

RAMCO AVIATION SOLUTION
VERSION 5.8

USER GUIDE

CrewAnywhere & Risk Management

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ABOUT THIS MANUAL

This document is the Software User Manual (SUM) for the **Risk Management** and **CrewAnywhere**.

Risk Management is a business component under the Flight Operations BPC in the Ramco Aviation desktop suite whereas CrewAnywhere is an online mobile application. Both of these have been developed by Ramco Systems to drive the Risk Assessment process and mitigate the risks arising from the Flight Operations / crew.

This manual will support

- The supervisors / administrators / approvers of the risk assessment to set up an operational framework for the Risk Assessment process.
- The Flight Operations crew in undertaking and submitting their risk assessments for evaluation

WHO SHOULD READ THIS MANUAL

This manual is intended for mobile users in remote areas performing aircraft maintenance activities offline in the Aviation industry and familiar with the Ramco Aviation desktop 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 various sections each describing the concept and procedures involved in accomplishing specific processes including setting up notification messages and designating message recipients, establishing framework for risk assessment including questionnaires and scores, setting evaluation measures and mitigation processes in the Ramco Aviation desktop suite. Next, the procedures for accessing notification messages and submission of the risk assessment submission by the Flight Operations crew have also been laid out in this 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 / critical 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).

WHOM TO CONTACT FOR QUERIES


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

1	DEVICE REQUIREMENTS	5
2	PREREQUISITE MASTER DATA	6
3	RISK MANAGEMENT	7
3.1	Maintaining Notification Messages	9
3.2	Creating Notification Messages for Flight Operations.....	10
3.2.1	ASSIGNING ROLES.....	10
3.2.2	ASSIGN STATION/WORK CENTER	11
3.3	Maintain Risk Assessment Questionnaire.....	13
3.3.1	Creating Risk Assessment Questionnaire	13
3.3.2	Adding responses to questions of questionnaire	14
3.4	Approve Risk Assessment.....	16
3.4.1	Approving Risk Assessment	16
3.4.2	Managing Risk Assessment	17
3.5	Review Risk Assessment.....	18
3.5.1	Reviewing employee risk assessments.....	18
4	CREWANYWHERE MOBILE APP	20
4.1	Logging into CrewAnywhere.....	21
4.2	Checking into CrewAnywhere from Dashboard	23
4.2.1	Working with Dashboard.....	23
4.3	Notification Messages	25
4.3.1	Reading Notification Messages	25
4.4	Risk Assessment	27
4.4.1	Creating New Assessment	28
4.5	Manage Trips.....	31
4.5.1	Creating Trips	32
4.5.2	Adding crew to trip.....	33
4.5.3	Trip List	33
4.6	Pilot Information	35
4.6.1	Viewing Currency Information	35
	Index	36

DEVICE REQUIREMENTS

The **CrewAnywhere** app requires the following recommended requirements for optimal user experience:

- ▶ iPhone 6, iPad Air / iPad Mini 2 or later with Apple A7 or later chipset
- ▶ iOSs 9 or later
- ▶ Constant network connectivity via Wi-Fi or 3G/4G*
- ▶ 100 MB or more free space

 *Note: 3G/4G connectivity requires an iPad capable of Mobile Data connectivity. Your carrier might charge you extra for data roaming. When available, always prefer Wi-Fi connectivity over Mobile Data.*

PREREQUISITE MASTER DATA

Prerequisite Data for CrewAnywhere

- ▶ Risk Management Master Data must be set up in the Risk Management component of Flight Operations BPC in the Ramco Aviation Desktop suite
- ▶ Process Parameters must be defined in the Set Process Parameters screen of the Define Process Entities activity of Common Master in the Ramco Aviation Desktop suite
- ▶ User Authentication Credentials must be set for the users of CrewAnywhere online mobile application

RISK MANAGEMENT

For On Demand Operators and HEMS, to operate efficiently and profitably, their Flight Operations must be agile, and must meet the safety standards prescribed by the regulatory authorities. To achieve all these, the entire process must be made infallible by factoring all the functional parameters, such as aircraft maintenance and Flight crew performance.

The Flight Operations staff includes Pilots, Co-Pilots, Instructor Pilots and Cabin Crew. To achieve enhanced flight operations, the human risks emanating from Pilots and other crew must be assessed, evaluated and mitigated. And finally, the impact of mitigation actions must be analyzed to verify the severity/existence of the risk post mitigation. To drive the risk assessment and evaluation process, new business component called Risk Management has been developed under the BPC Flight Operations in the Ramco Aviation desktop suite. The supervisors and administrators of the Flight Operations process can now depend on Risk management to build and maintain a Risk Assessment survey and response management setup. Questionnaires can be created, Scores can be defined for responses to questions and risk assessments of employees can be approved or rejected by supervisors/administrators.

Also, the Air Travel regulatory agencies, such as IATA transmit notification messages to inform aviation airline operators regarding flight delay, cargo, weather or airport. A facility to maintain these notifications and send them to relevant Pilots and other Flight Operations crew must be incorporated in the system.

However, Risk Management works in conjunction with the mobile application –CrewAnywhere. This mobile application provides the platform for the Pilots, Co-Pilots, Instructor-Pilots and Cabin Crew to access the relevant questionnaires and record their responses. The duly answered risk assessments will be routed to the Ramco Aviation Desktop Risk Management. The supervisors can then access the employee responses and approve/ return /reject them. The employees involved in Flight Operations will be also mandated to read notification messages routed from Risk Management before they check-in for duty in **CrewAnywhere**.

