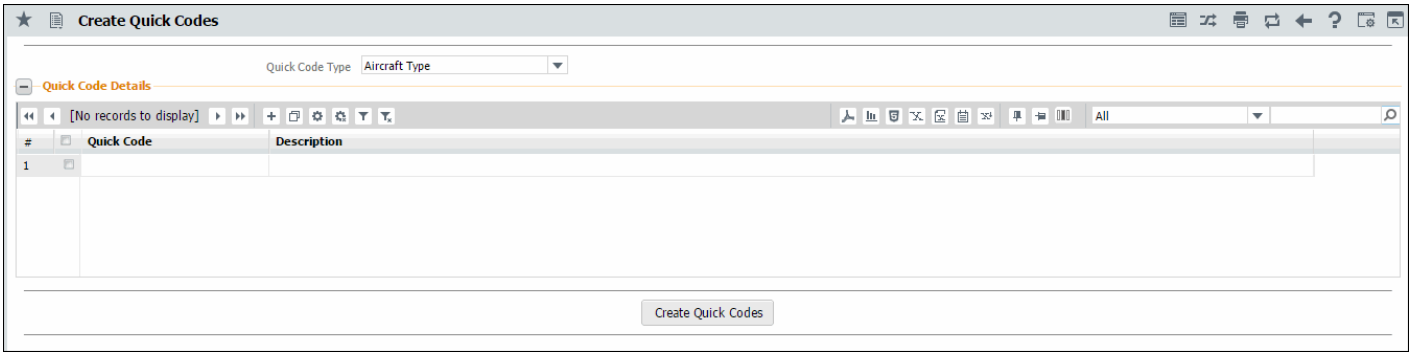



*Figure 2.1 Creating aircraft quick codes*

2. Use the **Quick Code Type** drop-down list box to select the type of quick code to be created. You can define quick codes of the type "Aircraft Group category", "Aircraft Type", "Aircraft Status", "Model Type", "Usage Type", "Aircraft Details - 1", "Aircraft Details - 2", "Component Details - 1", "Component Details - 2", "Component Details - 3", "Manufacturer Category", "Mod Category", "Mod Classification", "Lower Landing Minimum" and "User Status".
3. Enter unique quick codes for the selected type, in the **Quick Code** field in the multiline.
4. Enter the **Description** for the quick code.
5. Click the **Create Quick Codes** pushbutton.

*Note: The system assigns the "Active" status to the quick codes entered in the multiline.*

## 2.2.2 Creating manufacturer

You can define the details of the manufacturer of the aircraft and components. The manufacturer can also be defined in "Supplier" business component.

1. Select **Create Manufacturer Information** under **Aircraft** business component. The **Create Manufacturer Information** page appears. *See Figure 2. 2.*

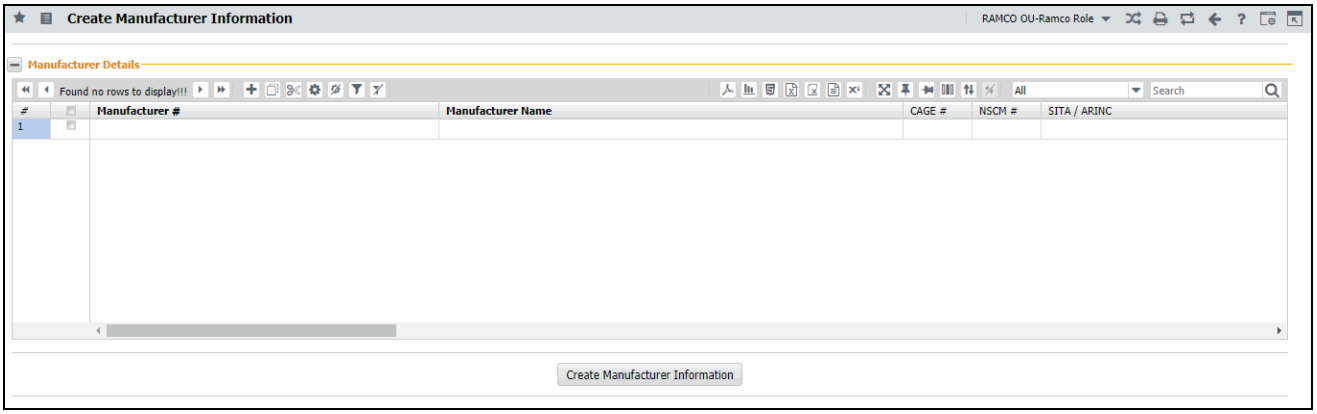



*Figure 2.2 Creating manufacturer information*

2. Provide a unique identifier for the **manufacturer** in the **Manufacturer #** field.
3. **Enter** Manufacturer Name.
4. Enter **SPEC 2000 Code assigned** to the manufacturer.
5. Select the category of the manufacturer from the **Manufacturer Category** drop-down list box.
6. Enter the contact details such as address, **phone** number of the registered office and website of the manufacturer in the **Address**, **Phone #** and **URL** fields.
7. Enter **Contact Person, Work Phone** and **Email** fields to **specify** the name, phone number and email address of the contact person.
8. Enter the contact details of the manufacturer which **includes Address**, **City, State, Country** and **Zip Code**.
9. Enter Phone #, URL, Contact Person, Work Phone and Email of the contact person.
10. Click Create Manufacturer Information **pushbutton**.

## 2.2.3 Managing Aircraft Weighing Conditions

1. Select the **Manage Weighing Conditions** link under the Aircraft business component. The **Manage Weighing Conditions** page appears. *See Figure 2. 3.*

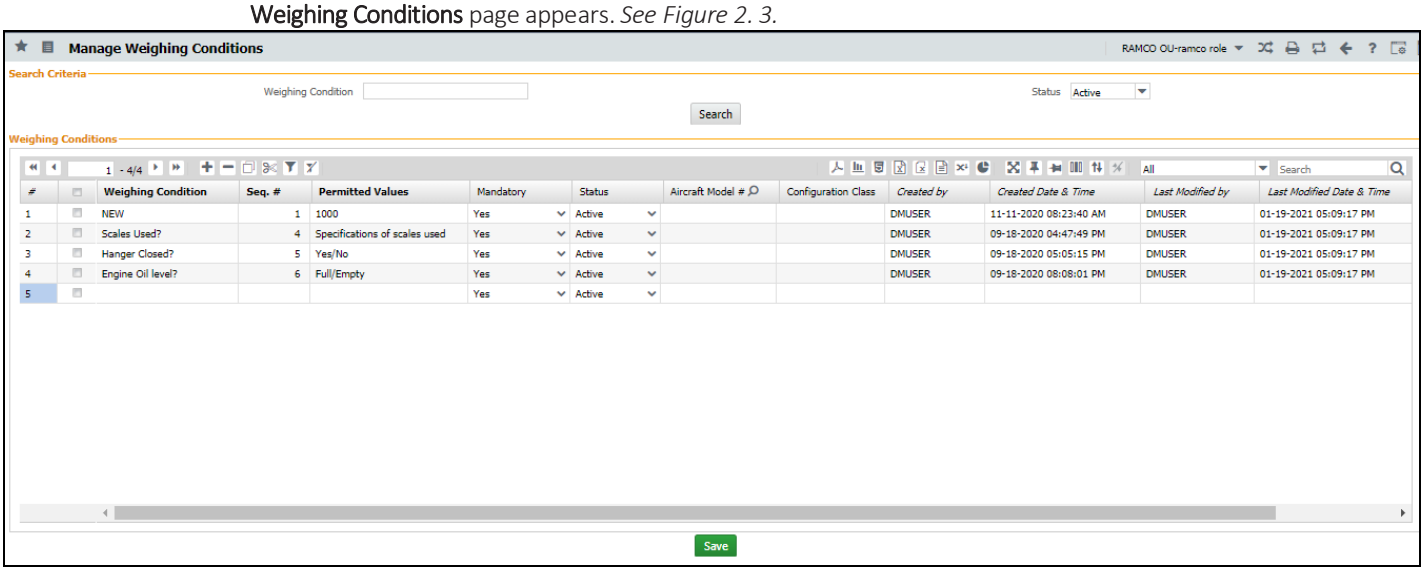



*Figure 2.3: Defining weighing conditions for aircraft*

2. To create new condition, enter the name / description of the aircraft **Weighing Condition** in the multiline.
3. Use the **Mandatory?** drop-down list box to indicate whether the weighing condition is mandatory or

not for the aircraft model and configuration class combination. The drop-down list box displays No and Yes.

4. Use the **Status** drop-down list box to select the status of the weighing condition. The drop-down list box displays Active and Inactive.
5. Specify **Aircraft Model** to which the weighing condition is valid and binding.
6. Use the **Configuration Class** drop-down list box to select the configuration class to which the weighing condition is valid and binding.
7. Enter the display order for the weighing condition record in the **Seq #** field.
8. Select the records you want to save in the multiline and then click the **Save** pushbutton.

## 2.2.4 Managing Aircraft Weight and Balance

The aircraft maintenance engineers to manage, monitor and track the weight and balance of specific aircraft. You can also generate the following reports for an aircraft:

- **Aircraft Weight and Balance Report**: This report retrieves the weight of the aircraft and, weight and arm of each component attached to the aircraft.
- **Equipment List Report**:This report shows all the components attached to the aircraft.

1. Select the **Manage Aircraft and Balance** link under the **Aircraft** business component. The **Manage Aircraft and Balance** page appears. *See Figure 2. 4.*

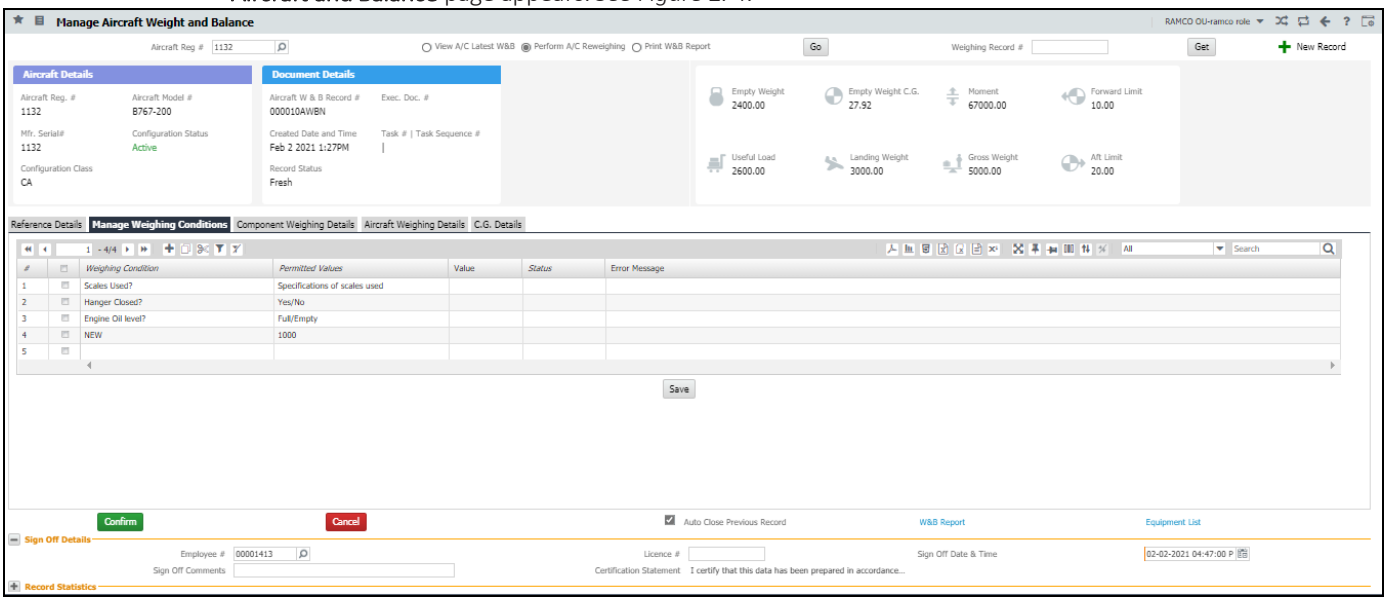
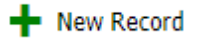



*Figure 2.4: Performing aircraft weighting*

2. Use the **Aircraft Reg #** drop-down list box to select the aircraft for which you want to manage weight and balance or generate reports.
3. Select the **Perform A/C Reweighing** radio button and then click the **Go** pushbutton.
4. To create new W&B record for the aircraft, click the 

button at the right hand top of the screen.
5. Enter **Max. Gross Wt., Weighing Configuration** and **Landing Wt.** for the aircraft.
6. In the adjacent multiline, enter **Weighing Points** and **Levelling Means** for the aircraft.
7. Specify **Employee # and Licence #** of the employee who performed the record sign off
8. Click the **Create New** pushbutton to save weight details to a new record.

9. Click the **Reweigh** pushbutton to save input details to the existing weighing record.
10. Click the **W&B Report** link to generate the Weight and Balance Report for the aircraft.
11. Click the **Equipment List** link to generate the Equipment List Report for the aircraft.

## 2.2.5 Creating parameters

There are certain attributes for each of the maintainable entity, which help in monitoring its condition or usage. These attributes, which can be either quantitative or qualitative, are defined as parameters and identified through a unique code. The parameter(s) can be associated to aircraft or components. The parameters can be of type "Consumption", "Range", "Technical" or "Attribute".

1. Select **Create Parameters** under **Aircraft** business component. The **Create Parameters** page appears. *See Figure 2. 5*.

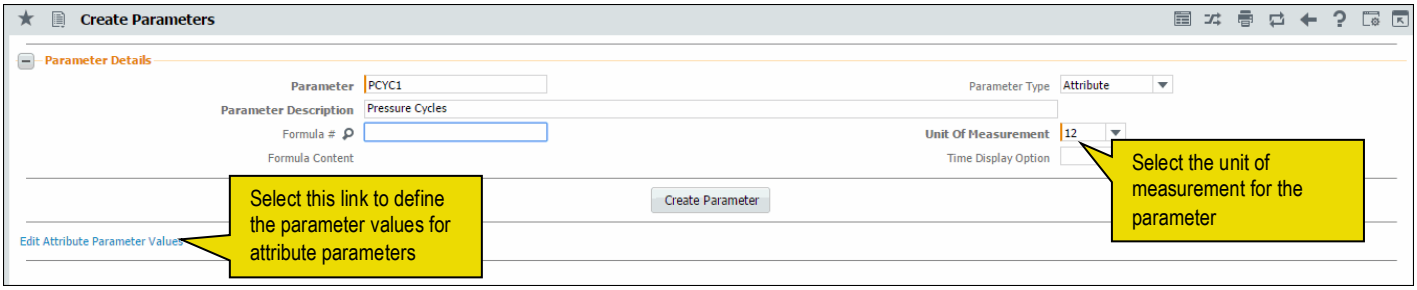



*Figure 2.5 Creating parameters*

2. Provide a unique **identifier** for the parameter in the **Parameter** field.
3. Use **Parameter Type** drop-down list box to **select** the type of the parameter, which could be "Attribute", "Consumption", "Range" or "Technical".
4. **Enter** the Parameter Description.
5. Enter the formula to be **associated** to the 'consumption' or 'range' parameter in the **Formula #** field. For more details, refer "Formula Builder" Online Help.
6. Select the **Unit of Measurement** for the **parameter**.
7. Specify the **Time Display Option** as 'Decimal Format' or 'HHMM Format'.
8. Click **Create Parameter** pushbutton.

To enter values for the parameter of type "Attribute",

- Select **Edit Attribute Parameter Values** link.

### Specifying values for attribute parameter

You can identify the various values that an "Attribute" parameter takes.

1. Select **Edit Attribute Parameter Values** link **in** the **Create Parameters** page or **Edit Parameter** page. The **Edit Attribute Parameter Value** page appears. *See Figure 2. 6.*


*Figure 2.6 Entering values for an attribute parameter*

2. Enter the value for the **attribute** parameter in the **Parameter Value** field.

3. Click the Edit Attribute Parameter Value **pushbutton**.

## 2.2.6 Setting base parameters

The system displays the base parameters such as flying hours, flying cycles, block hours, landing cycles, engine hours, engine cycles, APU hours, APU cycles, aircraft weight, aircraft moment and position formula by default. You can associate the equivalent parameter defined in the system to each of these predefined parameters, so that the present value of the parameters is suitably updated. For example, if the parameter for Flight Hour is defined as FH in the "Create Parameters" page, then FH should be specified as parameter for the Base parameter Flight Hours.

1. Select **Set Base Parameters** under **Aircraft** business component. **Set Base Parameters** page appears. *See Figure 2. 7.*

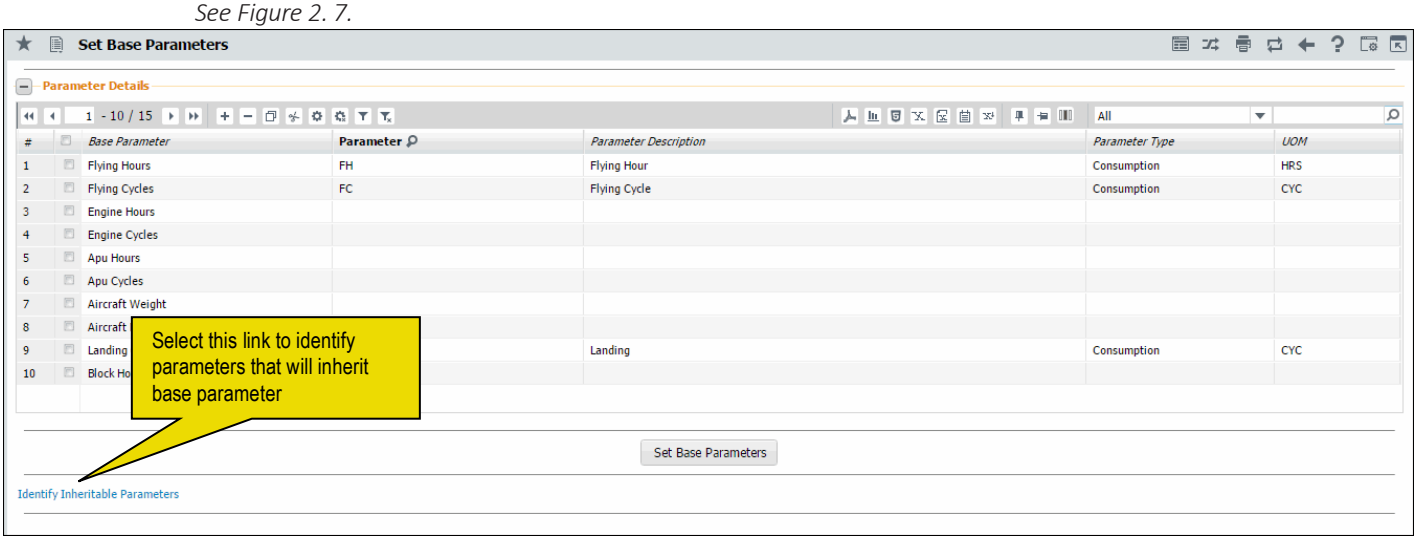



*Figure 2.7 Setting base parameters*

The system lists all the base parameters in the multiline.

2. Enter the **Parameter** code that you wish to associate to the base parameter. For more details on base parameters setting, refer "Aircraft" Online Help.

   *Note: The parameter type of base parameters is commonly set to "Consumption". However, an exception to this are base parameters "Aircraft Weight", , "Aircraft Moment", "Oil Consumption Rate" and "Fuel Consumption/Hour", which can also be of type "Range" or "Technical".*

3. Click Set Base Parameters **pushbutton**.

To provide further information,

- Select **Identify Inheritable Parameters** link to **identify** the inheritable parameters.

### Identifying inheritable parameters

Inheritable parameters are the parameters that that must be updated during parameter value update.

1. Select Identify Inheritable Parameters **link** in the Set Base Parameters page.
2. Enter the **Parameter** that will be inherited or updated during parameter value update. The parameter value update takes place when the flight log gets updated.
3. Click Update Parameter List **pushbutton**.

## 2.2.7 Creating formula for consumption and range parameters

A formula is an independent entity that can be associated to dependent quantitative parameters. The formula contains the participating parameters and the relationship between them specified in the form of mathematical expressions.

1. Select **Create Formula** under **Formula Builder** business component. The **Create Formula** page appears. *See Figure 2. 8*.

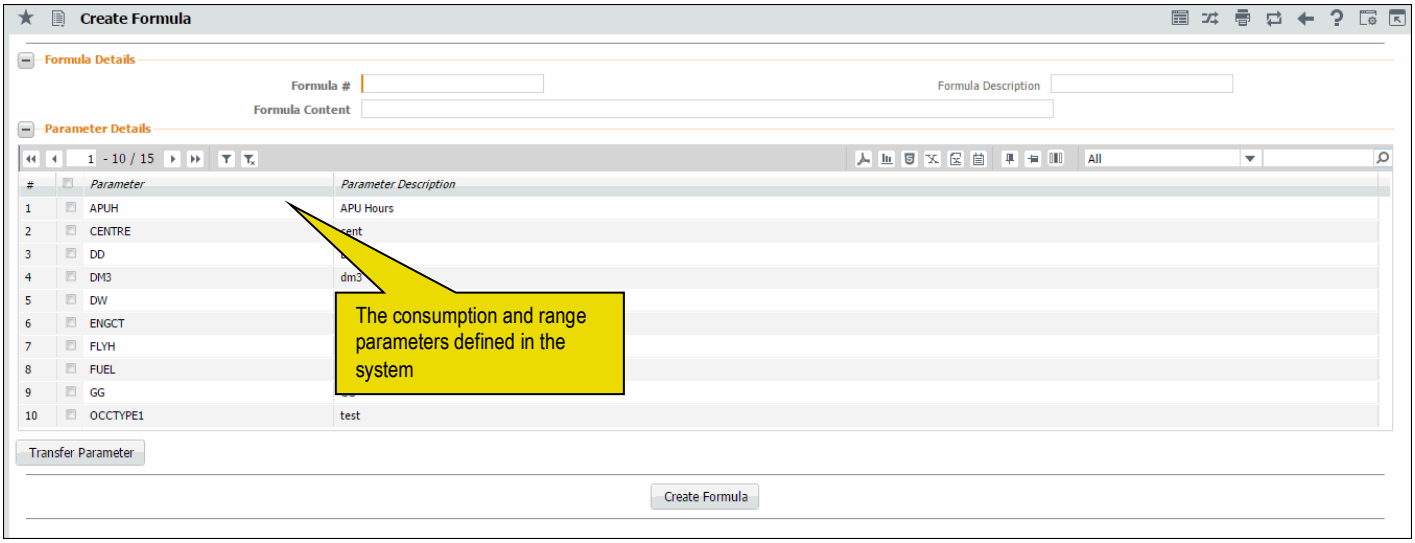



*Figure 2.8 Creating formula*

2. Provide a unique identifier for the **formula** in the **Formula #** field.
3. Enter the **Description** for the formula.
4. Enter the actual content of the **formula** in the **Formula Content** field.
5. Select the relevant parameter **from** the **Parameter Details** multiline.
6. Click **Transfer Parameter pushbutton** to transfer the selected parameter to the **Formula Content** field.
7. Click **Create Formula pushbutton**.

## 2.2.8 Creating aircraft model

The aircraft model provides for the definition of the aircraft models present with the operator. You can define an aircraft model and associate aircraft to it.

1. Select **Create Aircraft Model** under **Aircraft business** component. The **Create Aircraft Model** page appears. *See Figure 2. 9*.

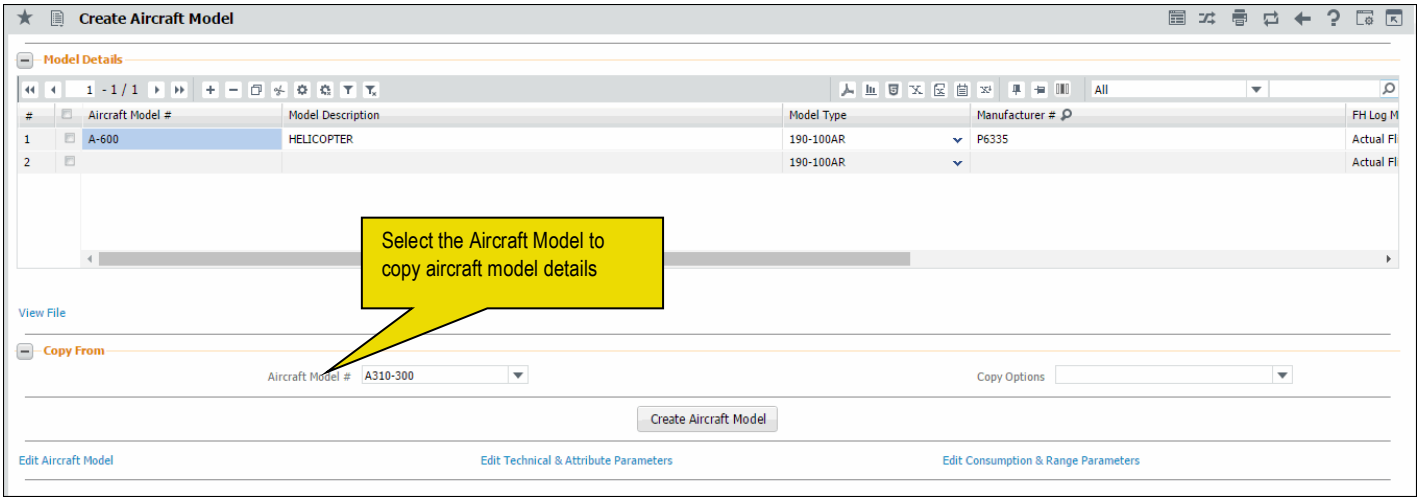



*Figure 2.9 Creating aircraft model*

2. Provide a unique number for the aircraft model in the **Aircraft Model #** field.
3. Enter **Description** for aircraft model.
4. Use **Model Type** drop-down list box to select the type of the aircraft model.
5. Enter Manufacturer # field.
6. Enter the type certificate number given for the aircraft model in the **Type Certificate #** field.

To copy the aircraft model details

7. Use the **Aircraft Model #** drop-down list box to specify the aircraft model from which the details must be copied.
8. Select an appropriate option in the **Copy Options** drop-down list box, to copy the zone, work area, access panel, parameter or the entire details of the aircraft model.
9. Click the **Create Aircraft Model** pushbutton.

To provide further information for aircraft model

- Select **Edit Aircraft Model** link at the bottom of the page to edit the aircraft model details.
- Select **Edit Technical & Attribute Parameters** link to define the technical and attribute parameter details for aircraft model.
- Select **Edit Consumption & Range Parameters** link to define the consumption and range parameter details for aircraft model.

### Defining technical and attribute parameters for aircraft model

You can define different types of parameters at the aircraft model level, which will be inherited by the aircraft when they are associated to the model.

Technical Parameters

These parameters provide static information about the maintainable entity like the make, power rating, capacity, weight, dimensions, etc. These parameters primarily describe the specifications of the aircraft or component.

Attribute Parameters

Qualitative attributes, which take values from a pre-defined set, are identified as 'Attribute Parameters'. For example, the color of the engine oil might be clear, brown or black.

1. Select **Edit Technical & Attribute Parameters** link in the **Create Aircraft Model** page. *See Figure 2. 10.*

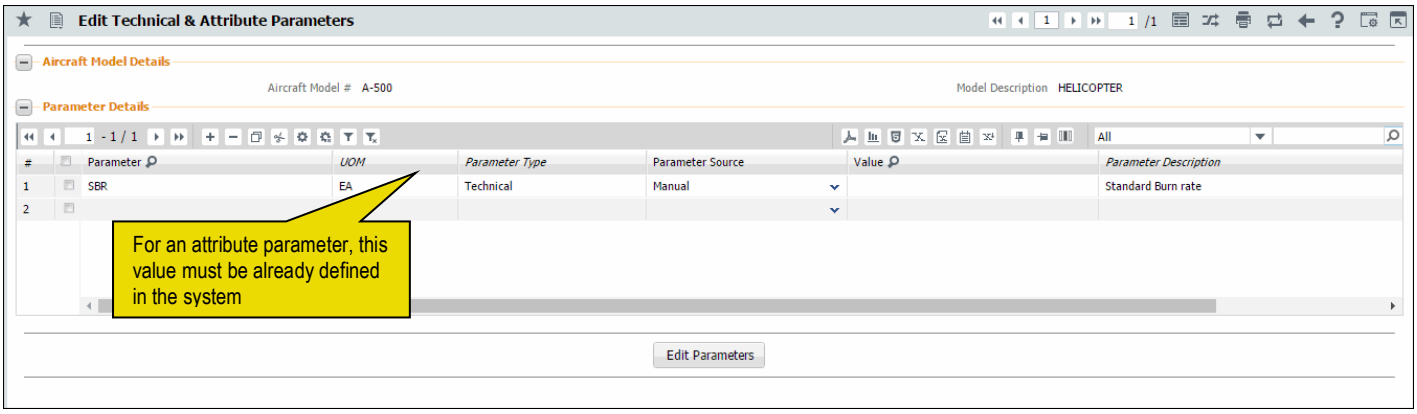



*Figure 2.10 Defining technical and attribute parameters for aircraft model*

2. Enter the technical or attribute parameter that you **wish** to associate to the aircraft model, in the **Parameter** field.
3. Select the source of parameter inheritance **from** the **Parameter Source** drop-down list box. The parameter source could be "Calculated", "Flight Log", "Manual" or "Parent". For more details, refer the "Aircraft" Online Help.
4. Specify the **Value** of the **parameter**.
5. Click the **Edit Parameters** pushbutton.

## Defining consumption and range parameters for aircraft model

You can define consumption and range parameters for an aircraft model.

Consumption Parameters: These are the attributes of an aircraft/component that increase in value on usage. Attributes like the flight hours and flight cycles fall under this type. Planned maintenance activities are triggered based on the values of these parameters. The life of an aircraft/component can also be expressed in terms of one or more consumption parameters.

Range Parameters: These are parameters whose value falls in a specified range. Range parameter values are indicative of the entity's condition; an actual value outside the specified range can indicate malfunctioning.

1. Select **Edit Consumption & Range Parameters** link **in** the **Create Aircraft Model** page. *See Figure 2. 11.*

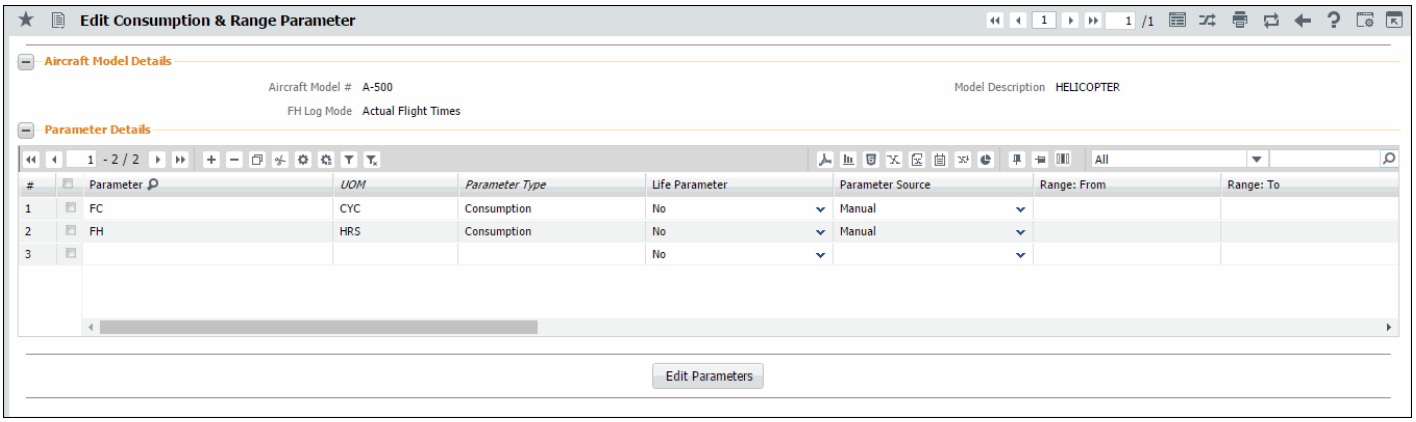



*Figure 2.11 Defining consumption and range parameters for aircraft model*

2. Enter the consumption or range parameter that you wish to associate to the aircraft model in the

Parameter field.

3. Use the Life Parameter drop-down list box and set the field to "Yes", to set the parameter as a life parameter.

   *Note: Life Parameter is a parameter that needs to be tracked for knowing the remaining life of a component.*

4. Select the source of parameter inheritance from the Parameter Source drop-down list box. The parameter source could be "Calculated", "Flight Log", "Manual" or "Parent". For more details, refer the "Aircraft" Online Help.

5. Enter the minimum and maximum range of values in the Range: From and Range: To fields for the range parameter.

6. Enter the Average Daily Utilization or Forecast Factor for the consumption parameter. Based on the average daily utilization or the forecast factor, the maintenance activity is forecasted.

7. Enter the Ultimate Life Value of the component, if you have set the consumption parameter as Life Parameter.

8. Enter the formula to be associated to the consumption parameter in the Formula # field.

9. Use the Warranty Tracking drop-down list box to specify whether the warranty tracking on the aircraft is based on this parameter value.

10. Specify whether the parameter update is mandatory or not, by selecting the appropriate option from the Parameter Update drop-down list box.

11. Select the parameter update mode from Update Mode drop-down list box, which could be "Delta" or "New".

12. Click the Edit Parameters pushbutton.

## 2.2.9 Creating zones

You can define various zones of the aircraft, which depicts the three dimensional identification of each location in the aircraft. The zones help in locating a specific component which might have several instances of it attached in different parts of the aircraft.

1. Select Create Zones under Aircraft business component. The Create Zones page appears. *See Figure 2. 12.*

2. Use the Aircraft Model # drop-down list box to select the aircraft model to which the zone belongs.

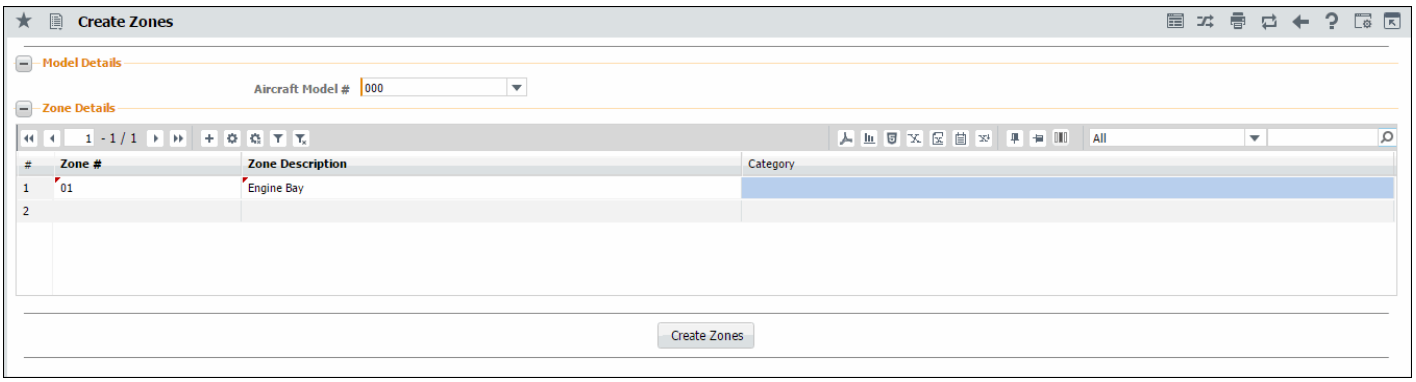



*Figure 2.12 Creating zones*

3. Provide a unique number for the zone in the Zone # field.

4. Enter Description for zone.

5. Enter Category field to categorize the zone.

6. Click the Create Zones pushbutton.

## 2.2.10 Creating ATA chapter

The Air Transport Authority chapter numbers define and describe the systems in the aircraft. ATA grouping of part numbers helps in easy trouble shooting as well as system-wise reliability analysis.

1. Select **Create ATA Chapter** under **Aircraft** business component. The **Create ATA Chapter** page appears. *See Figure 2. 13.*

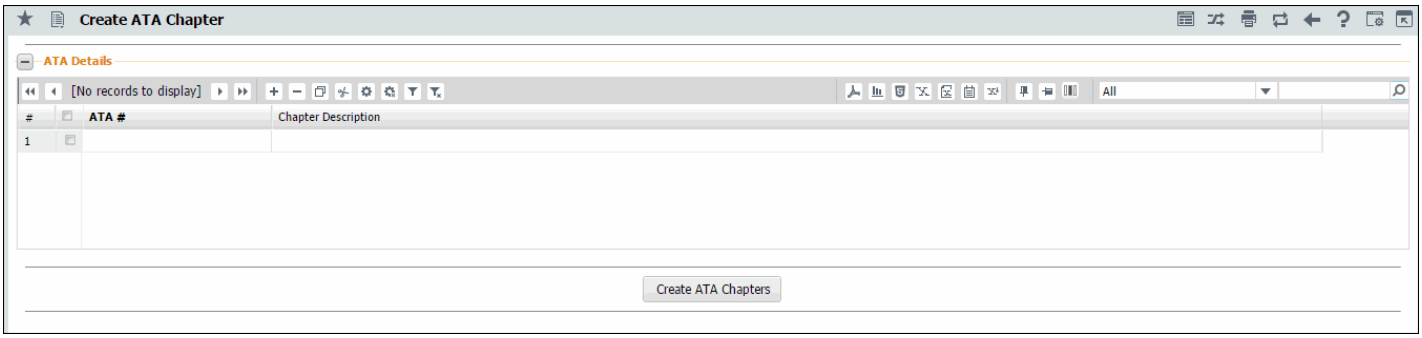



*Figure 2.13 Creating ATA chapters*

2. Provide a unique number for the ATA chapter in the **ATA #** field.
3. **Enter** Chapter Description.
4. **Click** the **Create ATA Chapters** pushbutton.

### Maintaining manufacturer ATA details

1. Select **Edit ATA Chapter** under **Aircraft** business component. Select **Maintain Manufacturer ATA# Details** link in the **Edit ATA Chapter** page. **The Maintain Manufacturer ATA# Details** page appears. *See Figure 2. 14.*

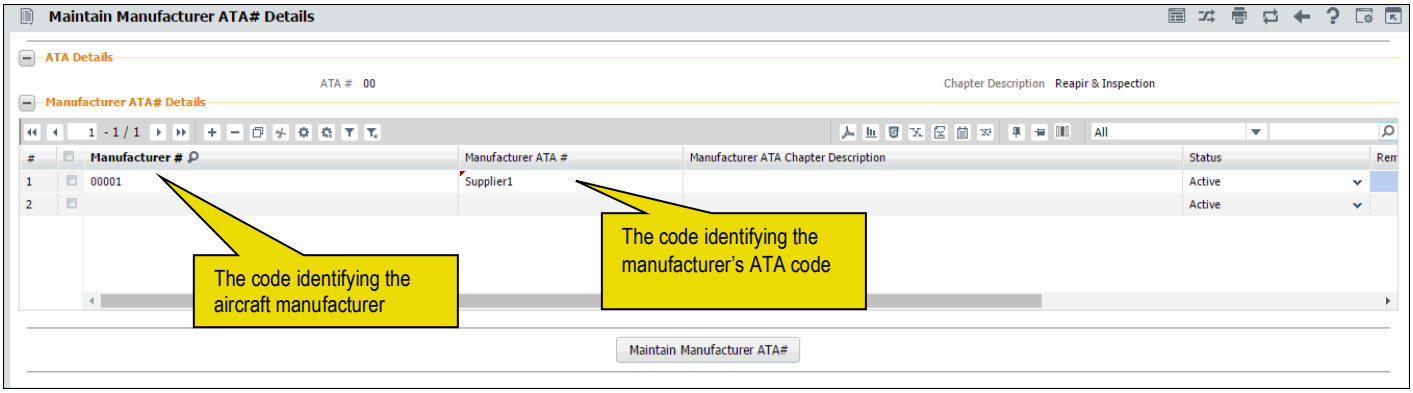



*Figure 2.14 Maintaining manufacturer ATA details*

2. In the Manufacturer ATA# Details group box, enter the Manufacturer #, Manufacturer ATA #, Manufacturer ATA Chapter Description, Status and Remarks fields

## 2.2.11 Managing Cabin Configuration

This activity enables tracking of the entire cabin configuration which includes all the items associated within an aircraft cabin, the seats, doors, galleys and passenger facilities, equipment like the Inflight entertainment system, oxygen tanks and so on. As such this activity enables the tracking of defects or discrepancies occurring inside the aircraft cabin and provides a visual model to aide in management of such defects/discrepancies.

1. You can record comprehensive configuration details of cabin sections for a specific aircraft or an aircraft model. For an aircraft model, cabin configuration is **defined** for Config. Class and Maint. Operator # combination. For an aircraft, if cabin configuration is not available, the system derives the same from the model of the aircraft. If no maintenance operator is tagged to the aircraft, the cabin configuration is derived from that of the aircraft model and Config. Class.

2. Select **Manage Cabin Configuration** activity under the **Configuration** business component. The **Manage Cabin Configuration** page appears. *See Figure 2. 15.*

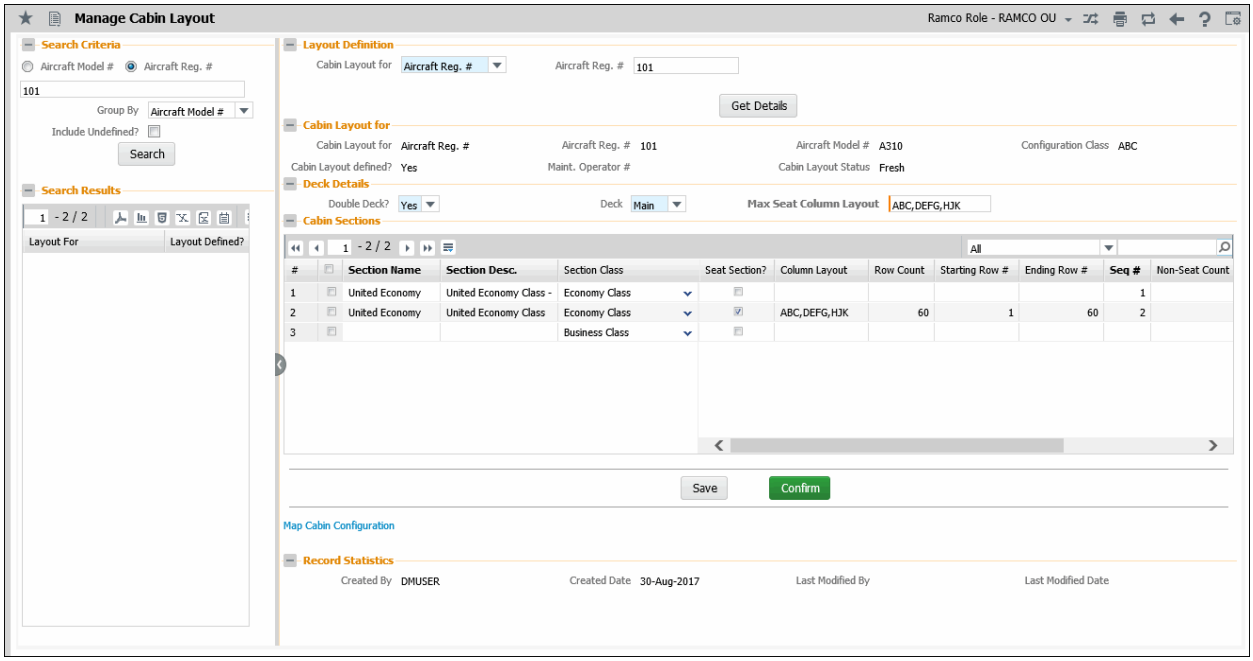



*Figure 2.15 Managing cabin configuration*

3. Use the **Cabin Layout for** drop-down list box to **indicate** whether you wish to record the configuration details for an aircraft model or a specific aircraft. The drop-down list box displays the following: Aircraft Model # or Aircraft Reg. #.

4. If you have selected Aircraft **Model #** in the **Cabin Layout for** drop-down list box, enter **Aircraft Model #, Configuration Class and Maint. Operator #** to retrieve the specific model.

5. If you have selected Aircraft Reg. # **in** the **Cabin Layout for** drop-down list box, enter **Aircraft Reg. # f**or the specific aircraft:

6. In the **Aircraft Details** group box, enter the **Aircraft Model #**, **Configuration Class** and **Customer** for whom the aircraft is flying and click the **Get Details** pushbutton.

7. In the **Deck Details** group box, specify whether the cabin is defined in two different sections in the **Double Deck?** drop down list box. From the **Deck** drop down list box specify whether you wish to define configuration for the main or upper deck and enter the number of column of seats required in the **Max Column Layout** field.

8. In the Cabin Sections **multiline**, enter Section Name and Section Description.

9. Use the **Section Class** drop-**down** list box to select the class to which the section belongs.

10. Use the **Seat Section?** drop-down list box to indicate whether the section comprises of only seats. The drop-down list box displays the following: Yes **or** No. Select: Yes, if the section has only seats; and No, if the section has both seats and equipment/gadget

11. Enter Column Layout **and** Row Count.

    *Note: It is mandatory that you enter a positive integer, if Seat Section? is 'Yes' in both the above-mentioned fields. Do not enter a value in this field, if Seat Section? is 'No'.*

12. Enter Starting Row # and Ending Row # for the **section**.

    *Note: It is mandatory that you enter a positive integer, if Seat Section? is 'Yes' in both the above-mentioned fields. Do not enter a value in this field, if Seat Section? is 'No'.*

13. Enter **Seq #** of the section in the cabin.

14. **Enter** Non-Seat Count.

*Note: This field is mandatory, if "Seat Section?" is selected as Yes.*

15. Enter **Unique identifiers** for the non-seat item.
16. Use **the Has Exit?** drop-down list box to indicate whether an exit is present in the section.
17. Click the **Save** pushbutton to save cabin configuration details for the given Aircraft Model – Configuration – Customer combination.

To map cabin configuration,

- Select the **Map Cabin Configuration** link at the bottom of the page to map cabin configurations.

## 2.2.12 Mapping Cabin Configuration

This activity enables you to map the defined sections based on their set up configurations to their positions in the aircraft.

1. Select the **Map Cabin Configuration** link at the bottom of the **Manage Cabin Configuration** activity under the **Configuration** business component *See Figure 2. 16.*

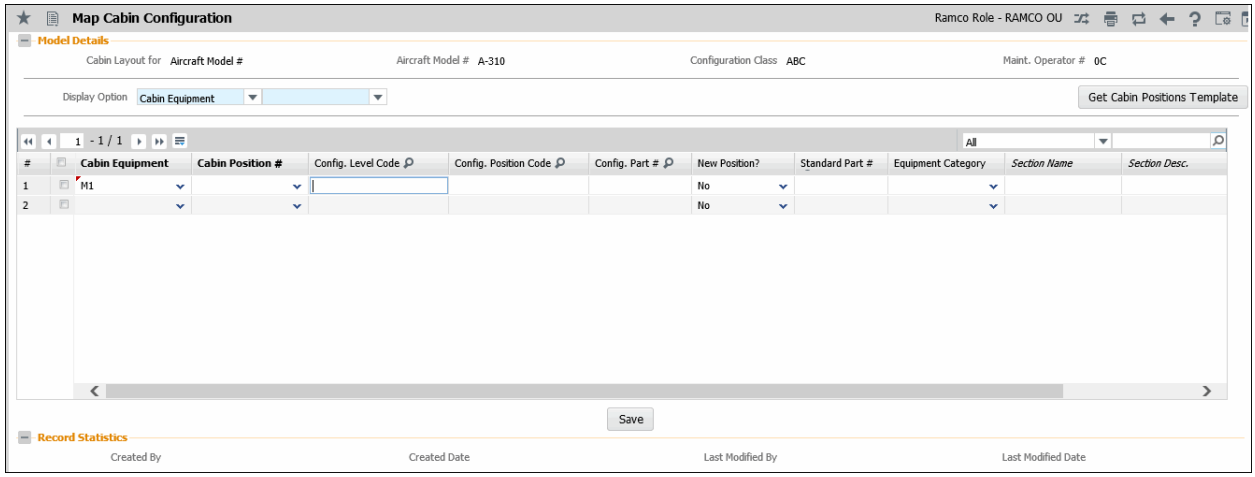



*Figure 2.16 Mapping cabin configuration*

2. In the **Cabin Details**, select the item for which position is to be mapped from the **Cabin Item** drop-down list box.
3. In the multiline, enter the **Standard Part #** for **which** configuration is not tracked and provide the other details.
4. Use the **Equipment Category** drop-down list box to select the category of the equipment that can be attached to the cabin position #.
5. Select the **Save pushbutton** to save mapping of the sections and the items to the aircraft configuration.

## 2.2.13 Maintaining Cabin equipment

This activity enables you to specify and categorize equipment categories and cabin equipment under specific equipment group, such as In-Flight Entertainment (IFE) and Global Communication Satellite (GCS). An equipment category typically identifies the version or model or brand of cabin equipment (such as Monitor, Harness Assembly, ADB, ADB Ports, Wi-Fi, File Servers) that is attached to a designated position code in the cabin layout of an aircraft. Cabin equipment are attached to the designated cabin positions in accordance with the cabin layout defined for an aircraft model / aircraft.

1. Select **Maintain Cabin Equipment List** activity under the Configuration business component. The Maintain Cabin Equipment List page appears. *See Figure 2. 17.*

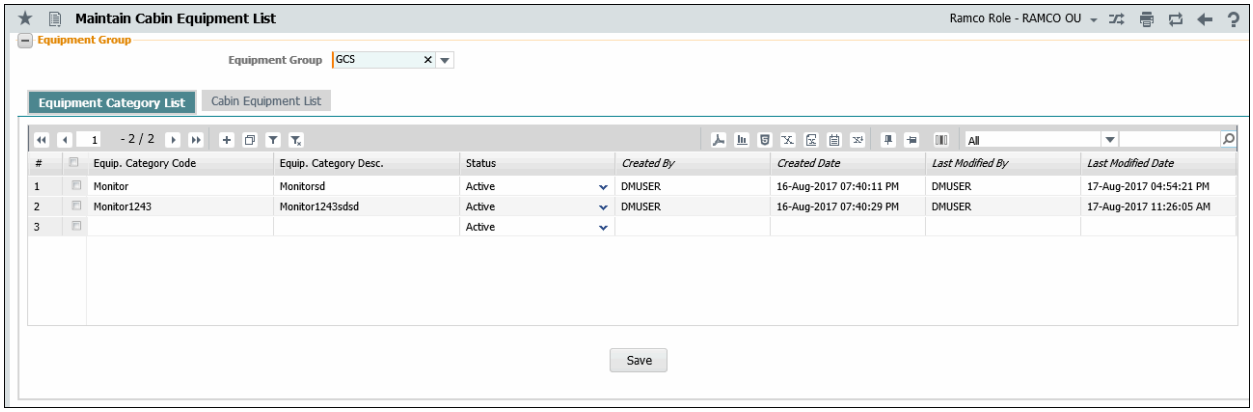



*Figure 2.17 Maintaining Equipment Category*

2. Use the **Equipment Group** drop-down list box to select the equipment group to which you want to tag the cabin equipment / equipment category. The drop-down list box displays the **Active quick** codes defined under the quick code type "Equipment Group" in the Create Quick Code activity of Aircraft. **In** addition, the drop-down list box also displays "Not Applicable". You can select "Not Applicable", if you do not wish to associate a cabin equipment / equipment category to any equipment group. However, if no equipment group has been defined in Active status, the drop-down list box the only option: "Not Applicable".

3. Select the **Equipment Category List** tab to associate equipment categories to the selected equipment group. See Figure 2.13.

4. Enter Equip. Category Code and Equip. Category Desc.

5. Use the **Status** drop-down list box to indicate whether the equipment category is Active or Inactive.

6. Select the **Cabin Equipment List** tab to associate cabin equipment to the selected equipment group. *See Figure 2. 18*

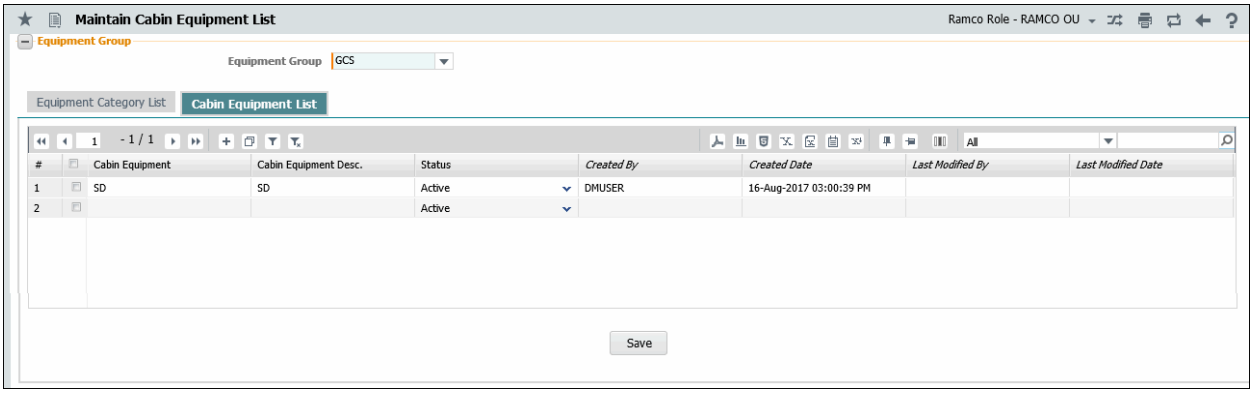



*Figure 2.18 Maintaining Cabin Equipment list*

7. Enter Cabin Equipment and Cabin Equipment Desc.

8. Use the **Status** drop-down list box to indicate whether the cabin equipment is Active or Inactive.

9. Select the **Save** pushbutton to save the details.

# 2.3 Defining configuration entities

The key data entities such as configuration class and deferral category can be defined in the system before venturing into the configuration building.

## 2.3.1 Creating configuration class

Configuration class is the code that denotes a particular type of configuration or structure of the aircraft. A configuration class can be associated to entities like aircraft models and aircraft registration numbers. Configuration Class and Aircraft Model number is a unique identifier for the aircraft configuration. Multiple configuration classes can be associated to an Aircraft Model, but at any point of time only one Configuration Class or Model combination can be associated to an aircraft registration number.

1. Select **Create Configuration Class** under **Configuration** business component. The **Create Configuration Class** page appears. *See Figure 2. 19.*

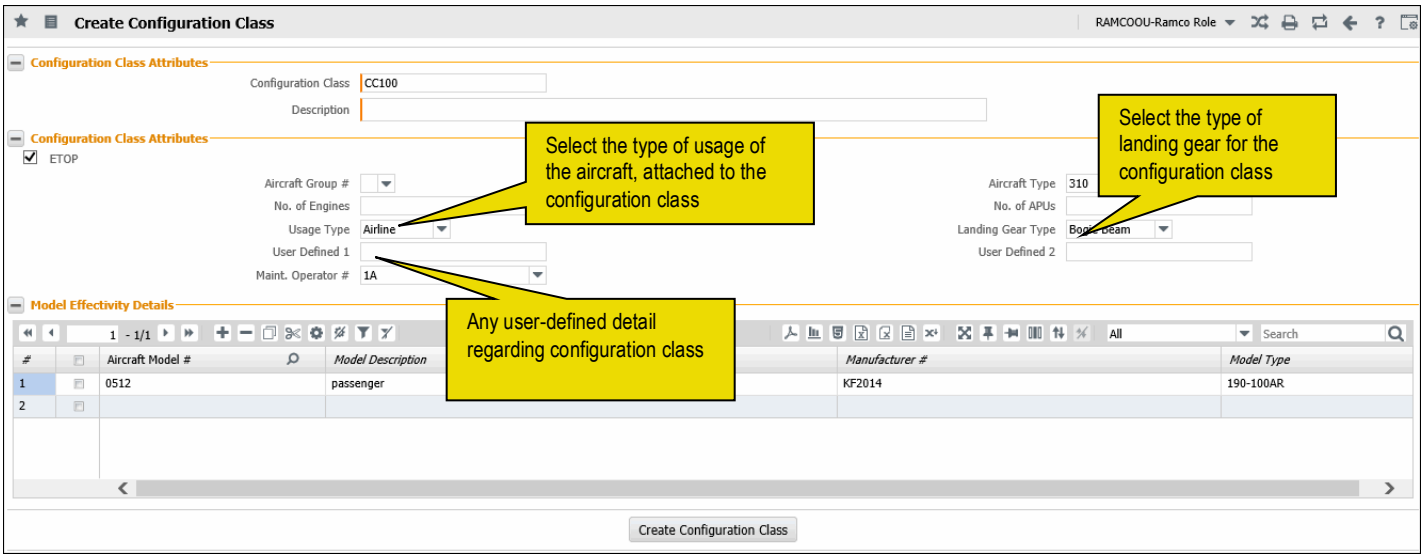



*Figure 2.19 Creating configuration class*

2. Provide a unique **identifier** for the **Configuration Class** and **Description**.
3. Check **ETOP** box to apply ETOP configuration for the configuration class. For more details, refer "Configuration" Online Help.

   *Note: The aircraft associated to this configuration class will inherit ETOP configuration if this box is checked.*

## To define Configuration Class Attributes

4. Select appropriate aircraft group from **Aircraft Group #** drop-down list box to associate to the configuration class.

   *Note: The system leaves this field blank, by default.*

5. Use the **Aircraft Type** drop-down list box to specify the type of the aircraft, which you wish to attach to the configuration class.

   *Note: The system leaves this field blank, by default.*

6. Enter the **No. of Engines, No. of APUs and Maint. Operator #,** you wish to **define** for the configuration class.

To define model effectivity for configuration class,

7. In the **Model Effectivity Details** multiline, enter the **Aircraft Model #** field to specify the aircraft model number for which the configuration class is applicable.

8. Click Create Configuration Class **pushbutton**.

## 2.3.2 Creating deferral category

All MEL/CDL items are deferred based on certain norms set by the aviation authority. Deferral category defines the deferment limits of the MEL/CDL items and the parameters on which it depends. An MEL/CDL item is associated to a deferral category, and it derives its deferment schedule from that of the deferral category.

1. Select **Create Deferral Category** under **Configuration** business component. The **Create deferral Category** page appears. *See Figure 2. 20.*
2. Provide a unique **identifier** for the **Deferral Category** and **Deferral Category Desc.**
3. Select the type of deferral limit associated to deferral category, from the **Limit Type** drop-down list box. The limit types could be "Infinite", "Time Limited", "Usage Limited" or "Time and Usage Limited". For more details, refer "Configuration" Online Help.
4. Select the **Limit Basis** for the time and usage based deferral. The options are "Whichever is earlier" and "Whichever is later".

   *Note: Leave this field blank, if the "Limit Type" is "Time Limited" or "Usage Limited".*

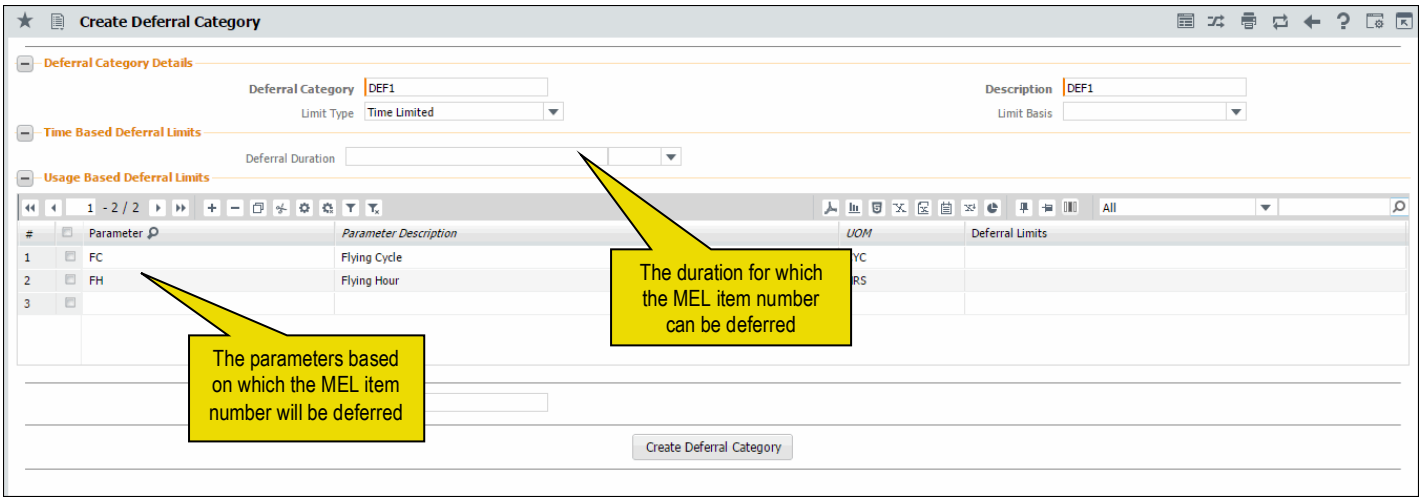



*Figure 2.20 Creating deferral category*

5. Enter the duration or period for **which** the MEL/CDL item number can be deferred, in the **Deferral Duration** field.

   *Note: Leave this field blank, if the "Limit Type" field is set to "Usage Limited".*

6. Enter the value of the **parameter** based on which the MEL/CDL item number is deferred, in the **Deferral Limits** field in the multiline.

   *Note: Leave this field blank, if the "Limit Type" field is set to "Time Limited.*

7. Click the Create Deferral Category **pushbutton**.

## 2.4 Managing effectivity of parts

Effectivity of a part is set for aircraft model/aircraft/part/component. Effectivity defines the compatibility of a part for an aircraft/component.

To make a part effective to all aircraft models/aircraft/parts/components, do not define effectivity for the part in this activity

You can set the effectivity of a part by choosing one of the following statuses as explained below:

Effective: You can make a part suitable for an aircraft model/aircraft/part/component by setting its Effectivity Status to "Effective". When a part is made effective for an aircraft model, it implies that the part is compatible for all the aircraft of the aircraft model. It also means that the part is incompatible for all other models of aircraft. You can also make a part effective for a specific aircraft, which means the part is not suitable for any other aircraft. Similarly, if you make a part effective for a NHA (parent) part/component, the system automatically makes all other parts/ components unsuitable for the part.

- Conditional Effective: You may make a part effective for an aircraft model/aircraft/part/component under certain flying conditions or for specific maintenance/usage parameters. This is achieved when you set Effectivity Status to "Conditional Effective". This makes the part incompatible to other aircraft models/aircraft/parts/components.
- Not Effective: You make a part invalid for an aircraft model/aircraft/part/component when you set the Effectivity Status to "Not Effective". This makes the part effective to all other aircraft model/aircraft/part/component.

The effectivity definition that you define in this activity forms the basis for attachment of parts during component replacement and aircraft maintenance

1. Select the **Manage Part Effectivity** link under the **Aircraft** business component. The **Manage Part Effectivity** page appears. *See Figure 2. 21.*

   *Note: In this page, the Part # and related fields are displayed or available for input only if the "Enable Manufacturer Part # control in transaction" parameter is set to "No" in the Set Inventory Process Parameters activity of the Logistics Common Master component. Conversely, the Mfr. Part # and Mfr. # related fields are displayed/available for input only if the "Enable Manufacturer Part # control in transaction" parameter is set to "Yes" in the Logistics Common Master' business component, in the Set Inventory Process Parameters activity of the Logistics Common Master component..*

Enter the following in the **Search Criteria** group box:

2. Use the **Search Entity** drop-down list box the entity for which you want to record the effectivity details.

Enter the following in the **Default Details** group box:

3. Use the **Effectivity Status** drop-down list box to indicate effectivity status of part.
4. Specify any additional information on the effectivity or suitability of the part to aircraft or component in the **Effectivity Notes** field.

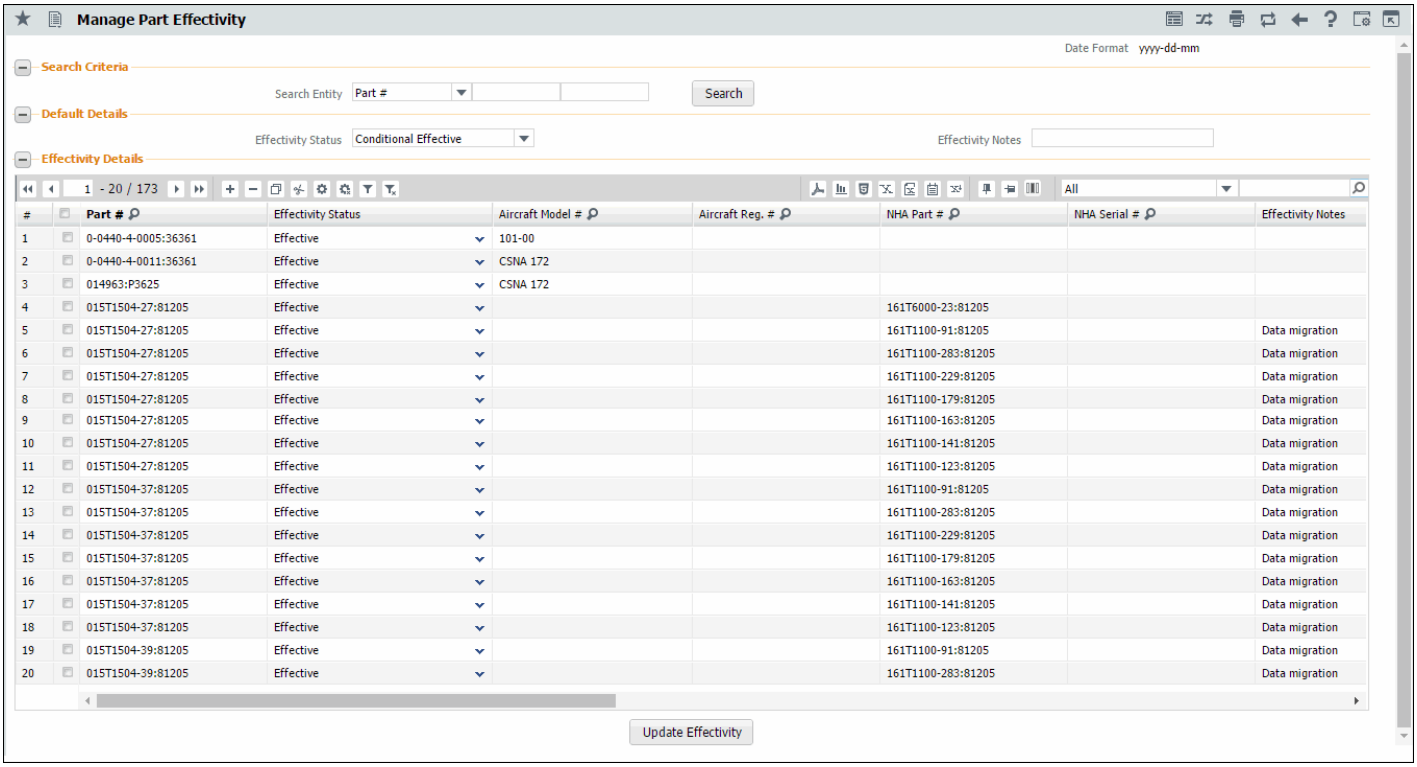



*Figure 2.21 Managing part effectivity*

Enter the following in the **Effectivity Details** multiline.

5. Specify the **Part #** for which you want to **record** effectivity details.
6. Use the **Effectivity Status** drop-down list **box** to indicate the effectivity of the part.
7. The **Aircraft Model # and the** Aircraft Reg # for which the part is effective.
8. The **NHA Part #** and **NHA Serial #** for which the part is effective.

   *Note: You must specify Aircraft Model # and/or Aircraft Reg. # or NHA Part # and/or Serial #. However, if you have entered the serial #, you must also specify the part #.*

9. Enter **Effectivity Notes**, if the Effectivity Status **is** set to "Conditional Effective".
10. The **Ref. Doc. Type**, the **Ref. Doc. #** and the **Ref. Doc. Rev #** of the **document** that affirms the effectivity or suitability of the part to aircraft or component.
11. Click the **Update Effectivity** pushbutton to save **effectivity** details.

## 2.5 Managing Recommended Spare Parts List

In the aviation industry, OEMs will provide the list of spare parts that has to be maintained at Aircraft Model level. Based on the recommended spare parts list provided by OEM, the inventory float gets computed. In this activity, recommended spare Part List for a given Aircraft Model can be defined and maintained. This activity also maintains the Aircraft Models for which a part serves as the spare along with additional RSPL Information.

1. Select **Manage Recommended Spare Parts List** activity under **Aircraft** business **component**. The **Manage Recommended Spare Parts List** screen appears. *See Figure 2. 22.*

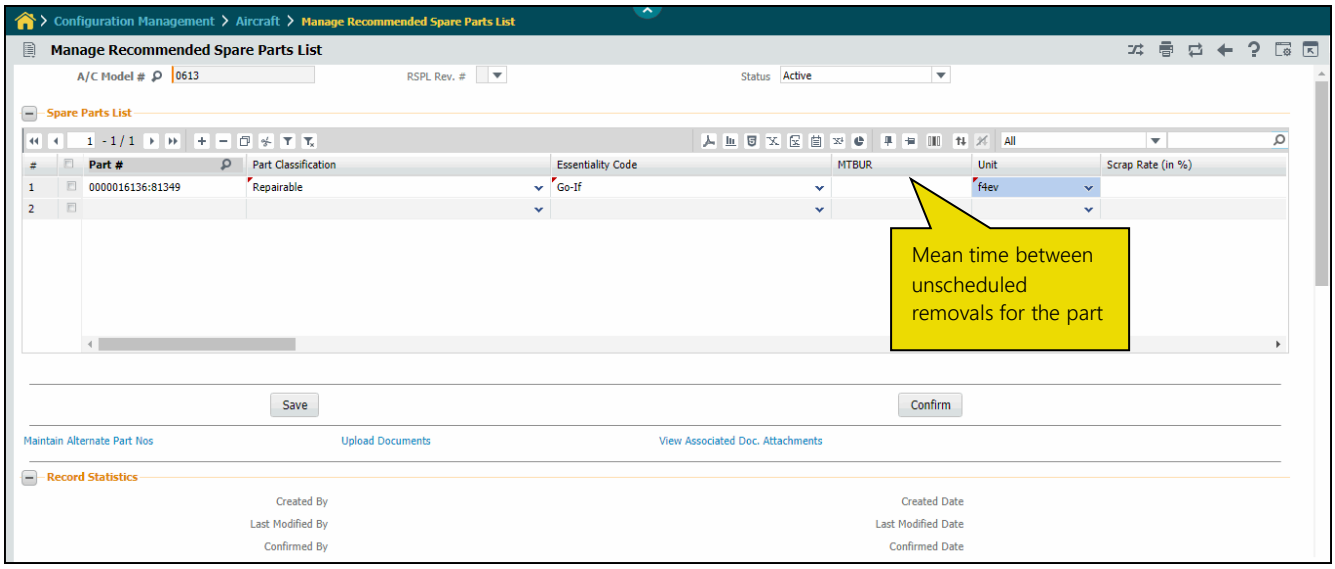



*Figure 2.22 Managing Recommended Spare Parts List*

2. Enter the **A/C Model #** for which the spare parts are to be defined.
3. Use the **RSPL Rev. #** drop-down list box to specify the revision number of the RSPL document. The system lists all the available revisions for the specified Aircraft Model.

In the "Spare Parts List" multiline,

4. Enter the **Part #** and specify the **Part Classification** of the spare part for the Aircraft Model.
5. Use the **Essentiality Code** drop-down list box to specify whether the aircraft is permitted to fly with or without the spare part specified by the OEM. The system lists the following values:

- No-Go - Indicates that the aircraft can fly without the spare part for a limited period, without any specific conditions.
- Go-If - Indicates that the aircraft can fly without the spare part for a limited period, with specific conditions.
- Go - Indicates that the aircraft cannot fly without the spare part.

6. Enter the MTBUR and Unit of the Mean Time Between Unscheduled Removals for the spare part #.
7. Enter the **Mean Shop Processing Time** and **MSPT UOM** for the spare part #.
8. Enter the **QPA** to specify the spare part per aircraft and the **UOM** of QPA.
9. Use the **BFE** drop-down list box to specify whether the spare part is Buyer Furnished Equipment.
10. Use the **Power Plant Part?** drop-down list box to specify whether the spare part is power plant part (Engine).
11. Enter the **NHA Part #** to specify the parent part effective for the spare part and the **Qty / NHA**.
12. Use the **Source Doc. Type** to specify the type of source document. The system lists the following values:

- IPC - Indicates that the source document is an Illustrated Parts catalogue.
- Eng. Doc – Indicates that the source document is an Engineering Document.
- Others – Indicates that the source document could be any document other than “IPC” and “Eng. Doc".

13. Enter the Part Description, Part Type and Part Planning Group of the spare part.
14. Click the **Save** pushbutton to save the entered details.

The system generates the Recommended Spare Parts List in ‘Fresh’ status with Revision # as 0. If the details are already available in ‘Active’ status, the system generates Revision # by incrementing 1 value if any value is modified / deleted and latest revision # will be in ‘Fresh’ status. The old revision #s status will be updated as ‘Revised’.

15. Click the **Confirm** pushbutton to confirm the recommended Spare Parts List.

The system updates the status of RSPL Revision # for Aircraft Model # as ‘Active’.

## To proceed, carry out the following

- Select the **Maintain Alternate Part Nos** link at the bottom of the screen to update the alternate part numbers for the spare part.
- Select the **Upload Documents** link at the bottom of the screen to upload the associated documents.
- Select the **View Associated Doc. Attachments** link at the bottom of the screen to view the associated documents.

# 2.6 Building model and part configuration

Building configuration essentially involves defining the position codes and identifying sub- assemblies, components and piece parts for the maintainable entity.

You can define

- Generic configuration for an aircraft model or part number, which can be inherited across associated aircraft or components.
- Entity specific configuration, which enables the tracking of aircraft or component specific variations from the generic structure.

As a part of the configuration definition, you can identify various position codes in which the parts can be fitted, categorize positions, define the interchangeability rules and identify MEL and CDL list for the aircraft model.

The following sections give you a bird's eye view of the configuration definition and management process.

## 2.6.1 Building aircraft model configuration

The first level of the configuration is defined as the Model Configuration. The position based configuration rules like part interchangeability rules, part intermixing rules and ETOP twin positions can be defined for the model configuration. Also the MEL and CDL items are identified for the aircraft model.

You can build aircraft model configuration, which can be inherited to the associated aircrafts.

1. Select **Build Model Configuration** under **Configuration** business component. The **Select Model** page appears.
2. Provide filter criteria to search for **Aircraft Model #** for building model configuration.
3. Select **Build Model Configuration** link to define configuration details for the selected aircraft model. The **Build Model Configuration** page appears. *See Figure 2. 23.*
4. Use the **Config. Status** drop-down list box to set the status of the model configuration. . The system lists the following:

- Fresh – When the model configuration is created or modified.
- Cancel – When the model configuration is cancelled. Select this option if you wish to disable this model configuration from future reference in other activities.

5. Use the **Config. Control Basis** drop-down list box to indicate the basis for attaching a part to the aircraft of the aircraft model during maintenance. The drop-down list displays the following: Part Effectivity and Config. Rules. If you select;

- Config. Rules, the system allows you to attach only those parts to the position code that satisfy specific configuration rules (interchangeability, intermixing, ETOPS Twin position and permitted serial #) as well as the condition set for the Part Effectivity option as explained next.
- Part Effectivity, the system allows you to attach only those parts that are effective for the aircraft model to the position code. (Note that the part effectivity must be pre-defined in the Maintain Part Effectivity page.)

6. Enter the **Seq #** for the position code.
7. Specify **Datum Point** that is the origin point or an imaginary point in the aircraft model from which the distance of the component / part is calculated. Enter **Position Code** field to identify the position of the part number in the model configuration.
8. Specify **Arm** that is the length between the Datum point and the component/part in the aircraft model.
9. Set the status of position code in **Position Code Status** field. You can activate or inactivate the position code by assigning "Active" or "Inactive" status.
10. Enter the part number to be associated to the model configuration in the **Part #** field.

11. Select the type of the position code **from** the **Position Type** field, which could be "APU", "Engine", "Landing Gear" or "Others".
12. Use the **Component Mandatory** drop-down list box to indicate whether a component must be fitted to the position code or not.
13. Use the **Weight Mandatory** drop-down list box to indicate whether the component/part attached at the position code to be considered for Weight & Balance analysis of the aircraft model.
14. Set the **Cargo** drop-down list box to "Yes" to indicate that the part can be used in the cargo aircraft.
15. Set the **RVSM** drop-down list box to "Yes" to indicate that the part can be used in the aircraft, which fly in the Reduced Vertical Separation Minimum limit. For more details, refer "Configuration" Online Help.
16. Enter **Zone #, Position Formula #, ATA #** fields to specify the zone, position formula and ATA chapter details for the position code.
17. Use the **Equipment Category** drop-down list box to select the category of the equipment that can be attached to the position code in the aircraft of the selected model.
18. Specify the drawing details of the part by **entering Drawing #** and **File Name** fields in the multiline.

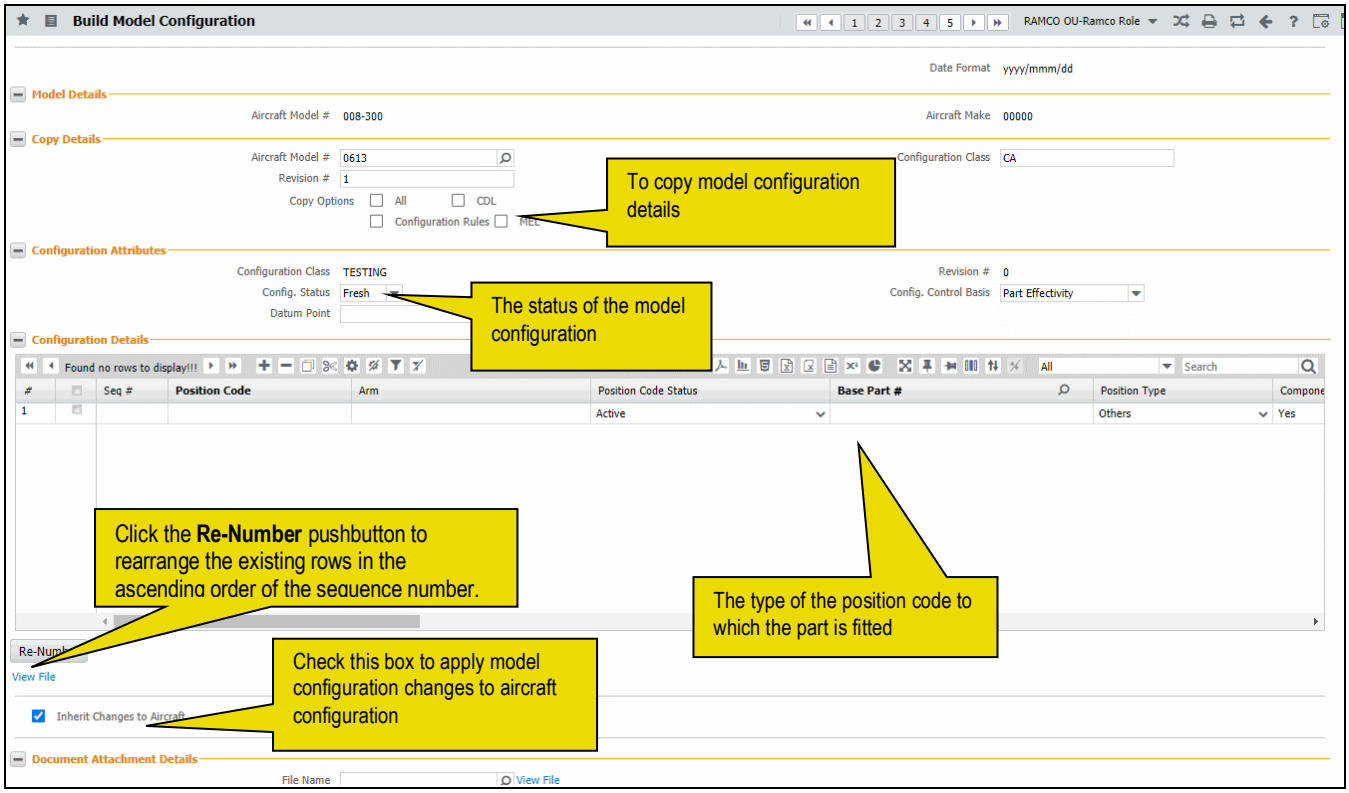



*Figure 2.23 Building model configuration*

19. Enter the remarks of the **configuration** in the **Remarks** field.
20. Click the Build Model Configuration **pushbutton**.

To provide further details for model configuration,

- Select **Edit Conf 46iguration Deviation List** link to identify the **configuration** deviation list for model configuration.
- Select **Edit Minimum Equipment List** link to identify the minimum equipment list for model configuration.
- Select **Edit Piece Part List for Model** link to identify the piece part list for model configuration.
- Select **Edit Notes** link to enter notes for model configuration.

- Select **Edit Configuration Rules** link to define model configuration rules.
- Select **Build Part Configuration** link to build part configuration.

## Defining model configuration rules

You can define rules for the position codes to govern the part numbers that can be fitted to it, the relationship of the position codes and the part numbers associated to it across the model configuration.

1. Select **Edit Configuration Rules** link in the **Build Model Configuration** page. The **Edit Position Attributes** page appears. *See Figure 2. 24.*
2. Provide filter criteria in **Display Filter group** box, to define configuration rules for the position code for the aircraft model.
3. The system displays the aircraft **configuration** details in the form of a tree structure.

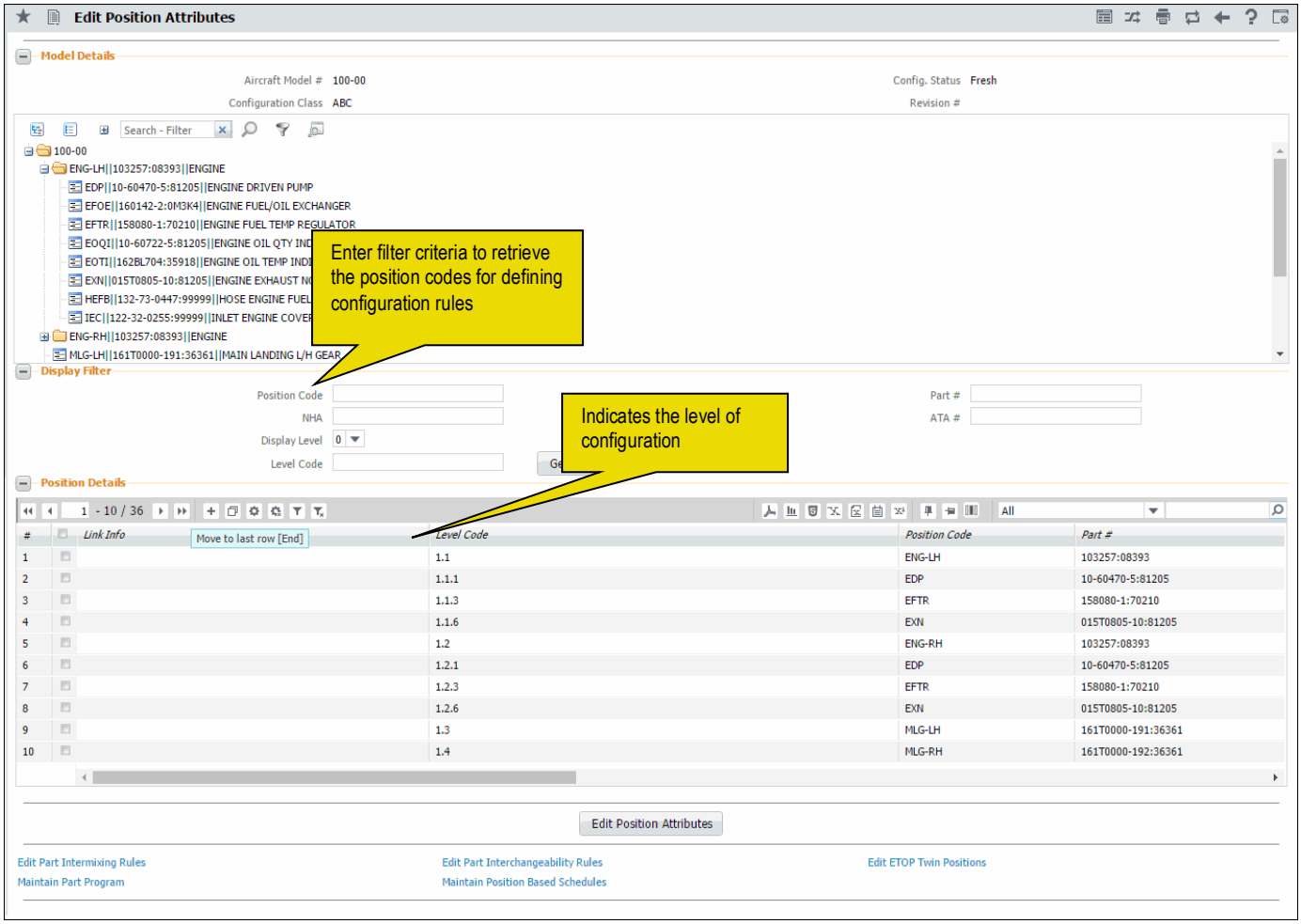



*Figure 2.24 Defining model configuration rules*

4. Set the **Cargo** drop-down list box to "Yes" to **indicate** that the position code is in the cargo aircraft.
5. Set the **RVSM** drop-down list box to "Yes" to **indicate** that the position code is in the aircraft, which fly in the Reduced Vertical Separation Minimum limit.
6. Enter **Zone #, Position Formula #, ATA #** fields to **specify** the zone, position formula and ATA chapter details for the position code.
7. Click Edit Position Attributes **pushbutton**.

To enter further information,

- Select **Edit Part Intermixing Rules** link to define part intermixing rules for the position code for the aircraft model.

- Select **Edit Part Interchangeability Rules** link to define part interchangeability rules for the position code for the aircraft model.
- Select **Edit ETOP Twin Positions** link to identify ETOP twin positions for the position code for the aircraft model.
- Select **Maintain Part Program** link to modify the part program details.
- Select **Maintain Position Based Schedules** link to modify position based schedules for the part.

## Defining part intermixing rules for model configuration

The intermixing rule defines the list of dependent position codes and the dependent part numbers for the reference position code and the reference part number. The intermixing rule states that, whenever the reference part number is fitted in the reference position code, the dependent position codes must have the associated dependent part numbers fitted in them.

1. Select **Edit Part Intermixing Rules** link in the **Edit Position Attributes** page. The **Edit Part Intermixing Rules** page appears. *See Figure 2. 25.*

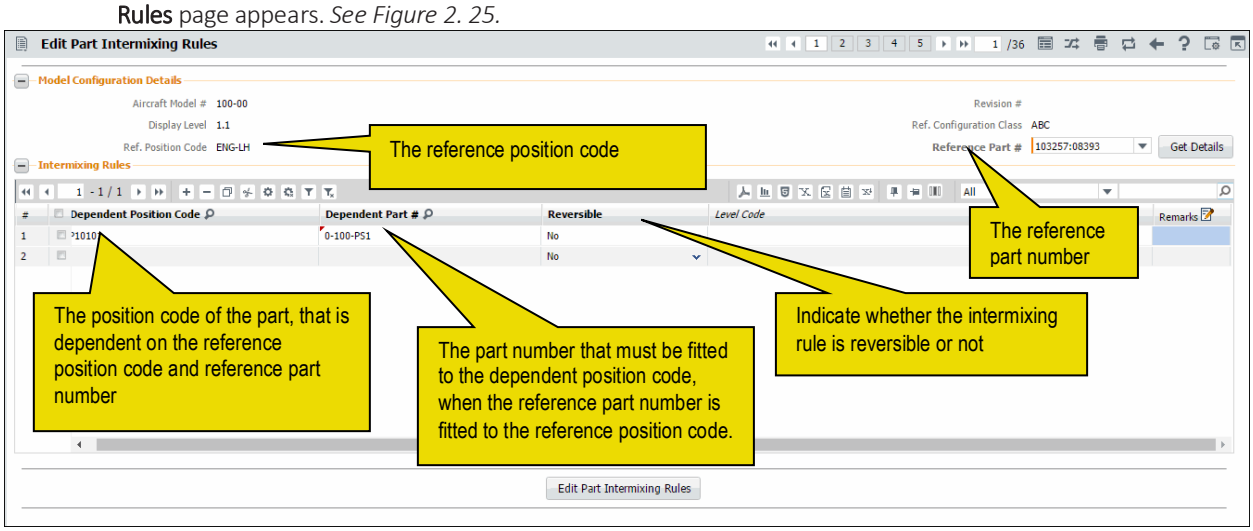



*Figure 2.25 Defining part intermixing rules for model configuration*

2. Select the **Reference Part #** for whose position code, the dependent position codes must be defined.
3. Click the **Get Details** pushbutton to retrieve the **intermixing** part details that are already defined for the reference part number.
4. Enter **Dependent Position Code** and **Dependent Part #** fields.
5. Click the Edit Part Intermixing Rules **pushbutton**.

## Defining part interchangeability rules for model configuration

The parts interchangeability rule defines the list of alternate part numbers that can be placed in the reference position code, in place of the reference part number, if the reference part number is not available.

1. Select **Edit Part Interchangeability Rules** link in the **Edit Position Attributes** page. The **Edit Part Interchangeability Rules** page appears. *See Figure 2. 26.*

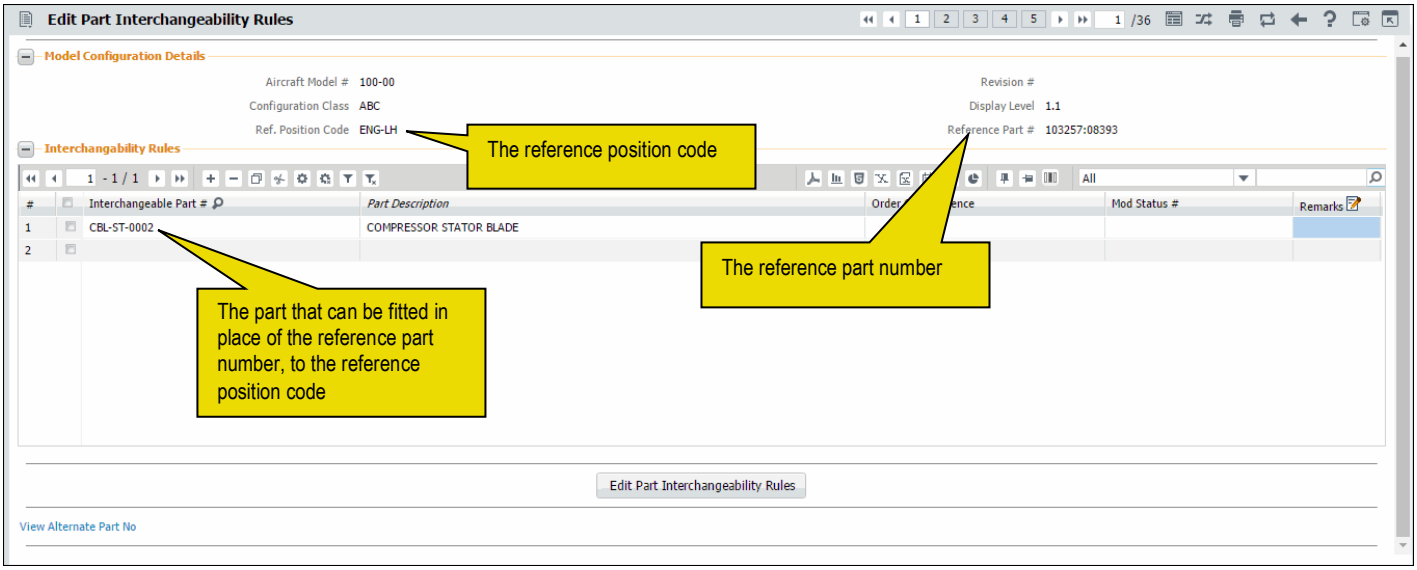



*Figure 2.26 Defining part interchangeability rules for model configuration*

2. Enter **Interchangeable Part #** field.
3. Enter **Order of Preference**, the preferred order in **which** the interchangeable part must be considered for fitting in the reference position code.
4. Click Edit Part Interchangeability Rules **pushbutton**.

To proceed,

- Select **View Alternate Part No** link to view the alternate part details for the interchangeable part.

## Identifying ETOP twin positions for parts in model configuration

ETOP twin position codes are the position codes that are parallel to a reference position code. This rule restricts any maintenance activity being carried out simultaneously in the reference position code and the twin position code. This is required to govern the reliability of aircraft while performing ETOP.

1. Select **Edit ETOP Twin Positions** link in **the Edit Position Attributes** page. The **Edit ETOP Twin Positions** page appears. *See Figure 2. 27.*

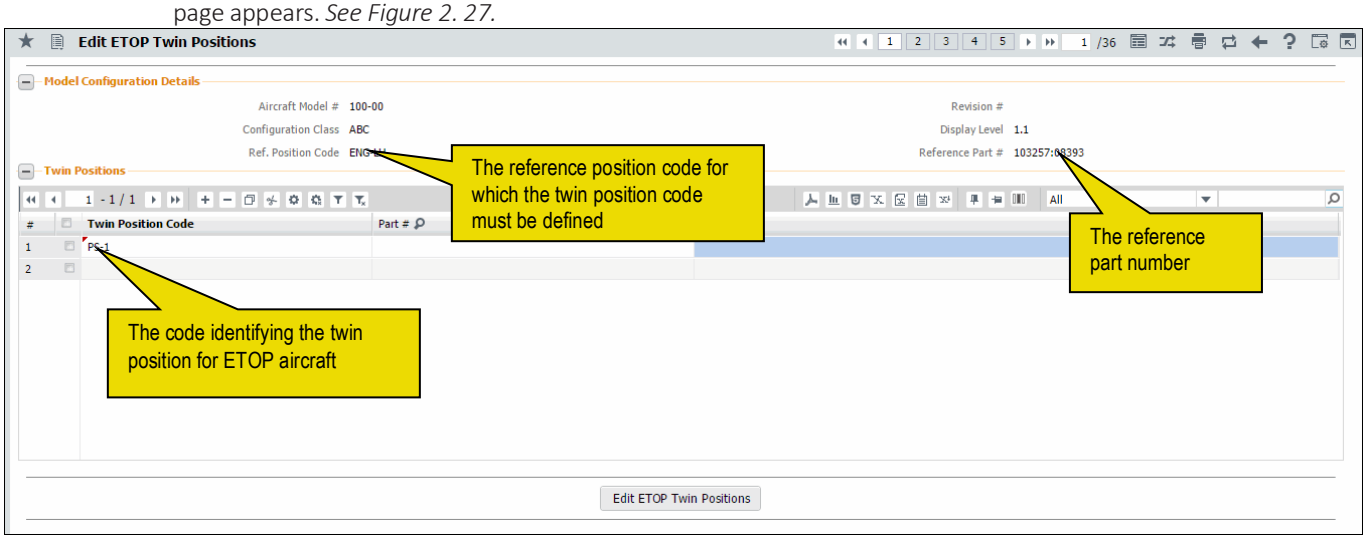



*Figure 2.27 Defining ETOP twin position codes for model configuration*

2. Enter **Twin Position Code** field. This is the **position** code that is parallel to the reference position code. For more information, refer "Configuration" Online Help.
3. Enter the part number associated to the twin position code in the **Part #** field.
4. Click the Edit ETOP Twin Positions **pushbutton**.

## Identifying Configuration Deviation List for model configuration

You can identify Configuration Deviation List (CDL), which is the list of secondary parts of the airframe and engine, which do not affect the flying of the aircraft. This list denotes that the aircraft can still fly without these parts, or with these parts in defective condition.