The **Risk Management** business component has been developed to help the airline operators to address the risks that the flight operations face from the Pilots, Co-Pilots, Instructors and cabin crew. **Risk Management** can be accessed from under the Flight Operations business component in the **Ramco Aviation** desktop suite. **Risk Management** facilitates the supervisors of Flight Operations to build and maintain a framework for the Risk Assessment survey process comprising the following tasks:

- ▶ Maintain Notification Messages
- ▶ Maintain Risk Assessment Questionnaire
- ▶ Approve Risk Assessment
- ▶ Review Risk Assessment

The Pilots, Co-Pilots, Instructors and cabin crew who form the key drivers in the flight operations are required to respond to the survey by means of the CrewAnywhere mobile application.

3.1 MAINTAINING NOTIFICATION MESSAGES

This feature enables the users to create and update notification messages. These messages are sent by the Air Travel regulatory authorities or other entities to airline operators. The notifications are typically delay, cargo, weather or airport facility updates transmitted to airports by air travel agencies, such as FAA or IATA. Every message created in the system is identified by a unique system-generated number. The details of the messages including message text, issue date, effective from and to dates, category and regulatory authority can be recorded and updated, if need be. Every message must be mapped to a specific role, specific station or work center.

All this ensures that the appropriate employees in the work centers or reporting stations automatically receive the impacting messages. Key documents / files associated with the notification messages can be uploaded to the central repository for future reference.

A message is identified by a unique number called the message ID. In this activity, you can record the following vital information on message:

- ▶ The text of the message
- ▶ The date on which the message was issued
- ▶ The regulatory authority or the entity that issued the message
- ▶ The effective period of the message
- ▶ Activate or Inactivate message

The notifications received from external sources or other entities are recorded and maintained in this activity. These messages in turn are communicated to the relevant employees in specific work centers or stations

You can also associate specific employees to the message by means of their roles. Likewise, work centers and stations can also be associated with messages. Specific employees in the work centers and stations assigned to messages will receive the message.

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Process Parameter Setting: You can map a work center or a station to a message based on the definition of the process parameter "Maintain and track notification messages at" under the entity type Risk Management and the entity Notification Messages in the Define Process Entities activity of Common Master

Process Parameter: Maintain and track notification messages at	
Value	Impact in the Assign Station / Work Center page
1 for Work center	Work Center # and Work Center Description fields appear that the users must specify
0 for Station	Station # and Station Name fields appear that the users must specify

3.2 CREATING NOTIFICATION MESSAGES FOR FLIGHT OPERATIONS

1. Select **Maintain Notification Messages** for **Flight Operations** link under the **Risk Management** business component. The **Maintain Notification Messages** for Flight Operations page appears. See Figure 3.1.

Maintain Notification Messages for Flight Operations

Search Criteria

Category: Effective From Date: Effective To Date: Status:

Regulatory Authority: Issue From Date: Issue To Date: Role:

Work Center #:

Message Details

#	Message ID	Ref. No.	Category	Message	Status	Mandatory	Issue Date	Effective From Date	Effective To Date	Reg. Auth.	Applicable Role	Applicable Work Center	Attachment
1	MNM000002			Test Message2	Active	Yes	30-05-2019	31-05-2019 13:04:01			1	1	
2	MNM000001			Test Message1	Active	Yes	30-05-2019	30-05-2019 13:03:08			1		
3					Active	Yes							

Figure 3.1: The screen for creating notification messages

2. In the **Message Details** multiline, enter the number assigned to the notification message by the regulatory authority or the source in the **Ref. No.** field.
3. Use the **Category** drop-down list box to select the category of the message.
4. Enter the complete text of the message in the **Message** field.
5. Use the **Status** drop-down list box to select the status of the message. The drop-down list box displays Active or Inactive.
6. Enter the date on which the message was published by the regulatory authority or the source in the **Issue Date** field.
7. Enter the date from which the notification becomes valid or binding on the employees, work center, station and employee in the **Effective From Date** field.
8. Enter the date till which the notification remains valid or binding on the employees, work center, station and employee in the **Effective To Date** field.
9. Click the **Maintain** pushbutton to save the details of the messages.

To proceed

- ▶ Select the **Assign Roles** link to associate the employees to the selected message.
- ▶ Select the **Assign Station/Work Center** link to station / work center in which the message is valid.
- ▶ Select the **Upload Documents** link to upload attachments associated with the message to the central repository.

Note: Refer to Object Attachments User Guide for detailed information on the procedure for uploading files associated with the notifications.

3.2.1 ASSIGNING ROLES

You can map one or more roles to a message to ensure that specific employees in work centers or stations receive the

notification messages. The roles are essentially job classifications of employees. It implies employees executing specific jobs mapped to a message will receive the message automatically as and when the regulatory agencies issue the notifications.

1. Select the **Assign Roles** link at the bottom of the **Maintain Notification Messages for Flight Operations** screen. The **Assign Role** page appears. See Figure 3.2.

Figure 3.2: The screen for mapping roles to notification messages

2. In the multiline, use the **Job Classification** drop-down menu to select the job classification you want to associate with the message ID. The employees with the job classification will be sent this message.
3. Click the **Save** pushbutton.

3.2.2 ASSIGN STATION/WORK CENTER

Messages can be mapped to one or more work centers or stations. If a message is defined at the work center level, the employees of the work center will automatically receive the message as and when issued by the regulatory authority. Similarly, to ensure that the employees of all the work centers in a station receive a message, you must associate the message to the requisite station. However, the employees in the roles assigned to the message only will receive the messages.

1. Select the **Assign Station/Work Center** link at the bottom of the **Maintain Notification Messages for Flight Operations** screen. The **Assign Station/Work Center** page appears. See *Figure 3.3*.

The screenshot shows the 'Assign Station/Work Center' interface. At the top, there's a title bar with the text 'Assign Station/Work Center' and standard window controls. Below it, a subtitle 'Station/Work Center' is visible. The main area contains a table with two columns: 'Work Center #' and 'Work Center Description'. The table has two rows, numbered 1 and 2. A yellow callout box with a black border points to the 'Work Center #' column of row 1, containing the text 'Enter the work center to be mapped to the message'. At the bottom center of the screen, there is a green 'Save' button.

Figure 3.3: The screen for mapping Station/Work Center to messages

2. In the multiline, enter the work center in which the message is valid or binding in the multiline. The employees of this work center (with the job specification as mapped in the Assign Role page) will receive the notification message.

Note: This field appears only if the process parameter "Maintain and track notification messages at" under the entity type Risk Management and the entity Notification Messages in the Define Process Entities activity of Common Master is set as 1 for Work Center.

OR

3. Enter the reporting station in which the message is valid and binding. The employees of this work center (with the job specification as mapped in the Assign Role page) will receive the notification message.

Note: This field appears only if the process parameter "Maintain and track notification messages at" under the entity type Risk Management and the entity Notification Messages in the Define Process Entities activity of Common Master is set as 2 for Station.

4. Click the **Save** pushbutton.

3.3 MAINTAIN RISK ASSESSMENT QUESTIONNAIRE

The users can create and maintain questionnaires for assessing risks emanating from pilots, Co-Pilots, Instructors and cabin crew. Questionnaires comprise of sets of questions based on specific parameters on the basis of which the employees involved in flight operations are surveyed for risks. The attributes of the questionnaire including unique identifier and revision, type, description, target role, effectivity period and approval and additional references can be recorded in the **Maintain Risk Assessment Questionnaire** sub process. Further, the limits or score range for Acceptable, Mitigable and High Risk response can also be defined in this sub process.

Relevant questions can be included in the questionnaire based on the target audience or respondents. The attributes of the questions including question ID, listing order in the questionnaire, text and category of the question and whether the question is mandatory must be recorded for a questionnaire.

The following additional tasks can be performed in this activity:

- ▶ Define Scores for each of the pre-defined response that the respondent might select for each of the questions. Mitigation and Post Mitigation scores can also be defined for each of the response.
- ▶ Map Roles to the questionnaires to ensure the applicability of a questionnaire to a specific set of employees. (Roles are essentially job classifications of employees.) The employees whose current role is mapped to the questionnaire will be able to access and respond to the questionnaire in the CrewAnywhere mobile application.
- ▶ Upload any related document / file or a soft copy of the questionnaire to the central repository for future reference.

3.3.1 CREATING RISK ASSESSMENT QUESTIONNAIRE



1. Select the **Maintain Risk Assessment Questionnaire** link under the **Risk Management** business component. The **Maintain Risk Assessment Questionnaire** page appears. See Figure 3.4.

Figure 3.4: Maintaining Risk Assessment Questionnaires

2. Select the **Create** radio button if you wish to create a new questionnaire.
3. In the **Questionnaire Details** group box, **Questionnaire # / Rev #**, **Questionnaire Type** and **Questionnaire Description** for the new questionnaire.
4. Enter **Effective From Date** and **Effective To Date** for the period in which the questionnaire will remain valid.
5. Indicate the questionnaire is mandatory for the employee by selecting the **Mandatory Questionnaire** check box. You can leave the check box unchecked to make the questionnaire optional for the employees.

6. Select the **Multiple Response** check box to indicate that multiple responses from the employees are acceptable for questions in the questionnaire. If the multiple responses are allowed, check box will be displayed along each of the questions in the questionnaire. Leave the check box unselected to indicate all the questions in the questionnaire will carry only one response. If only single response questions are allowed in the questionnaire, a radio button appears against each question in the questionnaire.
7. In the **Question Details** multiline, enter the unique identifier for the question in the questionnaire in the **Question ID** field.
8. Use the **Question Category** drop-down list box to select the category of the question.
9. Enter the entire text of the question in the **Question** field.
10. Enter the order or place of the question in the questionnaire in the **Display Seq. #** field.
11. Use the **In Flight Question** drop-down list box to indicate whether the question must appear in the questionnaire in the FlyAnywhere application. The drop-down list box displays No and Yes.
12. Use the **Static Response** drop-down list box to indicate that previous response of the employee will be carried forward to the next assessment. : The drop-down list box displays No and Yes.
13. Use the **Response Mandatory** drop-down list box to indicate whether it is mandatory for the employees to respond to the question. The drop-down list box displays No and Yes.
14. Enter the start and end numbers in the range of acceptable scores in the **Acceptable Limit** field.
15. Enter the start and end numbers in the range of acceptable scores in the **Mitigation Limit** field.
16. Enter the start and end numbers in the range of acceptable scores in the **High Risk** field.