1. Select **Edit Configuration Deviation List** link in **the Build Model Configuration** page. The **Edit Configuration Deviation List** page appears. *See Figure 2. 28.*

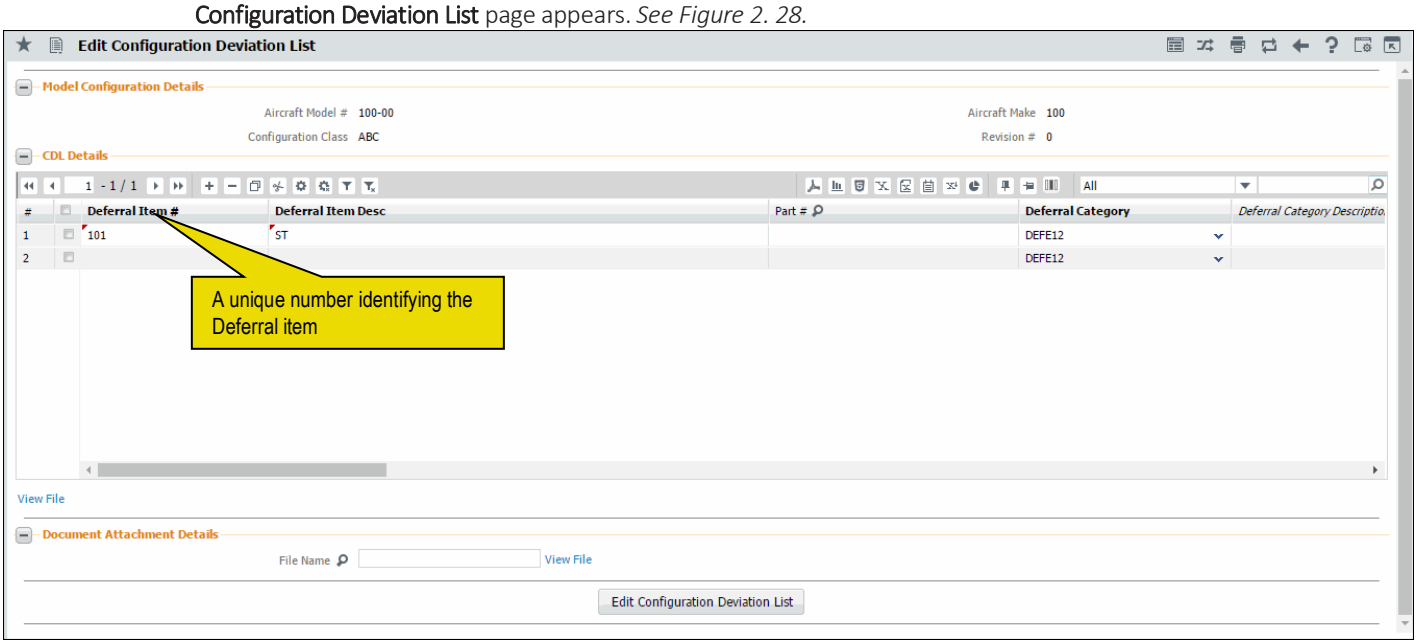



*Figure 2.28 Defining configuration deviation list for model configuration*

2. Provide a unique number and description for **the** Deferral item in the **Deferral Item #** and **Deferral Item Desc** fields.
3. Specify the Deferral Category of the CDL item.
4. Specify the **CDL Quantity**, which is **the** quantity of part to be included in the configuration deviation list.
5. Enter minimum quantity of the CDL, in the **Minimum CDL Quantity** field. Minimum quantity refers to the total quantity that can be under CDL at **any** given point of time.
6. Set the status of CDL item to "Active" or "**Inactive**" in the **Item Status** drop-down list box.
7. Enter the task performed during the first **scheduled** maintenance to ensure that the deferred task is completed, in the **Deferral Task #** field.
8. Enter the task performed during the **second** scheduled maintenance to ensure that the deferred task is completed, in the **Deferral Rev. Task #** field.
9. State the **Maintenance Procedures** and **Operational Procedures** of flying the aircraft **without** the secondary part or with the secondary part in defective condition.
10. Use the **Placard** drop-down list box to indicate whether a placard must be **posted** at the location of the CDL item. The options are "Required" and "Not Required".
11. **Enter** Placarding Instructions.
12. Click the Edit Configuration Deviation List pushbutton.

## Identifying Minimum Equipment List for model configuration

You can identify Minimum Equipment List (MEL), the list of equipment approved by the aviation authority, which may remain in an unserviceable state under certain operating conditions, but still provide an acceptable level of safety in the operation of the aircraft.

1. Select **Edit Minimum Equipment List** link in the **Build Model Configuration** page. The **Edit Minimum Equipment List** page appears. *See Figure 2. 29.*

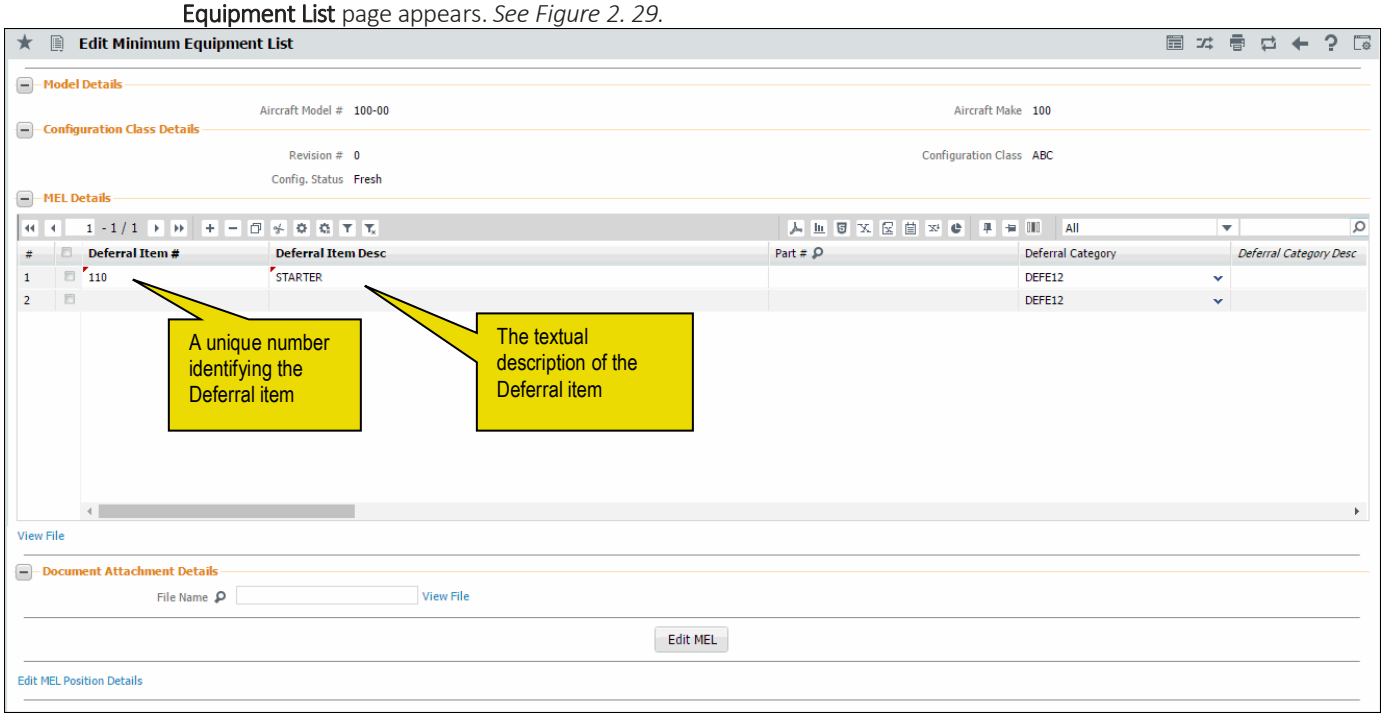



*Figure 2.29 Defining minimum equipment list for model configuration*

2. Enter **MEL Item #** and **MEL Item Desc** fields.
3. If the MEL item is defined as a part in the "Part Administration" business component, enter **Part #** field.
4. Specify the Deferral Category.
5. Set the status of MEL item to "Active" or "Inactive" in the **Item Status** drop-down list box.
6. Specify the **MEL Quantity**, which is the **quantity** of part to be included in the minimum equipment list.
7. Enter minimum quantity of the **part** that can be under MEL at any given point of time, in the **Number Required** field.
8. Set the **Conditional?** drop-down list box to "Yes" to indicate that the usage of the part in an unserviceable state is based on certain conditions. Enter **Conditions**.
9. Enter the task performed during the first scheduled maintenance, to rectify a deferred discrepancy which would have occurred during a maintenance activity, in the **Deferral Task #** field.
10. Enter the task performed during the second scheduled maintenance, in case of further deferment in the discrepancy rectification, in the **Deferral Rev. Task #** field.
11. State the **Maintenance Procedures** and **Operational Procedures** of flying the aircraft with **the** part in an unserviceable state.
12. Use the **Placard** drop-down list box to indicate whether a placard must be posted at the **location** of the MEL item. The options are "Required" and "Not Required". Enter **Placarding Instructions**.
13. Click the **Edit MEL pushbutton**.

To define position code details for MEL items, for which the MEL quantity is less than the total MEL quantity defined per aircraft,

- Select **Edit MEL Position Details** link.

## Defining position details for MEL item number

You can define the position code details only for a MEL item number that is 'position based'. A MEL item becomes 'position based' when the MEL quantity is less than the total MEL quantity defined for the aircraft. For example, if the total MEL quantity identified for an aircraft is 5, and the MEL quantity (the MEL items that can be deferred) is 3, then the MEL item is said to be 'position based'. You can define the position code details for the MEL items that will be deferred.

1. Select Edit MEL Position Details link in the Edit **Minimum Equipment List** page. The **Edit MEL Position Information** page appears. *See Figure 2. 30.*
2. Use the **MEL** drop-down list box and set **the** field to "Yes", if you wish to include the part associated to the position code in the minimum equipment list.
3. Set the **Conditional?** drop-down list box to "Yes" to indicate that, the part associated to the position code can remain in an unserviceable state, based on certain conditions. Enter **Conditions**.
4. State the **Maintenance Procedures** and **Operational Procedures** flying the **aircraft** with the part placed in the position code in an unserviceable state.
5. Use the **Placard** drop-down list box to indicate whether a **placard** must be posted at the position of the part. The options are "Required" and "Not Required".
6. **Enter** Placarding Instructions.

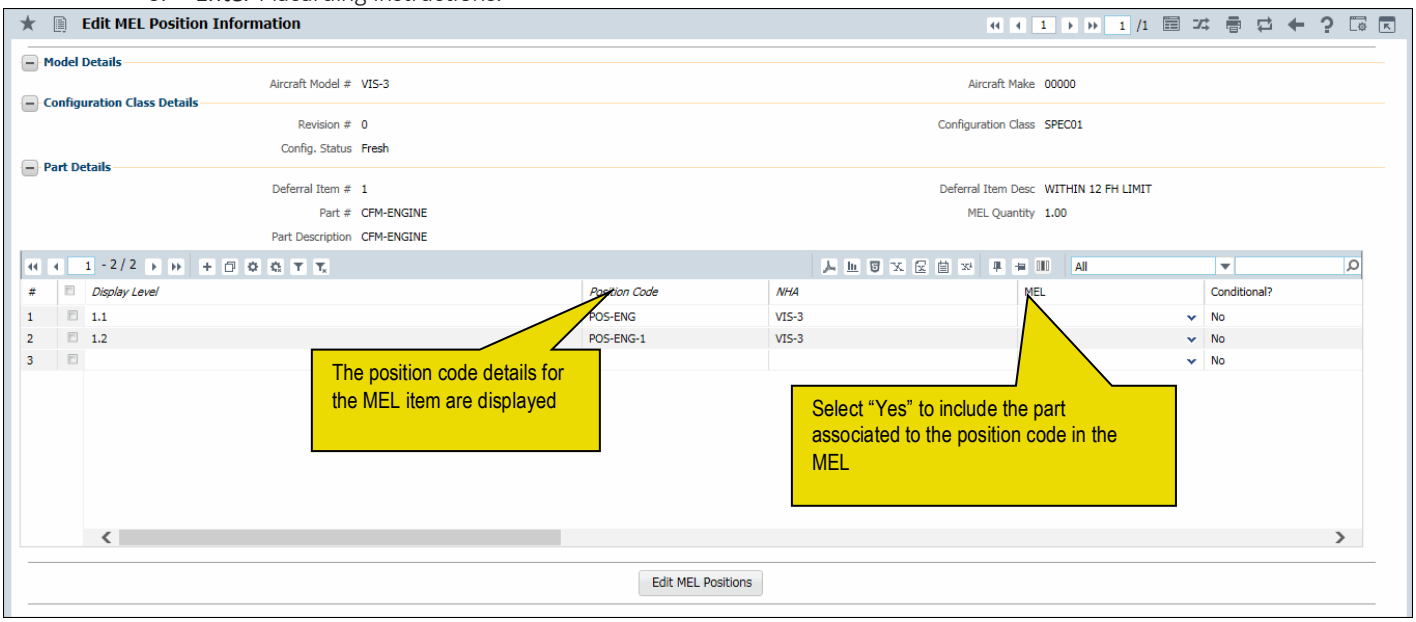



*Figure 2.30 Defining MEL position details for model configuration*

7. Click the **Edit MEL Positions** pushbutton.

## Identifying piece part list for model configuration

Among the various part numbers associated or fitted to the aircraft, certain parts are identified as piece parts. Some of these piece parts need to be tracked for various reasons such as their high value in terms of their price, warranty requirements and to identify parts that are fitted on a trial basis.

You can identify the piece parts for the model configuration including the quantity per piece part.

1. Select **Edit Piece Part List for Model** link in the **Build Model Configuration** page. The **Edit Piece Part List for Model** page appears. *See Figure 2. 31.*
2. Enter the piece part **number** in the **Piece Part #** field.
3. Specify the **Quantity** of the piece part identified for model.

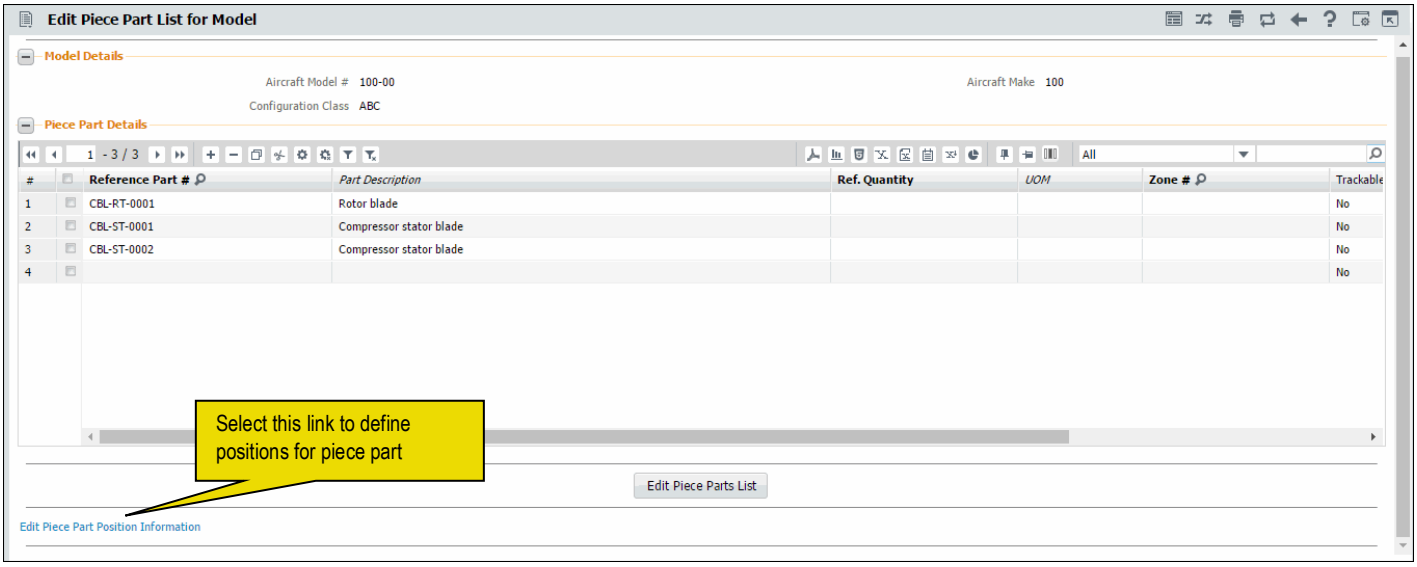



*Figure 2.31 Defining piece part list for model configuration*

4. Enter **Zone #** field to specify the zone to which the piece part belongs.
5. Indicate whether the piece part must be tracked in the **Trackable** field. High value pieces can be marked as trackable.
6. Enter the prefix for piece part **position** in the **Prefix for Position #** field.
7. Click the Edit Piece Parts List **pushbutton**.

To enter position details for the piece part,

- Select **Edit Piece Part Position Information** link.

## Defining piece part positions for model configuration

You can identify the position codes to which the piece parts must be fitted, in the model configuration.

1. Select Edit Piece Part Position Information link in **the** Edit Piece Part List for Model page.
2. Enter the position code to which the piece part **must** be fitted in the **Position Number** field.
3. Activate or inactivate the position code by selecting appropriate option from the **Status** drop-down list box.
4. Click the Edit Position Details **pushbutton**.

## 2.6.2 Building part configuration

A set of identical components may be grouped into a single addressable group called “Part”. You can define the configuration details for a selected part, which can be inherited to the components associated to it.

> *Note: The part # is available/displayed only if the Enable Manufacturer Part # control in transaction" parameter is set to ”No” in the Logistics Common Master' business component, in the Set Inventory Process Parameters activity of the Logistics Common Master component. Conversely, the manufacturer part # and manufacturer # fields are available/displayed only if the Enable Manufacturer Part # control in transaction" parameter is set to ”Yes” in the Logistics Common Master' business component, in the Set Inventory Process Parameters activity of the Logistics Common Master component.*

1. Select **Build Part Configuration** under **Configuration business** component. The **Select Part** page appears.
2. Provide filter criteria to search for **Part #** for building part **configuration**.
3. Select the **Build Part Configuration** link in the **Select Part** page or click **the** hyperlinked part number in

the same page, to define configuration details. The **Build Part Configuration** page appears. *See Figure 2. 32.*

4. Enter the **Part #** in the **Part Details** group box for which you wish to create configuration or modify existing configuration details.
5. Use the **Mfr. Part #/ Mfr. #** drop-down list box to specify manufacturer part # and manufacturer # of the part for which you wish to create configuration or modify existing configuration details.
6. Click the **Get Details pushbutton**.

The system displays the part configuration details in the form of a tree structure. The configuration details such as Position Code, Part #, Part Description, Part Serial # and Component ID are displayed for the part.

On selection of a node in the tree structure, the system automatically retrieves the corresponding part details in the Part Details group box, and the child part details in the Next Level Details multiline.

7. Enter the **Seq #** of the position **code**.
8. Enter **Position Code** field to identify the position of the part number in the part configuration.
9. Set the status of position code in **Position Code Status** field. You can activate or inactivate the position code by assigning “Active” or “Inactive” status.
10. Enter the Part # identifying the child part to be **associated** to the position code Mandatory.
11. Enter the **Mfr. Part #** and **Mfr. #** of the child part to **be** associated to the position code. You must specify the manufacturer part # of the child part as it is mandatory.
12. Select the type of the position code from the **Position Type** field, which could be “APU”, “Engine”, “Landing Gear” or “Others”.
13. Set the **RVSM** drop-down list box to “**Yes**” to indicate that the part can be used in the aircraft, which fly in the Reduced Vertical Separation Minimum limit. For more details, refer “Configuration” Online Help.
14. Set the **Cargo** drop-down list box to “Yes” to **indicate** that the part can be used in the cargo aircraft.
15. Enter **ATA #** field to specify the ATA chapter to which the position code belongs.
16. Use the **Equipment Category** drop-down list box to select the category of the equipment that can be attached to the position code in the part.
17. Specify the drawing details of the **part** by entering **Drawing #** and **File Name** fields in the multiline.
18. Use the **Component Mandatory** drop-down **list** box to indicate whether a component must be fitted to the position code or not.
19. Click **Previous Level** and **Next Level pushbuttons** to traverse across configuration levels.
20. Click the Build Part Configuration **pushbutton**.

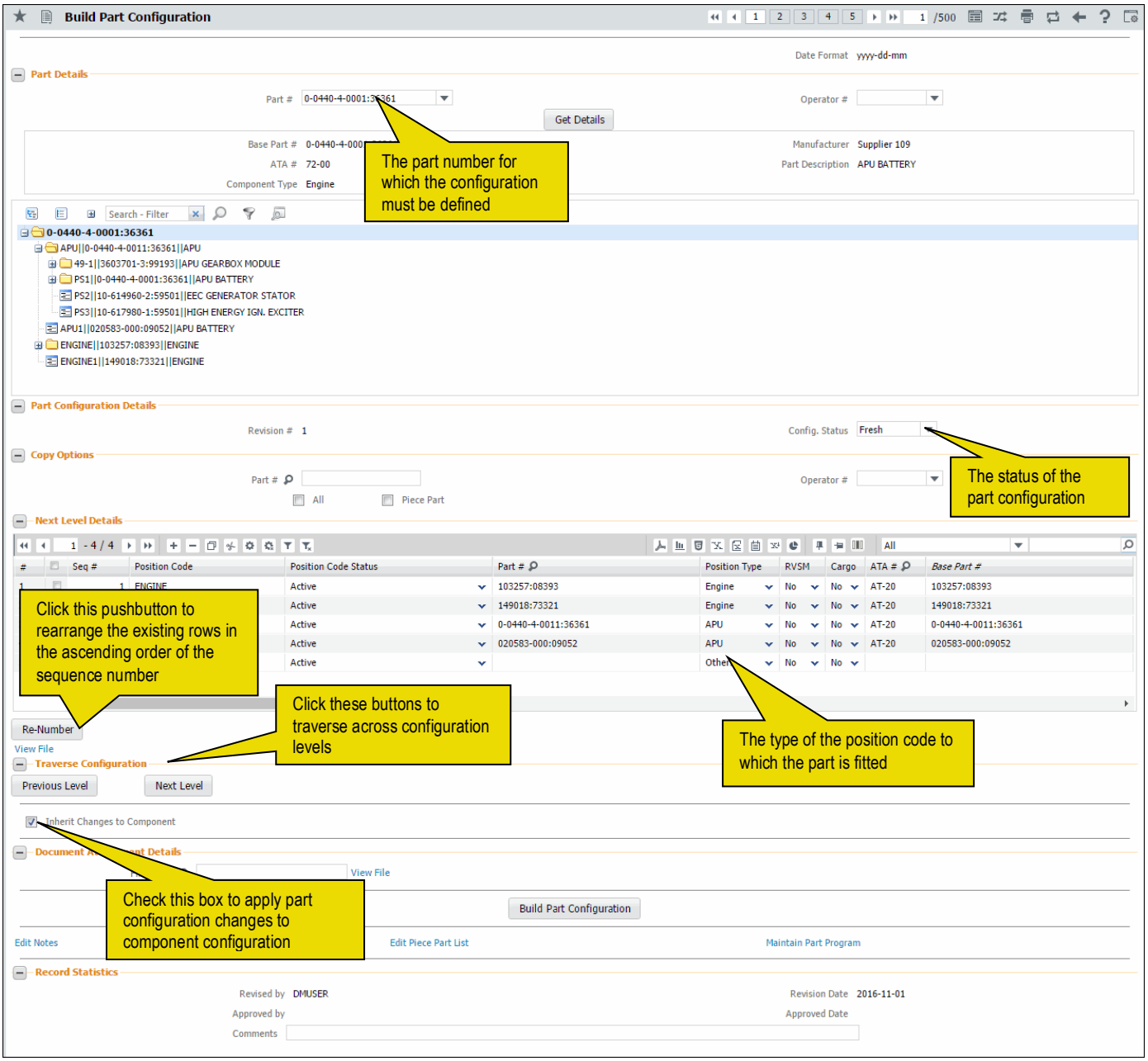



*Figure 2.32 Building part configuration*

To provide further details for part configuration,

- Select **Edit Notes** link to enter notes for part configuration.
- Select **Edit Piece Part List** link to identify the piece part list for part configuration.

## Identifying piece part list for part configuration

1. Select **Edit Piece Part List** link in the **Build Part Configuration** page. The **Edit Piece Part List** page appears. *See Figure 2. 33.*

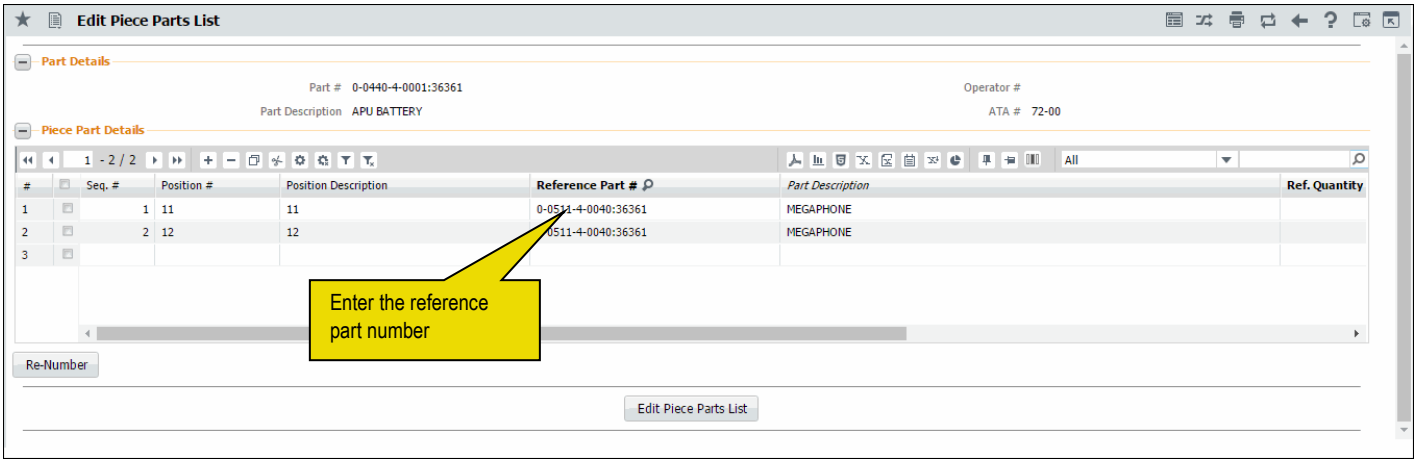



*Figure 2.33 Defining piece part list for part configuration*

2. Enter the **Seq #** for the **reference** part.
3. Enter the **Position #** corresponding to the reference part, if Reference Part # is duplicated.
4. Enter the **Reference Part #** in the piece part configuration. You cannot modify the reference part.
5. Enter the **Ref. Quantity** indicating the **quantity** of reference parts identified for the Piece Part configuration.
6. Select the **Position Type** indicating the **status** of the position code of the reference part as 'Others'.
7. Select the **Position Status** of the **reference** part as 'Active' or 'Inactive'.
8. Click the **Re-Number** pushbutton to insert Seq # in the multiline and rearrange the existing rows in the ascending order of the Seq #.
9. Click the Edit Piece Parts List **pushbutton**.

# 2.7 Maintaining flight log parameters

The flight log is created after the accomplishment of a flight by an aircraft. You can record the leg-wise parameters and oil uplift details for specific aircraft model and configuration class combinations.

1. Select Maintain Flight Log Parameters link under the Aircraft **business** component. The Maintain Flight Log Parameters page appears.

In the Aircraft Details group box,

2. Select the **Aircraft Model #** for which the leg-wise **parameter** information is to be recorded.
3. Select the Configuration Class.
4. Click the **Get Details** pushbutton.
5. **Select** the **Maintain JL Parameter Details** tab. *See Figure 2. 34.*

Enter the following details of leg wise-parameters in the multiline,

6. Enter the **Position Code** for which the parameter is reported.
7. Enter the **Parameter** reported at **the** specified position code.

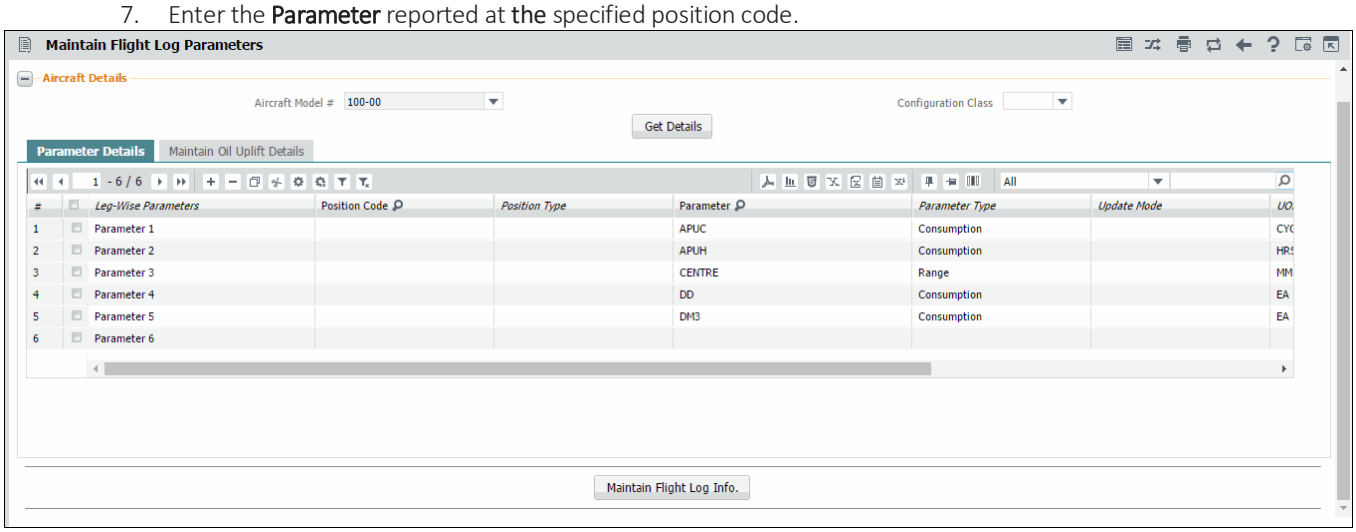



*Figure 2.34 Maintaining leg-wise parameters*

8. Select the **Maintain Oil Uplift Details** tab. *See Figure 2. 35.*

Enter the following details of oil uplift parameters in the multiline,

9. Enter **the** Item #, Item Description, **Item Type** and Part #.
10. Enter Position Code, UOM, Maximum Capacity, Status and Mandatory?

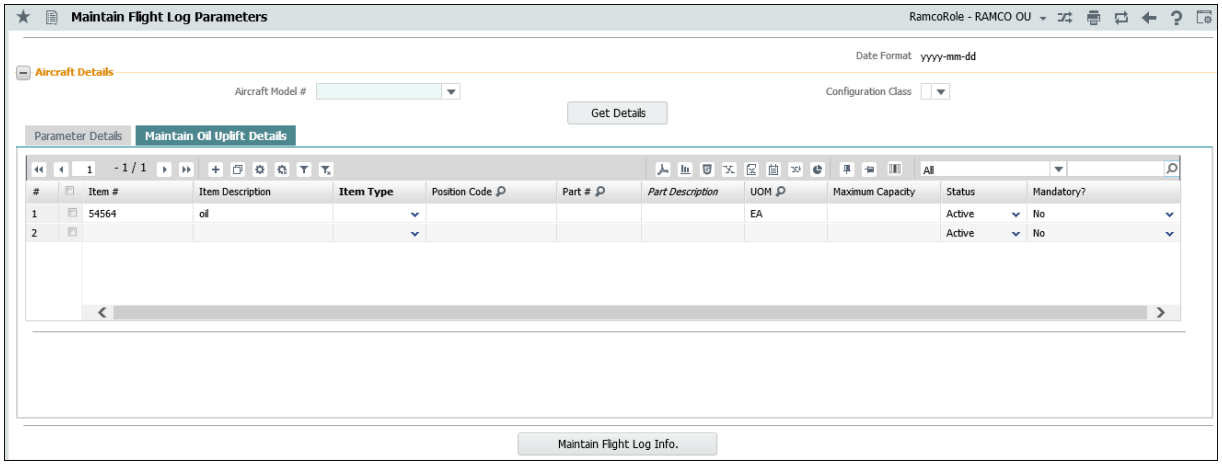



*Figure 2.35 Maintaining oil uplift parameters*

11. Click the Maintain Flight Log Info. pushbutton.

# 2.8 Inducting aircraft and components

You can induct aircraft and components once the logical configuration of model and part are available. The induction process involves defining component, aircraft and other sub-assemblies.

## 2.8.1 Maintaining maintenance information for part

For defining components, the part numbers of type "Component" in the inventory are identified. You can define maintenance information for the part number, which will be inherited by the components generated using the part number. You can also define maintenance activities for non-component parts in this sub-process.

1. You can specify the classification, administrative and operational details of the part along with the component ID generation mode, which could be "Auto" or "Manual". You can also specify whether multiple maintenance tasks for a part can be consolidated and executed through a single shop work order. Select **Maintain Maintenance Info. for Part** under **Aircraft** business component. The **Select Part** page appears.
2. Provide filter criteria to search for a part for updating maintenance information for the part of type **Component**.
3. Select the **Part #** in the multiline.
4. Select the **Edit Part Information** link to update **maintenance** information for the part. The **Maintain Maintenance Info. for Part** page appears. *See Figure 2. 36.*

To specify classification details for the part,

5. Enter the **Part Model #** field to specify **the** part model to which you wish to associate the part.
6. Click **Get Details** pushbutton to retrieve the details of the part model entered.
7. Select the **Component Type** to which the **part** belongs.
8. Select the appropriate option from **Part Classification** drop-down list box to classify the part. The part can be classified as "Controllable", "Repairable" or "Rotable". If the part is of type other than "Component", the systems lists only the "Repairable" and "None" options, and sets this field to "Repairable" by default.

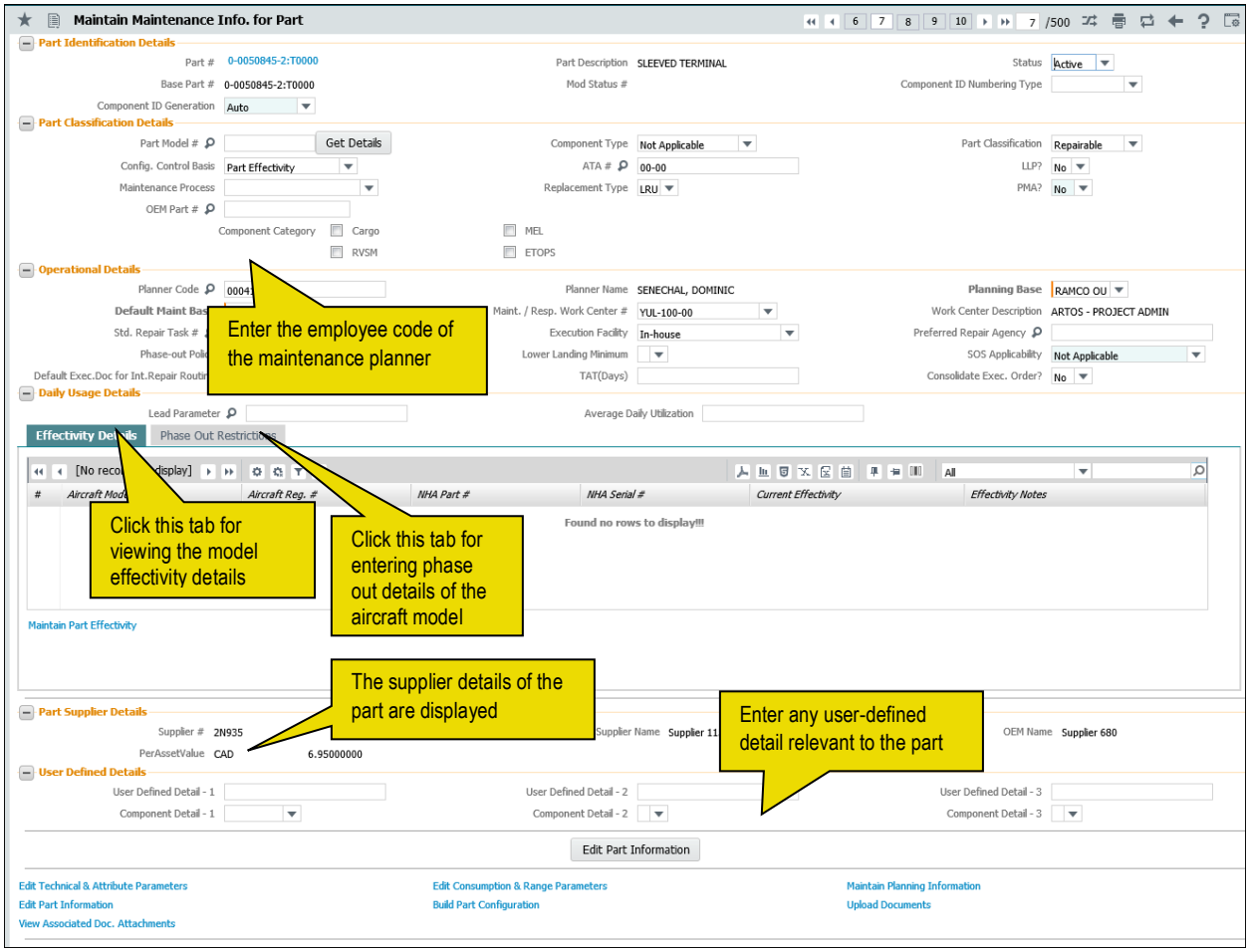



*Figure 2.36 Entering maintenance information for part*

9. Enter the **ATA #** field to specify the ATA chapter number to which the part belongs. Data entry in this field is mandatory, if the part is classified as "Rotable", "Repairable" or "Controllable". The ATA number entered here must be the same as the ATA number of the part model specified in the "Part Model #" field.

10. Use the **Config. Control Basis** drop-down list box to select the basis for attachment of the part during component replacement/aircraft maintenance, which could be Config. Rules or Part Effectivity. By default, the system displays Config. Control Basis as Part Effectivity, if this attribute has not been defined for the aircraft/model yet.

11. Check one of the options **Cargo, RVSM, MEL or ETOPS** to specify the **Component Category** for part.

12. Set the **LLP?** field to "Yes" if the part has a specific **lifetime**. Select "No" otherwise.

    *Note: The system displays only the "No" option in this field, if the part is classified as "Rotable" or if the part is of types other than "Component".*

13. Set the **Maintenance Process** for the part to one **of** the following:

- "Hard-Time" – Select this option if the maintenance needs to be performed so that the items are restored to a suitable condition within a fixed period, **such** as number of cycles, landings or calendar time.
- "On-Condition" – Select this option if the maintenance needs to be performed such that the items are inspected or tested at specific periods to an **appropriate** standard in order to determine whether they can continue in service. It is not a philosophy of "use until failure".
- "Condition Monitored" – Select this option if the maintenance needs to be performed such that the items remain in service until a functional failure **occurs** and the overall reliability is monitored by analysis and surveillance programs, such as "Built-In Test Equipment" (BITE).

14. Specify the **Replacement Type** that part must **undergo**, which could be "SRU" and "LRU".

15. Use the **PMA?** drop-down list box to indicate whether the part can be sourced from manufacturers other than OEM (Original Equipment Manufacturer). By default, this field is set to "No".

- Select "Yes", if the part can be procured from a non-OEM.
- Select "No", if the part must be procured from OEM only.

16. The **OEM Part #** of the part as allotted by the original equipment manufacturer (OEM), Mandatory.

*Note: This field is available only if you have selected "Yes" in the "PMA?" drop-down list box.*

17. Use the **DER?** drop-down list box to indicate whether modifications to the part as maintained by DER are approved by the regulatory authorities. By default, this field is set to "No".

- Select "Yes", if the modifications to the part can be carried out as stated by DER.
- Select "No", if the regulatory authorities do not approve of any modifications to the part.
- Enter **Cargo**, **RVSM**, **MEL** and **ETOPS** to specify the component category.

To specify operational details for the part,

18. Use the **Planning Base** drop-down list box to select the organizational unit responsible for the maintenance planning of the part.

19. Use the **Default Maint Base** drop-down list box to select the default maintenance base in which the maintenance activities on the part can be carried out.

20. Select the default work center for the part from the **Default Work Center #** drop-down list box.

21. Enter the **Std. Repair Task #** for the part, such as Refurbishment or Bushing to be automatically added to a SWO on creation.

22. Use the **Execution Facility** drop-down list box to specify the location where the part can be repaired. The execution facility can be one of the following:

- "In-house" – Select this option if the part can be repaired in the operator's shop.
- "Outsource" – Select this option if the part can be repaired in the third party's location such as an authorized repair shop of the supplier.
- "In-house & Outsource" – Select this option if the part can be repaired in the operator's shop or in the third party's location.
- "None" – Select this option if the part can be repaired at multiple locations. The system will not require the user to give Work Center # for this option.

23. Enter the **Preferred Repair Agency** to which the part must be sent for repair.

24. Use the **Phase-out Policy** drop-down list to specify the policy for phasing out the part. The phase-out policy can be one of the following:

- "Not Permitted" – Select this option if phasing out is not allowed for the part.
- "All Work centers" – Select this option if the part can be phased out in all the work centers.
- "Specific Work Centers" – Select this option if the part can be phased out only in specific work centers.

24. Use the **Lower Landing Minimum** drop-down list to specify the lower landing minimum of the part.

25. Use the **SOS Applicability** drop-down list to specify whether the part under repair should be shipped or shelved.

26. Use the **Default Exec. Doc** for Int. Repair Routing drop-down list to specify the execution document required for the internal repair routing.

27. Enter **TAT (Days)** to indicate the time required for execution of the maintenance program on the part. You must specify a positive number in this field.

28. Use the **Consolidate Exec. Order?** drop-down list box to indicate whether multiple tasks for the part can be consolidated into a single shop work order during component maintenance. The drop-down

list box displays the following: 'Yes' and 'No'. By default, this field is set to "No". Select "Yes", to facilitate shop mechanics to create a single shop work order comprising multiple tasks for the part in the Shop Work Order component. Conversely, select "No" to ensure an individual shop work order is generated for each component task.

To enter daily usage details for the part,

29. In the **Lead Parameter** field, enter the consumption parameter to be identified as the lead parameter. A lead parameter is identified from a set of consumption parameters defined for the part based on the importance of the parameter in indicating the life of the part.
30. For the lead parameter, enter the **Average Daily Utilization,** based on **which** the maintenance arisings are forecasted.
31. Select the **Effectivity Details** tab to view the effectivity **details** for the part.
32. Select the **Phase Out Restrictions** tab to update the **phase** out restriction details for the part.

Refer to the topic "Updating phase out restrictions for the part" for the part for **more** details.

33. Click the Edit Part Information **pushbutton**.

To provide further details for the part,

- Select **Edit Technical & Attribute Parameters** link to define the technical and attribute parameter details for part.
- Select **Edit Consumption & Range Parameters** link to define the consumption and range parameter details for part.
- Select the **Maintain Planning Information** link at the bottom of the page to manage the stock planning for the part.
- Select the **Edit Part Information** link at the bottom of the page to update part main information.
- Select **Build Part Configuration** link at the bottom of the page to define the configuration for the part.
- Select the **Upload Documents** link at the bottom of the page to upload documents associated with the part to the "Object Attachments" repository.
- Select the **View Associated Doc. Attachments** link at the bottom of the page to view the documents associated with the part from the "Object Attachments" repository.

## Updating phase out restrictions for the part

This tab allows you to update the phase out restriction details for the part. The phase out restriction details must be entered if the "Phase-out Policy" field is set as "Specific Work Centers". You cannot update the phase out restriction details for the part for which "Phase-out Policy" is set as "Not Permitted" or "All work Centers".

1. Select the **Phase Out Restrictions** tab in **the Maintain Maintenance Info. for Part** page. *See Figure 2. 37.*
2. Enter the **Work Center #** where phasing **out** is allowed for the part
3. Set the **Include Child ?** field to "Yes" if the child part must also be phased out with the parent part. Select "No" otherwise.
4. Specify the organization unit for which the **work** center is applicable, in the **Execution Unit** field.
5. Click the **Edit Part Information** pushbutton in the main page, to update details of the selected part along with the phase out restriction details.

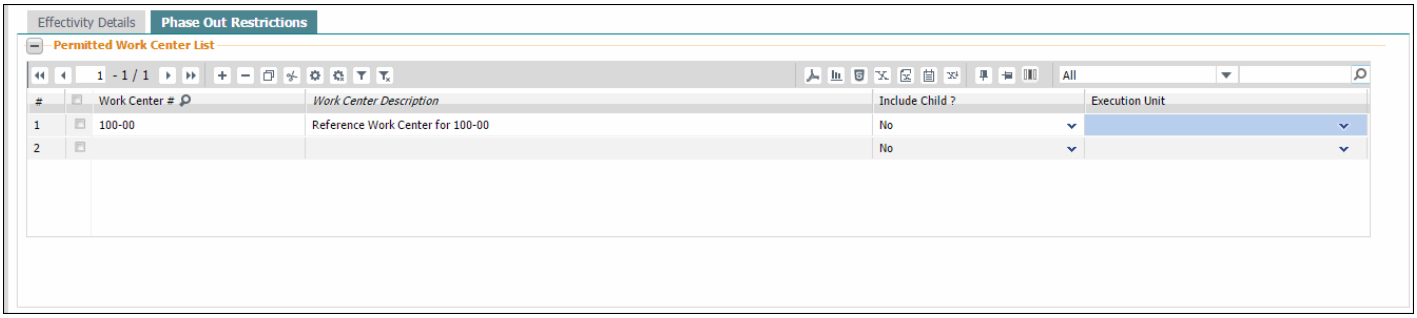



*Figure 2.37 Updating phase out restrictions for the part*

## Defining technical and attribute parameters for part

You can identify the various technical and attribute parameters for the part.

1. Select **Edit Technical & Attribute Parameters** link in the **Maintain Maintenance Info. for Part** page. *See Figure 2. 38.*

   *Note: This page can be invoked only for parts of type "Component".*

2. Enter the technical or attribute parameter that you wish to associate to the part in the **Parameter** field.

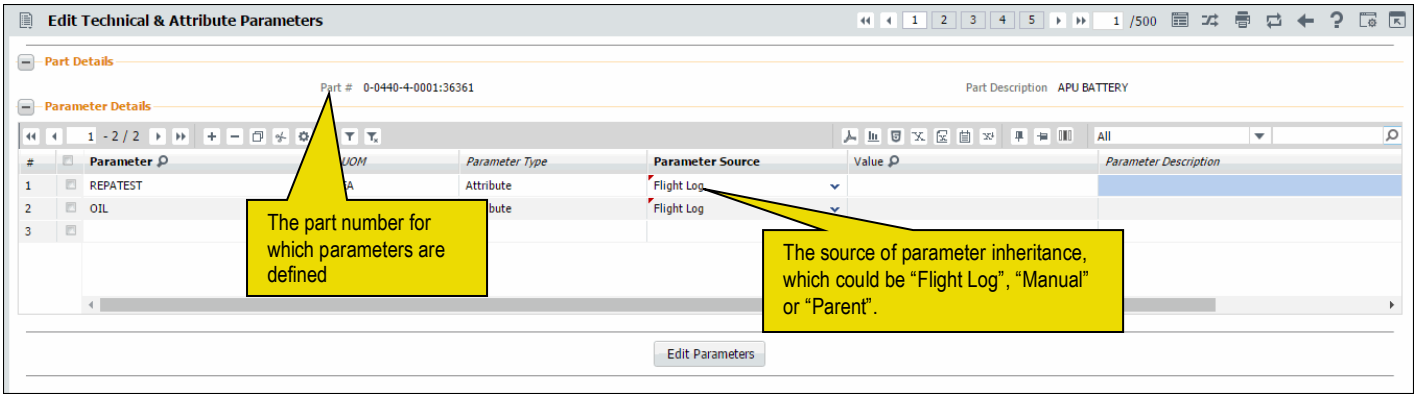



*Figure 2.38 Defining technical and attribute parameters for part*

3. Specify the **Value** of the parameter. For the **attribute** parameter, the value must be already defined in the system.

4. Click the **Edit Parameters** pushbutton.

## Defining consumption and range parameters for part

You can identify the various consumption and range parameters for the part based on which the usage and life of the part is monitored.