To proceed

- ▶ Select the **Add Responses** link to set the correct response(s) to questions in the questionnaire.
 - ▶ Select the **Upload Documents** link to upload documents / files against the questionnaire into the central repository.
-  *Note: Refer to Object Attachments User Guide for detailed information on the procedure for uploading files associated with the notifications.*
- ▶ Select the **View Associated Documents** link to view the documents / files uploaded against the questionnaire.
-  *Note: Refer to Object Attachments User Guide for detailed information on the procedure for viewing the files associated with the notifications.*

3.3.2 ADDING RESPONSES TO QUESTIONS OF QUESTIONNAIRE

1. Select the **Add Responses** link at the bottom of the **Maintain Risk Assessment Questionnaire** screen. The “Risk Questionnaire Response” page appears. See Figure 3.5.

The screenshot shows the 'Add Response' interface. At the top, there are fields for 'Questionnaire#/Rev#' and 'Question ID'. Below these is a table with 15 rows. The columns are: #, Question ID, Question, Response, Score, Severity, Mitigation Comments, and Post Mitigation Score. A yellow callout box with a speech bubble points to the 'Score' column, containing the text: 'Add score to each of the responses to the question and mitigation comments'. At the bottom of the screen is a 'Save' button.

Figure: 3.5: The screen for defining responses and scores for questions in questionnaire

2. Use the **Question ID** drop-down list box to select the question from the questionnaire for which you wish to response and score details.
3. Enter the text of the answer to the question in the **Response** field.
4. Enter the marks / points the response for the question carries in the **Score** field.
5. Enter the severity assigned to the response in the **Severity** field.
6. Enter Mitigation Comments
7. Enter Post Mitigation Score
8. Click the **Save** pushbutton to commit details of responses.

3.4 APPROVE RISK ASSESSMENT

The **Approve Risk Assessment** task in **Risk Assessment** enables the supervisors to approve, return or reject a risk assessment of the employees. The supervisors can search and retrieve assessments pending for approval based on questionnaire attributes and then act on them. The users can also view a breakup of the retrieved employee risk assessment records on the basis of the scores - Acceptable, Mitigate and High Risk scores.

The supervisors are required to record Approval comments on approval, Mitigation comments on return or Rejection comments on rejection of the assessment.

A supervisor as an assessment approver can

- ▶ View all risk assessments in pending status
- ▶ Use tiles to filter retrieved risk assessments in acceptable range, mitigation range and high risk range
- ▶ Review the responses in risk assessment and then reject, return or approve the risk assessments
- ▶ Add mitigation comments at Question level or Risk Assessment level before returning
- ▶ Add rejection or approval comments at Risk Assessment level
- ▶ View all associated crew members of the trip
- ▶ View response, score and mitigation comments of employees
- ▶ View response and score of the crew of the trip associated with the employee

3.4.1 APPROVING RISK ASSESSMENT

1. Select **Approve Risk Assessment** activity under the **Risk Management** business component. The **Approve Risk Assessment** page appears. See Figure 3.6.

The screenshot displays the 'Review Risk Assessment' interface. At the top, there are search filters for Risk Assessment #, Employee, Trip #, Description, Job Classification, Job Family, Assessment Period, and Aircraft Reg. #. A yellow callout points to these filters, stating 'Specify search criteria to retrieve risk assessments'. Below the filters is a 'Search' button. Underneath the search bar are five status tiles: All (0), Pending Approval (0), Approved (0), Returned (0), and Rejected (0). Below the tiles is a table with columns: #, Status, Crew, Risk Assessment #, Description, Employee Code, Employee Name, Job Classification, Score, and Assessment Date. A yellow callout points to the 'Risk Assessment #' column, stating 'Click here to open the Fleet operations Dashboard'. Another yellow callout points to the table, stating 'Risk Assessment record status legends'. A third yellow callout points to a link in the bottom right, stating 'Click here to view crew details of the flight associated with the assessment'. At the bottom, there is a 'Generate Risk Assessment Report' button and a legend for Pending Approval (green dot), Approved (blue dot), Returned (red dot), and Rejected (red dot). A 'View Associated Crew' link is also present.

Figure 3.6: Evaluating risk assessments of employees

2. Specify the search criteria to retrieve specific crew assessments under the **Questionnaire Details** group box.
3. Click the **Search** pushbutton to display the retrieved records in the **Risk Assessment Details** multiline.
4. Click on the hyperlink in the **Risk Assessment #** column to open the Manage Risk Assessment page to approve, return or reject the employee risk assessment.

For bulk approval, return or rejection of risk assessment

5. Select the assessment records in the Risk **Assessment Details** multiline that you wish to approve, return or reject.
6. To approve the selected assessment records, enter the **Approval Comments** field and then click the **Approval** pushbutton.
7. To return the selected assessment records, enter the **Mitigation Comments** field and then click the **Return** pushbutton.
8. To reject the selected assessment records, enter the **Rejection Comments** field and then click the **Reject** pushbutton.

3.4.2 MANAGING RISK ASSESSMENT

The supervisors can process the risk assessment of employees individually by approving, returning and rejecting their assessments

1. View the details of the Risk Assessment # under the Risk Assessment group box.
2. View the questionnaire, response and score details of the assessment as submitted by the employee
3. Select the assessment record in the multiline that you wish to approve, return or reject.
4. To approve the selected assessment record, enter the **Approval Comments** field and then click the **Approval** pushbutton.
5. To return the selected assessment record, enter the **Mitigation Comments** field and then click the **Return** pushbutton.
6. To reject the selected assessment record, enter the **Rejection Comments** field and then click the **Reject** pushbutton.

To proceed

- ▶ Click on the hyperlink in the **Risk Assessment #** column to open the **Manage Risk Assessment** page to approve, return or reject the employee risk assessment.
- ▶ Select the **View Associated Crew** link to inquire on the details of the crew that flew the trip associated with the assessment

3.5 REVIEW RISK ASSESSMENT

The supervisors can visit this sub process to retrieve and inquire the risk assessment history of employees. The supervisors can specify search criteria to retrieve assessment records of their choice. A breakup of retrieved risk assessments based on the status (Pending Approval, Approved, Returned and Rejected) is also provided in the screen. You as the supervisor can choose to view all the retrieved records or only those retrieved based on specific status.

This process helps the supervisors to discern the assessment records and obtain comprehensive details of them.

The activity facilitates additional tasks including:

- ▶ View risk assessment records of employees
- ▶ View risk assessment records of crew of the trip
- ▶ Quick access to Fleet Operations Dashboard

3.5.1 REVIEWING EMPLOYEE RISK ASSESSMENTS

1. Click Review Risk Assessment under Risk Assessment. The Review Risk Assessment screen appears. *See Figure 3.7.*

The screenshot shows the 'Review Risk Assessment' interface. At the top, there are search filters for Risk Assessment #, Employee, Trip #, Description, Job Classification, Job Family, Assessment Period, Aircraft Reg. #, and SearchOn. A yellow callout points to these fields: 'Enter search criteria to retrieve assessment records'. Below the filters is a status summary bar with buttons for All (30), Fresh (3), Pending Approval (10), Approved (12), Returned (2), Rejected (2), and Cancelled (1). The main area is a table with columns: #, Status, Crew, Risk Assessment #, Description, Employee Code, Employee Name, Job Classification, Score, Assessment Date, and Aircraft Reg. #. A yellow callout points to the Status column: 'Click here to view risk assessment scores of crew members'. Another callout points to the Status bar: 'Status tiles filter retrieved records based on status'. A third callout points to the table rows: 'Click here to open the Manage Risk Assessment screen to view / edit risk assessment record of the employee'. A fourth callout points to the bottom of the table: 'Refer to the legends to ascertain the status of the Assessment records in multiline'. A fifth callout points to the bottom of the table: 'Color-coded Status indicators'. At the bottom left is a 'Generate Risk Assessment Report' button. At the bottom right is a legend for status indicators: Pending Approval (orange), Approved (green), Return (blue), Rejected (red), and Cancel (grey).


#	Status	Crew	Risk Assessment #	Description	Employee Code	Employee Name	Job Classification	Score	Assessment Date	Aircraft Reg. #
1	●		RSK000012-2019		00000007	Dmuser Ramco	Co-Pilots	5	01-08-2019	vt-666
2	●		RSK000013-2019		00000007	Adam Gordon	Co-Pilots	2	02-08-2019	VT-T
3	●		RSK000014-2019	Risk Assessment Question 2019-	00000007	Adam Gordon	Co-Pilots	3	02-08-2019	VT-T
4	●		RSK000015-2019	Risk Assessment Question 2019-	00000007	Adam Gordon	Co-Pilots	2	02-08-2019	vt-t
5	●		RSK000016-2019	Tested	00000007	Adam Gordon	Co-Pilots	1	02-08-2019	51186
6	●		RSK000017-2019	Test	00000007	Adam Gordon	Co-Pilots	2	05-08-2019	51186
7	●		RSK000018-2019	Test	00000007	Adam Gordon	Co-Pilots	2	05-08-2019	51186
8	●		RSK000019-2019	Test	00000007	Adam Gordon	Co-Pilots	2	12-08-2019	vh-czk
9	●		RSK000020-2019	Test	00000007	Adam Gordon	Co-Pilots	5	20-08-2019	vt-666
10	●		RSK000021-2019	Test	00000007	Adam Gordon	Co-Pilots	5	23-08-2019	VH-CZK
11	●		RSK000022-2019	Test	00000007	Adam Gordon	Co-Pilots	3	23-08-2019	VH-CZK
12	●		RSK000023-2019	Test	00000007	Adam Gordon	Co-Pilots	3	23-08-2019	VH-CZK
13	●		RSK000024-2019	Test	00000007	Adam Gordon	Co-Pilots	3	23-08-2019	VH-CZK
14	●		RSK000025-2019	Test	00000007	Adam Gordon	Co-Pilots	3	23-08-2019	VH-CZK
15	●		RSK000026-2019	Test	00000007	Adam Gordon	Co-Pilots	3	23-08-2019	VH-CZK

Figure 3.7: Inquiring employee risk assessments

2. Specify search criteria for retrieving employee assessment records as explained below.
3. Enter **Risk Assessment #** to retrieve specific assessment record.
4. Enter **Description** to retrieve assessment record with the required description.
5. Enter the start date and end date of **Assessment Period** to retrieve assessments valid in the given assessment period.
6. Enter **Employee Name** to retrieve assessments of the given employee
7. Use the **Job Type** drop-down list box to retrieve assessments of employees with the selected job type.
8. Enter **Aircraft Reg. #** to retrieve assessments of employees associated with the trip flown by the aircraft.
9. Enter **Trip #** to retrieve assessments of employees associated with the trip
10. Select **Job Family** to retrieve assessments of employees belonging to the job family.