1. Select **Edit Consumption & Range Parameters** link in the **Maintain Maintenance Info. For Part** page. *See Figure 2. 39.*

   *Note: This page can be invoked only for parts of type "Component".*

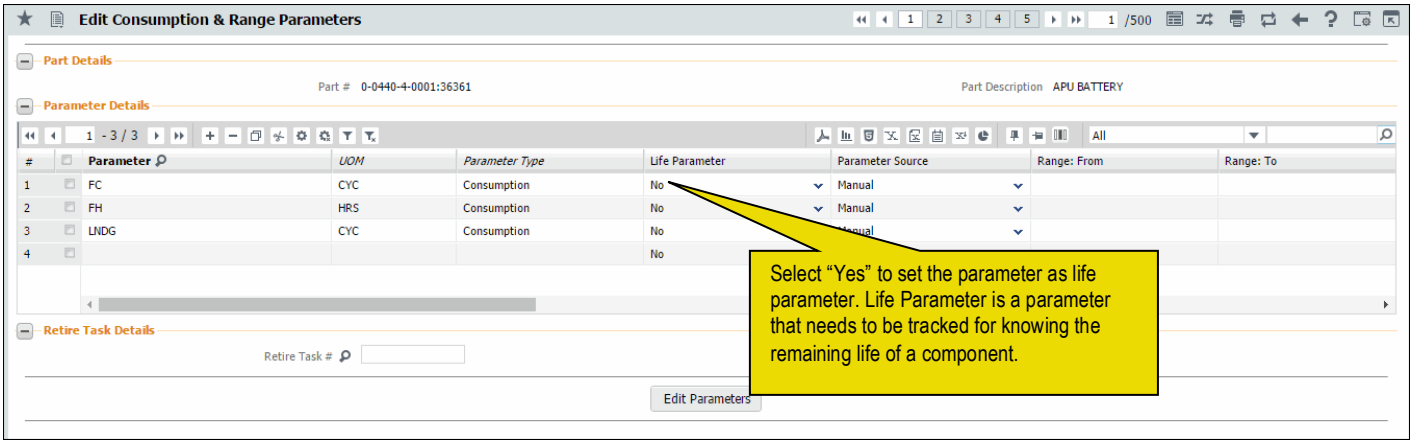



*Figure 2.39 Defining consumption and range parameters for part*

2. Enter the consumption or range parameter that you wish to associate to the part in the **Parameter** field.
3. Select the source of parameter inheritance **from** the **Parameter Source** drop-down list box. The parameter source could be "Flight Log", "Manual", "Parent" or "Calculated.
4. Enter the minimum and maximum range of **values** in the **Range: From** and **Range: To** fields for the range parameter.
5. Enter the **Average Daily Utilization** or **Forecast Factor** for the consumption parameter. Based on the average daily utilization or the forecast factor, the maintenance **activity** is forecasted.
6. Enter the **Ultimate Life Value** of the part, if you have set the consumption parameter as **Life Parameter**.
7. Enter the formula to be associated to the consumption parameter in the **Formula #** field.
8. Use the **Warranty Tracking** drop-down list box to specify whether the warranty tracking on the part is based on the parameter value.
9. Specify whether the parameter update is mandatory or n**o**t, by **selecting** appropriate option from the **Parameter Update** drop-down list box.
10. Select the parameter update mode from **Update Mode** drop-down list box, **which** could be "Delta" or "New". For more details, refer the Aircraft Online Help.
11. Select the following in the **Retire Task Details** group box.

    *Note: This group box is displayed only if the part is a life limited part and*

    *a) If there doesn't exists any Part Maintenance Program for the Part.*

    *b) If the Part Program exists, but is not defined with retire task in the maintenance program for the part.*
12. Enter **Retire Task #** that is executed on the **part** prior to phase out.
13. Enter **Ultimate Life (Days)** of the part **subsequent** to which the retire task is executed on the part and then the part is phased out of operations.
14. Click the **Edit Parameters pushbutton**.

## 2.8.2 Creating part model

Part model relates to grouping of similar part numbers such as Engine component group.

1. Select **Create Part model** under **Aircraft business** component. The **Create Part model** page appears. *See Figure 2. 40.*
2. Provide a unique identifier for the part **model** in the **Part Model #** field.
3. Select the appropriate option from **Part Classification** drop-down list box to classify the part model.

The part can be classified as “Controllable”, “Repairable” or “Rotable”.

4. Use the **Component Type** drop-down list box to select the type of the component that can be defined in the part model, which could be “Engine”, “APU”, “Landing Gear”, or “Others”. Components that are attached to the part model inherit the type defined for the part model.

5. Enter the Part Model Description.

6. Check one of the options **Cargo, RVSM or MEL** to specify the **Component Category** for part model.

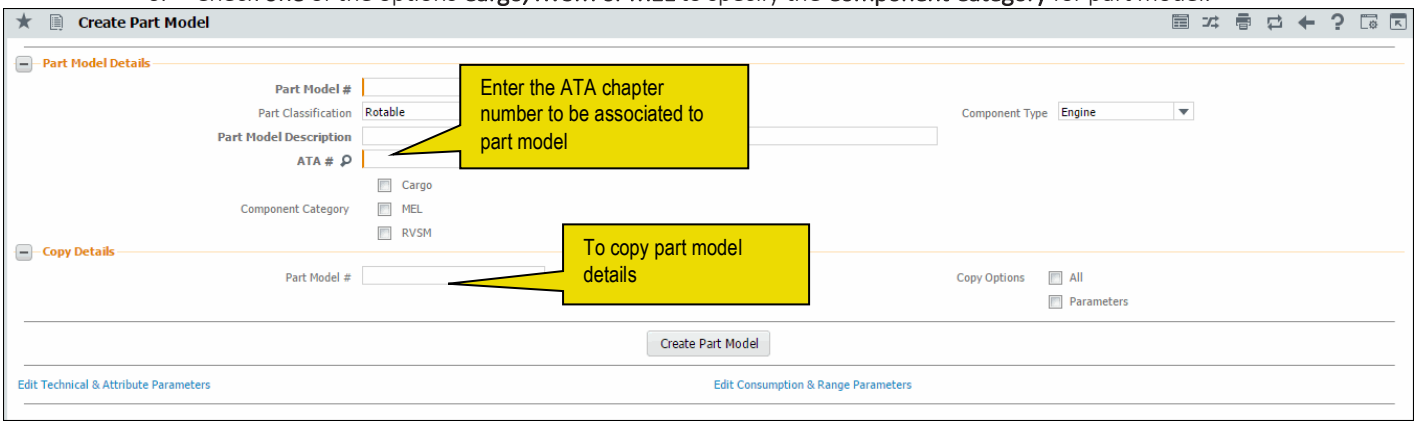



*Figure 2.40 Creating part model*

7. Click the **Create Part Model** pushbutton.

To enter further information for part model,

- Select **Edit Technical & Attribute Parameters** link to **define** the technical and attribute parameter details for part model.
- Select **Edit Consumption & Range Parameters** link to define **the** consumption and range parameter details for part model.

## Defining technical and attribute parameters for part model

You can identify the technical and attribute parameters for the part model.

1. Select Edit Technical & Attribute Parameters link in the Create Part Model page.
2. Enter the technical or attribute parameter that you **wish** to associate to the part model in the **Parameter** field.
3. Select the source of parameter inheritance **from** the **Parameter Source** drop-down list box. The parameter source could be “Calculated”, “Flight Log”, “Manual” or “Parent”. For more details, refer the Aircraft Online Help.
4. Specify the **Value** of the **parameter**.
5. Click the **Edit Parameters** pushbutton.

## Defining consumption and range parameters for part model

The consumption and range parameters that are to be monitored for the component that represents the group, is identified.

1. Select Edit Consumption & Range Parameters link **in** the Create Part Model page.
2. Enter the consumption or range parameter that you **wish** to associate to the part in the **Parameter** field.
3. Use the **Life Parameter** drop-down list box and set the field to “Yes”, to set the parameter as a life parameter.

*Note: Life Parameter is a parameter that needs to be tracked for knowing the remaining life of a component.*

4. Select the source of parameter inheritance from the **Parameter Source** drop-down list box. The parameter source could be "Flight Log", "Manual" or "Parent". For more details, refer the "Aircraft" Online Help.
5. Enter the minimum and maximum range of values in the **Range: From** and **Range: To** fields for the range parameter.
6. Enter the **Average Daily Utilization** or **Forecast Factor** for the consumption parameter. Based on the average daily utilization or the forecast factor, the maintenance activity is forecasted.
7. Enter the **Ultimate Life Value** of the part, if you have set the consumption parameter as **Life Parameter**.
8. Enter the formula to be associated to the consumption **parameter** in the **Formula #** field.
9. Use the **Warranty Tracking** drop-down list box to specify **whether** the warranty tracking on the part model is based on the parameter value.
10. Specify whether the parameter update is mandatory or not, by selecting appropriate option from the **Parameter Update** drop-down list box.
11. Select the parameter update mode from **Update Mode** drop-**down** list box, which could be "Delta" or "New". For more details, refer the Aircraft Online Help.
12. Click the **Edit Parameters pushbutton**.

## 2.8.3 Defining component

Each instance of a maintainable aircraft component is identified through the component definition process. The component definition involves generating component IDs, identifying maintenance planning and execution locations, induction and operational date details, parameter details, history and other details.

> *Note: In all the Create/Edit Component Record activity pages, the Part # and related fields are displayed/available for input only if the "Enable Manufacturer Part # control in transaction" parameter is set to "No" in the **Set Inventory Process Parameters** activity of the **Logistics Common Master** component. Conversely, the Mfr. Part # and Mfr. # related fields are displayed/available for input only if the "Enable Manufacturer Part # control in transaction" parameter is set to "Yes" in the Logistics Common Master' business component, in the **Set Inventory Process Parameters** activity of the **Logistics Common Master** component.*

1. Select **Create Component Record** under **Aircraft** business component. The **Select Part** page appears.
2. Provide filter criteria to search for part number for creating **component** record.
3. Select the **Create Component Record** link in the **Select part** page or click the hyperlinked **Part #** in the multiline of the same page, to create component **information**. The **Create Component Record** page appears. *See Figure 2. 41.*
4. To automatically generate component **Ids** for the components, check **Generate Component ID** check box.
5. Provide a unique number for the **component** in the **Component #** field, if the component ID generation is set as "Manual".
6. Select the type of the component from the **Component Type** drop-down list box. The component can be of types "APU", "Engine", "Landing **Gear**" or "Others".
7. Enter the date on which the date on which the component was put to operation in the **Operational Date** field.
8. Enter the employee code of the planner in the **Planner Code** field. The planner is the one who is responsible for planning the maintenance activities on the component.
9. Use the **Default Maint Base** drop-**down** list box to select the default maintenance base in which the maintenance activities on the component can be carried out.
10. Set the **Component Condition** drop-down list box to "New", "Serviceable", "Unserviceable",

"Overhauled" or "Phased Out" to record the condition of the component. For more details, refer the "Aircraft" Online Help.

11. Enter the date from which the component is in the condition specified in the "Component Condition" field in the **From Date** field

12. Select the ownership type for the component from **Component Ownership** drop-down list box. You can select the values "Owned", "Supplier" or "Customer" to indicate whether operator supplier or customer owns the component.

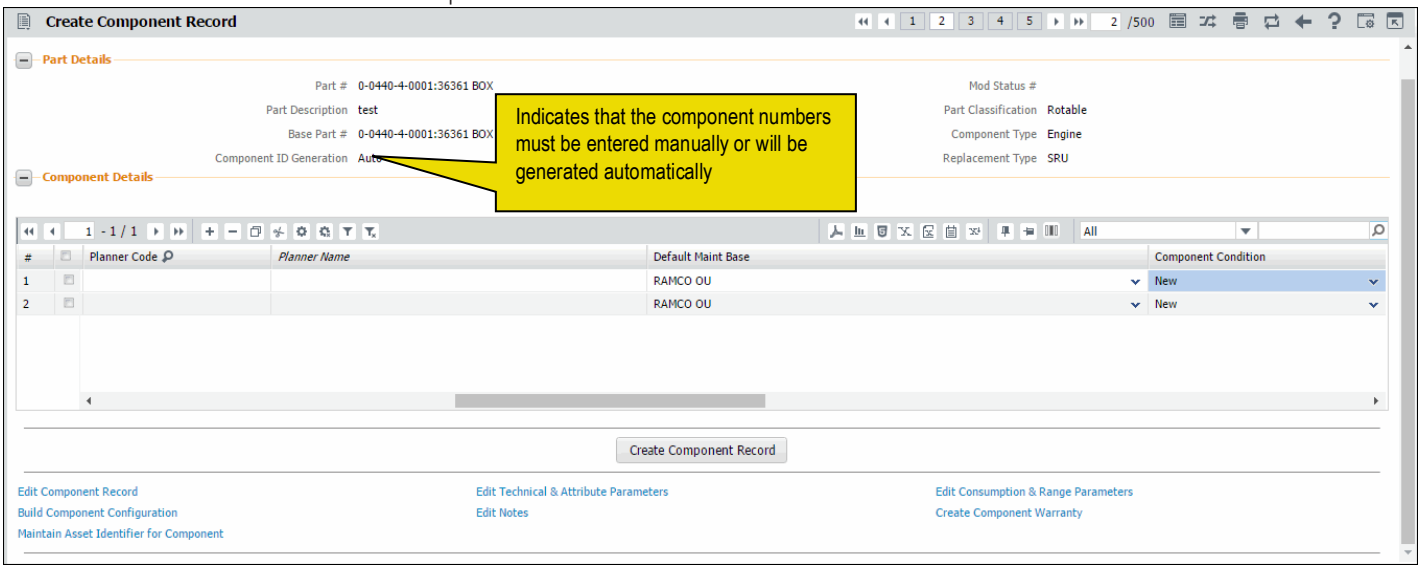



*Figure 2.41 Creating component information*

13. Select the **Component Possession Status**, which could be "Loaned in", "Rented Out" or "PBH.

14. Enter the **Manufactured Date, Manufacturer Serial #** and fields in the multiline to specify the date of component manufacture and serial number of the manufacturer.

15. Identify the code of **Owning Agency**, which owns the component.

    *Note: Ensure that this field is not left blank, if the "Component Ownership" is "Supplier".*

16. Select the **Preferred Stock Status,** to specify the preferred stock status for the component. The system lists all the stock statuses having status attribute as "Ownership – Internal" or "Ownership – Customer".

17. Select the **Engagement Type** that indicates whether the 'Full Maintenance' service would be provided on the component or maintenance service would be available 'On Request'.

18. Use the **Maint. Operator#** drop-own list box to select the maintenance operator for the component. The drop-down list box displays all the "Active" maintenance operator codes defined in the Common Masters component. The maintenance operator is mandatory, if the process parameter "Enforce Maintenance Parameter" for entity type "Component Entry" is set to '1' in the "Define Process Entities" activity. Further, the system automatically retrieves and displays the maintenance operator for a customer owned component, if "Enforce Maintenance Parameter" for entity type "Component Entry" is set to '1'.

19. Click the Create Component Record **pushbutton**.

To enter further information for component,

- Select **Edit Component Record** link to edit the component information.
- Select **Edit Technical & Attribute Parameters** link to define the technical and attribute parameter details for component.
- Select **Edit Consumption & Range Parameters** link to define the consumption and range parameter details for component.
- Select **Build Component Configuration** link to define configuration details for the component.

- Select **Edit Notes** link to enter notes for **component**.
- Select **Create Component Warranty** link to create **warranty** details for the component.
- Select **Maintain Asset Identifier for Component** link **to** associate asset number and asset tag for the created component.
- Select **Record Part Deviation** List link to record **deviations** found in parts of components.

## Entering component information

For a component thus created, you can enter the classification, **ownership**, operational, daily usage and commercial details.

1. Select **Edit Component Record** link in **the Create Component Record** page. The **Edit Component Record** page appears. *See Figure 2. 42.*

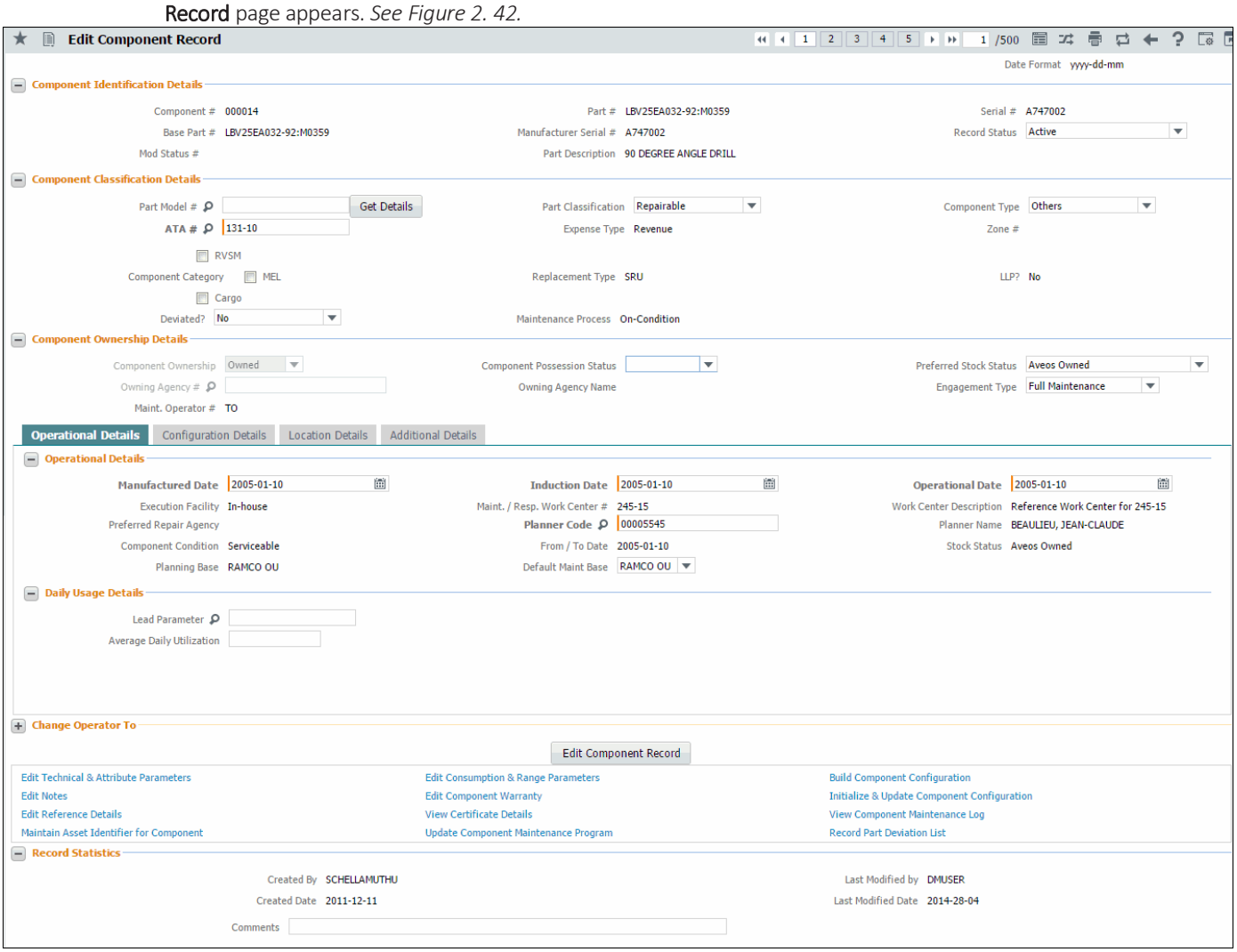



*Figure 2.42 Entering component information*

To specify classification details for the component,

2. Enter the **Part Model #** field to **specify** the part model to which you wish to associate the component.
3. Click **Get Details** pushbutton **to** retrieve the details of the part model entered.
4. Select the appropriate **option** from **Part Classification** drop-down list box to classify the part. The part can be classified as “Controllable”, “Repairable” or “Rotable”.
5. Select the **Component Type** to which the component belongs.
6. Enter the **ATA #** field to specify the ATA chapter **number** to which the part belongs.

7. Check one of the options **Cargo, RVSM or MEL** to specify the **Component Category** for part.
8. In the Component Ownership Details group box, select the Component Ownership and Component Possession Status of the component.
9. Enter the **Owning Agency #** that owns the component. You must leave this field blank if the "Component Ownership" is "Owned". Data entry in this field is mandatory, if the **"Component** Ownership" is "Supplier".
10. Use the **Engagement Type** drop-down list box to select the type of service provided to the component. The system lists the following options:

- Full Maintenance – Select this option to indicate that full maintenance service would be provided on the component
- On Request – Select this option to indicate that the maintenance service would be provided on request. You can select this option only if the "Component Ownership" is "Supplier" or "Customer".

11. Use the **Preferred Stock Status** drop-down list box to specify the preferred stock status for the component.
12. Select the Operational Details tab to edit the operational details of the component.
13. Select the Configuration Details tab to edit the configuration details of the component.
14. Select the Location Details tab to edit the location details of the component.
15. Select the Additional Details tab to edit the additional details of the component.
16. In the **Change Operator To** group box, select the **Maint. Operator #** for the component. Select the **Inherit to Child?** as "Yes" or "No" to indicate whether the maintenance operator of the component is inherited by all the child components or not.

## Editing operational details of component

1. The **Operational Details** tab appears by default, in the **Edit Component Record** page. *See Figure 2. 39.*
2. In the Operational Details group box, enter the date on which the component was manufactured, in the **Manufactured Date** field.
3. Enter the date on which the component was inducted in the **Induction Date** field, and the date on which the component is put to operation in the **Operation Date** field.
4. Enter the **Planner Code** that is responsible for planning the maintenance activities on the selected component.
5. To enter daily usage details for component,
6. In the **Lead Parameter** field, enter the consumption parameter to be identified as the lead parameter. You must enter this field, if **Average Daily Utilization** is specified.
7. For the lead parameter, enter the **Average Daily Utilization,** based on which the maintenance arising is forecasted.

## Editing configuration details of component

8. Select the **Configuration Details** tab in the **Edit Component Record** page. *See Figure 2. 43.*

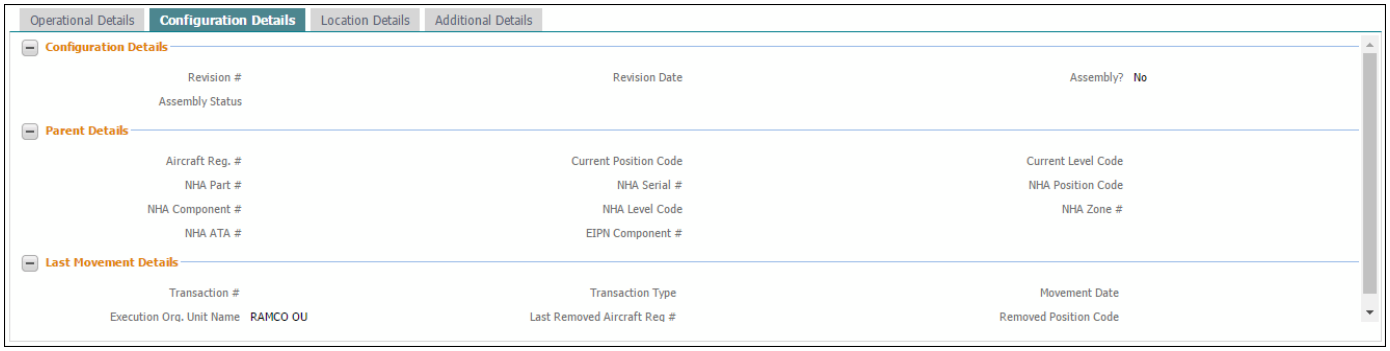



*Figure 2.43 Editing configuration details of component*

9. The system displays the following details in this tab:

- Configuration Details like Revision #, Revision Date, Assembly Status.
- Parent Details like Aircraft Reg #, Current Position Code, Current Level Code, NHA Part-serial details.
- Last Movement Details like Transaction #, Transaction Type, Movement Date, Last Removed Aircraft Reg #, Removed Positon Code.

## Editing location details of component

10. Select the Location Details tab in the Edit Component Record page. *See Figure 2. 44 .*

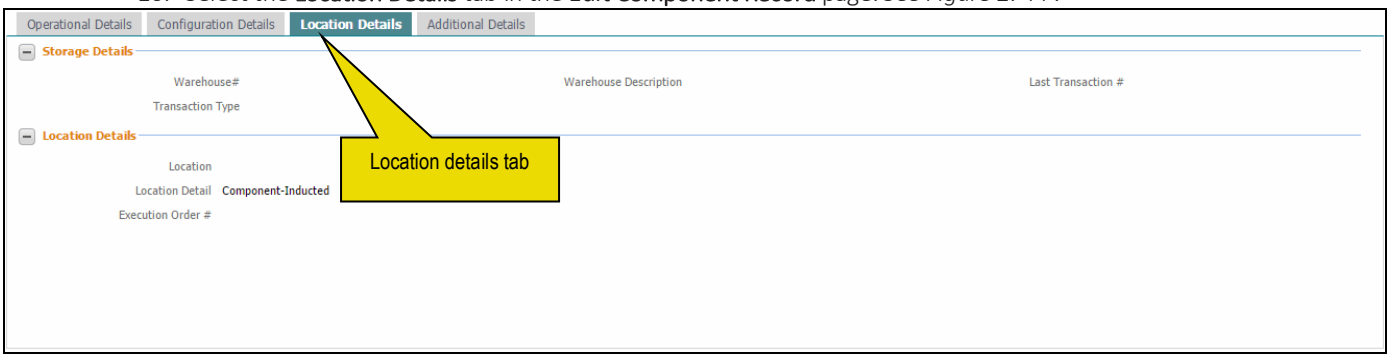



*Figure 2.44 Editing location details of component*

11. The system displays the following details in this tab:

- Storage Details like Warehouse #, Warehouse Description, Last Transaction #, Transaction Type.
- Location Details, Execution Order #.

## Editing additional details of component

1. Select the Additional Details tab in the Edit Component Record page. *See Figure 2. 45.*

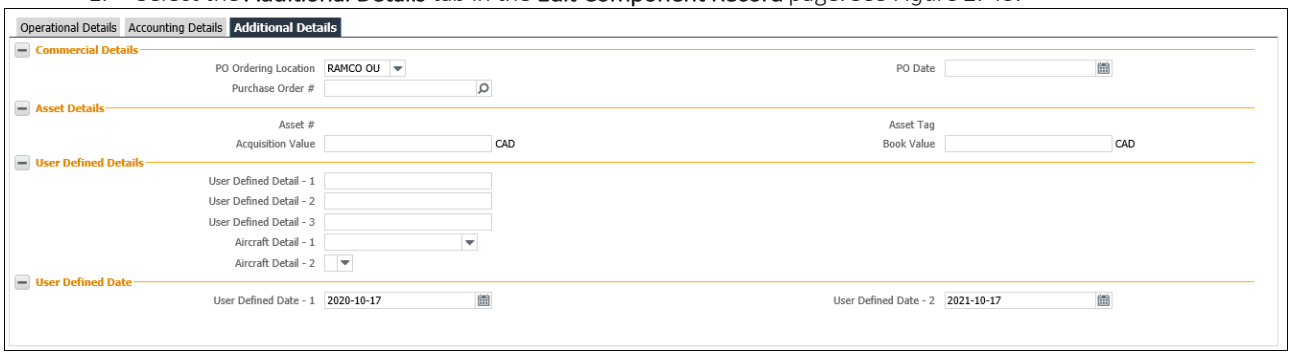



*Figure 2.45 Editing additional details of component*

To enter commercial details for component,

2. Use the **PO Ordering Location** drop-down list box to specify the ordering location in which the purchase order was raised.
3. Enter purchase order **details** such as **Purchase Order #, PO Date.**
4. Enter Asset **Details** like **Acquisition Value** and **Book Value.**
5. **Enter** User Defined Details and Component Details.
6. Enter User Defined Dates.
7. **Click** the Edit Component Record pushbutton.

## Defining technical and attribute parameters for component

1. **Select** Edit Technical & Attribute Parameters link in the Create Component Record page.
2. Enter the **technical** or attribute parameter that you wish to associate to the component in the **Parameter** field.
3. Select the source of **parameter** inheritance from the **Parameter Source** drop-down list box. The parameter source could be "Flight Log", "Manual" or "Parent".

   *Note: The system displays the present value of the parameter with the date and time.*
4. Click the **Edit Parameters** pushbutton.

To initialize parameter **values**,

- Select the Initialize Parameter Values **link**.

## Initializing technical and attribute parameter values for component

For a component that is in "Under Creation" status, the technical and attribute **parameter** values can be updated till it attains the "Active" status.

1. Select Initialize Parameter Values link in **the** Edit Technical & Attribute Parameters page. The Initialize Technical & Attribute Parameter Values page appears. *See Figure 2. 46.*
2. Enter the current value of the parameter in the **Present Value** field.

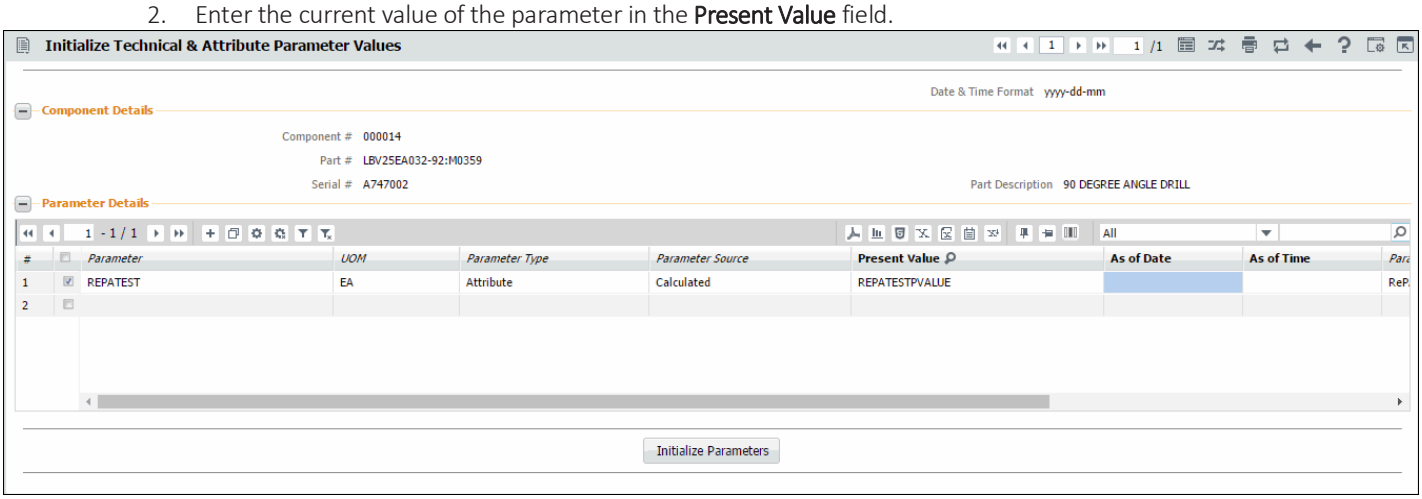



*Figure 2.46 Initializing technical and attribute parameter values for component*

3. Enter the date and time on which the **parameter** value was updated in the **As Of Date** and **As Of Time** fields.
4. Click the Initialize Parameters **pushbutton**.

## Deleting technical and attribute parameters for the component

1. Select the parameters you want to delete for the component in the multiline.
2. Click the Delete icon in the tool bar above the multiline to delete the parameters selected in the multiline.

> *Note: The system allows for deletion of parameters, if the process parameter "Allow deletion of parameters for Aircraft and Component" under the entity "Manage Technical Records" of the entity type 'Tech Records Process Ctrl' in the Define Process Parameters activity of Common Master is 'Yes'.*

## Defining consumption and range parameters for component

3. Select **Edit Consumption & Range Parameters** link in the **Create Component Record** page. The **Edit Consumption & Range Parameters** page appears. *See Figure 2. 47.*
4. Enter the consumption or range parameter that you wish to associate to the part in the **Parameter** field.
5. Use the **Life Parameter** drop-down list box and set the field to "Yes", to set the parameter as a life parameter.

> *Note: Life Parameter is a parameter that needs to be tracked for knowing the remaining life of a component.*

6. Select the source of parameter **inheritance** from the **Parameter Source** drop-down list box. The parameter source could be "Flight Log", "Manual", "Parent" or "Calculated".
7. Enter the minimum and **maximum** range of values in the **Range: From** and **Range: To** fields for the range parameter.

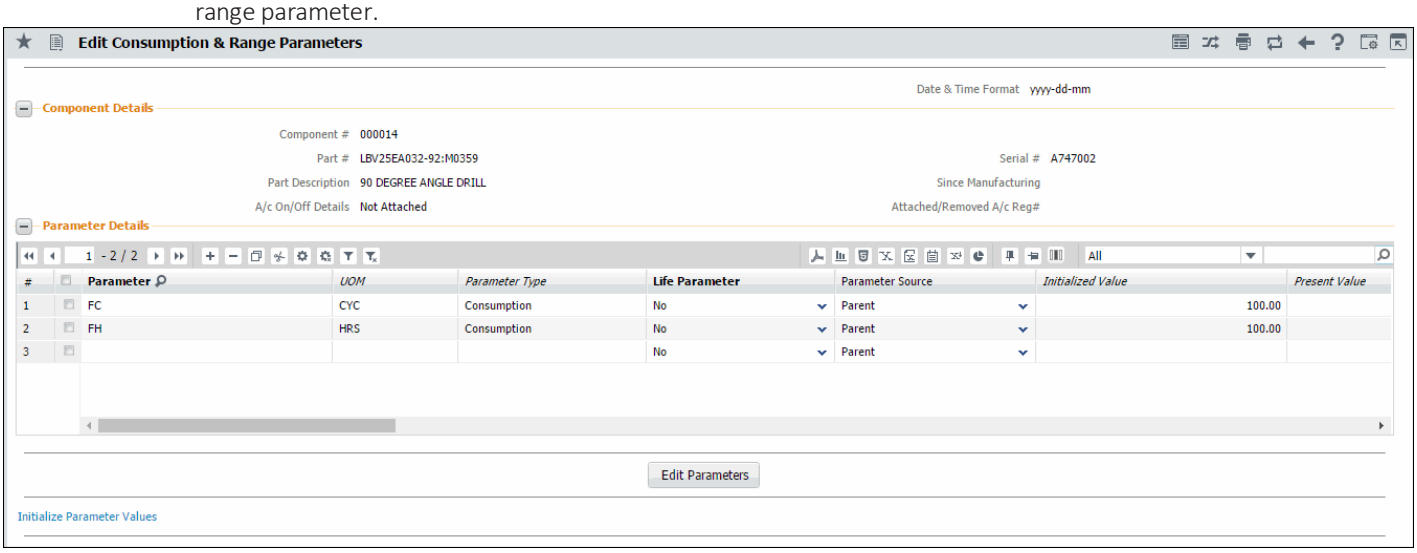



*Figure 2.47 Defining consumption and range parameter values for component*

8. Enter the **Average Daily Utilization** or **Forecast Factor** for the **consumption** parameter. Based on the average daily utilization or the forecast factor, the maintenance activity is forecasted.
9. Enter the **Ultimate Life Value** of the component, if you have set the **consumption** parameter as **Life Parameter**.
10. Enter the formula to be associated to the consumption **parameter** in the **Formula #** field, if you have selected the "Parameter Source" as "Calculated".
11. Use the **Warranty Tracking** drop-down list box to specify whether the warranty tracking on the component is based on the parameter value.
12. Specify whether the parameter update is mandatory or not, by **selecting** appropriate option from the **Parameter Update** drop-down list box.
13. Select the parameter update mode from **Update Mode** drop-down list box, which could be "Delta" or

"New".

14. Click the **Edit Parameters** pushbutton.

15. To initialize **parameter** values,

τ Select the Initialize Parameter Values **link**.

## Deleting consumption and range parameters for the component

1. Select the parameters you want to delete for the **component** in the multiline.

2. Click the **Delete** icon in the tool bar above the multiline **to** delete the parameters selected in the multiline.

*Note: The system allows for deletion of parameters, if the process parameter "Allow deletion of parameters for Aircraft and Component" under the entity "Manage Technical Records" of the entity type 'Tech Records Process Ctrl' in the Define Process Parameters activity of Common Master is 'Yes'.*

## Initializing consumption and range parameter values for component

1. Select Initialize Parameter Values link in the Edit Consumption & Range Parameters page. The Initialize Consumption & Range Parameter Values *See Figure 2. 48.*

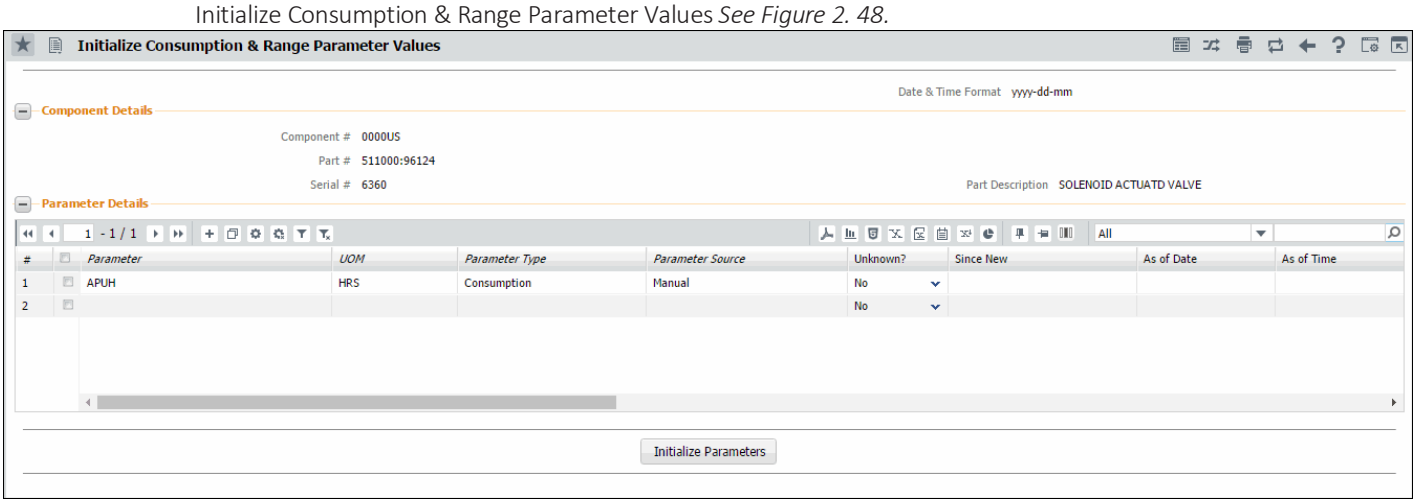



*Figure 2.48 Initializing consumption and range parameter values for component*

In the **Parameter Details** multiline,

2. Set the **UnKnown?** Field to "Yes" or "No" to specify whether the "Since New" value is known for the component that is not in "New" condition.

3. Enter **Since New** to specify the cumulative flying **hours** or flying cycles of the component since it is manufactured.

*Note: If the component is not in "New" condition, then the "Since New" value can be entered, only if the "Unknown?" field is set as "No".*

4. Enter the date and time on which the parameter value was updated in the **As Of Date** and **As Of Time** fields.

5. Enter **Since Overhaul** to indicate the cumulative flying hours or flying cycles of the component since it is overhauled.

6. Enter **Since Repair** to indicate the **cumulative** flying hours or flying cycles of the component since it is repaired.

7. Enter **Since Inspection** to specify the cumulative flying hours or flying cycles of the component since it is inspected.

8. Enter **Since Last Shop Visit** to specify the **cumulative** flying hours or flying cycles of the component since its last shop visit.

9. Click the Initialize Parameters pushbutton.

   *Note: If the part is initially inducted into the system and if the "Since New" value is not known for the component, the system performs the following during initialization of the parameters:*

- If one of the "Since Overhaul", "Since Repair", "Since Inspection" or "Since Last Shop Visit" fields is entered, the system updates the "Since New" field with the available parameter value.
- If more than one parameter value is entered, the system updates the "Since New" field with the greatest of the available parameter values.

## Recording deviated parts from a component

The Record Part Deviation List task enables shop mechanics to record details of those parts in a component that do not conform to normal/regulatory requirements. Any attribute of a part when found not in conformance with the required norms is considered to be a case of deviation. Such anomalies are usually detected by shop mechanics during preliminary inspection of components when executing shop work orders.

You can record details of parts including ATA #, deviation description and approval #. You may also specify additional information, such as circumstances that led to the deviation in parts. For example, the diameter of a part A is found to be 5cms during inspection though it must be 7cms. This shrinkage in the size of the part could be owing to frequent flying in rough weather conditions.

1. Select the Record Part Deviation List link from the Edit Component Record, or Record Shop Execution Details page. The Record Part Deviation List page appears.
2. In the Deviation List multiline, enter the following details of parts that are missing from the component associated with shop work order: ATA #, Deviation #, Description and Approval #.

   *Note: The Mfr. Part # is displayed only if "Enable Manufacturer Part # control in Transaction" is set as "Yes" in the Set Inventory Process Parameters activity of the Logistics Common Master component. However, if "Enable Manufacturer Part # control in Transaction" is set as "No", Mfr. Part # and Mfr. # are not displayed though Part # and Serial # are displayed in the multiline.*

3. Click the Update Details pushbutton to save details of missing parts.

### 2.8.4 Updating component condition

1. You can update the condition of the component after its last removal from the parent (aircraft or component).
2. Select Update Component Condition under Aircraft business component. The Update Component Condition page appears.
3. Provide Search Criteria and click Search pushbutton to retrieve the component for which the condition needs to be updated.
4. Enter the Default Details group box to specify the default component condition, the time period from which the condition was updated and comments for the components listed in the multiline.
5. In the Search Results multiline, select the new condition of the component from the Component Condition – New field.

   *Note: You can change the condition of the component, only if the new condition of the component is applicable for the warehouse associated to the component.*

6. Enter the From Date and From Time fields to indicate the date and time from which the component condition got changed.
7. Click Update Condition pushbutton to update the condition of the component, and accordingly update the component condition in the "Stock Maintenance" business component.

### 2.8.5 Defining aircraft

Aircraft definition involves assigning identifiers, identifying maintenance planning and execution details, induction and operational dates, parameters, aircraft history and other details for each maintainable aircraft.

1. Select **Create Aircraft Record** under **Aircraft** business component. The **Create Aircraft Record** page appears. *See Figure 2. 49.*

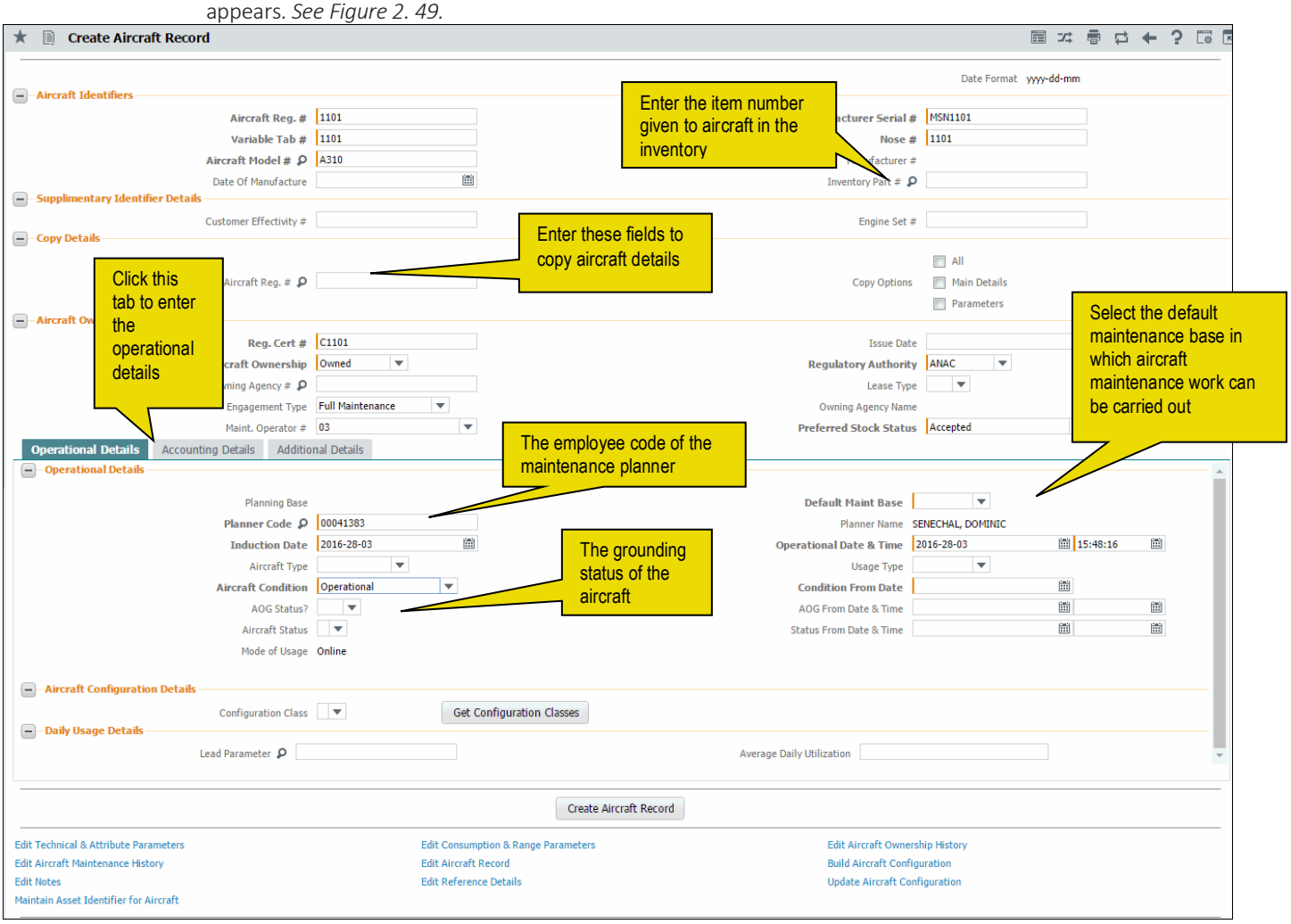



*Figure 2.49 Creating aircraft record*

To enter identification details for aircraft,

2. Provide a unique identifier for the aircraft by entering **Aircraft Reg #** field.
3. Provide additional identifiers such as **Manufacturer Serial #, Variable Tab # and Nose #** for the aircraft.
4. Enter the **Aircraft Model #** field to identify the aircraft model to which the aircraft belongs.
5. Enter the **Date Of Manufacture** of the aircraft.
6. Enter **Customer Effectivity #** and **Engine Set #** fields to identify customer effectivity number and engine set number for aircraft.

To enter ownership details for aircraft,

7. Enter the number of registration certificate of the aircraft in the **Reg. Cert #** field.
8. Enter the **Issue Date** of the certificate.
9. Use the **Regulatory Authority** drop-down list box to select the regulatory authority to which the aircraft belongs.
10. Identify the ownership of the aircraft by selecting **"Owned"**, "Leased", "Leased Out" or "Customer" from **Aircraft Ownership** drop-down list box.
11. Use the **Lease Type** drop-down list box to select the type of the lease if the aircraft ownership is "Leased" or "Leased Out". The type of lease can be "Wet" or "Dry". For more details, refer Aircraft Online Help.

12. Enter the code of the **Owning Agency** who **owns** the aircraft.
13. Select appropriate value in the **Engagement Type** to indicate whether the full maintenance service would be provided on the aircraft or maintenance service would be provided on request.
14. Select the **Preferred Stock Status,** to specify the preferred stock **status** for the component. The system lists all the stock statuses having status attribute as "Ownership – Internal" or "Ownership – Customer".
15. Select appropriate value in the **Engagement Type** to indicate whether the full maintenance service would be provided on the aircraft or maintenance service would be provided on request.
16. Use the **Maint. Operator#** drop-own list box to select the **maintenance** operator for the aircraft. The drop-down list box displays all the "Active" maintenance operator codes defined in the Common Masters component. The maintenance operator is mandatory, if the process parameter "Enforce Maintenance Parameter" for entity type "Aircraft Entry" is set to 1 in the "Define Process Entities" activity.
17. Select the **Preferred Stock Status,** to specify the preferred stock status for the component. The system lists all the stock statuses having status attribute as "Ownership – Internal" or "Ownership – Customer".