11. To base your search on an additional filter, select the attribute from the **SearchOn** drop-down list box. The drop-down list box displays the following: **Approver**, **CallSign**, **Aircraft Req #** and **Risk Questionnaire #**. Enter the value for the attribute in the input box alongside.
12. Click the **Search** pushbutton to display the breakup of retrieved records based on the status in the Status tiles.
13. Click on the required **Status** tile to display all the records in the specific status in the multiline.

To proceed

- ▶ Click on the  icon to open the **View Associated Crew** window and view assessment score details of the crew associated with the trip.
- ▶ Click on the data hyperlink in the **Risk Assessment #** to open the Manage Risk Assessment screen, inquire and, if required modify the assessment record.

CREWANYWHERE MOBILE APP

For On Demand Operators and HEMS, to operate as efficiently and profitably, their Flight Operations must be agile, prompt and must meet the safety standards as prescribed by the regulatory authorities. To achieve all these, the entire process must be made infallible by factoring all the functional parameters, such as aircraft maintenance and Flight crew performance.

To achieve the highest level of efficiency from the Pilots, Co-Pilots, Instructor Pilots and Cabin Crew) in the Flight Operations process, a new mobile application has been designed and developed to evaluate and mitigate the human risks emanating from them. Pilots and the Flight Operations crew with the required login user – current role mapping can login to the application and access the relevant Risk Assessment questionnaires and record responses. The responses are evaluated and the response scores are derived based on predefined score for reach of the responses to a question in the questionnaires. This mobile application works in conjunction with the desktop business component Risk Management under the BPC of Flight Operations. Risk Management provides the framework and the infrastructure for establishment of the Risk Assessment survey and the employee response evaluation processing.

The **CrewAnywhere** mobile application has been developed to manage the entire process of evaluation and mitigation of risks that Flight Operations face from the Pilots, Co-Pilots, Instructor Pilots and Cabin crew. The application covers the entire process of risk assessment including downloading the relevant questionnaires, recording responses and then evaluating the scores to determine risks. The risks are categorized as Acceptable, Mitigable and High Risk. The mobile application of CrewAnywhere includes the following features that drive the Risk Assessment process.

- ▶ Duty check in and check out
- ▶ Reading Notification Messages
- ▶ Risk Assessment
- ▶ Manage Trips

4.1 LOGGING INTO CREWANYWHERE

1. Opening screen of the **iPad** device in which **CrewAnywhere** is installed for flight operations. From here you can initiate the access to **CrewAnywhere**. See *Figure 4.1*.