To enter operational details

1. Select the **Operational Details** tab to record the operational **details** of the aircraft. *See Figure 2. 50*.

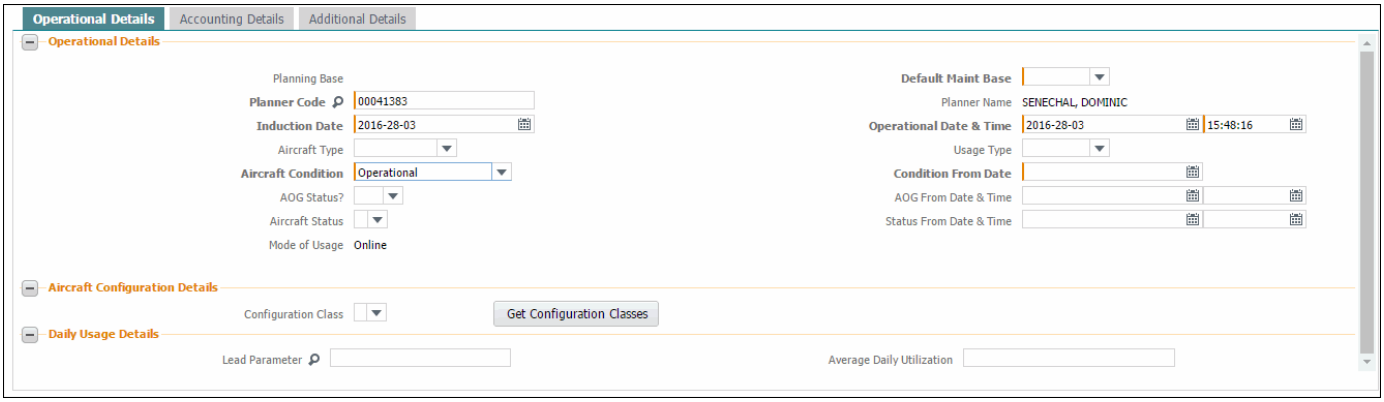



*Figure 2.50 Recording operational details*

2. Select the **Default Maintenance Base** where the **maintenance** activities of the aircraft must be carried out.
3. Enter the date on which the aircraft was **inducted** in the **Induction Date** field.
4. Enter the date and time at which the date on **which** the aircraft was put to operation in the **Operational Date & Time** field.
5. Specify **Aircraft Type** and **Usage Type** for the aircraft.
6. Set the **Aircraft Condition** drop-down list box to "**Operational**", "Phased Out" or "Under Maintenance" to record the condition of the aircraft. For more details, refer the Aircraft Online Help.
7. Enter the date from which the aircraft is in the condition specified in the "Aircraft Condition" field in the **Condition From Date** field. You must enter this field when the "Engagement Type" of the aircraft is "Full Maintenance" and when the "Aircraft Condition" is "Phased Out" or "**Under** Maintenance".
8. Set the **AOG Status?** field to "AOG", if the aircraft is **grounded**. Set the field to "No", if the aircraft is not grounded.
9. Enter the date and time from which the aircraft is **grounded** in the **AOG From Date & Time** field. You must enter this field if value is specified in the "AOG Status?" field.

*Note: The date entered in the "AOG From Date & Time" field must be later than the date specified in*

*the "Induction Date" field.*

10. Use the **Aircraft Status** drop-down list box to specify the status of the aircraft.
11. Enter the date and time from which the aircraft is in the status specified in the "Aircraft Status" field, in the **Status From Date & Time** field. You must enter this field, if "Aircraft Status" is specified.

> *Note: The date entered in the "Status From Date & Time" must be the same or later than the date specified in the "Induction Date" field.*

To enter configuration details for aircraft,

12. Select the configuration class that you **wish** to associate to the aircraft from the **Configuration Class** drop-down list box.

> *Note: You can leave this field blank, if the "Aircraft Ownership" is "Customer" and "Engagement Type" is "On Request".*

To enter daily usage details for aircraft,

13. In the **Lead Parameter** field, enter the consumption parameter to be identified as the lead parameter. A lead parameter is identified from a set of consumption **parameters** defined for the aircraft based on the importance of the parameter in indicating the life of the aircraft.
14. For the lead parameter, **enter** the **Average Daily Utilization,** based on which the maintenance arisings are forecasted.
15. Select the **Accounting Details** tab to maintain **the** accounting details of the aircraft. *See Figure 2. 51.*

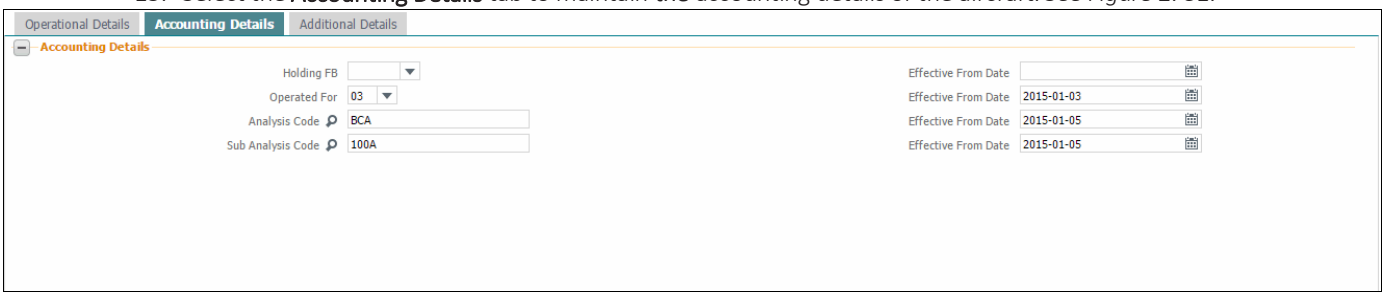



*Figure 2.51 Entering accounting details for the aircraft*

To enter accounting details for aircraft,

16. Use the **Holding FB** drop-down list to select the posting finance book.
17. Use the **Operated For** drop-down list to specify the customer for whom the aircraft is operated.
18. Enter a valid analysis code of the finance **book** defined in the "Account Based Budget" business component in the **Analysis Code** field.
19. Enter the sub-analysis code **within** the analysis code in the **Sub Analysis Code** field.
20. Enter the **Effective From** dates **for** the above in their respective fields.
21. Select the **Additional Details** tab to record the additional details of the aircraft. *See Figure 2. 52.*

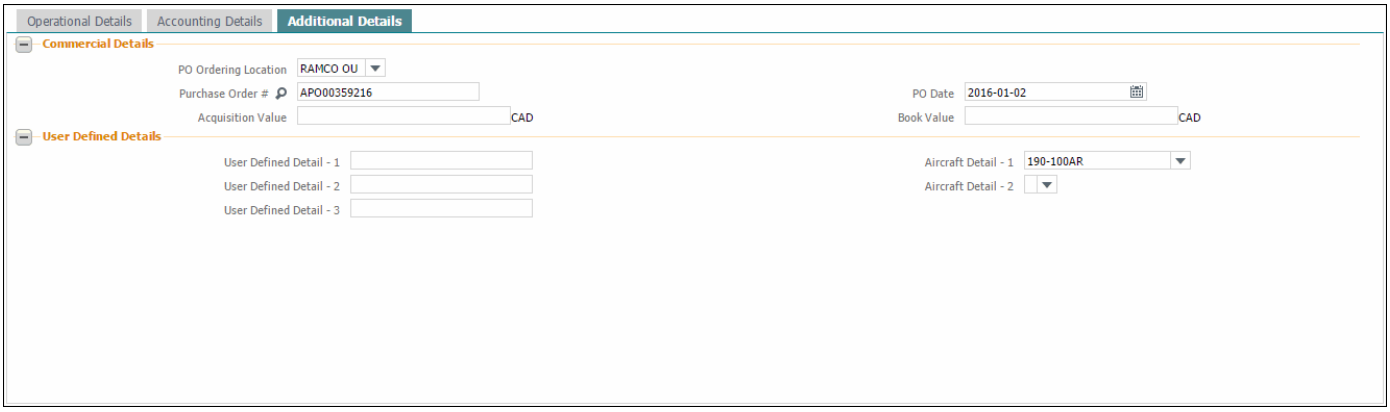



*Figure 2.52 Entering additional details for the aircraft*

To enter commercial details for aircraft,

22. Use the **PO Ordering Location** drop-down list box to specify the ordering location in which the purchase order was raised.
23. Enter purchase order details such as the purchase order number, purchase order date, cost of acquisition of aircraft and the present value of the aircraft in the **Purchase Order #, PO Date, Acquisition Value** and **Book Value** fields.

    *Note: If Fixed Asset Management business process interaction exists, the user will not be allowed to enter "Acquisition Value" and "Book Value" for the aircraft.*
24. Click the Create Aircraft Record pushbutton.

To enter further information for aircraft,

- Select **Edit Technical & Attribute Parameters** link to define the technical and attribute parameter details for aircraft.
- Select **Edit Consumption & Range Parameters** link to define the consumption and range parameter details for aircraft.
- Select **Edit Aircraft Ownership History** link to record ownership history for an aircraft.
- Select **Edit Aircraft Maintenance History** link to record maintenance history for an aircraft.
- Select **Edit Aircraft Record** link to edit the aircraft information.
- Select **Build Aircraft Configuration** link to define configuration details for the aircraft.
- Select **Edit Notes** link to enter notes for aircraft.
- Select **Edit Reference Details** link to modify the reference details.
- Select **Update Aircraft Configuration** link to initialize and update the aircraft configuration details.
- Select **Maintain Asset Identifier for Aircraft** link to associate asset number and asset tag to the aircraft.

**Refer to the topic, "Initializing and updating aircraft/component configuration" for more details.**

## Defining technical and attribute parameters for aircraft

1. Select Edit Technical & Attribute Parameters link in the Create Aircraft Record page.
2. Enter the technical or attribute parameter that you wish to associate to the aircraft in the **Parameter** field.
3. Select the source of parameter inheritance from the **Parameter Source** drop-down list box. The parameter source could be "Calculated", "Flight Log", "Manual" or "Parent".

   *Note: The system displays the present value of the parameter with date and time.*

4. Click the **Edit Parameters** pushbutton.

To initialize technical and attribute parameter values,

- Select **Initialize Parameter Values** link.

## Deleting technical and attribute parameters for the aircraft

1. Select the parameters you **want** to delete for the aircraft in the multiline.
2. Click the **Delete** icon in the tool **bar** above the multiline to delete the parameters selected in the multiline.

   *Note: The system allows for deletion of parameters, if the process parameter "Allow deletion of parameters for Aircraft and Component" under the entity "Manage Technical Records" of the entity type 'Tech Records Process Ctrl' in the Define Process Parameters activity of Common Master is 'Yes'.*

## Initializing technical and attribute parameter values for aircraft

You can initialize the technical and attribute parameter values for the aircraft, if the aircraft had already been in use.

1. Select Initialize Parameter Values link in the Edit Technical & Attribute Parameters page.
2. Enter the current value of the **parameter** in the **Present Value** field.
3. Enter the date and time on which the **parameter** value was updated in the **As Of Date** and **As Of Time** fields.
4. Click the Initialize Parameters **pushbutton**.

## Defining consumption and range parameters for aircraft

1. Select Edit Consumption & Range Parameters link in the Create Aircraft Record page.
2. Enter the consumption or range parameter **that** you wish to associate to the aircraft in the **Parameter** field.
3. Use the **Life Parameter** drop-down list box and set **the** field to "Yes", to set the parameter as a life parameter.

   *Note: Life Parameter is a parameter that needs to be tracked for knowing the remaining life of a component.*
4. Select the source of parameter inheritance from the **Parameter Source** drop-down list box. The parameter source could be "Flight Log", "Manual" or "Computed".
5. Enter the minimum and maximum range of values in the **Range: From** and **Range: To** fields for the range parameter.
6. Enter the **Average Daily Utilization** or **Forecast Factor** for the consumption parameter. Based on the average daily utilization or the forecast factor, the maintenance activity is forecasted.
7. Enter the **Ultimate Life Value**, if you have set the **consumption** parameter as **Life Parameter**.
8. Enter the formula to be associated to the consumption **parameter** in the **Formula #** field.
9. Use the **Warranty Tracking** drop-down list box to specify whether the warranty tracking on the aircraft is based on the parameter value.
10. Specify whether the parameter update is **mandatory** or not, by selecting appropriate option from the **Parameter Update** drop-down list box.
11. Select the parameter update mode from **Update Mode** drop-down list box, which could be "Delta" or "New".
12. Click the **Edit Parameters** pushbutton.

To initialize consumption and range parameter values for aircraft,

- Select Initialize Parameter Values link.

## Deleting consumption and range parameters for the aircraft

1. Select the parameters you want to delete for the aircraft in the multiline.
2. Click the **Delete** icon in the tool bar above the multiline to delete the parameters selected in the multiline.

*Note: The system allows for deletion of parameters, if the process parameter "Allow deletion of parameters for Aircraft and Component" under the entity "Manage Technical Records" of the entity type 'Tech Records Process Ctrl' in the Define Process Parameters activity of Common Master is 'Yes'.*

## Initializing consumption and range parameter values for aircraft

You can initialize the consumption and range parameter values for the aircraft.

1. Select Initialize Parameter Values link in the Edit Consumption & Range Parameters page.
2. Enter the current value of the parameter in the **Present Value** field.
3. Enter the date and time on which the parameter value was updated in the **As Of Date** and **As Of Time** fields.
4. Click the Initialize Parameters pushbutton.

## Recording ownership history of aircraft

If the aircraft was already in use by another airline operator, you can record the aircraft ownership history details.

1. Select Edit Aircraft Ownership History link in the Create Aircraft Record page.
2. Enter **Aircraft Reg #** field to specify the aircraft registration number given to the aircraft by the previous airline operator.
3. Enter the number of registration certificate of the aircraft in the **Reg. Cert #** field.
4. Enter the **Country** in which the aircraft was registered and the **Owner** of the aircraft.
5. If the aircraft was taken on lease, enter **Lessor** and **Lessee** fields.
6. Enter the range of dates in **Period – From** and **Period – To** fields to indicate the duration in which the previous operator used aircraft.
7. Click the Edit Aircraft Ownership History pushbutton.

## Recording maintenance history of aircraft

If the aircraft was already under operation before it was inducted into the system, the details of last major maintenance activity that was carried out on aircraft can be recorded.

1. Select Edit Aircraft Maintenance History link in the Create Aircraft Record page.

To record the details of last major maintenance work performed on aircraft,

2. Enter the **Maintenance Program number#** that was last performed on the aircraft.
3. Specify the cycle, schedule number, work unit number, work unit type and the date on which the program was last performed by entering **Cycle #, Sch #, Work Unit #, Work Unit Type** and **Last Performed Date** fields.
4. Enter the **Last Performed Value** of the aircraft parameter.
5. Click the Edit Aircraft Maintenance History pushbutton.

## 2.8.6 Changing aircraft registration number

The aircraft registration number is the primary identifier for an aircraft. Maintenance and regulatory records related to an aircraft are typically maintained with respect to the aircraft registration number. This activity enables you to change the registration number of the aircraft.

1. Select Change Aircraft Reg # under Aircraft business component. The Select Aircraft page appears.
2. Provide filter criteria to search for **Aircraft Reg #** for **changing** the registration number.

   *Note: The system retrieves all the aircraft that are in "Under Creation" or "Active" status. The system does not retrieve the aircraft records that are in "Frozen" status.*

3. Select the **Change Aircraft Reg #** link in the **Select Aircraft** page or click the hyperlinked aircraft registration number in the same page, to change the registration **number** of the aircraft. The **Change Aircraft Reg #** page appears. *See Figure 2. 53.*

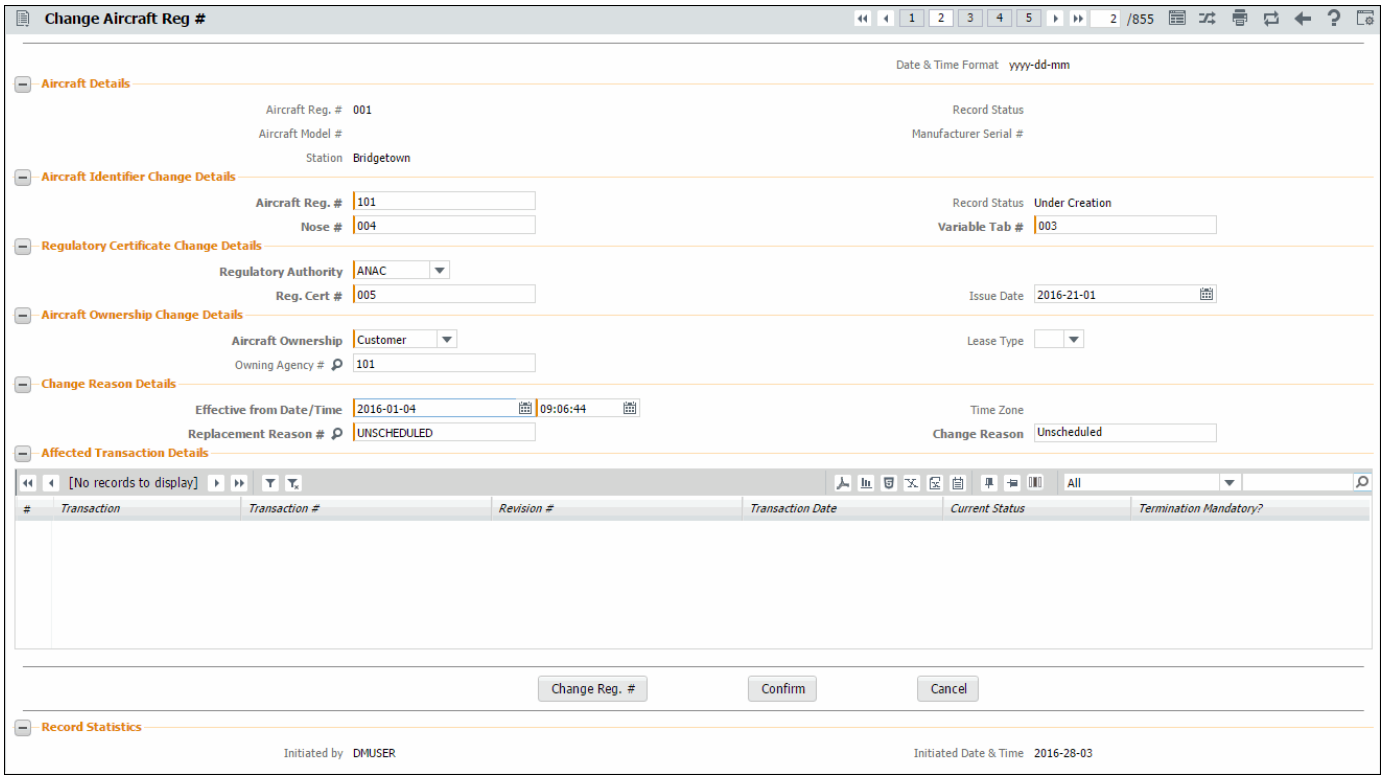



*Figure 2.53 Changing aircraft registration number*

4. Enter the new registration number of the aircraft in the **Aircraft Reg #** field. The 'Mode of Usage' for the aircraft specified here must be "Online" which indicates that the **aircraft** is in main base.
5. Enter the **Nose #** and **Variable Tab #** for the **aircraft**.

   *Note: If you are specifying a new variable tab number, ensure that the tab number is unique for the manufacturer number associated to the aircraft model.*

6. Specify the **Regulatory Authority** to which the **aircraft** belongs.
7. Enter the registration certificate of the aircraft in the **Reg. Cert #** field.
8. Enter the date on which the registration certificate is **issued** to the aircraft, in the **Issue Date** field.
9. Use the **Aircraft Ownership** drop-down list box to **indicate** the ownership type of the aircraft. The system lists the following options:

- Owned – Select this option to indicate that the aircraft is owned.
- Leased – Select this option to indicate that the aircraft is taken on lease.
- Leased out – Select this option to indicate that the aircraft is leased out to a third party.

- Customer – Select this option to indicate that the aircraft is owned by customer.

10. Use the **Lease Type** drop-down list box to select the **type** of lease if you have selected "Leased" or "Leased out" in the **Aircraft Ownership** field. The system lists the following options:

- Wet - indicates that the lessee should maintain the aircraft.
- Dry - indicates that the lessor should maintain the aircraft.

11. Enter the **Owning Agency** of **the** aircraft.
12. Enter the date and time from which the newly created aircraft registration number is effective, in the **Effective from Date/Time** field.
13. Enter the reason for removal of a **component** from the aircraft in the **Replacement Reason #** field.
14. Enter the reason for changing aircraft registration number in **Change Reason** field.
15. Click the **Change Reg. # pushbutton** to change the registration number of aircraft.
16. Click the **Confirm** pushbutton to **confirm** the change in registration number of aircraft.

## 2.8.7 Creating aircraft group

Creating an aircraft group facilitates the grouping of aircraft across models.

1. Select Create Aircraft Group under Aircraft business **component**. The Create Aircraft Group page appears.
2. Provide a unique identifier for the aircraft group **in** the **Aircraft Group #** field.
3. Enter **the** Group Description.
4. In the **Aircraft Group List multiline**, enter **Aircraft Reg #** of the aircraft that you wish to associate to the aircraft group.

   *Note: Ensure that the record status of the aircraft is not "Frozen".*

5. Click the Create Aircraft Group **pushbutton**.

# 2.9 Building component and aircraft configuration

The aircraft or component inherits the configuration defined for the model or part number. The components or sub-assemblies are fitted to the respective position codes as defined in the configuration hierarchy. When the components or sub-assemblies are fit, the configuration depicts the actual structure of the aircraft or component. This can be referred as the physical configuration, which represents the entire configuration for the object.

## 2.9.1 Building component configuration

Components are the building blocks for the systems in the aircraft. They are items or equipment that is attached to a parent entity (which can be the aircraft or another component) and moves from one parent to another during its active life. You can define the configuration details for a component by specifying component attachment and piece part list details.

1. Select Build Component Configuration **under** Configuration business component. The Select Component page appears.
2. Provide filter criteria to **search** for **Component #** for building component configuration.
3. Select the **Build Component Configuration** link in the **Select Component** page or click the hyperlinked component number to define **configuration** details. The **Build Component Configuration** page appears. *See Figure 2. 54.*

### Tree Structure:

The system displays the configuration details of the component in the form of a tree structure with 'Component #' as a parent level node. On expanding the node, the details such as "Position Code", "Part #", "Part Description", "Part Serial #" and "Component ID" are displayed. If a component exists for a position code, and if a Piece Part is defined for that position code level in the configuration, the system displays the first level position code along with a folder for Piece Part #. The tree display format is as shown below:

- Component #

  - Position Code II Part # II Part Description II Serial # II Component #

  - Piece Parts

    Part # II Part Description II Quantity II Position # II Position Description

### Color Identifiers for Position Codes:

- Display the record in 'Dark Green' color, if the position code is attached.
- Display the record in 'Red' color, if the position code is empty and 'Component Mandatory' is 'Yes'.
- Display the record in 'Black', if the position code is empty and 'Component Mandatory' is 'No'.
- Display the record in 'Italics', if the position code is 'Inactive'.

### Color Identifiers for Piece Parts:

- Display the record in 'Dark Green' color, if the Piece Part quantity is greater than '0'.
- Display the record in 'Red' color, if the Piece Part quantity is equal to '0'.

*Note: The part # is available/displayed in the **Build Component Configuration activity pages** only if the Enable Manufacturer Part # control in transaction" parameter is set to "No" in the Logistics Common Master' business component, in the Set Inventory Process Parameters activity of the Logistics Common Master component. Conversely, the manufacturer part # and manufacturer # fields are available/displayed only if the Enable Manufacturer Part # control in transaction" parameter is set to "Yes" in the Logistics Common Master' business component, in the Set Inventory Process Parameters activity of the Logistics Common Master component. On selection of a node in the tree structure, the system automatically retrieves the corresponding component details in the "Component Details" group box, and the configuration details in the "Next Level Details" multiline.*

4. Enter the **Seq #** for the **position** code.
5. Enter **Position Code** field to identify the position of the part number in the component configuration.
6. Set the status of position code in **Position Code Status** field. You can activate or inactivate the position code by assigning "Active" or "**Inactive**" status.
7. Enter the part number to be **associated** to the component configuration in the **Part #** field.
8. The **Mfr. Part #** and **Mfr. #** of the child component to be attached to the position code. It is mandatory that you enter the manufacturer part for the child **component**.

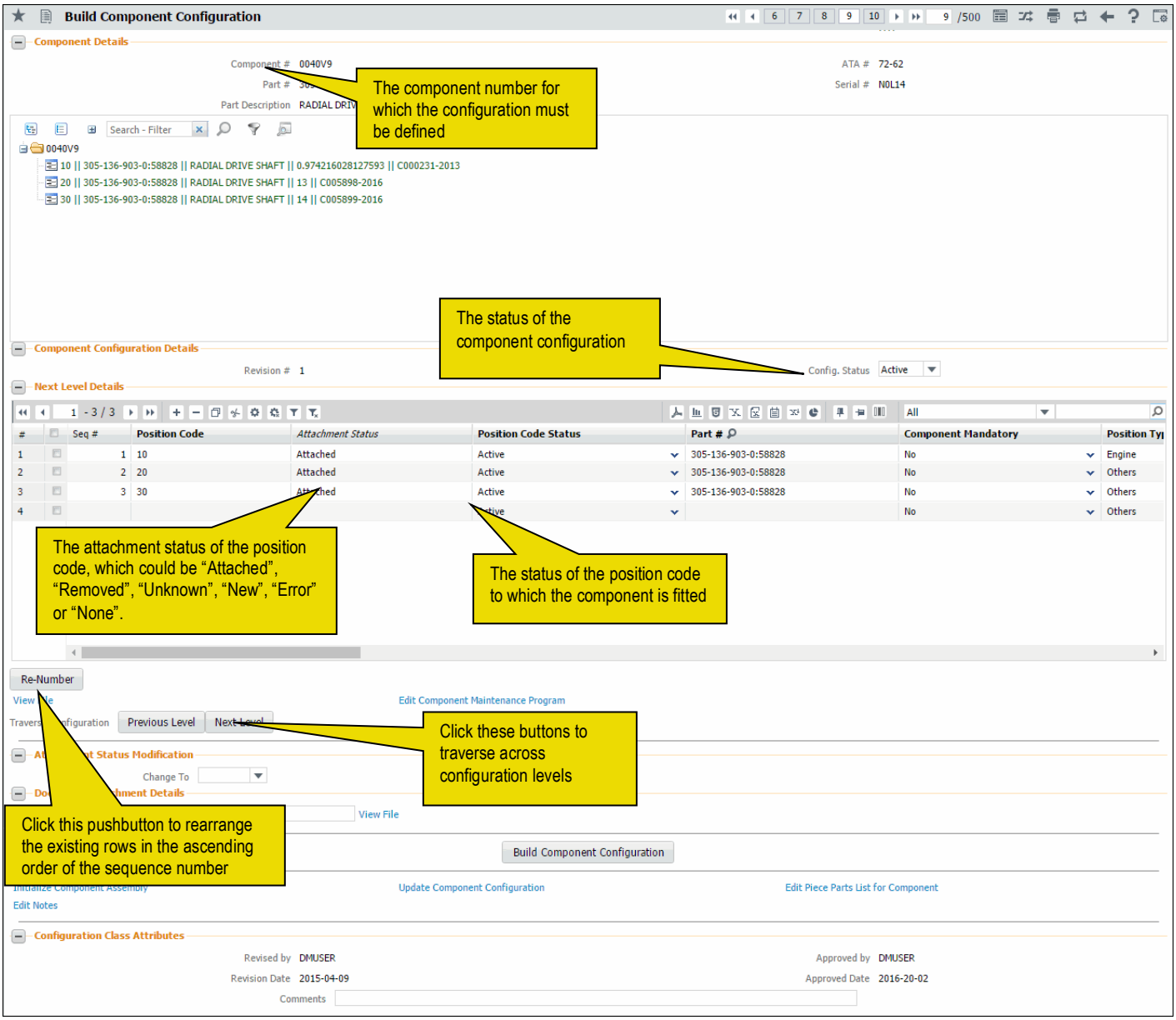



*Figure 2.54 Building component configuration*

9. Use the **Component Mandatory** drop-down list box to indicate whether a component must be fitted to the position code or not.
10. Select the type of the position code from the **Position Type** field, which could be "APU", "Engine", "Landing Gear" or "Others".
11. Enter **ATA #** field to specify the ATA chapter to which the position code belongs.
12. Use the **Equipment Category** drop-down list **box** to select the category of the equipment that can be attached to the position code in the component.

13. Specify the drawing details of the part by entering **Drawing #** and **File Name** fields in the multiline.
14. Click **Previous Level** and **Next Level pushbuttons** to traverse across component configuration levels.
15. Use the **Change To** drop-down list box to **change** the attachment status of the position code. The system provides the options "New" and "Unknown".

    *Note: You can change the attachment status of the position code, only if the attachment status of the position code is "Removed" in the "Component Configuration details" multiline.*

16. Click the **Build Component Configuration** pushbutton.

To provide further details for component configuration,

- Select **Initialize Component Assembly** link to **attach** components to component configuration.
- Select **Edit Piece Part List for Component** link to **identify** the piece part list for component configuration.
- Select **Edit Notes** link to enter notes for component **configuration**.

## Initializing component assembly

You can attach components to the position codes in the component configuration to initialize component assembly.

1. Select **Initialize Component Assembly** link in the **Build Component Configuration** page. The **Initialize Component Assembly** page appears. *See Figure 2. 55.*

The system displays the configuration details of the component in the form of a tree structure.

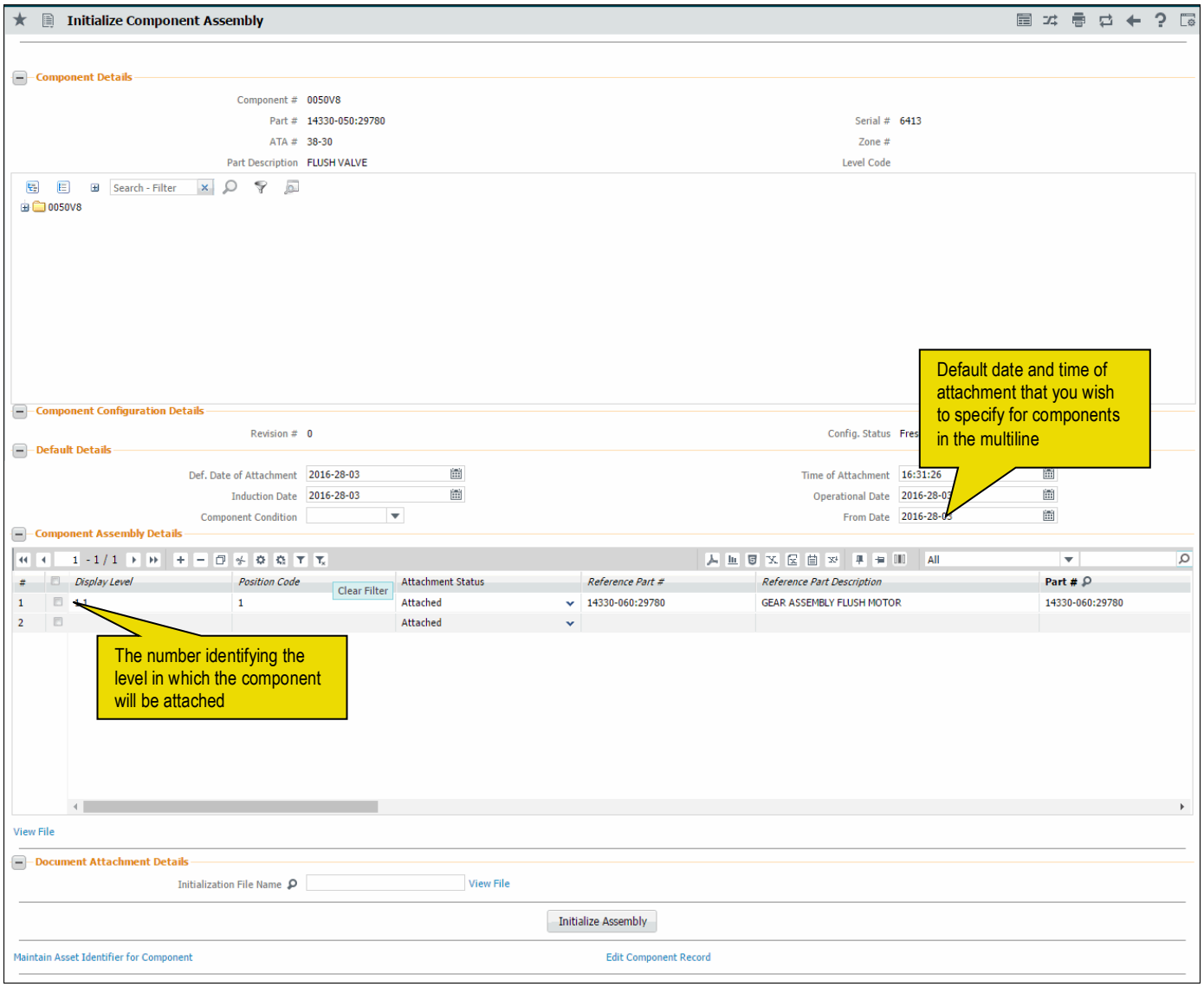


*Figure 2.55 Initializing component assembly*

2. In the Component Assembly Details multiline,
3. Set the Attachment Status of the position code to one of the following:

- Attached – Select this option if the component is attached to the position code.
- Removed – Select this option if no component is attached to the position code.
- New – Select this option if the position code is newly created.
- Unknown – Select this option if the serial number of the component attached to the position code, is unknown.

> *Note: The component assembly details can be entered only for position codes with attachment status as "Attached".*

4. Enter the Part # specified for the position code.
5. Enter the Mfr. Part # and Mfr. # of the part specified for the position code. It is mandatory that you enter the manufacturer part for the child component.
6. Enter the number of the component associated to the component configuration, in the Component # field.
7. Enter the Manufacturer Serial # of the component.
8. Enter the Date Of Attachment and Time Of Attachment fields to specify the date and time of component attachment.
9. Set the Component Condition drop-down list box to "New", "Serviceable", "Unserviceable", "Overhauled" or "Phased Out" to record the condition of the component.
10. Enter the date from which the component is in the condition specified in the "Component Condition" field in the From Date field.
11. Specify the drawing details of the component by entering Drawing # and File Name fields in the multiline.
12. Click the View File link to view the file details.
13. Click the Initialize Assembly pushbutton.

> *Note: You can define/change configuration details in the Initialize Component Assembly page only if the component configuration is in "Fresh" status and/with revision # of '0'. After activation of configuration, details of configuration can be updated only using the Update Component Configuration page.*

To enter further information for component,

- Select Maintain Asset Identifier for Component link, to associate asset number and asset tag to the newly created Component ID.
- Select the Edit Component Record link, to modify the component details.
- Select the Update Component Configuration link to update configuration details of component with revision number => 0.

## Identifying piece part list for component configuration

The piece part list for the component configuration can be defined.

1. Select Edit Piece Parts List for Component link in the Build Component Configuration page.
2. Enter the Seq # for the piece part.
3. Enter the Position # corresponding to the reference part, if Reference Part # is duplicated.
4. Enter the Reference Part # in the piece part configuration. You cannot modify the reference part.

5. Enter the **Ref. Quantity** indicating the quantity of reference parts identified for the Piece Part configuration.
6. Select the **Position Type** indicating the status of **the** position code of the reference part as 'Engine', 'APU', 'Landing Gear' or 'Others'.
7. Select the **Position Status** of the reference **part** as 'Active' or 'Inactive'.
8. Click the **Re-Number** pushbutton to insert Seq # in the multiline and rearrange the existing rows in the ascending order of the Seq #.
9. Click the Edit Piece Parts List **pushbutton**.

## 2.9.2 Building aircraft configuration

Configuration represents the structure of the equipment. In the case of aircraft, configuration is the hierarchy of the position codes and part numbers representing the various systems of the aircraft. Components can be fitted to the position codes in the aircraft, depending on the various rules defined for the position codes.

1. Select Build Aircraft configuration **under** Configuration business component. The Select Aircraft page appears.
2. Provide filter criteria to search for Aircraft # for building aircraft configuration.
3. Select the **Build Aircraft Configuration** in the **Select Aircraft** page or click the hyperlinked aircraft number in the multiline to build aircraft **configuration**. The **Build Aircraft Configuration** page appears. *See Figure 2. 56*.

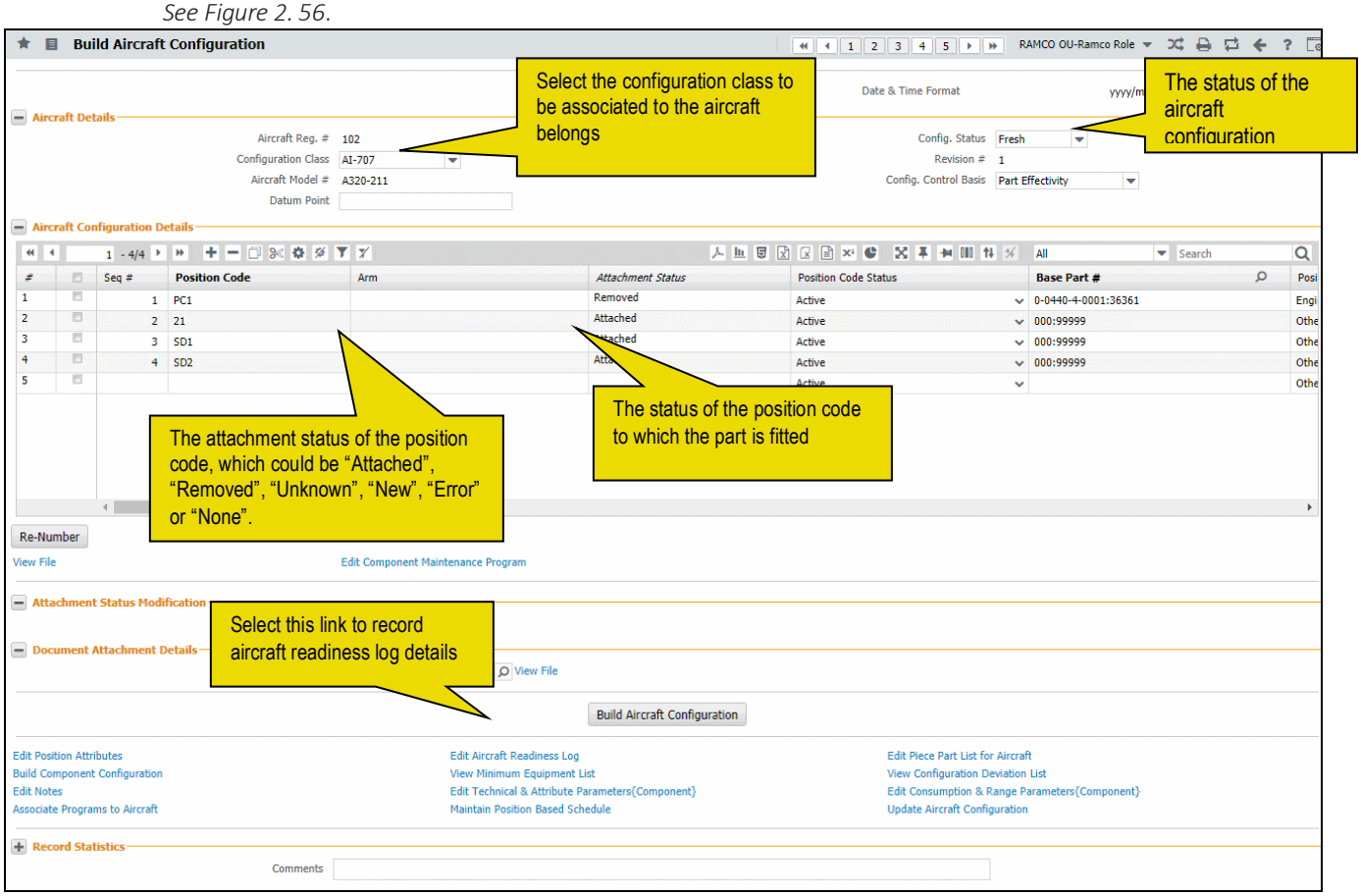



*Figure 2.56 Building aircraft configuration*

In the **Aircraft Details** multiline,

4. Use the **Conf. Status** drop-down list box to select the configuration status of the aircraft. Select
   - "Fresh", to indicate configuration for the aircraft **has** already been defined.

- "Cancelled – When the aircraft configuration is cancelled. Select this option if you wish to disable this aircraft configuration from future reference in other activities.
- "Active", Active – When the aircraft configuration has been approved using the "Approve Model & Aircraft Configuration" activity.

5. Use the **Configuration Class** drop-down list box to select the configuration class to be associated to the aircraft registration number. The system lists the configuration classes that are associated to the selected aircraft model. If the Configuration Class is modified for an Aircraft Configuration, the system compares the structure of the new configuration class and the aircraft model combination with the existing configuration of the aircraft. Also, the system automatically copies all the configuration rules defined for the new configuration class and the aircraft model combination to the aircraft configuration.
6. Use the **Config. Control Basis** drop-down list box to indicate the basis for attaching a part to the aircraft during maintenance. The drop-down list displays the following: Part Effectivity and Config. Rules. If you select;

- Config. Rules, the system allows you to attach only those parts to the position code that satisfy specific configuration rules (interchangeability, intermixing, ETOPS Twin position and permitted serial #) as well as the condition set for the Part Effectivity option as explained next.
- Part Effectivity, the system allows you to attach only those parts that are effective for the aircraft model to the position code. (Note that the part effectivity must be pre-defined in the Maintain Part Effectivity page.)

7. Enter **Datum Point** that is the origin point or an imaginary point in the aircraft from which the distance of the component / part is calculated.

In the **Aircraft Configuration Details** multiline,

8. Enter the **Seq #** for the position code.
9. Enter **Position Code** field to identify the position of the part number in the aircraft configuration.
10. Enter **Arm** that is the length between the Datum point and the component/part in the aircraft.
11. Set the status of position code in **Position Code Status** field. You can activate or inactivate the position code by assigning "Active" or "Inactive" status.
12. Enter the part number to be associated to the aircraft configuration in the **Part #** field.
13. Select the type of the position code from the **Position Type** field, which could be "APU", "Engine", "Landing Gear" or "Others".
14. Use the **Component Mandatory** drop-down list box to indicate whether a component must be fitted to the position code or not.
15. Select the **Weight Mandatory** drop-down list box to indicate whether the component/part attached at the position code to be considered for Weight & Balance analysis of the aircraft.
16. Enter **Zone #**, **Position Formula #**, **ATA #** fields to specify the zone, position formula and ATA chapter details for the position code.
17. Use the **Equipment Category** drop-down list box to select the category of the equipment that can be attached to the position code in the aircraft.
18. Specify the drawing details of the part by entering **Drawing #** and **File Name** fields in the multiline.
19. Enter any remarks regarding the configuration in the **Remarks** field.

In the Attachment Status Modification group box,

20. Use the **Change To** drop-down list box to change the attachment status of the position code. The system provides the options "New" or "Unknown".

> *Note: You can change the attachment status of the position code, only if the attachment status of the position code is "Removed" in the "Aircraft Configuration Details" multiline.*

21. Click the Build Aircraft Configuration pushbutton.

To provide further details for aircraft configuration,

- Select **Edit Position Attributes** link to define aircraft position attributes.
- Select **Edit Aircraft Readiness Log** link to record aircraft readiness log details.
- Select **Edit Piece Part List for Aircraft** link to identify the piece part list for aircraft configuration.
- Select **Build Component Configuration** link to build component configuration.
- Select **View Minimum Equipment List** link to view the minimum equipment list identified for aircraft model configuration.
- Select **View Configuration Deviation List** link to view the configuration deviation list identified for aircraft model configuration.
- Select **Edit Notes** link to enter notes for aircraft configuration.
- Select **Edit Technical & Attribute Parameters{Component}** link to edit the technical and attribute parameter details for the component.
- Select **Edit Consumption & Range Parameters{Component}** link to edit the consumption and range parameter details for the component.
- Select **Associate Programs to Aircraft** link to associate maintenance programs to aircraft.
- Select **Maintain Position Based Schedule** link to modify the position based schedule for the part.
- Select **Update Aircraft Configuration** link at the bottom of the **page** to initialize and update the configuration details for the aircraft.

## Initializing and updating aircraft/component configuration

In this page, you can update the configuration details for an aircraft. You can also modify the configuration details for the aircraft after component removal and replacement transactions.

This page can also be used to update the configuration details of the components attached to the aircraft.

> *Note: You cannot update the configuration details for an aircraft/component under the following circumstances:*

- If the record status of the aircraft is “Frozen”.
- If the component is attached to an **aircraft** with “Frozen” record status.

> *Note: The configuration details of only the latest revision of the aircraft/component are retrieved in this page, regardless of the configuration status. You can modify/update these details, if required.*

1. Select the **Update Configuration** link in the **main** page. The **Initialize & Update Configuration** page appears. *See Figure 2. 57.*

The system displays the aircraft/component details in the **Maint. Object Details** group box, as **retrieved** from the previous page.

The system displays the configuration details for the aircraft/component in the form of a tree **structure**. The details such as Position Code, Part #, Part Description, Part Serial # and Component ID are displayed in the tree structure.

On selection of a particular node in the tree structure, the system automatically retrieves the configuration details, initialization/replacement details and lower assembly details in this page.

In the **Display Option** group box:

2. Use the **Positions** drop-down list box to specify the position or the actual location from which the component is attached, removed or replaced. The system lists the options: “All”, “Free Positions”, “Mandatory Positions” and “Open Mandatory Positions”. Select,

- “All”, to find components attached to all positions at the **specified** level in the aircraft configuration.

- "Free Positions", to find components not attached in all non-mandatory positions at the specified level in the aircraft configuration.
- "Mandatory Positions", to find components attached to all mandatory positions at the specified level code in the aircraft configuration.
- "Open Mandatory Positions", to find components not attached to all mandatory positions in the specified level code in the aircraft configuration.

3. Select the Level Code to which the part must be attached, removed or replaced and click the Get Details pushbutton to retrieve the lower assembly details of the level.

In the Initialization / Replacement Details group box:

4. Set the Removal Type as

- Others: To indicate that the part is being attached to the component configuration.
- Scheduled: If the part is being removed to carry out preventive maintenance operations such as lubrication or the component removal is a scheduled removal.
- Unscheduled: If the component is removed to carry out maintenance activity based on the outcome of equipment parameter inspections or on the breakdown of the equipment.

5. Enter the Reason # for the attachment of the part.

In the Lower Assembly Details multiline:

6. Use the Component Mandatory drop-down list box to indicate whether the part is essential for the aircraft configuration. Select "Yes" to indicate the part is mandatory for the aircraft and "No" otherwise.

7. Set the Attachment Status of the position code to one of the following:

- Attached – Select this option if the component is attached to the position code.
- Removed – Select this option if no component is attached to the position code.
- New – Select this option if the position code is newly created.
- Unknown – Select this option if the serial number of the component attached to the position code, is unknown.
- Error – Select this option if the component attached to the position code is different from the actual intended component.

> *Note: You cannot modify the existing attachment status, if any component is currently attached to the position code.*

> *If this field is blank by default and if no component is attached to the position code currently, you can set the attachment status only to "Unknown", "New" or "Removed". If you set the field to "Removed", ensure that the condition of the outgoing component is "Unserviceable" or "Phased-Out".*

8. Set the Replacement Type as

- Attachment Only: To specify that the component must be attached to the component configuration.
- Remove Only: To remove the component from the assembly.
- Replacement Only: To replace a component/part with incoming component/part.

9. Enter the Incoming Part #, Incoming Serial # and the Incoming MSN # of the part that must be attached to the component.

> *Note: The Installed Part # must be effective or conditionally effective to the aircraft or the higher assembly maintenance object.*

10. Use the Incoming Condition drop-down list box to specify the condition of the incoming component, which could be "New", "Overhauled", or "Serviceable". Apart from this, the system also provides the

options “Unserviceable” or “Phased Out” if the condition of the main component is “Unserviceable” or “Phased Out”.