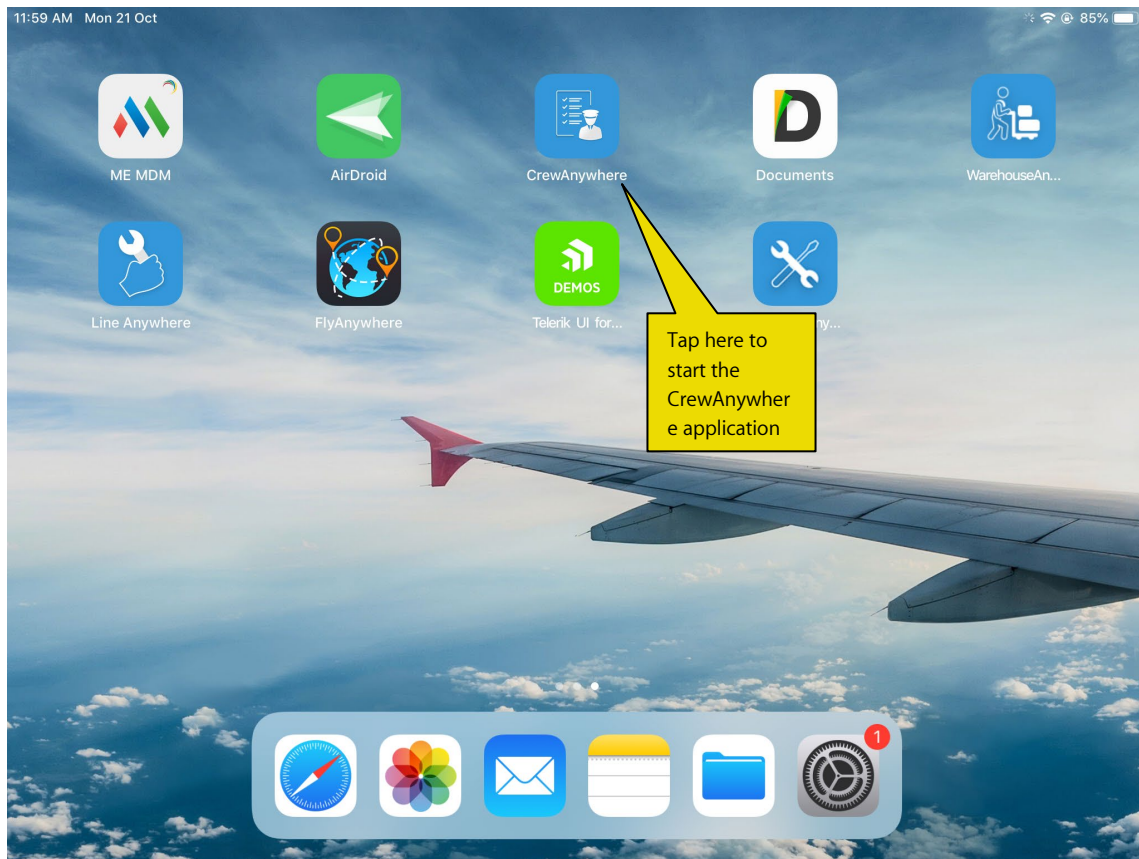


Figure 4.1: The screen saver of the iPad device

2. Tap the **CrewAnywhere** icon in the iPad screen. The authenticate screen comes up. See *Figure 4.2*.

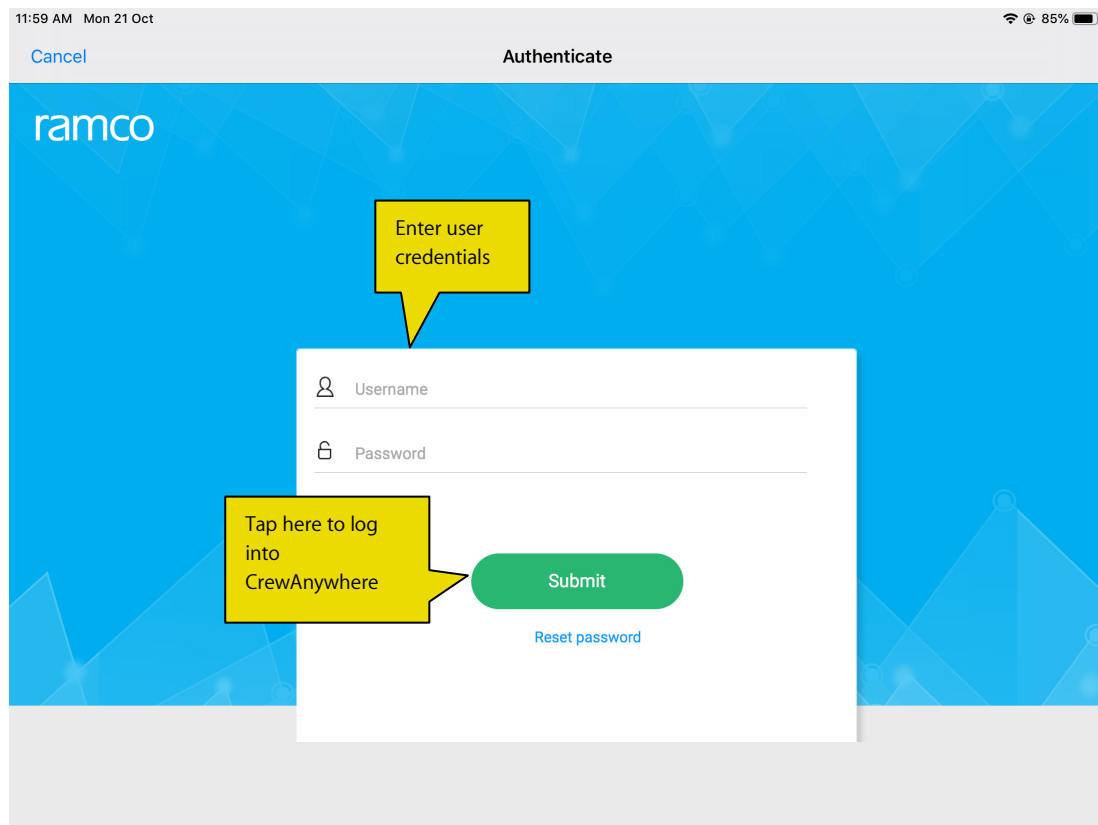


Figure 4.2: The Authenticate screen of CrewAnywhere

4.2 CHECKING INTO CREWANYWHERE FROM DASHBOARD

The dashboard is a centralized platform that enables Pilots, Co-Pilots, Instructor Pilot and Cabin crew to perform the following crucial tasks:

- ▶ Check-in and Check-Out for duty
- ▶ Manage Risk Assessment
- ▶ Execute required actions for mitigating risks
- ▶ View Notification Messages
- ▶ Manage Trips
- ▶ Pilot Currency including pilot duty details

On successful authentication, the login user is placed in the Dashboard screen of CrewAnywhere. The dashboard based on the activity-role mapping of the login user displays the following:

- ▶ Details of the login users including Employee Name, Designation, Code, Telephone # and Email ID
- ▶ Date and Time details of check in check out of **CrewAnywhere**
- ▶ Alerts
- ▶ Links to perform the following tasks:
 - Risk Assessment: Record New Risk Assessment: Assessment History, Action Required
 - Trip Details: New Trip, Trip List
 - Notification Messages
 - Pilot Currency Information