*You can attach components that are in “Unserviceable” or “Phased Out” condition, only if the main component or the NHA component is also in “Unserviceable” condition.*

11. Enter the Attachment Date and Attachment Time.

12. Set the **Removal Type** as “Others” for **attaching** the part.

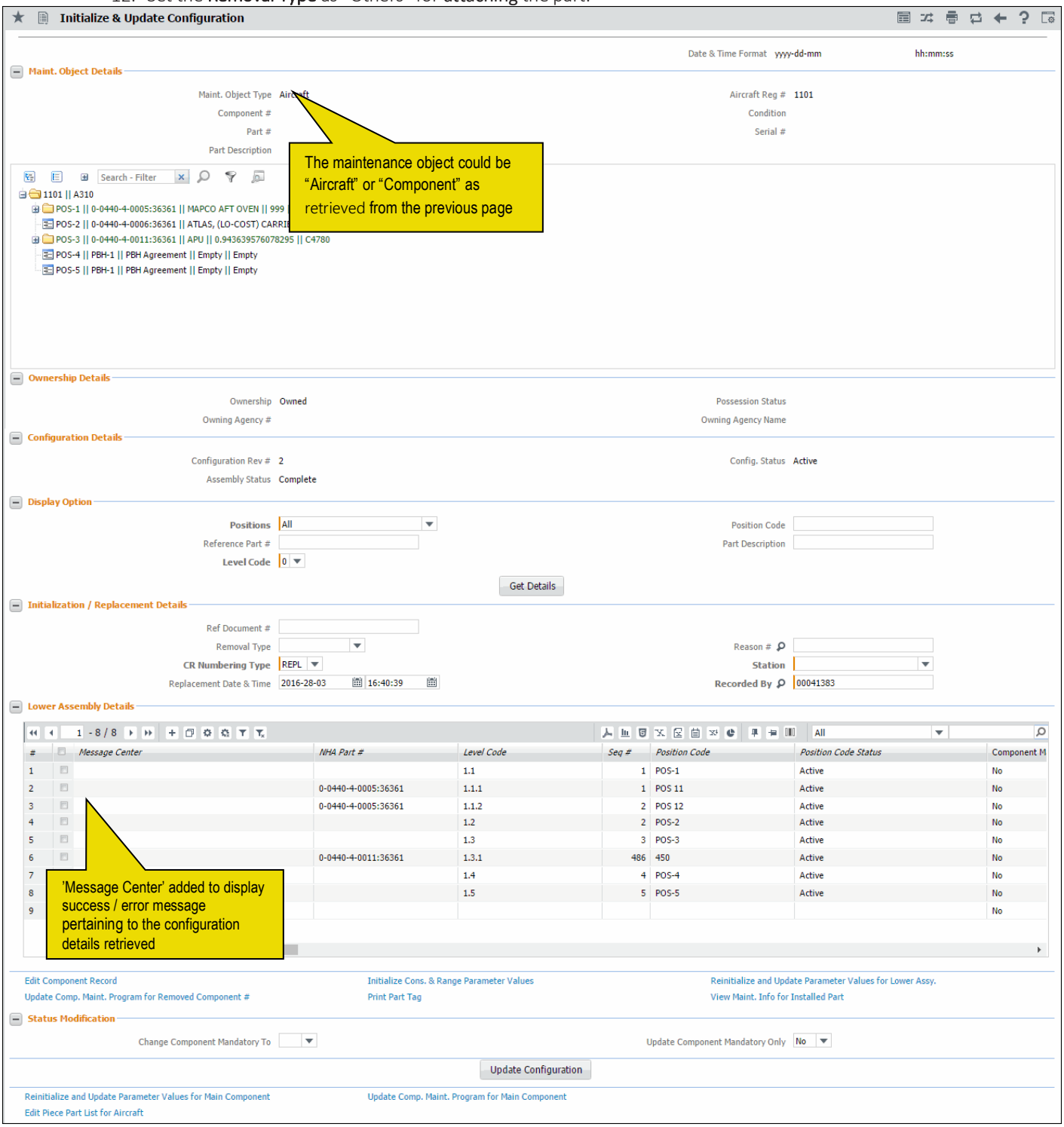



*Figure 2.57 Initializing and updating aircraft/component configuration*

13. Enter the **Reason #** for attaching, removing or **replacing** the part. Enter the **Acceptance Ref**. while attaching a part to aircraft. The acceptance reference may be a document or a text.

*Note: While attaching a part to an aircraft or a Component, the system ensures that the Part # of the*

*installed Component is effective to the Aircraft / Component #. Some parts are identified as Effective to Aircraft or Component based on specific conditions. If the "Effectivity Status" of the installed part or the part # of the child component attached to installed part # / installed serial #, is set as "Conditional Effective" for any of the higher assembly maintenance object, then as authentication for verification of the conditions before attachment, system will mandate an Acceptance Reference.*

14. Enter the **Remarks** pertaining to the component **replacement** transaction.
15. In the **Status Modification** group box, use the **Change Component Mandatory To** drop-down list box to set the mandatory status of all or many **components** in the **Lower Assembly Details** multiline at one time. The system sets the Component Mandatory attribute to "Yes" or "No" as per the value selected here for components for which you have not specified/modified.
16. Check the **Update Component Mandatory Only** box to **exclusively** update the **Component Mandatory** attribute of the component in the Lower Assembly Details multiline and ignore the validity of the rest of the details entered by the user.
17. Check the **Update Ownership for Child Components** box below the multiline to automatically update ownership details of child components when updating configuration of parent **components**.
18. Click the **Update Configuration** pushbutton to update the configuration details of the aircraft/component. The system generates a component replacement transaction of the selected numbering type and updates the status of the transaction to "Confirmed".

## Defining aircraft configuration rules

You can define configuration rules for a position code in the aircraft. Configuration rules govern the interchanging and intermixing of parts and the list of ETOP twin position codes.

1. Select Edit Position Attributes link in the Build Aircraft Configuration page. The Edit Position Attributes page appears.

The system displays the aircraft configuration details in the form of a tree structure. The details such as Position Code, Part #, Part Description, Part Serial # and Component ID are displayed.

On selection of a node in the tree structure, the system automatically retrieves the corresponding aircraft position details in the "Display Filter" group box and the "Configuration Details" multiline.

2. Provide filter criteria in **Display Filter** group box, to **define** configuration rules for the position code.
3. Set the **Cargo** drop-down list box to "Yes" to **indicate** that the position code is in the cargo aircraft.
4. Set the **RVSM** drop-down list box to "Yes" to indicate that the position code is in the aircraft, which fly in the Reduced Vertical Separation Minimum limit.
5. Enter **Zone #, Position Formula #, ATA #** fields to specify **the** zone, position formula and ATA chapter details for the position code.
6. Enter the remarks regarding the **configuration** in the **Remarks** field.
7. Click the Edit Position Attributes **pushbutton**.

To enter further information,

- Select **Edit Part Intermixing Rules** link to define part intermixing rules for the position code.
- Select **Edit Part Interchangeability Rules** link to define part interchangeability rules for the position code.
- Select the **Edit Permitted Serial # List** link at the bottom of the page to define the permitted serial number details for the selected position code.
- Select **Edit ETOP Twin Positions** link to identify ETOP twin positions for the position code.

## Defining part intermixing rules for aircraft configuration

1. Select Edit Part Intermixing Rules **link** in the Edit Position Attributes page. The Edit Part Intermixing Rules page appears.

2. Select the **Reference Part #** for **whose** position code, the dependent position codes must be defined.
3. Click the **Get Details** pushbutton to retrieve the intermixing part details that are already defined for the reference part number.
4. Enter **Dependent Position Code,** which is the **position** code dependent on the reference position code and the reference part number.
5. Enter **Dependent Part #** field, which is the part number **that** must be fitted to the dependent position code, when the reference part number is fitted to the reference position code.
6. Click the Edit Part Intermixing Rules **pushbutton**.

## Defining part interchangeability rules for aircraft configuration

1. Select Edit Part Interchangeability Rules link in the Edit Position Attributes page. The Edit Part Interchangeability Rules page appears.
2. Enter **Interchangeable Part #**, the part that can be **fitted** in place of the reference part number, to the reference position code.
3. Enter **Order of Preference**, the preferred order in which the interchangeable part must be considered for fitting in the reference position code.
4. Click the Edit Part Interchangeability Rules **pushbutton**.

To proceed,

- Select **View Alternate Part No** link to view the alternate part details for the interchangeable part.

## Identifying ETOP twin positions for parts in aircraft configuration

1. Select Edit ETOP Twin Positions link **in** the Edit Position Attributes page. The Edit ETOP Twin Positions page appears.
2. Enter **Twin Position Code** field. This is the position code that is parallel to the reference position code. For more information, refer Configuration Online Help.
3. Enter the part number associated to the twin position code in the **Part #** field.
4. Click the Edit ETOP Twin Positions **pushbutton**.

## Identifying permitted serial numbers for aircraft configuration

You can identify the serial numbers that are allowed for a particular position code on an aircraft. You can select the reference position code in the “Edit Position Attributes” page and enter details of permissible serial numbers.

1. Select Edit Permitted Serial # List link in **the** Edit Position Attributes page. The Edit Permitted Serial # List page appears.
2. Enter the **Part #** field to denote the part **number** to which the serial number belongs.
3. Enter the range of manufacturer serial **numbers** in the **From MSN #** and **To MSN #** fields, to indicate the serial numbers that can be allowed at the reference position code.
4. Click the **Edit Serial # List pushbutton**.

## Identifying piece part list for aircraft configuration

1. Select Edit Piece Part List for Aircraft link in **the** Build Aircraft Configuration page.
2. Enter the piece part **number** in the **Piece Part #** field.
3. Specify the **Quantity** of the piece part **identified** for model.
4. Enter **Zone #** field to specify the zone to which the piece part belongs.
5. Enter the prefix for piece part **position** in the **Prefix for Position #** field.

6. Click the **Edit Piece Parts List** pushbutton.

To enter position details for the piece part,

- Select Edit Piece Part Position Details link.

## Defining piece part positions for aircraft configuration

1. Select Edit Piece Part Position Details link **in** the Edit Piece Part List for Aircraft page.
2. Enter the position code to which the piece **part** must be fitted in the **Position Number** field.
3. Activate or inactivate the position code by **selecting** appropriate option from the **Status** drop-down list box.
4. Enter the serial number of the piece part in the **Serial #** field and lot number to which the serial number belongs in the **Lot #** field.
5. Click the Edit Position Details **pushbutton**.

# 2.10 Recording aircraft readiness log details

The first time definition of components attached to an aircraft happens through aircraft readiness log. Aircraft readiness log is recorded to complete the physical configuration. The child components and their positional references are recorded including the date of attachment and other details. Component Ids are also generated if a component is inducted through the aircraft readiness log. The components Ids are generated according either manually or automatically as specified in the Maintain Maintenance Info. for Part page. For manual generation, you can enter the component ID, whereas for automatic generation, you need to specify the manufacturer serial number of the component.

1. Select Build Aircraft Configuration under Configuration **business** component. The Select Aircraft page appears.
2. Search for the aircraft for recording aircraft **readiness** log details.
3. Click the hyperlinked aircraft registration number in the multiline. The **Build Aircraft Configuration** page appears.
4. Select the **Edit Aircraft Readiness Log** link to enter the aircraft readiness log information. The **Edit Aircraft Readiness Log** page appears. *See Figure 2. 58.*

**Tree Structure:**

The system displays the aircraft configuration details in the form of a tree structure with 'Aircraft Reg #' as a parent level node. On expanding the node, the details such as "Position Code", "Part #", "Part Description", "Part Serial #" and "Component ID" are displayed. If a component exists for a position code, and if a Piece Part is defined for that position code level in the configuration, the system displays the first level position code along with a folder for Piece Part #. The tree display format is as shown below:

- Aircraft Reg # || Model #

  - Position Code II Part # II Part Description II Serial # II Component #

    - Position Code II Part # II Part Description II Serial # II Component #

    - Piece Parts

      Part # II Part Description II Quantity

  - Piece Parts

    Part # II Part Description II Quantity

Color Identifiers for Position Codes:

- Displays record in 'Dark Green' color, if the position code is attached.
- Displays record in 'Red' color, if the position code is empty and 'Component Mandatory' is 'Yes'.
- Displays record in 'Black', if the position code is empty and 'Component Mandatory' is 'No'.
- Displays record in 'Italics', if the position code is 'Inactive'.

Color Identifiers for Piece Parts:

- Displays record in 'Dark Green' color, if the Piece Part quantity is greater than '0'.
- Displays record in 'Red' color, if the Piece Part quantity is equal to '0'.

5. Enter **Def. Date of Attachment** and **Time of Attachment** fields that you wish to specify for the components entered in the multiline, in the **Default Details** group box.

In the **Component Attachment Details** multiline,

6. Set the **Attachment Status** of the position code to "Attached", "**Removed**", "Unknown" or "New".
7. Set the **Component Condition** drop-down list box to "New", "Serviceable", "Unserviceable", "Overhauled" or "Phased Out" to record the condition of **the** component. For more details, refer the

"Aircraft" Online Help.

*Note: The component attachment details can be entered only for position codes with attachment status as "Attached".*

8. Enter the date from which the component is in the condition specified in the "Component Condition" field in the From Date field, if you have entered the manufacturer serial number and the component number.

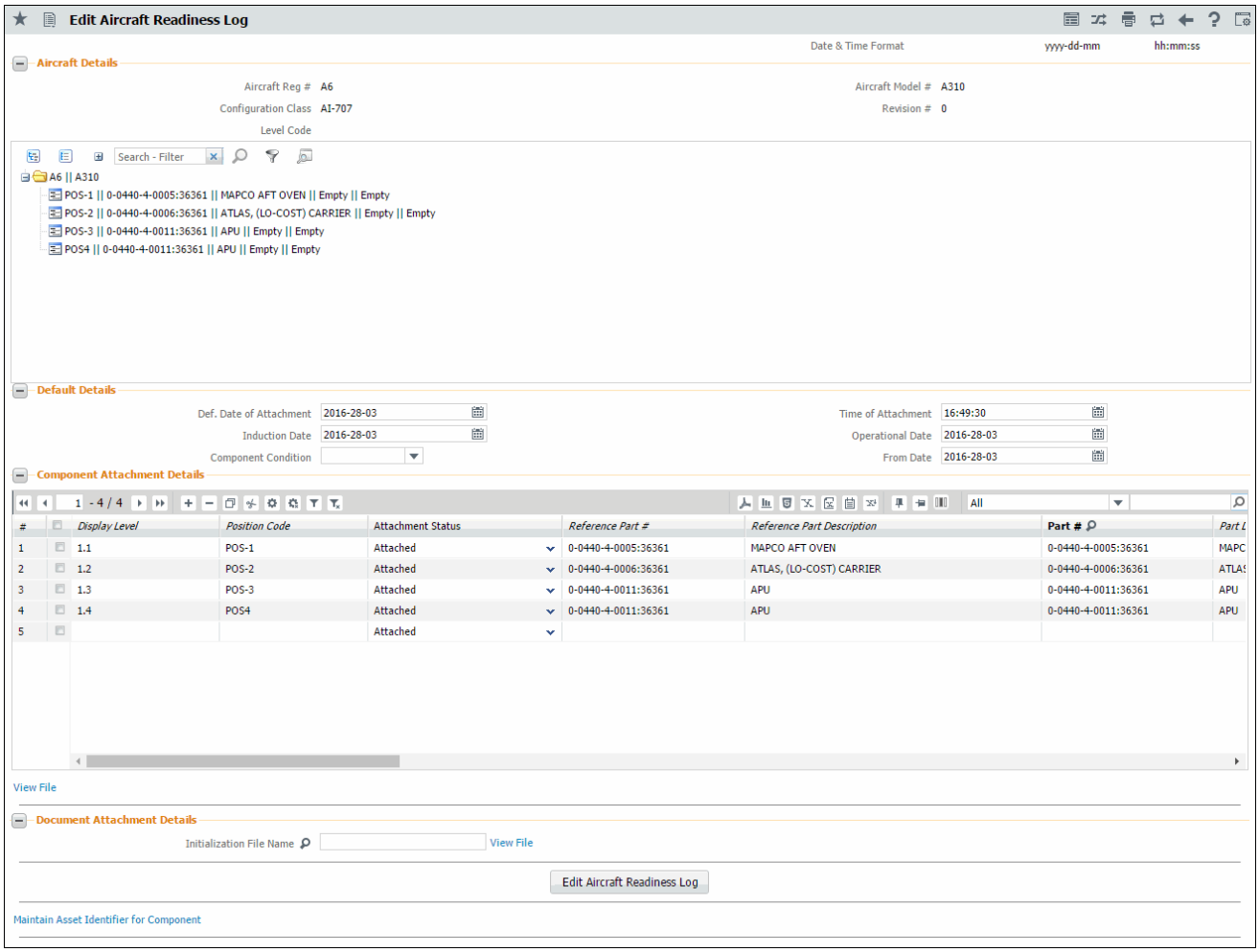



*Figure 2.58 Recording aircraft readiness log details*

9. Specify the drawing details of the part by entering Drawing # and File Name fields in the multiline.
10. Click the Edit Aircraft Readiness Log pushbutton.

*Note: You can define attachment details for an aircraft in the Aircraft Readiness Log page only if the aircraft configuration is in "Fresh" status and/with revision # of "0". After activation of configuration, aircraft configuration can be updated only using Update Aircraft Configuration page. To enter further information for component,*

To enter further information for component,

- Select Maintain Asset Identifier for Component link to associate asset number and asset tag to the newly created Component ID.
- Select the Update Aircraft Configuration link to update configuration details of aircraft with revision number => 0.

# 2.11 Activating aircraft record

The aircraft that is in "Under Creation" status can be activated after entering all information including the configuration details. You cannot modify the details of the aircraft record that is created through the Change Aircraft Reg # page.

1. Select **Edit Aircraft Record** under **Aircraft** business component. The **Select Aircraft** page appears.
2. Provide filter criteria and select the **Aircraft Reg #.**
3. Select **Edit Aircraft Record** link. The **Edit Aircraft Record** page appears. *See Figure 2. 59.*

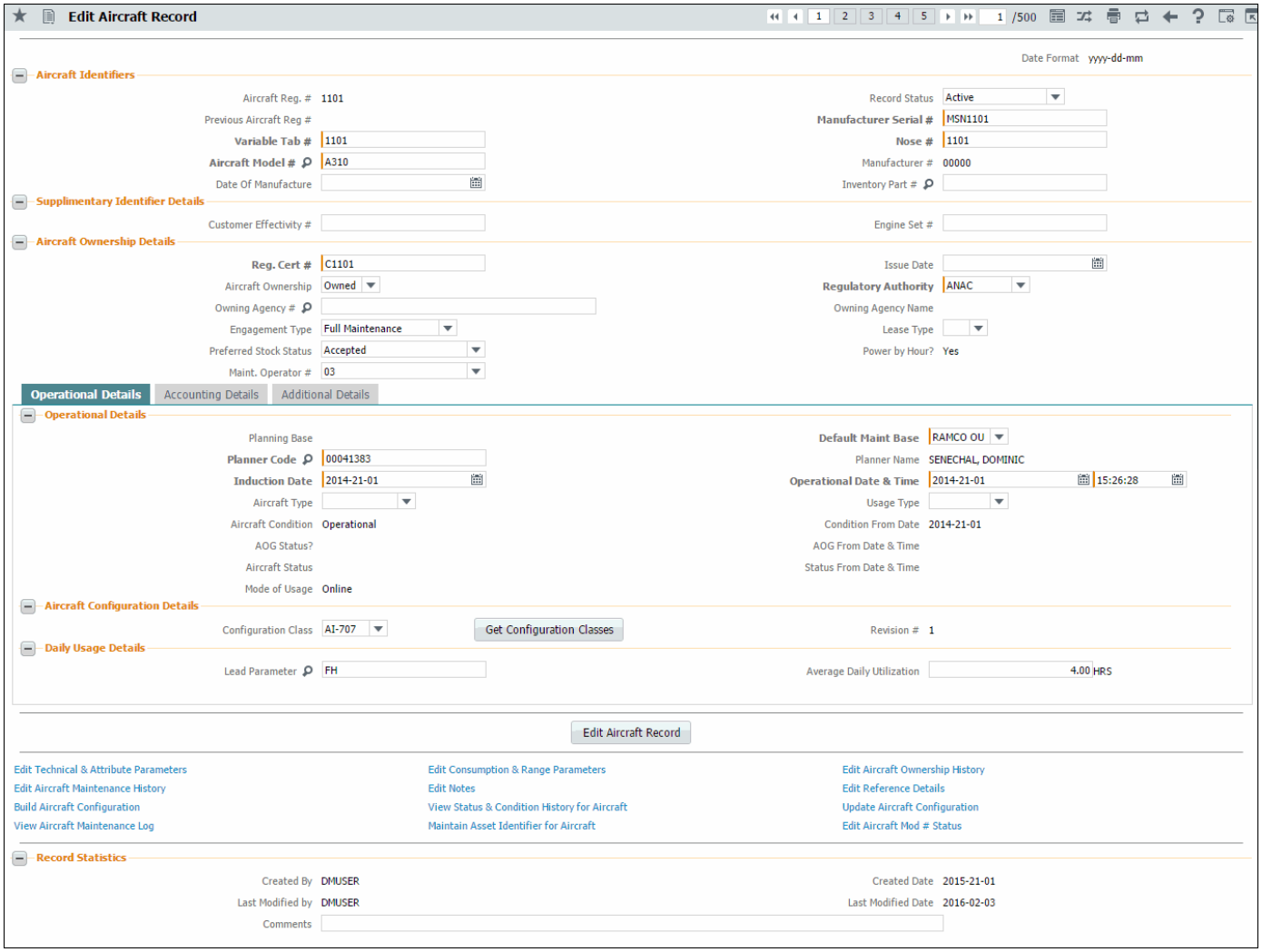



*Figure 2.59 Editing aircraft record*

4. To activate the aircraft, select "Active" from **Record Status** drop-down list box and click the **Edit Aircraft Record** pushbutton.

## 2.12 Updating status and condition for aircraft records

You can freeze those aircraft records that do not satisfy the norms as listed down by the Federal Aircraft Authority (FAA) or any other Regulatory Agency. The aircraft record will be frozen if the Regulatory Authorities demand lock-out of the aircraft as certain maintenance activities, which were to be performed on the aircraft have been delayed. The aircraft record will also be frozen if some discrepancies are detected in the maintenance activities. On freezing the aircraft record the various transactions corresponding to the aircraft attain "Hold" status. After analyzing the cause for freezing the aircraft record and planning for the required maintenance, you can unfreeze the aircraft record for performing the planned maintenance activities. You can unfreeze only those aircraft records that are in "Frozen" status. The various transaction associated to the aircraft record are released, on freezing the aircraft record.

1. Select **Update Aircraft Status & Condition** under **Aircraft business** component. The **Update Status & Condition for Aircraft Records** page appears. *See Figure 2. 60.*
2. Provide filter criteria to search for the **aircraft** that needs to be frozen or updated.

   *Note: The system retrieves only those aircraft records that are in "Active" status. The system will not retrieve aircraft that are in "Phased-Out" condition.*

In the Aircraft Record List multiline,

3. Set the **Record Status** of the aircraft **to** "Active" or "Inactive".
4. Set the **Aircraft Condition** to one of the following:

- Operational – Select this option to **indicate** that the aircraft is in working condition.
- Under Maintenance – Select this option to indicate that the aircraft is under maintenance.
- Phased Out – Select this option to indicate that the aircraft cannot be used for operation. You can select this option only when the "Record Status" of the **aircraft** is "Inactive".

5. Set **Aircraft Status** for the **aircraft**.
6. Set the **AOG?** Field to "AOG", if the **aircraft** is grounded. Set the field to "No", if the aircraft is not grounded.
7. Enter the date and time at which the aircraft record is updated in the **From/To Date** and **From Time** fields.

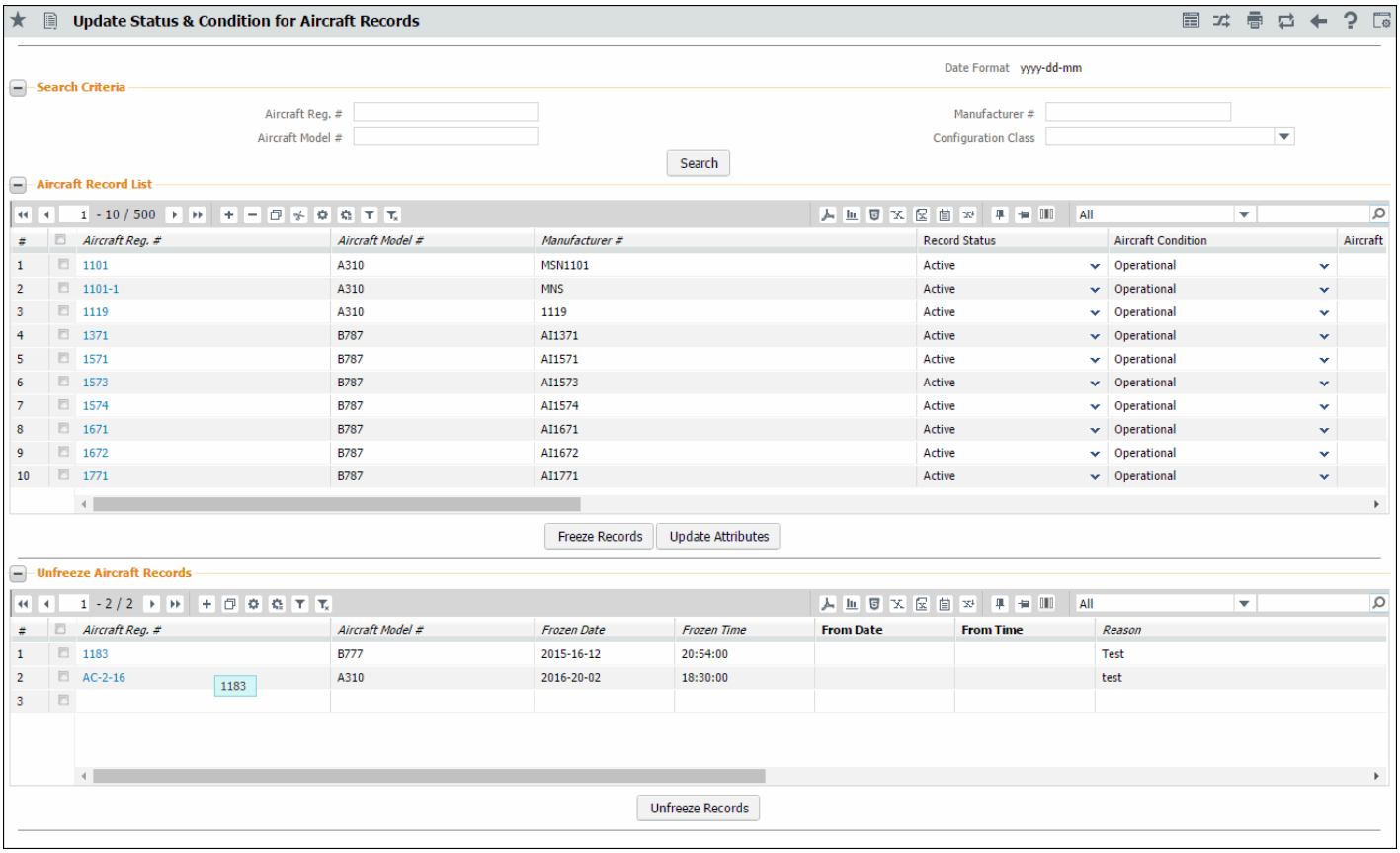



*Figure 2.60 Updating status and condition for aircraft records*

8. Enter the **Reason** for freezing or **updating** the aircraft record.
9. Enter the reference document based on **which** the aircraft record is updated, in the **Ref.Doc#** field.
10. Enter the name of the login user who **updated** the aircraft record, in the **Approved By** field.
11. Click the **Freeze Records** pushbutton to freeze the aircraft records.
    - The system updates the record status of **the** aircraft as "Frozen".
    - The system automatically moves the frozen **records** from the "Aircraft Record List" multiline to the "Unfreeze Records" multiline, on clicking the "Freeze Records" pushbutton.
12. Click the **Update Attributes** pushbutton to **update** the attributes for the aircraft records.

In the Unfreeze Aircraft Records multiline,

13. Enter the date and time at which the aircraft record is unfrozen, in the **From Date** and **From Time** fields.
14. Enter the name of the login user who unfroze the aircraft record, in the **Approved By** field.
15. Enter the reference document based on which the aircraft record is unfrozen, in the **Reference #** field.
16. Click the **Unfreeze Records pushbutton** to unfreeze the frozen aircraft records.
    - The system updates the "Record Status" of the aircraft record as "Active".

# 2.13 Approving configurations

The configuration is approved after verifying that the components are attached to all mandatory positions. Once approved, the status of the configuration becomes “Active”.

## 2.13.1 Approving model and aircraft configuration

1. Select **Approve Model and Aircraft Configuration** under **Configuration** business **component**. The **Approve Model & Aircraft Configuration** page appears. *See Figure 2. 61.*

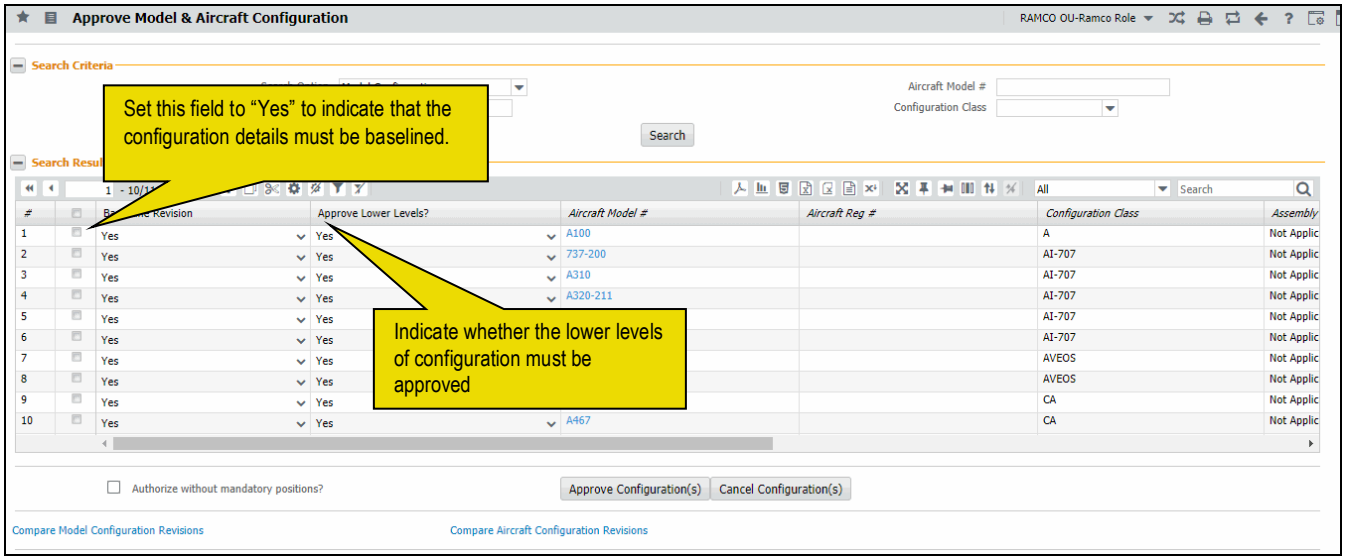



*Figure 2.61 Approving model and aircraft configuration*

2. Provide appropriate filter criteria to search for aircraft model or **aircraft** configuration for approval.

   *Note: The system retrieves only those configurations that are in the “Fresh” status and for which configuration class exists.*

   *The system does not retrieve aircraft records that are in “Frozen” status.*

**Concept of Baseline Configuration:**

A configuration can be set as a baseline configuration. If the configuration is baselined, the system maintains the configuration details with a new revision number for future reference. If baseline version already exists for the configuration, it will also be retained with the respective revision numbers and with the status set as “Revised”. Base lining a revised configuration helps in comparing the changes made as part of revisions.

3. Select the model or aircraft configuration in the **multiline**.
4. Select the checkbox **Authorize without mandatory positions?** to approve configuration records without attaching components to mandatory positions in the aircraft model and aircraft configuration.
5. Click the **Approve Configuration (s)** pushbutton to **approve** configuration(s).

   *Note: The configuration attains “Active” status on approval. If the aircraft condition is "Operational", you can approve the aircraft configuration and model configuration, even when no component is attached to the mandatory position code and the attachment status of the mandatory position codes is "Unknown", "New" or "Error".*

To proceed,

- Select **Compare Aircraft Configuration Revisions** link to compare the configuration revision details for baselined aircraft configuration.
- Select **Compare Model Configuration Revisions** link to compare the configuration revision details for baselined model configuration.

## Comparing model configuration revisions

This facility allows you to compare the current model configuration with a baseline revision that already exists.

1. Select Compare Model Configuration Revisions link in the Approve Model & Aircraft Configuration page. The Compare Aircraft Model Configuration Revisions page appears. *See Figure 2. 62.*
2. Select the previous revision number for which you wish to view the configuration details, from the **Previous Revision #** drop-down list box.

*Note: The system displays the details of the affected entities along with the value and change information.*

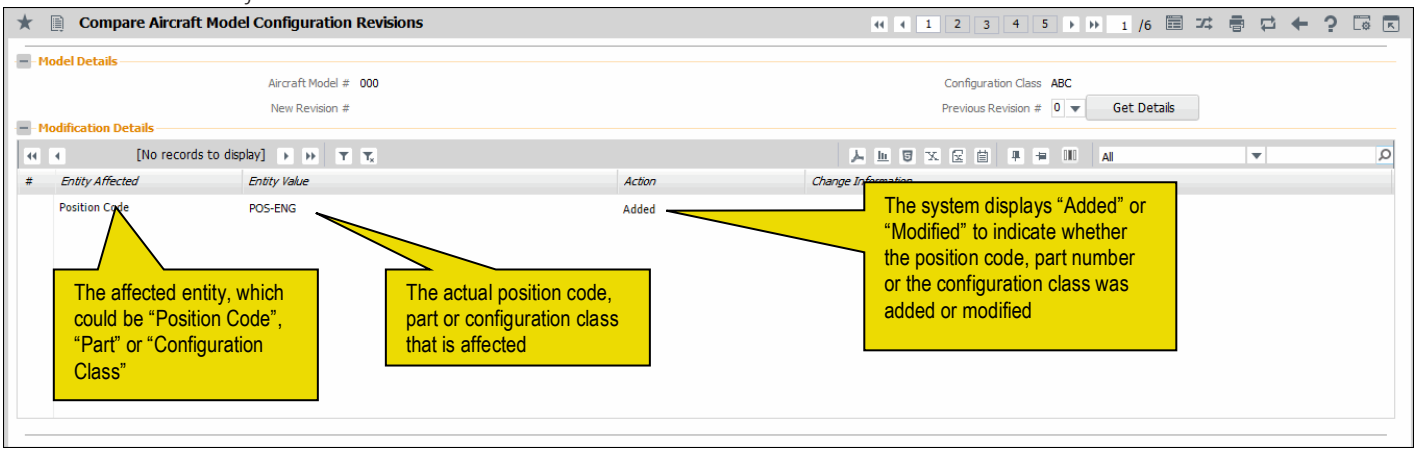



*Figure 2.62 Comparing model configuration revisions*

## Comparing aircraft configuration revisions

This facility allows you to compare the current aircraft configuration with a baseline revision that already exists.

1. Select Compare Aircraft Configuration Revisions link in the Approve Model and Aircraft Configuration page.
2. Select the previous revision number for which you wish to view the configuration details, from the **Previous Revision #** drop-down list box.

*Note: The system displays the details of the affected entities along with the value and change information.*

## 2.13.2 Canceling model and aircraft configuration

Canceling of model and aircraft configuration is allowed, after which the configuration status becomes "Cancelled".

1. Select Approve Model and Aircraft Configuration **under** Configuration business component.
2. Provide appropriate filter criteria to search for aircraft model or aircraft configuration for cancellation.
3. Select the model or aircraft **configuration** in the multiline.
4. Click **Cancel Configuration (S)** pushbutton to cancel configuration(s).

*Note: The configuration attains "Cancelled" status.*

## 2.13.3 Approving part and component configuration

1. Select **Approve Part and Component Configuration** under **Configuration** business component. The **Approve Part & Component Configuration** page appears. *See Figure 2. 63.*
2. Provide appropriate filter criteria to search for part **or** component configuration for approval.

### Concept of Baseline Configuration:

A configuration can be set as a baseline configuration. If the configuration is baselined, the system maintains the configuration details with a new revision number for future reference. If baseline version already exists for the configuration, it will also be retained with the respective revision numbers and with the status set as “Revised”.

3. In the **Search Results** multiline, use the **Base Line Revision** drop-**down** list box to indicate whether the configuration details must be baselined or not.

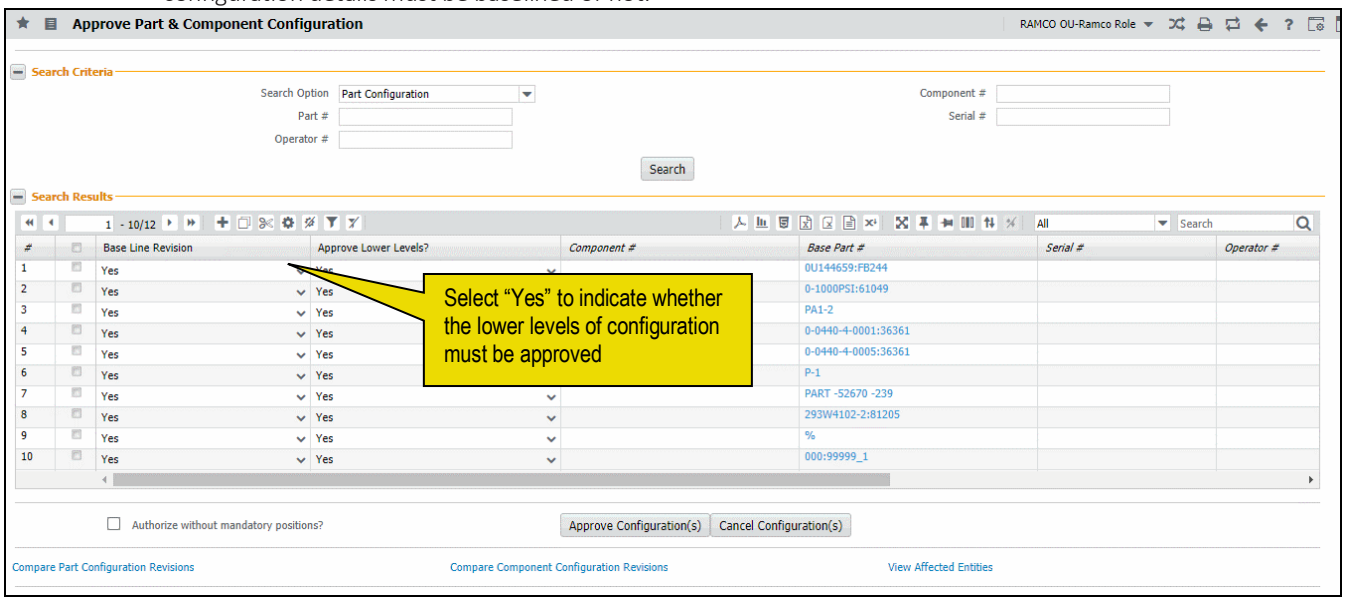



*Figure 2.63 Approving part and component configuration*

4. Set the **Approve Lower Levels?** drop-down list box to “Yes” to indicate **whether** the lower levels of configuration must be approved.
5. Select the part or component configuration in the **multiline**.
6. Select the checkbox **Authorize without mandatory positions?** to approve configuration records without attaching components to mandatory positions in the part and component configuration.
7. Click the **Approve Configuration (S)** pushbutton to **approve** configuration (s).

> *Note: The configuration attains “Active” status on approval. If the component condition is not "Unserviceable" or “Phased-Out”, you can approve the part configuration and component configuration, even if the component is not attached to any mandatory position code and the attachment status for these mandatory position codes is "Unknown", "New" or "Error".*

To proceed,

- Select **Compare Part Configuration Revisions** link to compare the configuration revision details for baselined part configuration.
- Select **View Affected Entities** link to view the affected entities information.
- Select **Compare Component Configuration Revisions** link to compare the configuration revision details for baselined component configuration.

## Comparing part configuration revisions

1. Select Compare Part Configuration Revisions link in the Approve Part & Component Configuration page.
2. Select the previous revision number for which you wish to view the configuration details, from the **Previous Revision #** drop-down list box.

> *Note: The system displays the details of the affected entities along with the value and change information.*

### Comparing component configuration revisions

1. Select Compare Component Configuration Revisions link in the Approve Part & Component Configuration page.
2. Select the previous revision number for which you **wish** to view the configuration details, from the **Previous Revision #** drop-down list box.

   *Note: The system displays the details of the affected entities along with the value and change information.*

## 2.13.4 Canceling part and component configuration

1. Select **Approve Part and Component Configuration** under **Configuration** business component.
2. Provide appropriate filter criteria to search for part or component **configuration** for cancellation.
3. Select the part or component configuration in the **multiline**.
4. Click **Cancel Configuration (s)** pushbutton to cancel **configuration**(s).

## 2.13.5 Viewing part usage information

You can view the different positions where a particular part is fitted across aircraft models and aircraft.

1. Select **Where Used Review** under Configuration **business** component. The **Select Part** page appears.
2. Provide filter criteria to search for the part for **viewing** the usage information.
3. Click the hyperlinked part number in the **multiline**. The **View Part Usage Information** page appears.

The system displays the details such as aircraft, model and the position code to which the part is fitted.

# 2.14 Generating serviceable certificate

You can generate serviceable certificate for a part that is removed from an aircraft. Serviceable certificate is generated for a part which is removed from an aircraft in serviceable condition or which is moved to Ship-on-Shelf (SOS) disposition and confirmed as 'No Fault Found'. The certificate is generated for these parts before they are required to be moved to a serviceable stock / stores.

You can perform the following using this activity:

- Generate serviceable certificate for a component that is removed from an aircraft directly in serviceable condition through a component replacement transaction.
- Generate serviceable certificate for a part which is moved to Ship-on-Shelf (SOS) disposition and confirmed as 'No Fault Found'.
- Reprint the existing certificate without modifying the existing certificate.

1. Select **Generate Serviceable Certificate** activity under **Aircraft** business component. The **Generate Serviceable Certificate** page appears. *See Figure 2. 64.*
2. Select the Certificate Generation Option as Create or Reprint.
3. Enter the **Search Criteria** and click the **Search** pushbutton. You must specify at least one search criteria to retrieve search results.

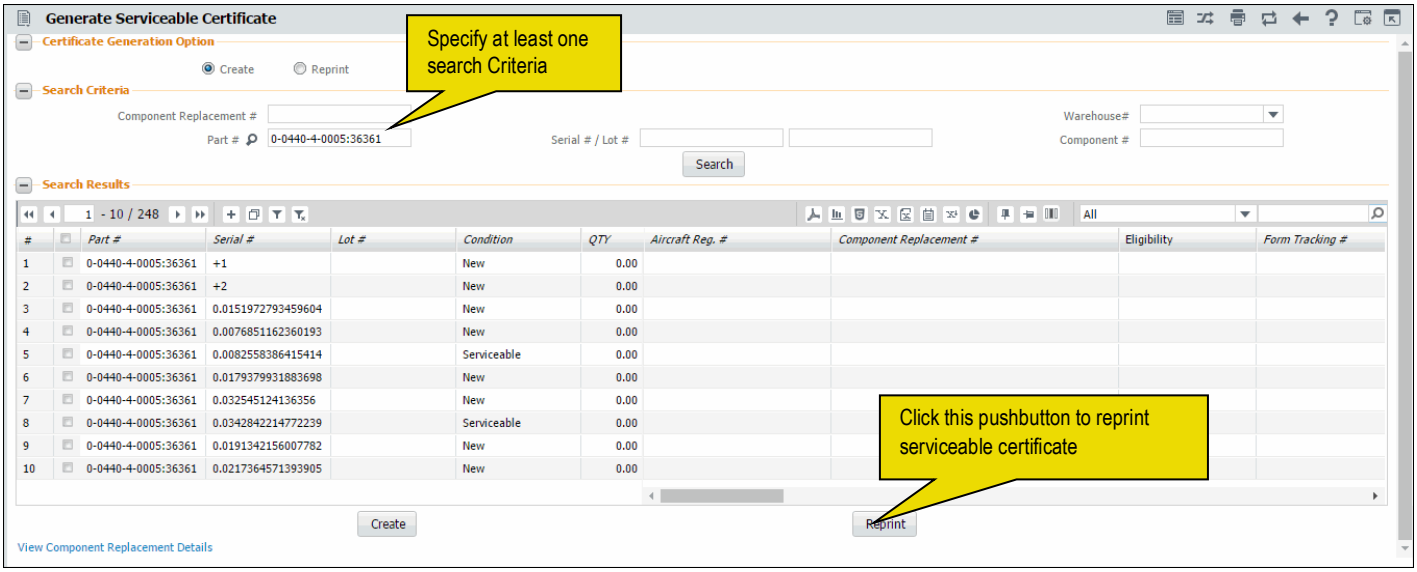



*Figure 2.64 Generating Serviceable Certificate*

4. In the multiline, if you wish to create the certificate, specify the part details, **Work Status**, **Certifying Remarks**, **Certificate Type** and **Certifying Authority.**
5. Enter the **Employee #**, **Skill #**, **License #** and **Issue Date** of the certificate.
6. Click the **Create** pushbutton to generate the serviceable certificate.
7. Click the **Reprint** pushbutton to reprint the serviceable certificate.

# 2.15 Reviewing component / receipt records

Components are received through various receipt transactions like 'Goods Inward', 'Unplanned Receipt' and 'Loan / Rental Receipts'. It becomes vital for the Tech Records Personnel to review the component related details when receiving components. This is achieved using the "Review Records Update" activity which enables the Tech Records Personnel to review the component related details such as parameter values, configuration details and maintenance program definition for a specified period, along with the receipt details.

Component records once verified shall re-appear in the queue for review at a later point of time. A history log of component verification info is maintained in the system. Whenever a component record is being fetched in the queue page its corresponding last updated verification status is displayed. The 'Verification Status' is displayed as "Pending" if the component is pending verification against any reference document.

1. Select **Review Records Update** activity under **Aircraft** business component. The **Review Records Update** page appears. *See Figure 2. 65.*

2. Enter the **Search Criteria** and click the **Search** pushbutton.

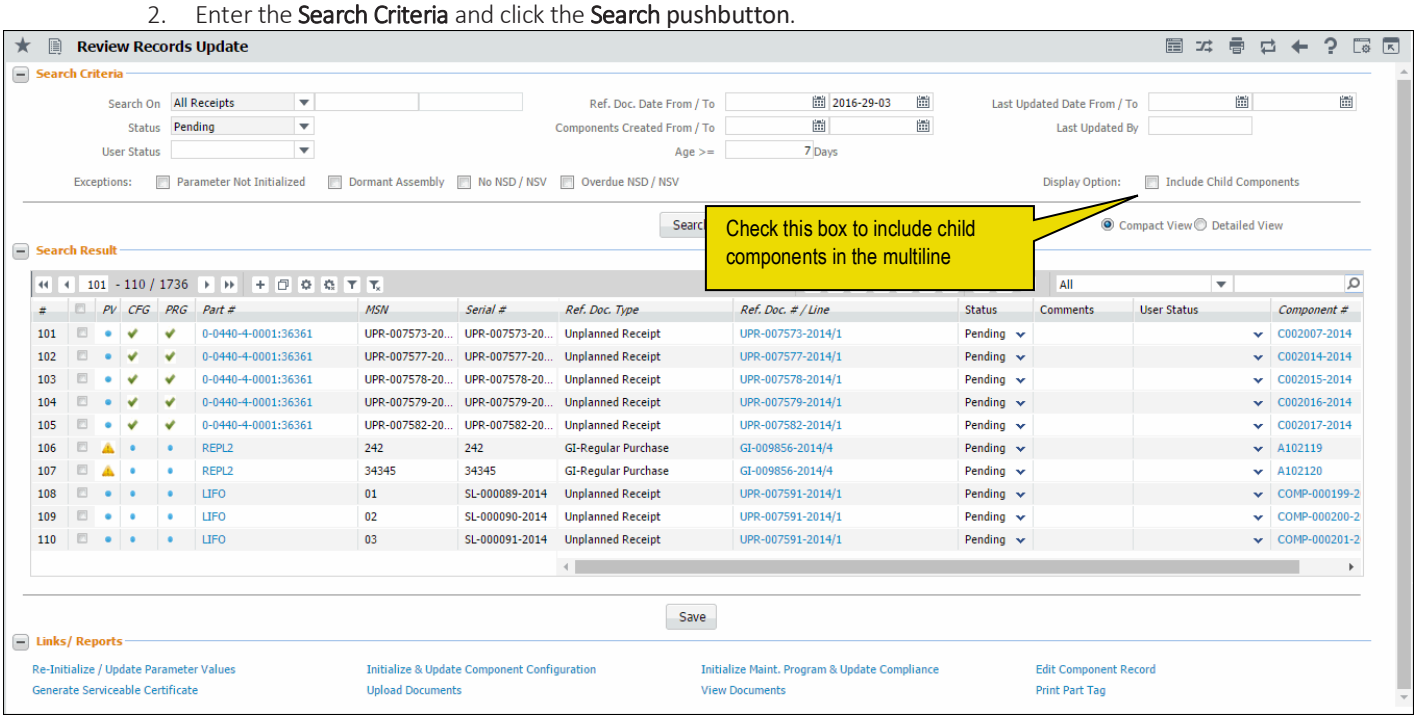



*Figure 2.65 Reviewing component / receipt records*

3. Select the **Compact View** pushbutton to view the selective details of the component or the **Detailed View** pushbutton to view all the component related information in a detailed view in the multiline.

In the multiline,

The system displays the component records based on the search criteria and selection of compact view or detailed view. The following icons are displayed based on the availability of parameter value, active configuration and maintenance program for the component records.

| Icons Displayed | PV (Parameter Value) | CFG (Configuration) | PRG (Maintenance Program) |
|---|---|---|---|
| ✖ (Not Available) | Component in the record does not have parameter | Any active configuration is not available for the component | Component in the record has no active maintenance program |
| ⚠ (Exception Current) | Consumption parameter value has not been initialized or updated for the component | a. Assembly status in active configuration is dormant / Error<br>b. Fresh configuration exists. | The component has overdue task in the pending tray.<br>(or)<br>The component has following attributes in the active maintenance program for the component: |

| | | | |
|---|---|---|---|
| | | | • 'Prog. Item Type' should have value "Block", "Non-Block" or "Base".<br>• 'Initiated / Reset by' should be set as "Self-Compliance".<br>• 'Schedule Status' set as "Active"<br>• Task with No NSD / NSV for recurring task or No LPD / LPV & No NSD / NSV for one time task. |
| ✔ (Complete) | All the parameter values are initialized for the component | a. There are no exceptions in the active configurations<br>b. No Fresh Configuration exists | The component does not have overdue task in the pending tray.<br>(or)<br>The component has following attributes in the active maintenance program for the component:<br>• 'Prog. Item Type' should have value "Block", "Non-Block" or "Base".<br>• 'Initiated / Reset by' should be set as "Self-Compliance".<br>• 'Schedule Status' set as "Active"<br>• Task with NSD / NSV for recurring task or LPD / LPV or NSD / NSV for one time task. |

4. Select the component verification **Status** as "Pending", "On Hold" or "Verified":
5. You ca view details like Part #, Serial # Component #, TSN, CSN, Earliest Due Details, Shelf Life Expiry Date, reference document details, Certificate details of the component, etc.
6. Enter any **Comments** related to the verification of the components and select the **User Status**.
7. Click the **Save** pushbutton to update the receipt / component details.

*Note: The system hides the "Save" pushbutton, if the Status is selected as "Verified" in the 'Search Criteria'.*

To proceed,

- Select the **Re-Initialize and Update Parameter Values** link to reinitialize and update the parameter values.
- Select the **Initialize and Update Component Configuration** link to initialize and update component configuration.
- Select the **Initialize Maint. Program & Update Compliance** link to initialize the maintenance program and update the compliance for the component.
- Select the **Edit Component Record** link to modify the component details.
- Select the **Generate Serviceable Certificate** link to generate serviceable certificate.
- Select the **Upload Documents** link to upload the files associated to receipt / component records.
- Select the **Print Part Tag** link to print the part tag for the component.

# 2.16 Managing part restrictions

A part / part serial needs to be restricted from usage in the system due to various business scenarios (incorrect definition of the part, SB / AD Circular from Authority / OEM, decision by the organization to prevent usage of the parts / part serial for various transaction like Component Attachment / maintenance issue etc.). In this page you can define restrictions at part level / serial level / lot level by providing restriction code information, so as to restrict those part / serial / lot from various transactions like attach, replace, etc.

You can specify the date range for which restriction is to be defined. You can also remove the restriction defined for a part. You can also view the parts that are restricted in the system.

1. Select Manage Part Restrictions activity under Aircraft business component. The **Manage Part Restrictions** page appears. *See Figure 2. 66.*
2. Select the **Define** radio button to create / remove restriction and **View** radio button to view all the restriction records.
3. Enter the **Search Criteria** and click the **Search** pushbutton.

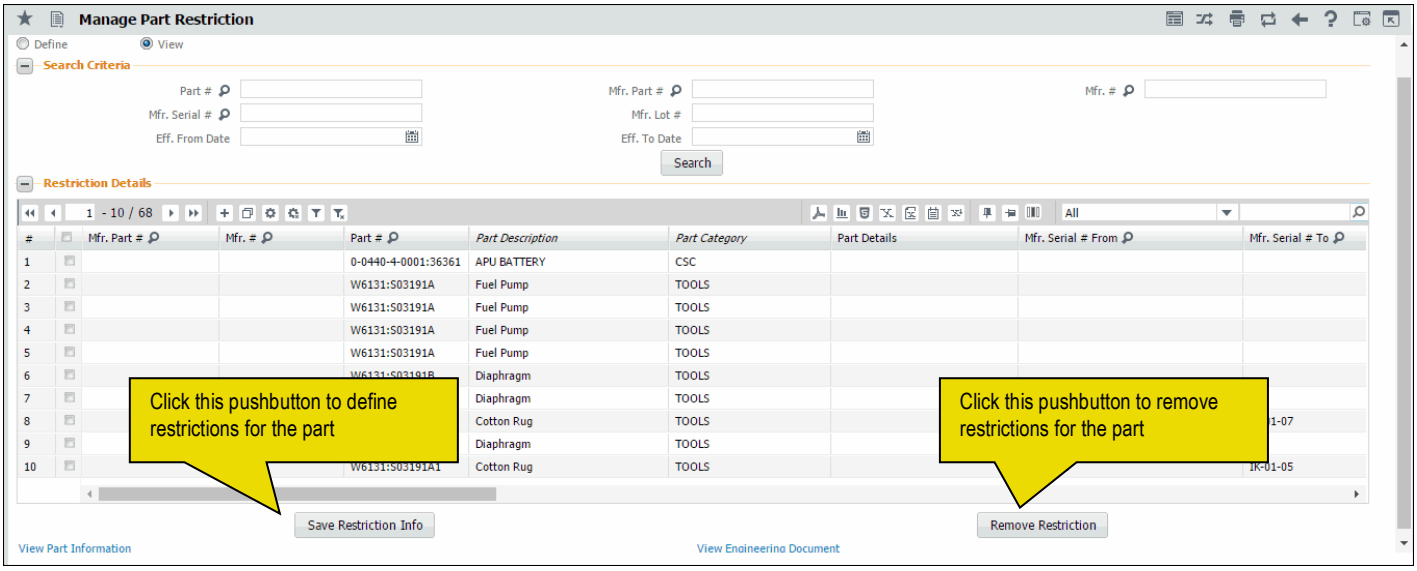



*Figure 2.66 Managing part restrictions*

4. In the multiline, enter the **Part #** and the range of **Mfr. Serial #** and **Mfr. Lot #** for which restriction is to be defined.
5. Select the **Restriction Code**.
6. Use the **Entity Type** drop-down list box to select the entity associated with the part on which you want to impose restrictions.
7. Enter **Entity Code** and **Entity Description.**
8. Select the **Ref. Doc. Type** and **Ref. Doc #** related to the part restriction.
9. Enter the **Eff. From Date** indicating the date from which restriction is effective.
10. Enter any **Remarks** related to the restriction.
11. Click the **Save Restriction Info** pushbutton to define restrictions for the part.
12. Click the **Remove Restriction** pushbutton to remove restrictions defined for the part.

*Note: The "Save Restriction Info" and the "Remove Restriction Info" pushbuttons are visible only on selecting the 'Define' radio button.*

# 2.17 Correcting the parameter value

This activity enables you to update and re-initialize the initialized parameter values, for the aircraft or component. You can re-initialize only parameters of type "Consumption". This activity also allows you to compute the updated parameter values.

1. Select the **Re-Initialize / Update Parameter Values** link under the **Aircraft** business component. The **Re-Initialize / Update Parameter Values** page appears. *See Figure 2. 67.*

> *Note: You can also access this page from the Goods Receipt and Configuration components. The part # is available/displayed in the **Re-Initialize / Update Parameter Values page** only if the Enable Manufacturer Part # control in transaction" parameter is set to "No" in the Logistics Common Master' business component, in the Set Inventory Process Parameters activity of the Logistics Common Master component. Conversely, the manufacturer part # and manufacturer # fields are available/displayed only if the Enable Manufacturer Part # control in transaction" parameter is set to "Yes" in the Logistics Common Master' business component, in the Set Inventory Process Parameters activity of the Logistics Common Master component.*

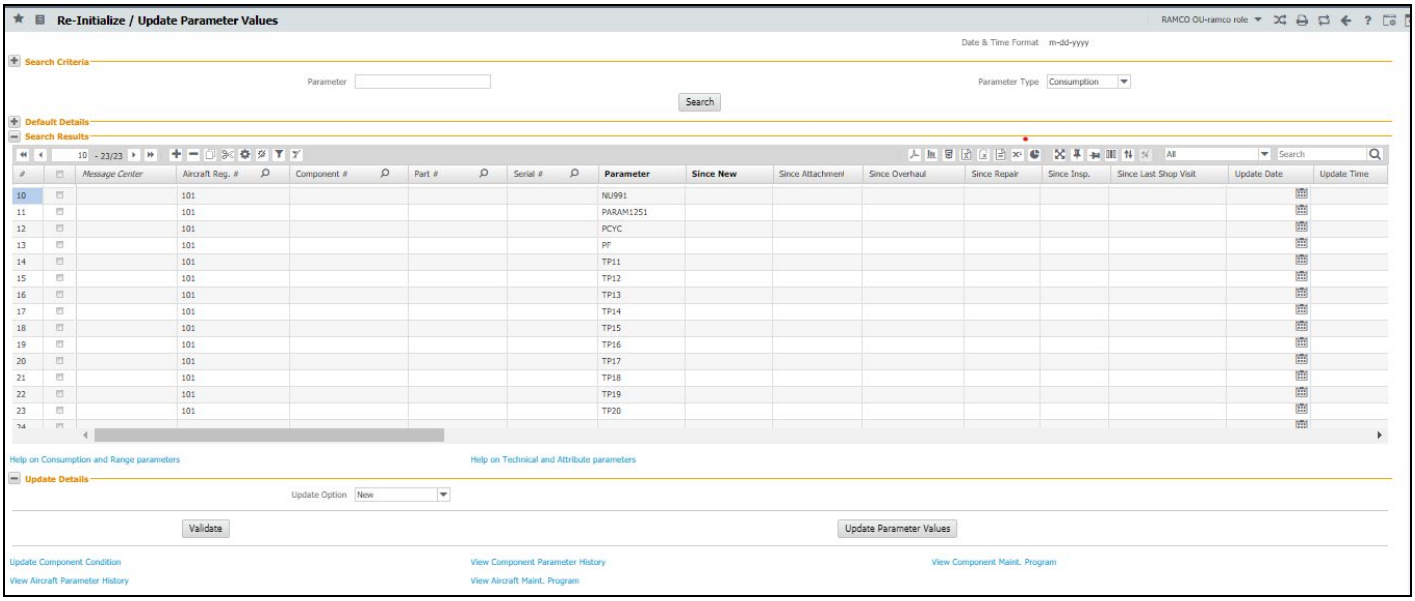



*Figure 2.67 Reinitialize / Update parameter values*

2. Specify the **Search Criteria** to retrieve the aircraft/components for which you want to re-initialize/update parameter values.
3. Select the **Search pushbutton**.

The system retrieves those aircraft records that are not in "Inactive" and "Frozen" status, in the **Search Results** multiline. However, you can also enter new parameter records in the multiline.

Specify the following in the **Search Results** multiline.

4. The aircraft for which parameter values must be updated/re-initialized in the **Aircraft Reg #** field.
5. The component for which parameter values must be updated/re-initialized in the **Component #** field.
6. The Part # and Serial # of the component for which parameter values must be updated/re-initialized in the **Part #** and **Serial #** fields.
7. The **Parameter** of the aircraft/component that you want to update/re-initialize.
8. The present value of the parameter (**Decimal**)in the **Since New** field.
9. The cumulative parameter value of the component since its last attachment in the shop in the **Since Attachment** field.

10. The cumulative parameter value of the component since the last overhaul in the shop in the **Since Overhaul** field.
11. The cumulative parameter value of the component since the last repair in the shop in the **Since Repair** field.
12. The cumulative parameter value of the component since the last inspection in the shop in the **Since Insp.** field.
13. The cumulative parameter value of the component since the last shop visit in the shop in the **Since Last Shop Visit** field.
14. The date and time of update of parameter values in the Update Date and Update Time fields.
15. The **Remarks** pertaining to the parameter value update. It is mandatory to enter remarks for individual parameters here, if you have not entered remarks in the **Default Remarks** multiline. However, remarks are not mandatory, if the reference document is a repair receipt or goods receipt. Use the **Initial Value Unknown?** drop-down list box to specify whether the "Since New" value is known for the component that is not in "New" condition. The system provides the following options:

- Yes – Select this option if the "Since New" value is not known.
- No – Select this option if the "Since New" value is known.

> *Note: The "Since New" parameter value can be entered only if the "Initial Value Unknown?" field is set as "No".*

16. Set the **Update Option** field to one of the following:

- Delta – Select this option to indicate that the new parameter value is to be added with the existing parameter value.
- New – Select this option to indicate that the parameter value is to be overwritten by the new parameter value.
- Re-Initialize – Select this option to indicate that the parameter value must be re-initialized.
- Correction: Select this option to indicate that the parameter value must be rectified for the aircraft/component, but not any of its child components.

> *Note that the system automatically resets the present value of the component and its entire hierarchy of child components to the "Since New" that you specify, if the Update Option is "New" or "Delta". Hence, it does not allow you to enter component records that share parent or child relationship in the multiline. On the contrary, when you have selected "Re-initialize" or "Correct" as the Update Option you can enter parent and child component records at the same time. The system sets the present value of the parameter to the Since New while the present values of child components are not affected.*

> *Note: The "Inherit to Child Components?" field is applicable only when the parameter type is "Consumption".*

> *Ensure that at least one of the fields, "Aircraft Reg #", "Component #" or "Part#" and, "Serial#" is entered in the "Search Criteria" group box.*

> *If the parameter type is "Consumption" and "Update Option" is "New", the "Since New" value must be greater than or equal to the "Since OH", "Since Repair", "Since Insp." and "Since Last Shop Visit" values.*

> *You can enter the "Since OH", "Since Repair", "Since Insp." and "Since Last Shop Visit" values, only when the "Maintenance Object Type" is "Component", "Parameter Type" is "Consumption" and "Update Option" is "New" or "Re-Initialize".*

## To verify and compute consumption parameter values

17. Click the **Validate** pushbutton. The system verifies the parameter values specified in the multiline and displays success/error message in the Message Center.

## To update the parameter values

18. Click the **Update Parameter Values** pushbutton to update the parameter values.

- *Note: For offline aircraft / components attached to offline aircraft / components available in offline warehouse / component removed and pending for return from offline aircraft, the system does not allow parameter value update in main base (i.e. Usage Mode set as "Online" in Configurator" business component), if the 'Update Option' is "Re-initialize" or "New".*
- *Aircraft is said to be offline if it is located in an offline field base i.e. 'Mode of Usage' defined as "Offline" in the "Aircraft" business component. 'Mode of Usage' could be "Online" or "Offline" to indicate whether aircraft is located in main base or offline base respectively.*

# 2.18 Viewing maintenance log details for the component or aircraft

You can view the maintenance log details for the aircraft or component. You can view the various transaction documents pertaining to the aircraft or component.

## 2.18.1 Viewing maintenance log details

1. Select the View Aircraft Maintenance Log or View Component Maintenance Log link in the View Aircraft Record page. The View Maintenance Log page appears. *See Figure 2.64.*

> *Note: In this page, the Part # and related fields are displayed or available for input only if the "Enable Manufacturer Part # control in transaction" parameter is set to "No" in the Set Inventory Process Parameters activity of the Logistics Common Master component. Conversely, the Mfr. Part # and Mfr. # related fields are displayed/available for input only if the "Enable Manufacturer Part # control in transaction" parameter is set to "Yes" in the Logistics Common Master' business component, in the Set Inventory Process Parameters activity of the Logistics Common Master component.*

The system displays the following fields in the **Object Details** group box, based on selection in the previous page:

> *Note: If this page is launched for viewing the maintenance log details of the component, the system retrieves all the component replacement transactions of the main component or its attached component along with the on-wing jobs executed on the component through Aircraft Maintenance Execution Ref. #.*

- The **Aircraft Reg #** for which the maintenance log **details** are to be viewed.

> *Note: If this page is launched for viewing the maintenance log details of the component, the system displays the registration number of the aircraft to which the component is attached.*

- The **Component #** for which the maintenance log **details** are to be viewed.
- The **Condition** of the aircraft or **component**.

> *Note: If this page is invoked for viewing the maintenance log details of the aircraft, and if the condition of the aircraft is not available, the system displays the condition of the component.*

- The **Flight Hours** and **Flight Cycles** of the **aircraft** or component.

If this page is invoked for viewing the aircraft maintenance log details, the system displays the configuration details of the aircraft specified in the **Aircraft Reg #** field. The configuration **details** such as **Position Code**, **Part #**, **Part Description**, **Part Serial #** and **Component ID** are displayed in the form of a tree structure.

If this page is invoked for viewing the component maintenance log details, the system displays the configuration details of the component specified in the "Component #" field. The **configuration** details such as **Position Code**, **Part #**, **Part Description**, **Part Serial #** and **Component ID** are displayed in the form of a tree structure.

2. Select the Maintenance Log tab to **retrieve** the maintenance log details.
3. Select the Review Additional Info tab to **retrieve** the additional details.

To proceed,

- Select the **Aircraft Maintenance Due Report** link to display the maintenance execution details of due tasks.

### Maintenance log details

This tab enables you to view the maintenance log details for the aircraft or component. You can view the various transaction documents pertaining to the aircraft or component in this page. You can enter the search criteria such as date range, document number, document description, reference document number, ATA chapter number, level code and position code. Based on the transaction document selected, the system retrieves the maintenance log details for the aircraft or component.

1. Select the **Maintenance Log** tab in the **View Maintenance Log** page. *See Figure 2. 68.*

2. In the **Search Criteria** group box enter the **following**:
3. Enter the number identifying the **transaction** document, in the **Document # field**.
4. The textual description of the transaction **document**, in the **Document Description** field.
5. Enter the number identifying the reference **document** for the transaction, in the **Ref.Doc.#** field.
6. Enter the **ATA #** corresponding to the aircraft **or** component.
7. Enter the **Level Code / Position Code corresponding** to the position to which the component is attached.
8. The **From Date** of the period for which the transaction documents are to be retrieved for the aircraft or component in the first input box. Mandatory. Ensure that the date entered is not later than the current system date. The **To Date** of the period for which the transaction documents are to be **retrieved** for the aircraft or component in the second input box. Mandatory. Ensure that the date entered is not later than the current system date.
9. Select the Display Option as "No Tasks", "Workscoping Tasks" or "All Tasks".
10. Select **Search On** values as "**Event**", "MCR #", "Task #", "Task Desc.", "Customer #", "Customer Desc.", "Parent Task #" or "Parent Task Desc.".
11. Check the 'All Documents' box to retrieve and display the reference documents and execution documents in the multiline.
12. Check the following boxes in the **Additional Search Criteria** group box, if you wish to view the corresponding transaction documents pertaining to the maintenance log: **Journey Log, Discrepancies, Occurrence Reports, A/C Maint. Exe. Ref #, A/C Maint. Exe. Ref # - CoM, Eng. Doc. #, Engineering Service Request, Component Attachments, Component Removals, Shop Work Orders, Repair Order, Shop Work Orders – CoM.**

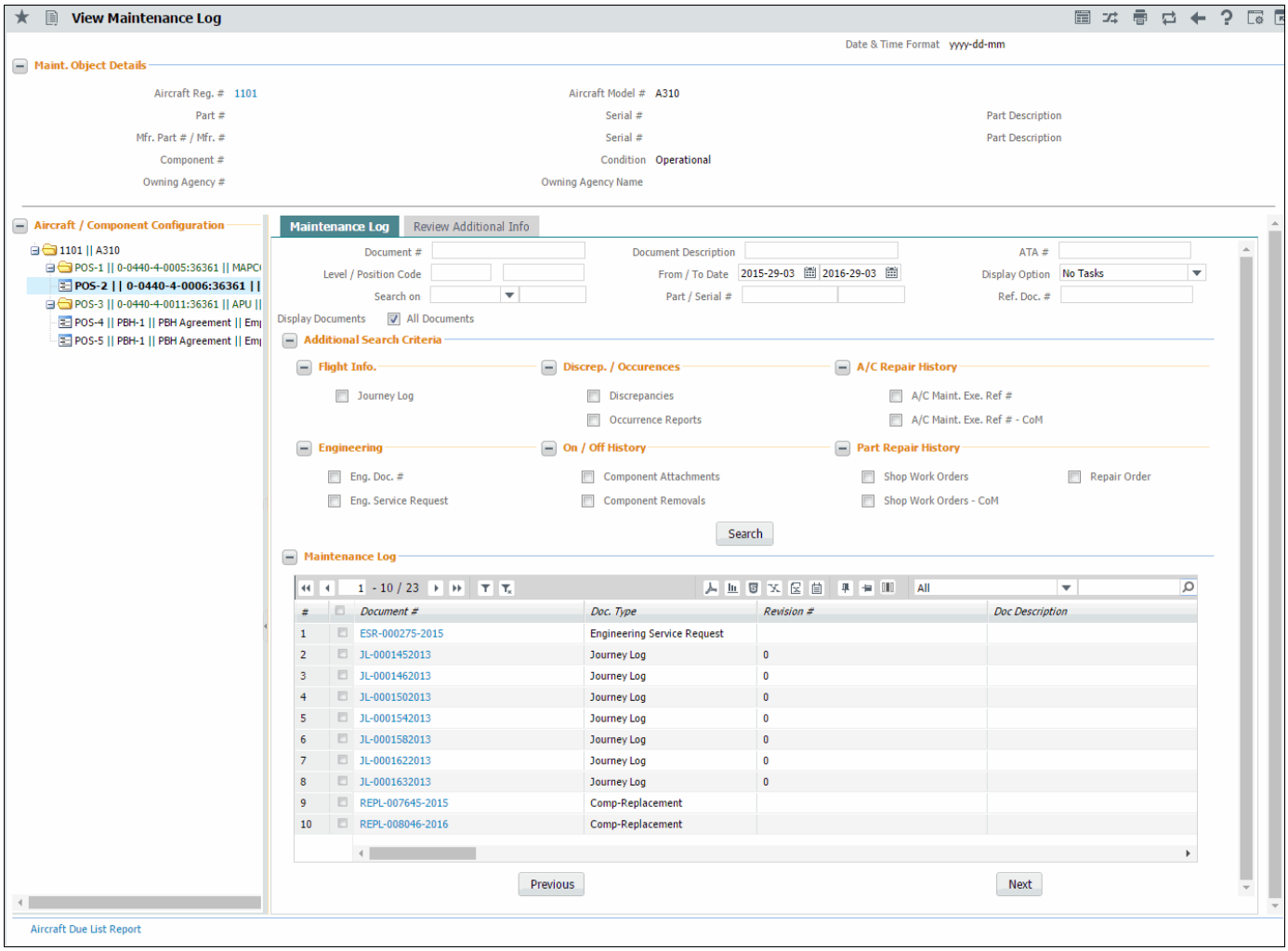



*Figure 2.68 Viewing maintenance log details for the component or aircraft*

13. Click the **Search** pushbutton to display the search results in the **Maintenance Log** multiline. The **Maintenance Log** multiline displays the following:

- The number identifying the transaction document, in the **Document #** field.
- The type of the transaction document, in the **Doc. Type** field.
- The **Revision #** of the transaction document.
- The **ATA #** specified in the execution document. However, the system leaves the field blank for "Journey Log", "A/C Maint. Exe. Ref – COM", "Shop Work Order-CoM" and " Occurrence Reports" documents.
- The **Status** of the transaction document or the status of the tasks, if the Display task is set as "Yes".
- The date and time at which the transaction document is closed/compiled, in the **Processed Date** and **Processed Time** fields.
- The **Aircraft Reg #** for which the transaction document is created.
- The **Parent Component #** for which the transaction document is raised.
- The **Position Code** corresponding to the parent component for which the transaction document is raised.
- The **Part #** to which the parent component belongs.
- The **Serial #** of the part.
- The **Maintenance Type** refers to the type of maintenance work performed on the part.
- The **Repair Process Code** assigned to the task at the time of execution.

- The Work unit #, Work Unit Type and Work Unit Desc.
- The Task #, Task Desc. Parent Task #, Root Task #.
- The remarks pertaining to the transaction document, in the Comments field.
- The date and time at which the transaction document is created, in the Doc Created Date & Time field.
- The number identifying the reference document of the transaction document, in the Ref. Doc # field.
- The type of the reference document, in the Ref Doc Type field.

14. Click the Previous pushbutton to view the set of records prior to the current records and Next pushbutton to view the set of records next to the currently displayed records in the multiline.

## View Additional information

This tab allows you to view the additional details like parameter details, parent component details, condition change details, compliance details, etc. You can also view the current location details of the component, and order execution details.

1. Select the Review Additional Info tab in the View Maintenance Log page. *See Figure 2. 69*

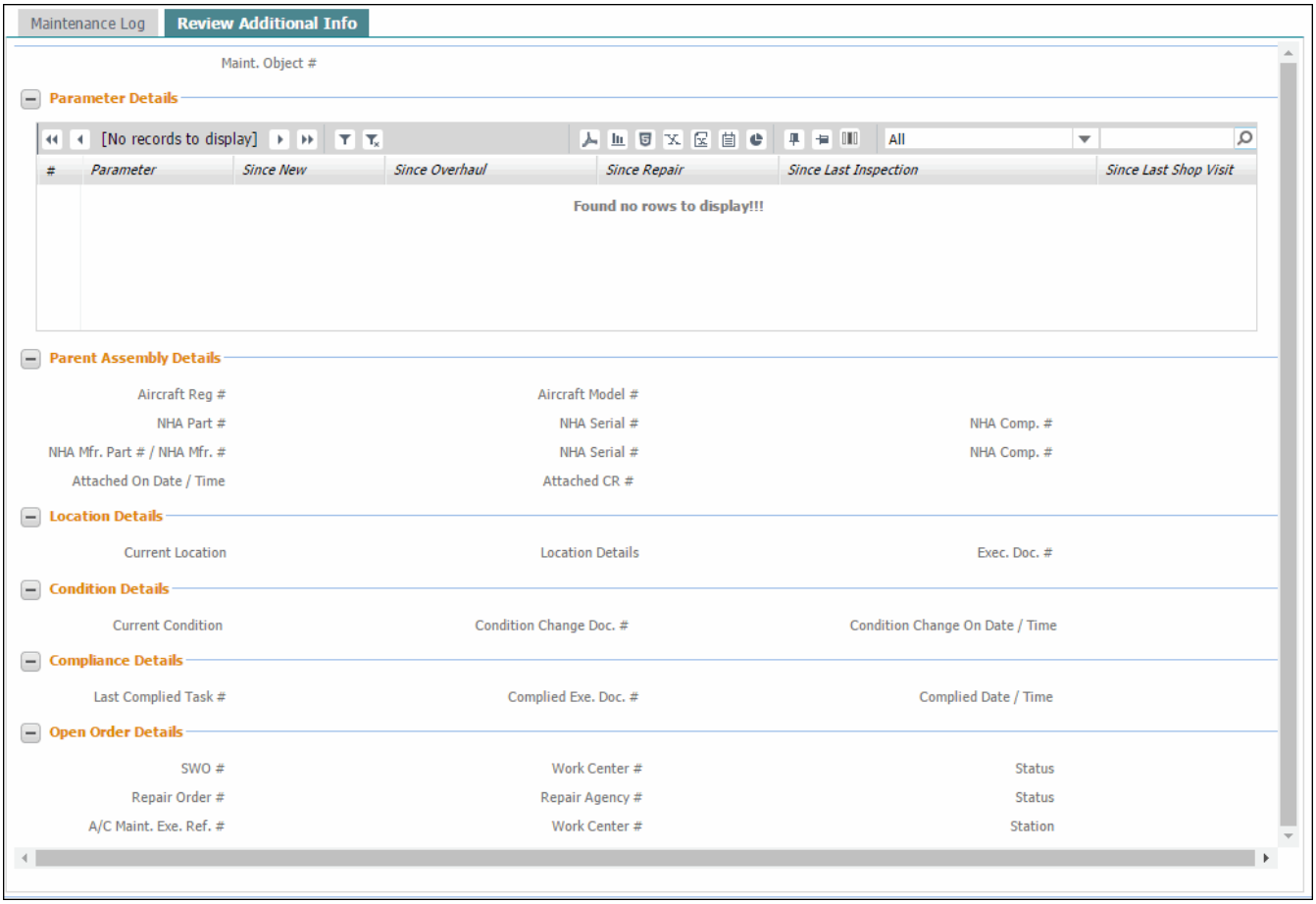



*Figure 2.69 Viewing additional details of component or aircraft*

2. The system displays the Maint. Object # in the header.
3. The following details are displayed in different sections:

- Parameter Details like Parameter, Since New, Since Overhaul, Since Repair, Since Last Inspection, Since Last Shop Visit.
- Parent Assembly Details like Aircraft Reg #, Aircraft Model #, NHA Part #, NHA Serial #, NHA Comp. #, Attached On Date / Time, Attached CR #.

- **Location Details** like Current Location, **Location** Details, Exec. Doc. #.
- **Condition Details** like Current Condition, Condition **Change** Doc. #, Condition Change On Date / Time.
- **Compliance Details** like Last Complied Task #, Complied **Exe**. Doc #, Complied Date / Time.
- **Open Order Details** like SWO #, Work Center #, Status, Repair Order #, Repair Agency #, Status, A/C Maint. Exe. Ref. #, Work Center #, Status.

# 3 TECHNICAL RECORD MANAGEMENT

Aircraft induction is a complicated process which involves various processes like building / updating configuration, initializing maintenance program, managing compliance of tasks for aircraft / component, etc. In order to achieve these maintenance functions, Tech Records personnel needs to navigate to various business components and activities and update / review configuration details, program details and compliance details maintained in the system. This is a time-consuming and laborious process.

For instance, to build Configuration 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.

The Technical Record business component provides a centralized hub which facilitates Tech Records personnel to easily manage Technical records document information like Configuration, Program and Compliance from a single screen. This simplifies the aircraft induction process and reduces the processing time for induction and maintenance of aircraft / component records.

The business component allows the user to perform the following functions through different tabs:

- Configuration functions
- Program functions
- Compliance functions

The business component also enables the user to perform Straight Through Processing (STP) whereby user can quickly Create Part Information, Update Effectivity Information and Define Alternate Information for the part without navigating away from Technical Record interface, based on user role access rights.

# 3.1 FLEET OVERVIEW

The Fleet Overview screen provides users a swift glimpse of the overall status of the entire fleet in this activity and then proceeds to manage technical records of aircraft by accessing relevant activities (Technical Records hub) with minimum traversal. They can precisely locate, find and then pick an aircraft from among the entire fleet to execute their tasks. At the very onset, they are presented with vital information for enhanced aircraft maintenance including:

- Aircraft details
- Engine details
- Parameter details
- Due and overdue tasks
- Deferred discrepancies
- Escalations, packages and engineering orders

## 3.1.1 Inquiring aircraft fleet

1. Select the Fleet Overview activity under the Technical Records business component. The Fleet Overview page appears. *See Figure 3. 1*

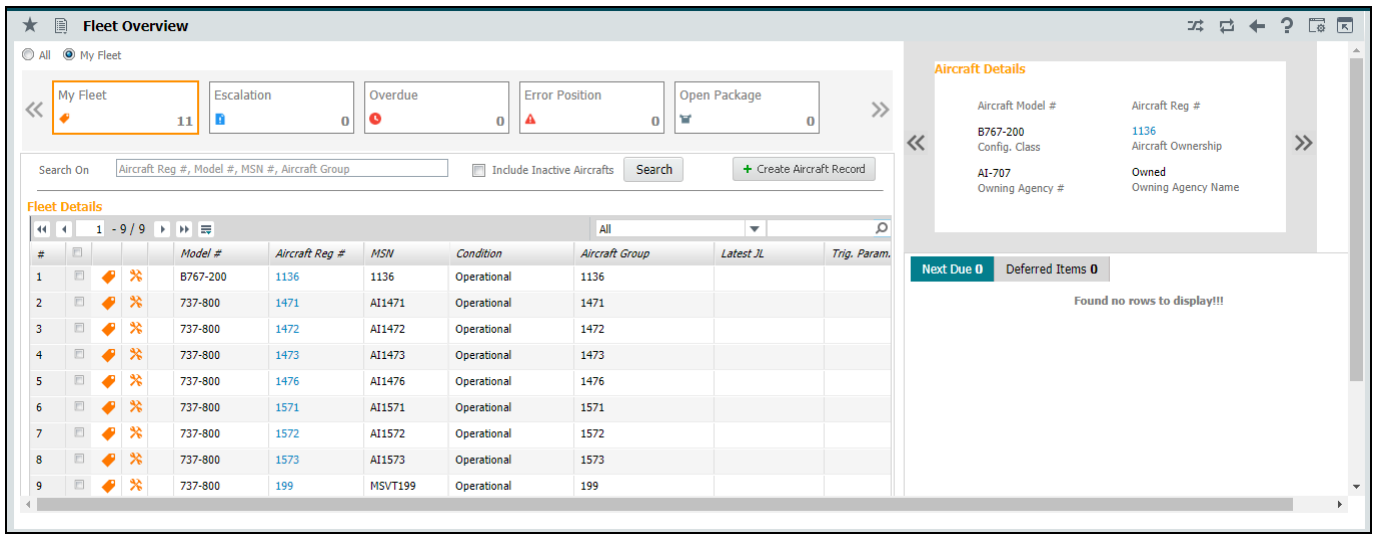



*Figure 3. 1Technical Records Dashboard*

2. Select one of the following radio buttons to set the context of aircraft retrieval:

    a. Select the **All** radio button to consider the entire aircraft defined in the system for search and retrieval in the activity.

*Note: This radio button will be selected by default, if no aircraft has been bookmarked to the login user.*

    b. Select the **My Fleet** radio button to consider only those aircraft bookmarked to the login user for search and retrieval in the activity.

*Note: This radio button will be selected by default, if any aircraft has been bookmarked to the login user.*

The page displays the following tiles of **information** on the entire aircraft fleet in the OU.

- **My Fleet**: The count of aircraft tagged to the **login** user. Click here to display aircraft **from** this category in the **Fleet Details** multiline. However, by default, the aircraft from this category are **retrieved** in the page, if aircraft have been bookmarked by the login user in the previous visit to the activity.

*Note: This exception tile appears and will be selected by default, if you have selected the My Fleet*

*radio button.*

- **All:** The count of aircraft defined in the Aircraft **component** / organization unit. Click here to display all records **in** the **Fleet Details** multiline. However, all aircraft in the fleet are retrieved in this page by default, if no aircraft have been bookmarked by the login user.

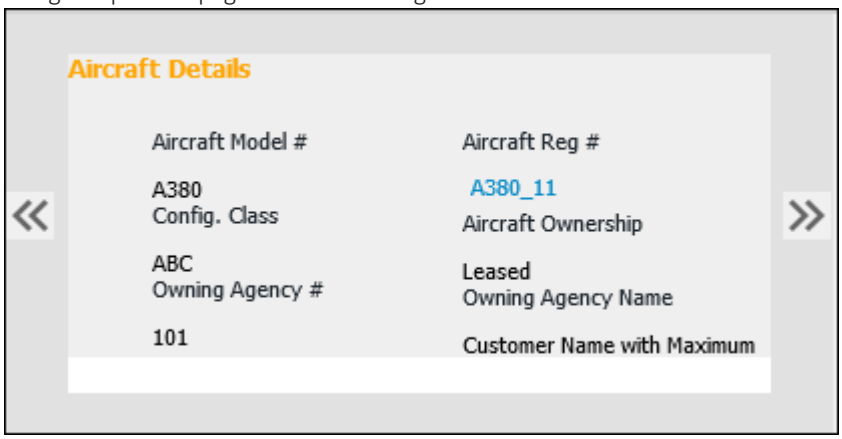
  *Note: This exception tile appears and is by defaulted selected, if you have selected the All radio button.*

- **Escalation:** The **count** of aircraft against which short term escalations have been reported. Click here to display aircraft from this category in the **Fleet Details** multiline.
- **Overdue:** The count of aircraft with tasks whose due date for execution has elapsed. However, an aircraft will qualify into this category even if overdue tasks exist for the subassemblies. Click here to display **aircraft** from this category in the **Fleet Details** multiline.
- **Remaining Days < 5:** The count of aircraft with tasks due for compliance in the next five days. However, an aircraft will qualify into this category even if tasks exist for the subassemblies that must be complied in the next five days. Click here to display **aircraft** from this category in the **Fleet Details** multiline.
- **Error Position:** The count of aircraft with error positions defined in Aircraft Configuration. However, an aircraft will qualify into this category even if error positions exist in the subassemblies. Click here to display **aircraft** from this category in the **Fleet Details** multiline.
- **Open Packages:** The count of aircraft with packages yet to be completed, meaning packages in the 'Planned' and 'In-Progress' status. Click here to display aircraft from this category in the **Fleet Details** multiline. Click here to display **aircraft** from this category in the **Fleet Details** multiline.

3. For advanced **search**, enter the values for **Aircraft Reg. #**, **Model #, MSN #** and **Aircraft Group** in the **Search On** input box.
4. To retrieve those **aircraft** in the Inactive status from the chosen category, select the **Include Inactive Aircrafts** check box.
5. Click the **Search pushbutton** to display search results in the **Fleet Details** multiline.

## 3.1.2 Aircraft Details section

1. Click the icon for the aircraft in the multiline to **display** the below-mentioned details of aircraft on the right top of the page as the next image shows.




- Aircraft Model #
- Aircraft Reg #
- Config. Class
- Aircraft Ownership
- Owning Agency
- Owning Agency Name

However, by default, the details of the first aircraft in the multiline are displayed in the Aircraft Details section.

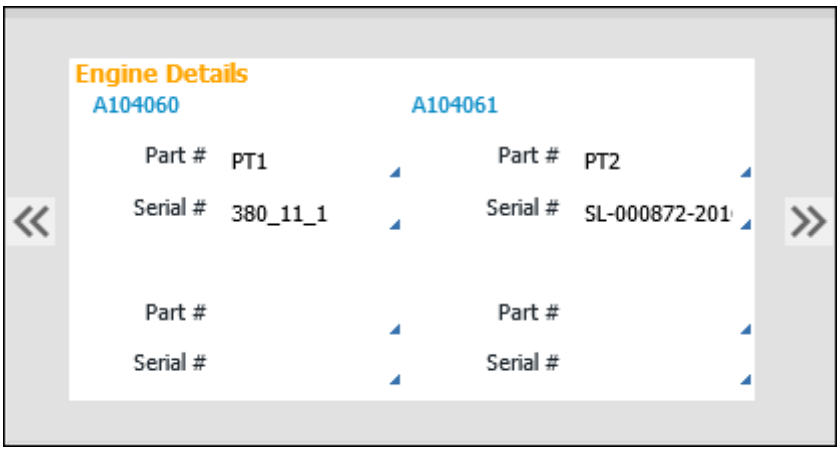
2. Click on the **Aircraft Reg. #** data **hyperlink** to open the "View Aircraft Record" page.

### 3.1.3 Engine Details section

1. Click  in the **Aircraft Details** section to display the Engine Details section.

2. Click  to display the previous **section**.

This section displays Component #, Part # and Serial # of up to four engines attached to the aircraft as the next image shows.



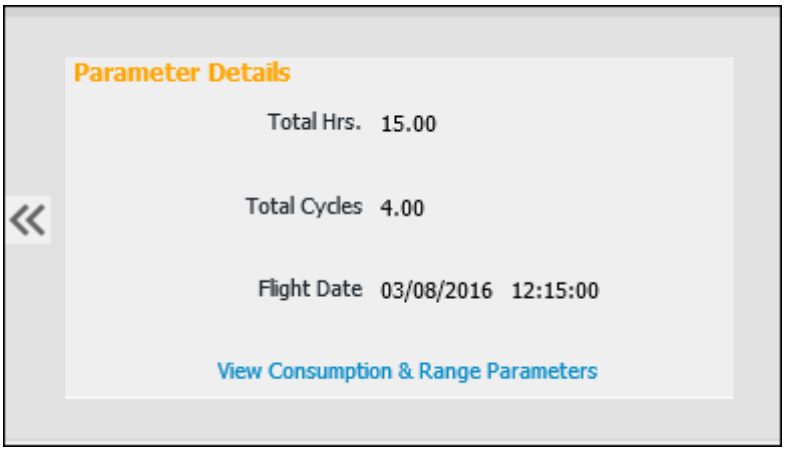

3. Click the data hyperlink on **Component #** to open **the View Component Record** page.

### 3.1.4 Parameter Details section

1. Click  in the **Engine Details** section to **display** the Parameter Details section.

2. Click  to display the previous **section**.

This section displays **Total Flight Hours, Total Flight Cycles** and the latest **Flight Date** of the aircraft selected in the multiline as the next image shows.




3. Select the **View Consumption & Range Parameters** link to view consumption and **range** parameters defined for the aircraft.

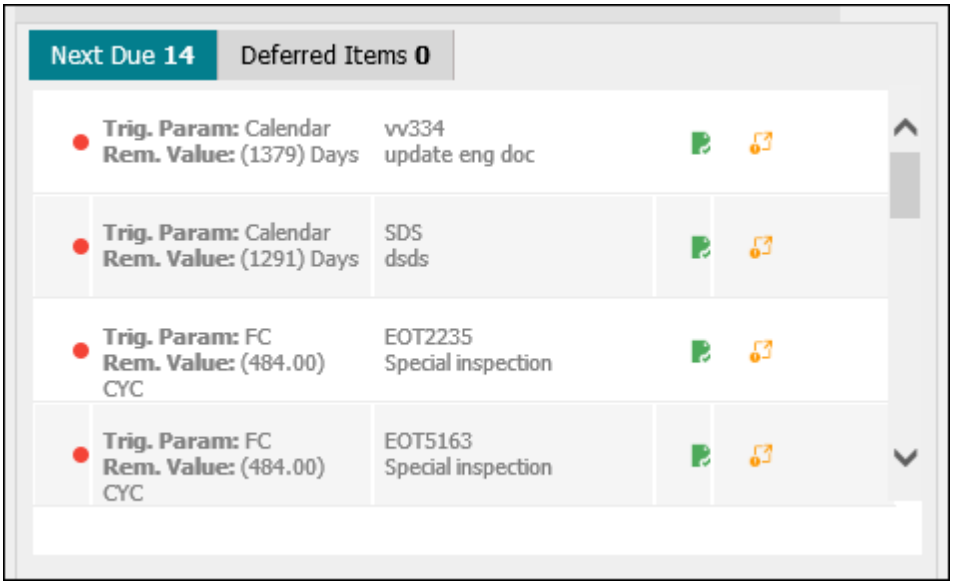
### 3.1.5 Due and Overdue tasks

1. Click the  icon for the aircraft in the **Fleet Details** multiline. The Maintenance details for the aircraft are displayed in the bottom right of the screen.

2. Click the **Next Due** tab to view Triggering Parameter, **Remaining** Value and the impending maintenance details for the aircraft. (This tab appears first by default.) The **Next Due tab** displays the count of tasks which fall within the horizon as set by the option 'Planning Horizon for Job Allocation (Days)'.

3. Click the icon alongside the task to open the **Request Short Term Escalation** page, if you wish to defer the task. However, you can request for the short term escalation of aircraft tasks only if the flag 'Deferment Policy' in the aircraft maintenance program is 'Allowed'. No escalation restriction exists for component tasks.

4. Click the **Deferred Items** tab to view the maintenance tasks that have been deferred for execution on the aircraft. This tab displays the count of the 'Deferred' discrepancies for the **aircraft** in context as the next image shows.




## 3.1.6 Creating aircraft

1. Click the **Create Aircraft Record** pushbutton to create **aircraft** (without navigating to the Aircraft component).

### Legends

| Icon | Action |
|---|---|
| | Displays aircraft, engine, parameter and maintenance details for the record selected in the "Fleet Details" multiline. |
| | Indicates the task has been assigned to a package for execution. |
| | Click on the icon to open the "Manage Aircraft /Component Records" activity |
| | Indicates that the maintenance task / discrepancy has crossed the Alert value |
| | Indicates that the maintenance task / discrepancy is overdue |
| | Click on the icon to open the "Request Short Term Escalation" activity |

To proceed further,

2. Select the **Due List Report** link to generate the **Aircraft** Maintenance Due Report.

3. Select the **Edit Aircraft Record** link to modify details of the aircraft record selected in the multiline.
4. Select the **Maint. Discrepancy Info.** link to update **discrepancies** for the aircraft record selected in the multiline.

## 3.2 Managing aircraft / component records

The Manage Aircraft / Component Records activity provides a centralized hub for managing configuration, program and compliance information. You can perform various functions like build / update configuration, initialize maintenance program and manage compliance of tasks for aircraft / component in a single screen using different tabs.

1. Select the **Manage Aircraft / Component Records** activity under the **Technical Record** business component. The **Manage Aircraft / Component Records** page appears. *See Figure 3. 2*

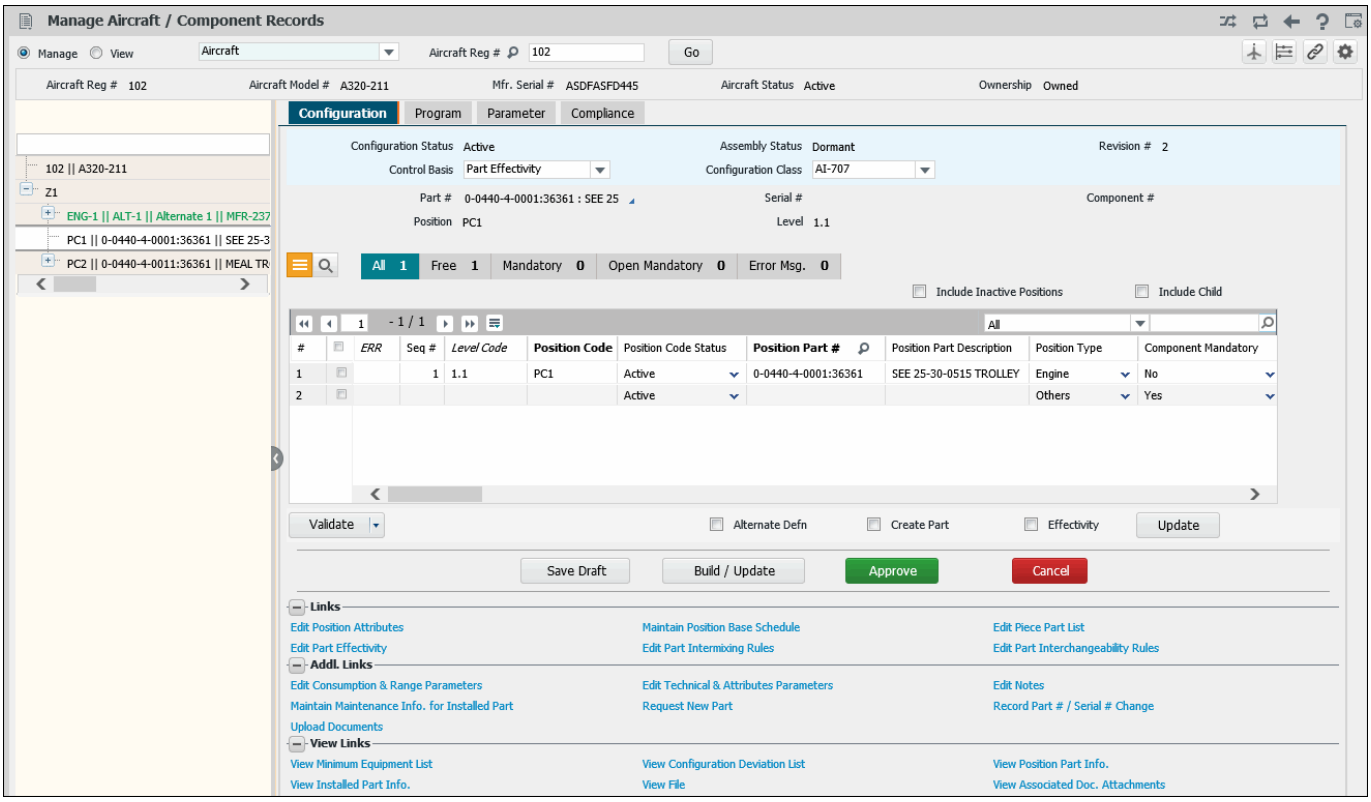



*Figure 3. 2 Technical Records Dashboard*

2. Select the 'Manage' or 'View' radio button to manage or **view** aircraft / component configuration.
3. Select the **Maintenance Object** as "Aircraft" or "Component".
4. Click the **Go** button to retrieve the aircraft / component details.
5. The system displays a tree structure with 'Aircraft Reg #' or 'Component #' as the root folder based on the Maintenance Object selected. Under the root folder, the system displays the child folders 'ATA #' (All ATA# available in the first level configuration) or Zone # based on option set in "User Preference" business component, Piece Part folder (piece part defined for the Aircraft and its assembly) and 'Draft' folder.
6. Click a node in the tree, to display the latest configuration details in the respective tabs in the multiline.

To proceed further,

- Select the Configuration tab to manage aircraft / component configuration.
- Select the Program tab to manage aircraft / component program
- Select the Compliance tab to manage task compliance.

## 3.2.1 Managing aircraft / component configuration

Using this tab, you can build / attach components, build / initialize entire assembly in one go, manage exceptions, etc. The Configuration tab allows you to perform the following:

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

1. The **Configuration** tab appears by **default**, in the **Manage Aircraft / Configuration Records** page. *See Figure 3. 3*.

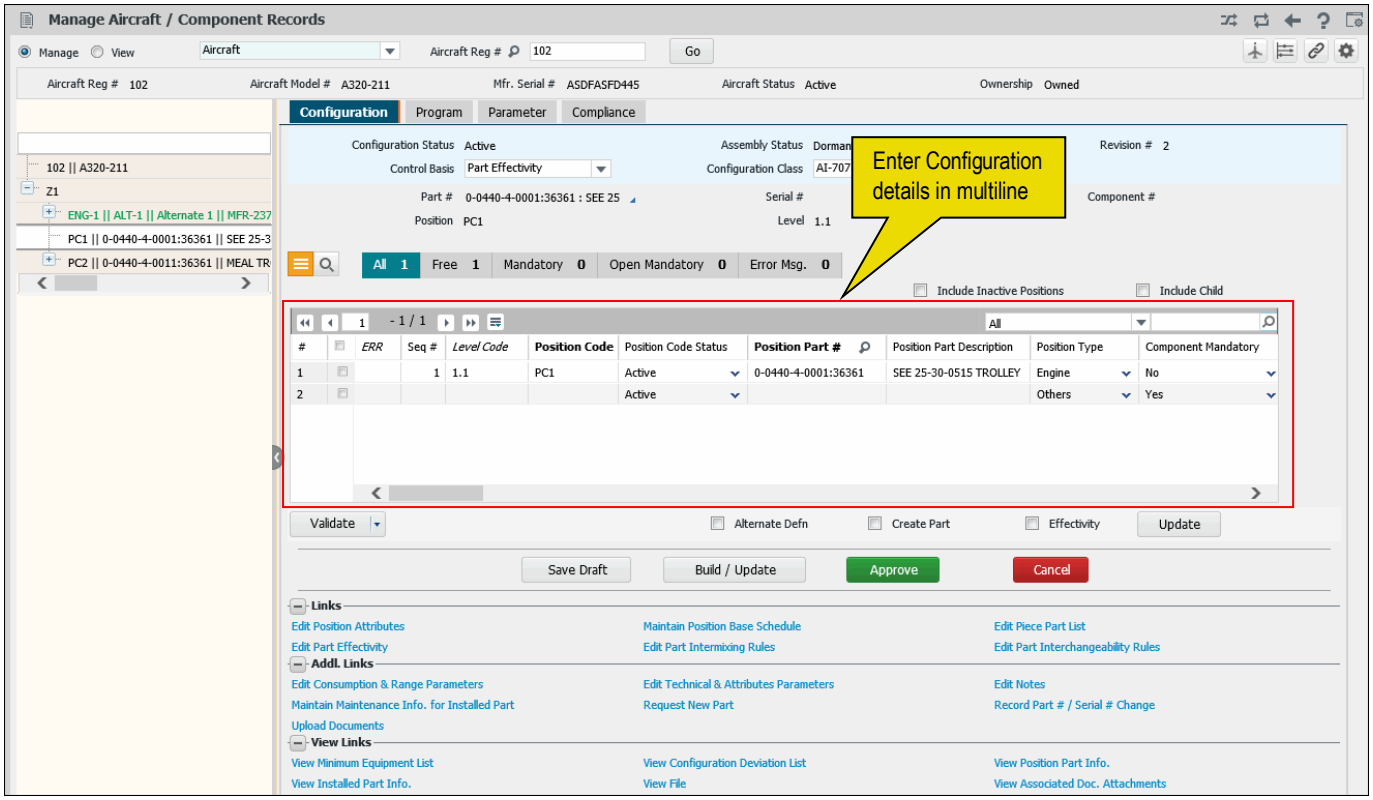



*Figure 3. 3 Managing aircraft / component configuration*

### Exception Management

2. Click on the Exception **search** icon '  ' to display Exception Management section. *See Figure 3. 4*

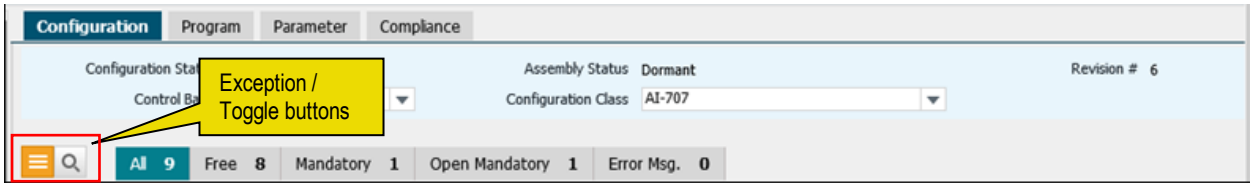



*Figure 3. 4 Configuration tab - Exception buttons*

3. Click on the Exception buttons in the Exception section. These buttons display the exception information along with count of Exceptions, using which user can quickly review and retrieve exception information. The following buttons are displayed: 'All', 'Free', 'Mandatory', 'Open Mandatory' and 'Error Msg.'.

## Primary Search

4. Click the Search icon ' ' to search configuration details based on the search criteria specified. *See Figure 3. 5*

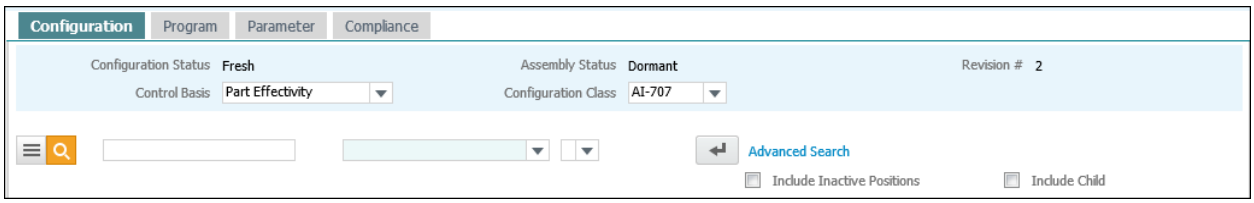



*Figure 3. 5 Configuration tab - Primary Search*

- You can search by entering one of the following: 'Position Code', 'ATA #', 'Position Part #', 'Installed Part #', 'Installed Serial #', 'Installed Component #', 'Part Description', 'NHA Part #', 'NHA Serial #', 'NHA Component #', 'EIPN Part #', 'EIPN Serial #' and 'EIPN Component #
- You can also perform search based on 'Configuration Status', 'Position Status" or 'Attachment Status'.

5. Click the 'Get' bu ' to retrieve the search results in the multiline

## Advanced Search

6. Click the Advanced Search link to display pop-up window to perform advanced search. *See Figure 3. 6*

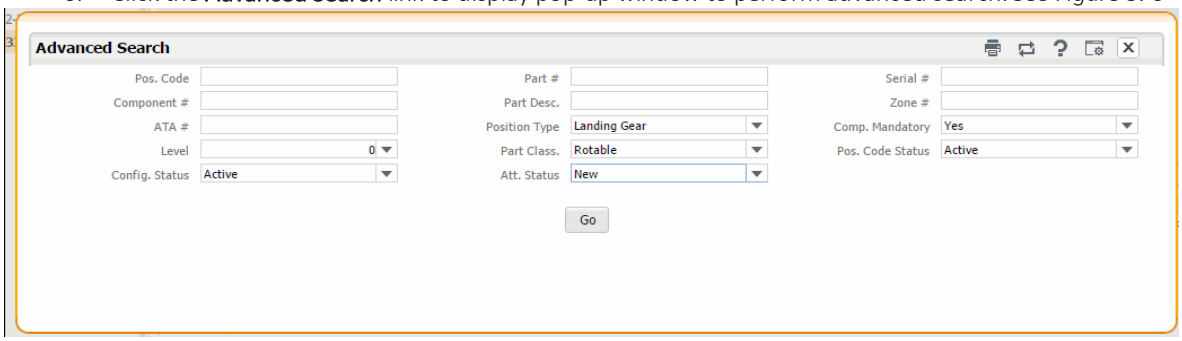



*Figure 3. 6 Configuration tab – Advanced Search*

## Filter - Inactive Positions / Child

7. Check the Include Inactive Positions box above the multiline to display all the inactive positions in the multiline.

8. Check the Include Child box to retrieve entire sub assembly information of the selected position code / record. This enables the user to build and Initialize entire Aircraft / Component assembly.

## Configuration Details multiline

9. Enter the Position Code, Position Code Status, Position Part #, Position Part Description, and Position

Mandatory in the multiline.

10. Select Attachment Status of the position code, such as “Attached”, “Removed”, “Unknown”, “New” and “Error”.
11. Enter the Installed Part #, Installed Serial #, Installed MSN #.
12. Enter NHA Part #, NHA Serial # and NHA Component #.
13. Enter Zone #, ATA #, Position Formula #, Template Part #, Replacement Type, Installed Part #, Installed Serial # and Installed MSN #.
14. Enter Installed Condition, Station, Recorded By, Removed Condition, Removal Type, Reason #, Removal Date & Time for the position code.
15. Enter the Attached Date, Induction Date and Manufactured Date of the
16. Enter ownership details like Ownership type and Owning Agency #.
17. Select Stock Status for the installed part.
18. Enter the Certificate Type, Certificate # and Certificate Date of the part.
19. Select Interchangeability Rules to indicate the method in which the part can be alternated for the reference part, such as “One way” or “Two Way”.
20. Enter TSN (Time Since New) and CSN (Cycles Since New) to initialize the cumulative flying hours and cumulative flying cycles for new components.
21. Click on the Validate option in the button combo to process the modified / selected records in the multiline and the records in the draft folder of the tree.

*Note: If records are not selected, the system considers all the modified records in the multiline for processing, and displays all the error descriptions in the ‘Message Center’ field. The error images are displayed in ‘ERR’ column for the respective records.*

22. Click on the Delete Position option in the button combo to delete a position from the configuration. Only empty positions can be deleted.
23. Click on the Re-Num option in the button combo to re-sequence the records in the multiline.

## Straight-Through Processing

24. Select the following check boxes below the multiline.
    - ‘Effectivity’
    - ‘Alternate Defn’
    - ‘Create Part’
25. Click Build / Update button to update part effectivity, define alternate parts or create new part based on user role access rights.

## To proceed

26. Click the Save Draft pushbutton to save the aircraft / component configuration details as draft.
27. Click the Build / Update pushbutton to build / update aircraft / component configuration.
28. Click the Cancel pushbutton to cancel aircraft / component configuration.
29. Click the Approve pushbutton to approve aircraft / component configuration

## Links

- Select the Edit Position Attributes link to define or modify the position attributes.
- Select the Maintain Position Base Schedule link to modify the position based schedule for the part.
- Select the Edit Part Intermixing Rules link to define intermixing rules for aircraft configuration.

- Select the **Edit Part Interchangeability Rules** link to define position based parts interchangeability rule for aircraft configuration.
- Select the **Edit Part Effectivity** link to define part effectivity for aircraft / component.
- Select the **Edit Piece Part List for Component** link to define piece information for component.
- Select the **Edit Consumption & Range Parameters** link to record the consumption and range parameters for the aircraft / component.
- Select the **Edit Technical & Attributes Parameters** link to record the technical and attribute parameter for the aircraft / component.
- Select the **Edit Notes** link to edit additional notes for aircraft configuration.
- Select the **Maintain Maintenance Info. For Installed Part #** link to update maintenance information for the part.
- Select the **Request New Part** link to request for new part that is not available in the system.
- Select the **Record Part # / Serial # Change** link to record part and serial change details.
- Select the **Upload Documents** link to upload files attached to the configuration record to central repository.
- Select the **View Minimum Equipment List** link to view the details of the parts included in the minimum equipment list.
- Select the **View Configuration Deviation List** link to view the list of secondary parts, which do not affect the normal flying of the aircraft.
- Select the **View Position Part Info.** link to view the details of the part.
- Select the **View Installed Part Info.** link to view the details of the installed part.
- Select the **View File** link to view the file details.
- Select the **View Associated Doc. Attachments** link to view documents attached to the configuration record.

### 3.2.2 Managing aircraft / component program

This tab allows you to create and manage aircraft and component programs. The Program for both Aircraft and for all the attached components can be created / modified in one go. 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 bulk, thus simplifying the Aircraft / Component induction process. You can perform the following using the Program tab:

- Manage Aircraft and attached Components Program
- Associate Aircraft to Model Program and Sub Fleet
- Add / modify tasks to maintenance program
- Delete task associated to the program
- Define Planning Relationship
- Define Post Compliance Relationship (Initiate Schedule, Terminate Schedule, Supersede)
- Straight Through Processing
    - Task Creation
    - Task Effectivity Definition

1. Select the **Program** tab in the **Manage Aircraft / Configuration Records** page. *See Figure 3. 7*

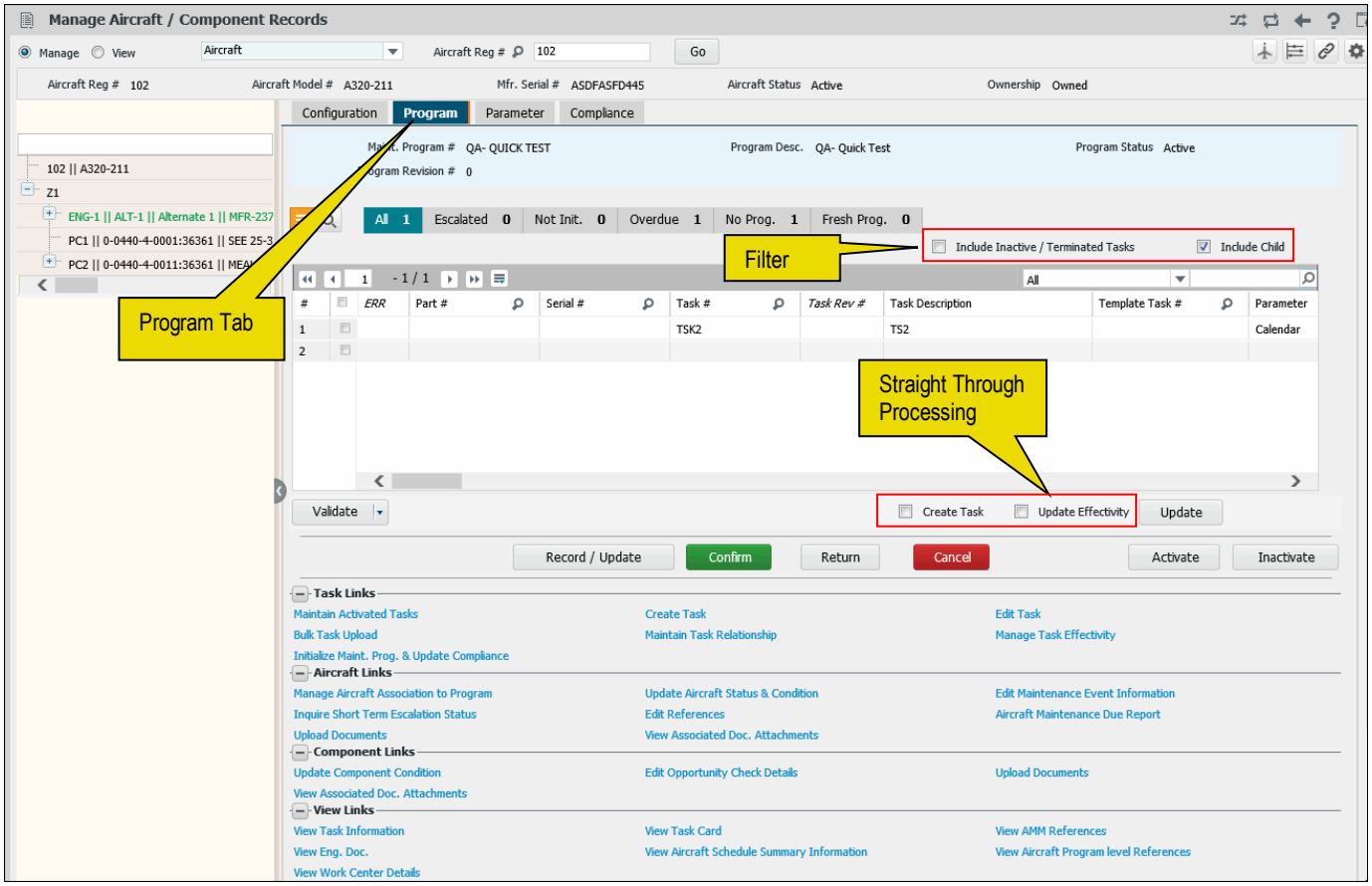



*Figure 3. 7 Managing aircraft / component program*

## Exception Management

2. Click on the **Exception** search icon '  ' to display Exception Management section. *See Figure 3. 8*

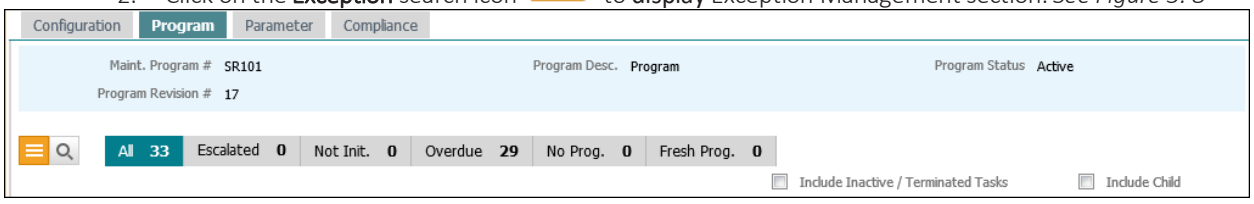



*Figure 3. 8 Program tab - Exception buttons*

3. Click on the Exception buttons in the Exception section. **These** buttons display the exception information along with count of Exceptions, using which user can quickly review and correct the exceptions in aircraft / component program.

- All - Click on this button to retrieve all the tasks in the aircraft / component program, into the multiline.
- Escalated - Click this button to retrieve the escalated tasks in the aircraft / component program, into the multiline.
- Not Initialized - Click this button to retrieve the tasks **that** are not initialized in the aircraft / component program, into the multiline.
- Overdue - Click this button to **retrieve** the overdue tasks in the aircraft / component program, into the multiline.
- No Program - Click this button to **retrieve** the records for which aircraft / component program is not defined.
- Fresh Program - Click this button to retrieve the details of the aircraft / component programs

that are in “Fresh” status in the multiline.

## Primary Search

4. Click the Search icon ‘ ’ to search program details based on the search criteria specified. *See Figure 3. 9*

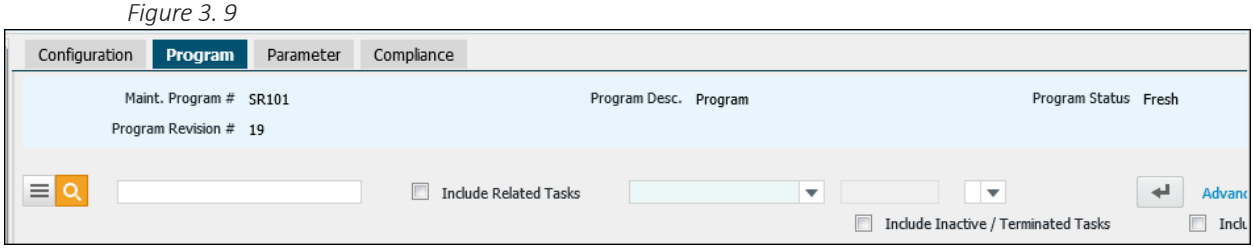



*Figure 3. 9 Program tab - Primary Search*

- You can search by entering one of the following: ‘Task’, ‘Task Desc.’, ‘Eng. Doc.’, ‘MCR #’, ‘Zone’, ‘Prog. Item Type’, ‘Job Type’, ‘Schedule Status’, ‘Rem. Value.
- ‘Include Related Tasks’ check box will be used to fetch all the related tasks for the searched Task #.
- Use the drop-down list box and select the search category as "Prog. Item Type", "Schedule Status", "Job Type", and "Rem. Values” to search program details.

5. Click the ‘Get’ bu ‘ to retrieve the search results in the multiline

## Advanced Search

1. Click the Advanced Search link to display pop-up window to perform advanced search. *See Figure 3. 10*

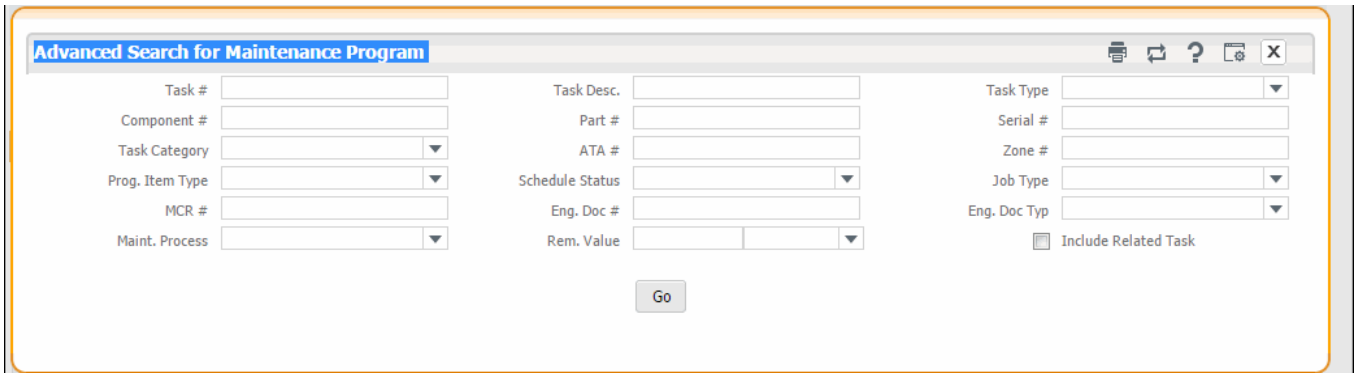



*Figure 3. 10 Program tab - Advanced Search*

## Filter - Inactive / Terminated tasks / / Child

2. Check the Include Inactive / Terminated Tasks box above the multiline to retrieve the matching Tasks in 'Fresh', 'Active', 'Inactive' or 'Terminated' status in the multiline.
3. Check the Include Child box to retrieve the matching Tasks from it child components program also which is in 'Fresh' and 'Active' status in the multiline.

## Program Details multiline

4. Enter the Part #, Serial #, Task # and Template Task #.
5. Select the Parameter for the task and select the Time Unit for the interval of execution of the task.
6. Enter the Threshold Value, Interval, Last Performed Date, Last Performed Value, Next Scheduled Date and Next Scheduled Value of the task.
7. Specify the Prog. Item Type, Job Type, Maintenance Type, Update Basis, Schedule Type and Schedule Status for the task.

8. Enter the Ref. Document #, Ref. Document Details and select the Ref. Document Type for the task.
9. Select the Default Exe. Priority, Execution Type, Sch Exec Rule and Expense Type of the task.
10. Enter the Eng. Doc. #, Eng. Doc. Rev. #, Comments and Other References for the task.
11. Specify the source document details for the task like Source Doc. Type, Source Doc. # and Source Doc. Rev. #.
12. Enter Task Level Remarks, if any.

## Processing

Select a task in the multiline and then from the pushbutton combo,

13. Click on Validate to process the changes made to the task.
14. Click on Get Base Task to retrieve base tasks of the task.
15. Click on the Get Schedule option to retrieve the task schedule.
16. Click on the Compute Next Due option to compute next schedule date/value.
17. Click on the Delete Schedule option to delete the schedules of the task from the program.
18. Click the Delete Task option to delete the task from the program.

## Straight-Through Processing

19. Select the Create Task check box to create the tasks that you have specified in the multiline.

    *Note: The system allows for the creation of the tasks only if the login user is mapped to the system activity "Create Task".*

20. Select the Update Effectivity check box to set task effective for the part # specified in the record in the multiline.

    *Note: The system allows for the update of the task effectivity only if the login user is mapped to the system activity "Update Effectivity".*

## To proceed

21. Click Update button to create new task or update task effectivity based on user role access rights.
22. Click the Record / Update pushbutton to record / update aircraft / component program.
23. Click the Confirm pushbutton to confirm the Aircraft Maintenance Program.
24. Click the Return pushbutton to modify the program that is in "Confirm" status to "Fresh" status.
25. Click the Cancel pushbutton cancel the Fresh / Draft revision of the aircraft / component program.
26. Click the Activate pushbutton to activate the aircraft / component program.
27. Click the Inactivate pushbutton to inactivate the aircraft / component program.

## Links

Task Links

- Select the Maintain Activated Tasks link to edit activated tasks.
- Select the Create Task link to create task.
- Select the Edit Task link to modify task details.
- Select the Bulk Task Upload link to perform direct upload of tasks.
- Select the Maintain Task Relationship link to maintain task relationship.
- Select the Manage Task Effectivity link to manage task effectivity.
- Select the Initialize Maint. Prog. & Update Compliance link to initialize maintenance program and update compliance.

Aircraft Links

- Select the **Manage Aircraft Association to Program**" link to associate aircraft to maintenance program.
- Select the **Update Aircraft Status & Condition** link to update aircraft status and condition.
- Select the **Edit Maintenance Event Information** link to edit maintenance event information of aircraft.
- Select the **Inquire Short Term Escalation Status** link to view short term escalation details of tasks in aircraft maintenance program.
- Select the **Edit References** link to edit reference details of the aircraft.
- Select the **Aircraft Maintenance Due Report** link to generate aircraft maintenance due reports for scheduled operations and on-demand operations.
- Select the **Upload Documents** link to upload files attached to the aircraft program record to central repository.
- Select the **View Associated Doc. Attachments** link to view documents attached to the aircraft program record.

Component Links

- Select the **Update Component Condition** link to update component condition.
- Select the **Edit Opportunity Check Details** link to edit the opportunity check details for the component.
- Select the **Upload Documents** link to upload files attached to the component program record to central repository.
- Select the **View Associated Doc. Attachments** link to view documents attached to the component program record.

View Links

- Select the **View Task Information** link to view the task details.
- Select the **View Task Card** link to view the task card details.
- Select the **View AMM References** link to view the details of aircraft maintenance manual for the task.
- Select the **View Eng. Doc.** link to view the engineering document details.
- Select the **View Aircraft Schedule Summary Information** link to view the schedules defined for maintenance program of aircraft.
- Select the **View Aircraft Program level References** link to view the program level references.
- Select the **View Work Center Details** link to view the work center details.

### 3.2.3 Managing parameter values

The **Parameter** tab enables you to **record**, update, view or delete parameter values mapped to an aircraft or a component. It mainly addresses the need of the Technical Records staff to access parameter values during the technical recording process cutting traversal to varied and multiple activities. Users may prefer to view parameter details of the maintenance object alone or its sub-assemblies too.

1. Select the **Parameter** tab in the **Manage Aircraft / Component Records** page. The **Parameter** tab appears. *See Figure 3. 11*

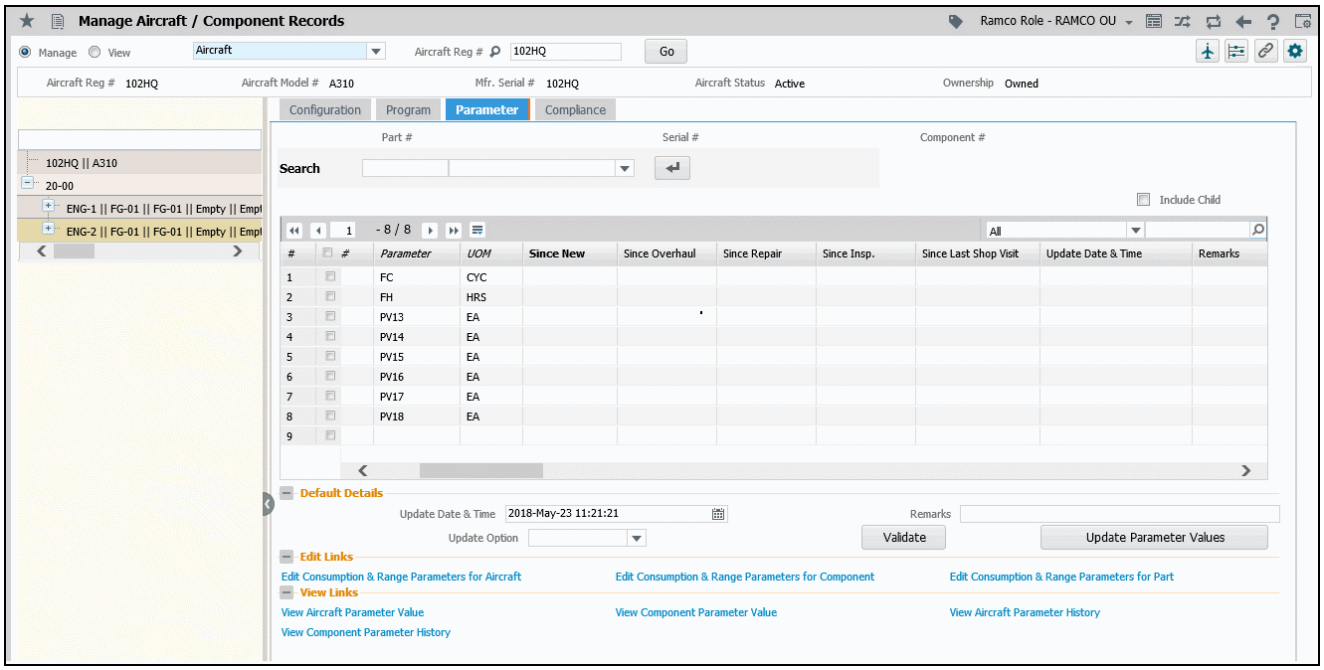



*Figure 3. 11 Program tab - Advanced Search*

2. In the **Search** input box, enter Part #, Serial #, Parameter or Parameter Description associated with the parameter for which you wish to view details.
3. From the adjacent drop-down list box, select **Parameter Type**. The drop-down list box displays the following: Consumption, Range, Attribute and Technical.
4. Click the  button to retrieve the parameters that satisfy the search criteria in the multiline.
5. To retrieve parameters of sub-assemblies of aircraft / component, select the **Include Child** check box.
6. In the multiline, enter Since New, Since Overhaul, Since Repair, Since Insp., Since Last Shop Visit, Update Date & Time and Init. Value Unknown?
7. Click the **Validate** pushbutton to verify the specified parameter values.
8. Click the **Update Parameter Values** pushbutton to save the parameter values.

**To proceed**

- Select the **Edit Consumption and Range Parameters for Aircraft** link to update consumption and parameter range values for the aircraft.
- Select the **Edit Consumption and Range Parameters for Component** link to update consumption and parameter range values for the component.
- Select the **Edit Consumption and Range Parameters for Part** link to update consumption and parameter range values for the part.

## 3.2.4 Managing task compliance

This tab allows managing compliance of the tasks for an aircraft / component. You can perform various compliance functions like recording compliance, correcting / deleting compliance and viewing compliance. These functions are controlled using security access rights. The Compliance tab provides the combined features of 'Work Compliance' in the **Initialize Maint. Prog. & Update Compliance** screen and **Track Maintenance Compliance History** screen. You can perform the following Compliance functions:

- Record manual task compliance for the program tasks
- Compliance correction / deletion for already complied tasks
- View all complied tasks and pending compliance for the tasks

- Activity based access rights for different functions like recording, correcting / deleting and viewing compliance.

1. Select the **Compliance** tab in the Manage Aircraft / Configuration Records page. *See Figure 3. 12*

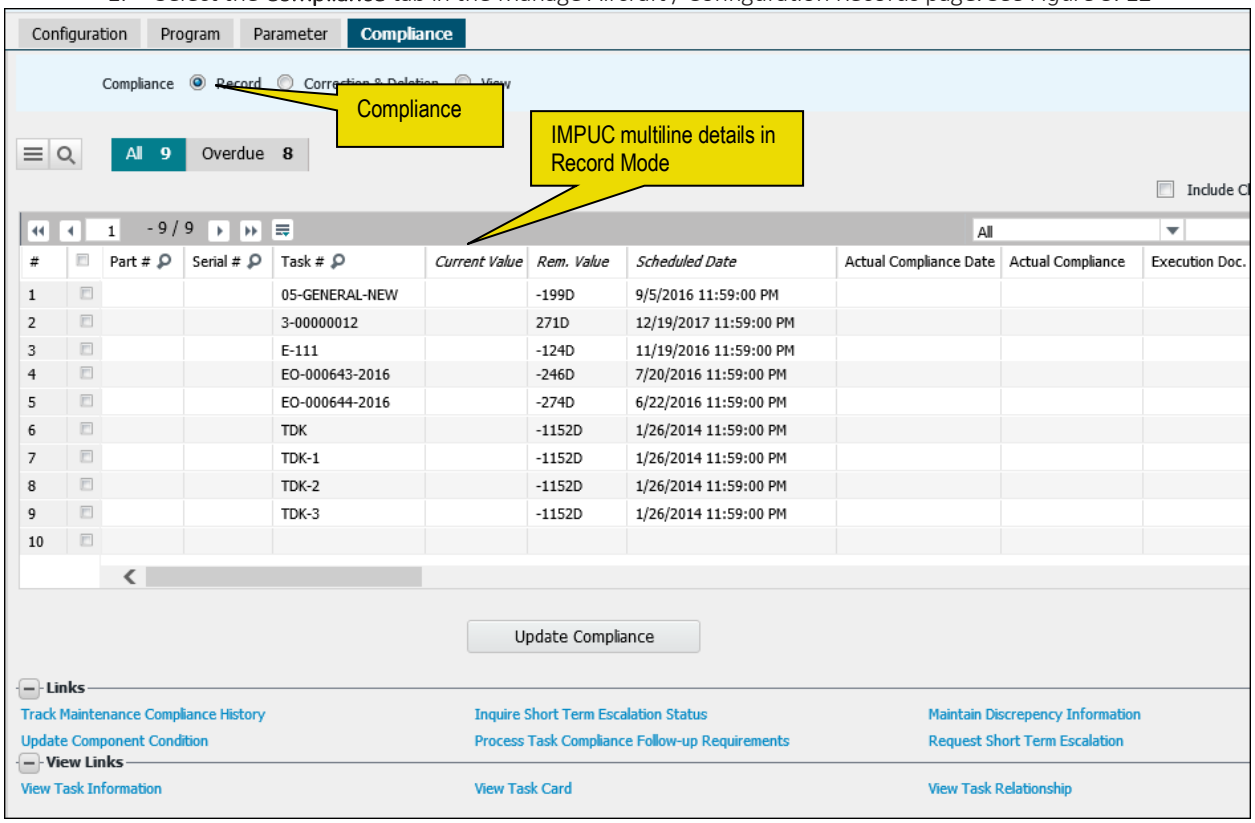



*Figure 3. 12 Managing task compliance - Record Mode*

2. Select one of the following radio buttons to select the compliance functions:

- Record - Select this radio button to retrieve program tasks for recording compliance. The system retrieves and displays the compliance details from the 'Initialize Maintenance Program Details and Update Compliance' (IMPUC) multiline.
- Correction & Deletion - Select this radio button to retrieve the last complied tasks for correction and deletion. The system retrieves and displays the details from the 'Track Maintenance Compliance History' multiline on selecting this radio button.
- View - Select this radio button to retrieve 'All Compliance' history of the tasks. The system retrieves and displays the details from the 'Track Compliance History' multiline on selecting this radio button.

# 3.3 Record Mode

This radio button appears by default, on launch of the tab. In 'Record' mode, the system displays the following sections:

## Exception Management

1. Click on the Exception search icon '  ' to display **Exception** Management section. These buttons display the exception information along with count of Exceptions. *See Figure 3. 13*

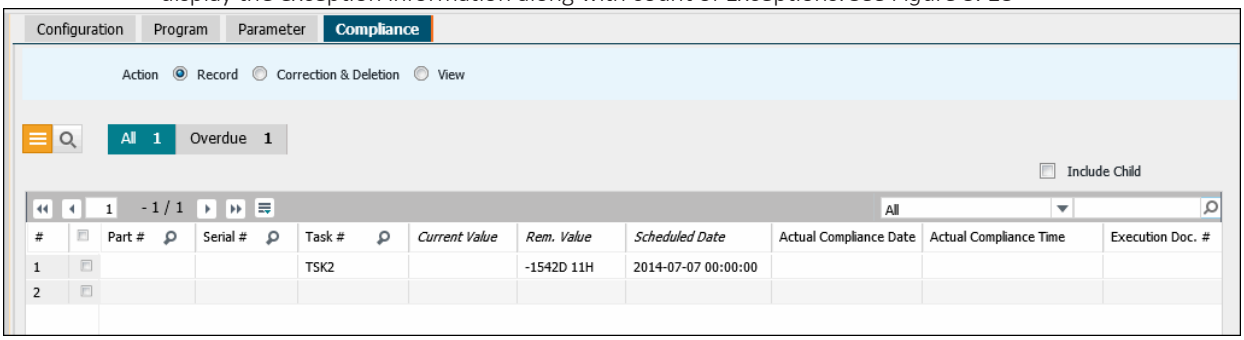



*Figure 3. 13: Compliance tab - Exception Search in Record Mode*

- All - Click this button to retrieve all the tasks **that** are available in the program of the searched aircraft / component or in the program of the selected component in the configuration tree.
- Overdue - Click this button to retrieve the overdue due tasks that are overdue with respect to the current date in the program of the searched aircraft / component or in the program of the selected component in the configuration tree.

## Primary Search

1. Click the Search icon '  ' to search complaince **details** based on the search criteria specified. *See Figure 3. 14*

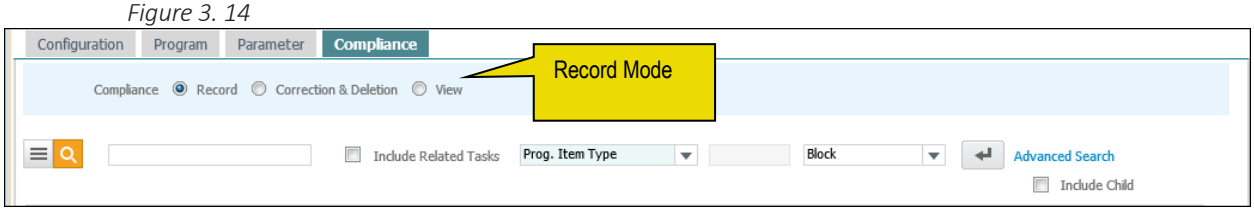



*Figure 3. 14 Compliance tab - Primary Search in Record Mode*

- You can search by entering one of the following: '**Task** #', 'Task Description', 'Eng. Doc #', 'Eng. Doc Type', 'MCR #' or 'ATA #'.
- 'Include Related Tasks' check box will be used to fetch all the related tasks for the Task # or Task Description mentioned in the editable field.
- Use the drop-down list box and select the following parameters to search for the program tasks: 'Prog. Item Type', 'Rem Value <=' or 'Job Type'.

2. Click the  button to retrieve the search results in the multiline

## Advanced Search

3. Click the **Advanced Search** link to display "Advanced Search for Compliance" pop-up window to perform advanced search. *See Figure 3. 15*.

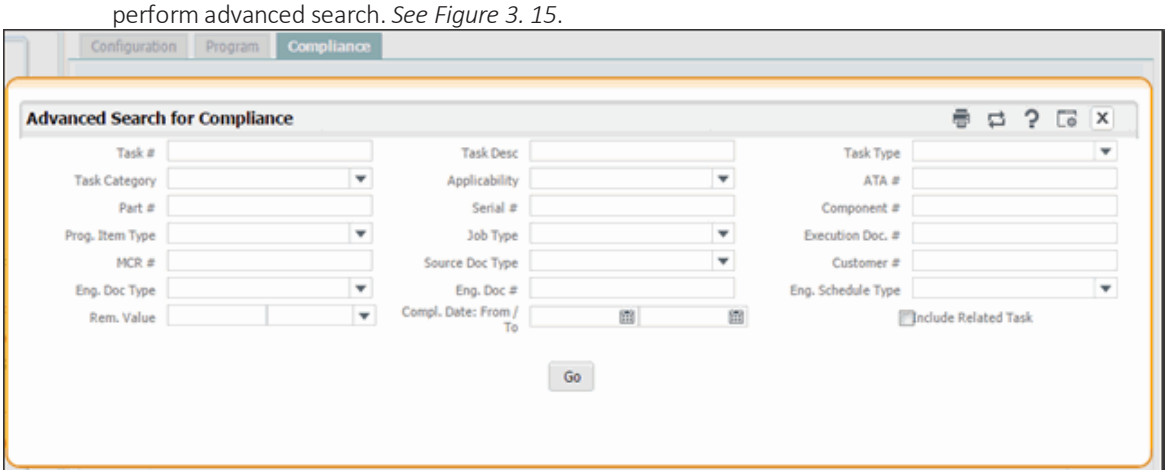



*Figure 3. 15 Compliance tab - Advanced Search*

## Filter – Include Child

4. Check the **Include Child** box to retrieve the matching Tasks from it child components program also which is in 'Fresh' and 'Active' status in the multiline.

## 'Initialize Maintenance Program & Update Compliance' (IMPUC) multiline

5. Enter the **Part #, Serial #** and **Task #.**

6. Enter the **Actual Compliance Date, Actual Compliance Time, Execution Doc. #** and **Execution Comments** for task compliance.

## Update Compliance

7. Click the **Update Compliance** pushbutton to update the compliance.

# 3.4 Correction & Deletion / View Mode

1. Select the 'Correction & Deletion' radio button. In 'Correction & Deletion' mode, the system retrieves the last complied tasks for correction and deletion. In 'View' mode, the system retrieves 'All Compliance' history of the tasks. The system retrieves and displays the details from the 'Track Maintenance Compliance History' multiline in both these modes. *See Figure 3. 16*

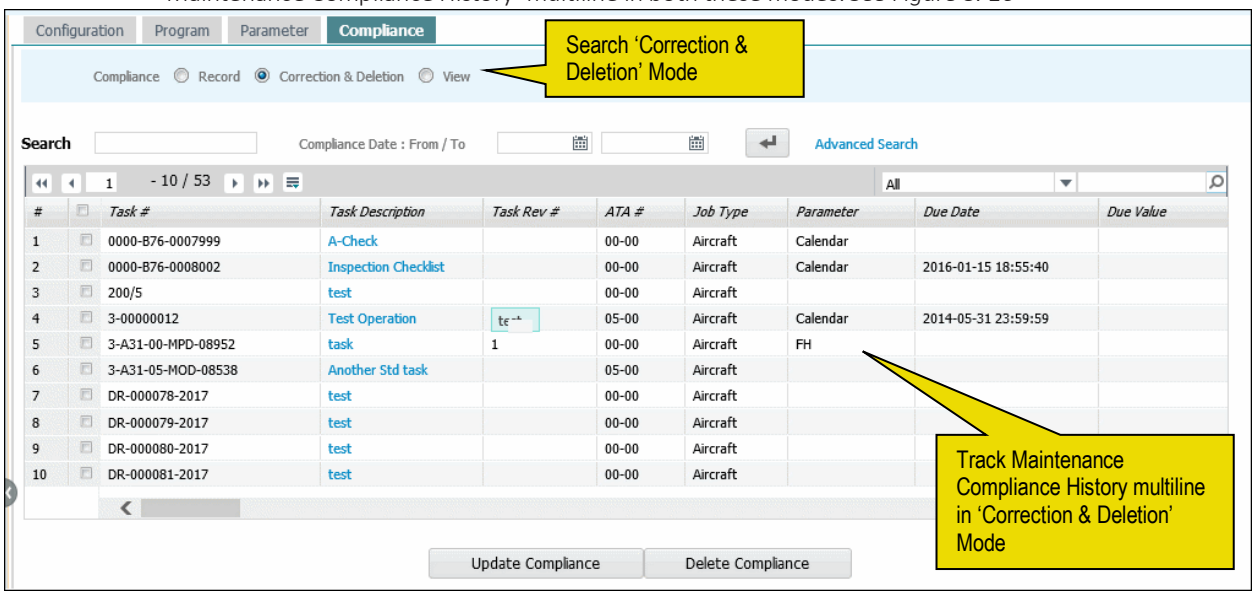



*Figure 3. 16 Compliance tab – Correction & Deletion mode*

## Primary Search

2. Specify **Search** criteria by entering **one** of the following: 'Task #', 'Task Description', 'Eng. Doc #', 'Eng. Doc Type', 'MCR #' and 'ATA #'.
3. Enter the **Compliance Date: From / To** indicating the compliance date range for which you wish to retrieve the task details.
4. Click the 'Get' button ' ' to retrieve the search results in the multiline

## Advanced Search

5. Click the **Advanced Search** link to display "Advanced Search for Compliance" pop-up window to perform advanced search.

## Track Maintenance Compliance History multiline

6. The last compliance date and compliance value can be corrected by entering the **New Compliance Date and Time**, **New Compliance Value**, **New Execution Doc #** and **Correction Remarks** for the respective task and its corresponding parameter.

## Update / Delete compliance

7. Click the **Update Compliance** pushbutton to update the compliance.
8. Click the **Delete Compliance** pushbutton to delete the compliance.

*Note: The "Update Compliance" and "Delete Compliance" pushbuttons are visible only in "Correction & Deletion" mode. Both the pushbuttons are hidden in 'View' Mode.*

## Links

- Select the **Track Maintenance Compliance History** link to track maintenance compliance history.
- Select the **View Task Information** link to view the task details.
- Select the **Inquire Short Term Escalation Status** link to inquire short term escalation status.
- Select the **Maintain Discrepancy Information** link to update discrepancy information.

- Select the **Update Component Condition** link to update component condition.
- Select the **View Task Card** link to view the task card details.
- Select the **Process Task Compliance Follow-up Requirements** link to process the task compliance follow-up requirements.
- Select the **View Task Relationship** link to view the task relationship details.
- Select the **Request Short Term Escalation** link to create short term escalation for the task.

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