4.2.1 WORKING WITH DASHBOARD

1. Select the work center from the **Work Center / Location** drop-down list box. *See Figure 4.3.*

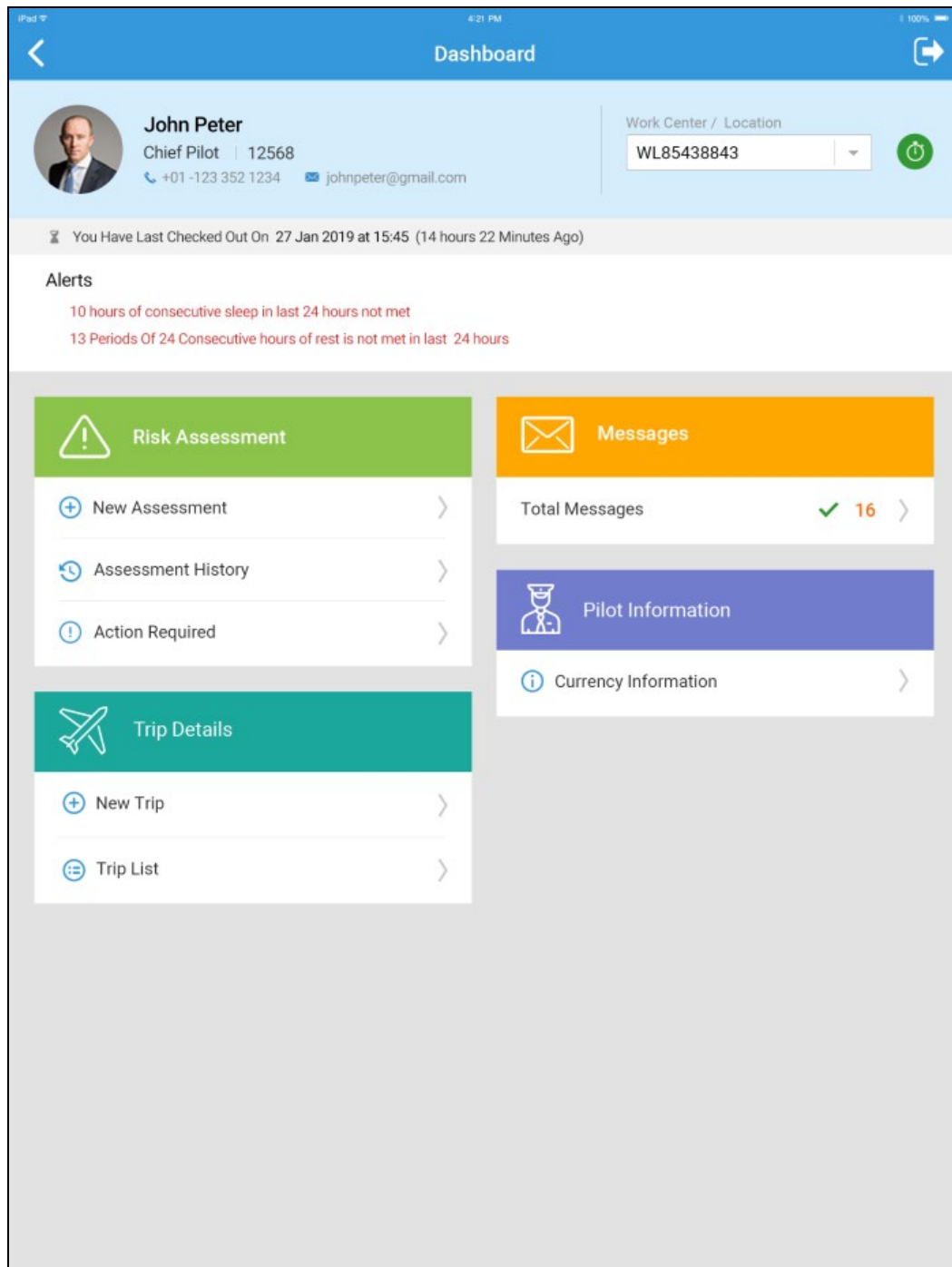


Figure 4.3: The Dashboard screen

2. Select the work center / location for flight operations from the **Work Center / Location** drop-down list box.

4.3 NOTIFICATION MESSAGES

It is mandatory for Pilots and other Flight Operations crew to read the Notification messages at least once before they clock into the CrewAnywhere mobile application.

Upon successful authentication, the users are placed in the Dashboard screen. They can also read messages at any point of time from the dashboard. If the available messages have been read by the login user at least once in the effectivity period, the login user is allowed to clock into CrewAnywhere straightaway and start working with the mobile application.

They can also view the images attached to the messages. However, the system does not allow the users to check-in prior without reading the messages at least once in their effectivity period. However, the act of reading messages upon mandatory upon clock in configurable based on process parameters that can be pre-defined in the system depending on organization practices. Again, it could also be mandatory for the pilots and crew to read and the notification messages before they proceed to modify the Risk Assessment questionnaire response depending on organization practices. This kind of restriction has been built in the application to ensure that no critical information misses the attention of the pilots and crew to ensure the safety of the flight operations.

This kind of restraint has been built in the application to ensure that no critical information misses the attention of the pilots and crew before they start their jobs to ensure the safety of the flight operations.

4.3.1 READING NOTIFICATION MESSAGES

The messages are grouped and displayed for a combination of the following attributes:

- ▶ Message Category
- ▶ Station
- ▶ Ref. #
- ▶ Work Center / Location

The above-mentioned attributes are displayed as header in the Messages screen.

1. Tap on **Notification Messages** under **Messages** in **Dashboard**. The **Messages** page appears. See *Figure 4.4*.

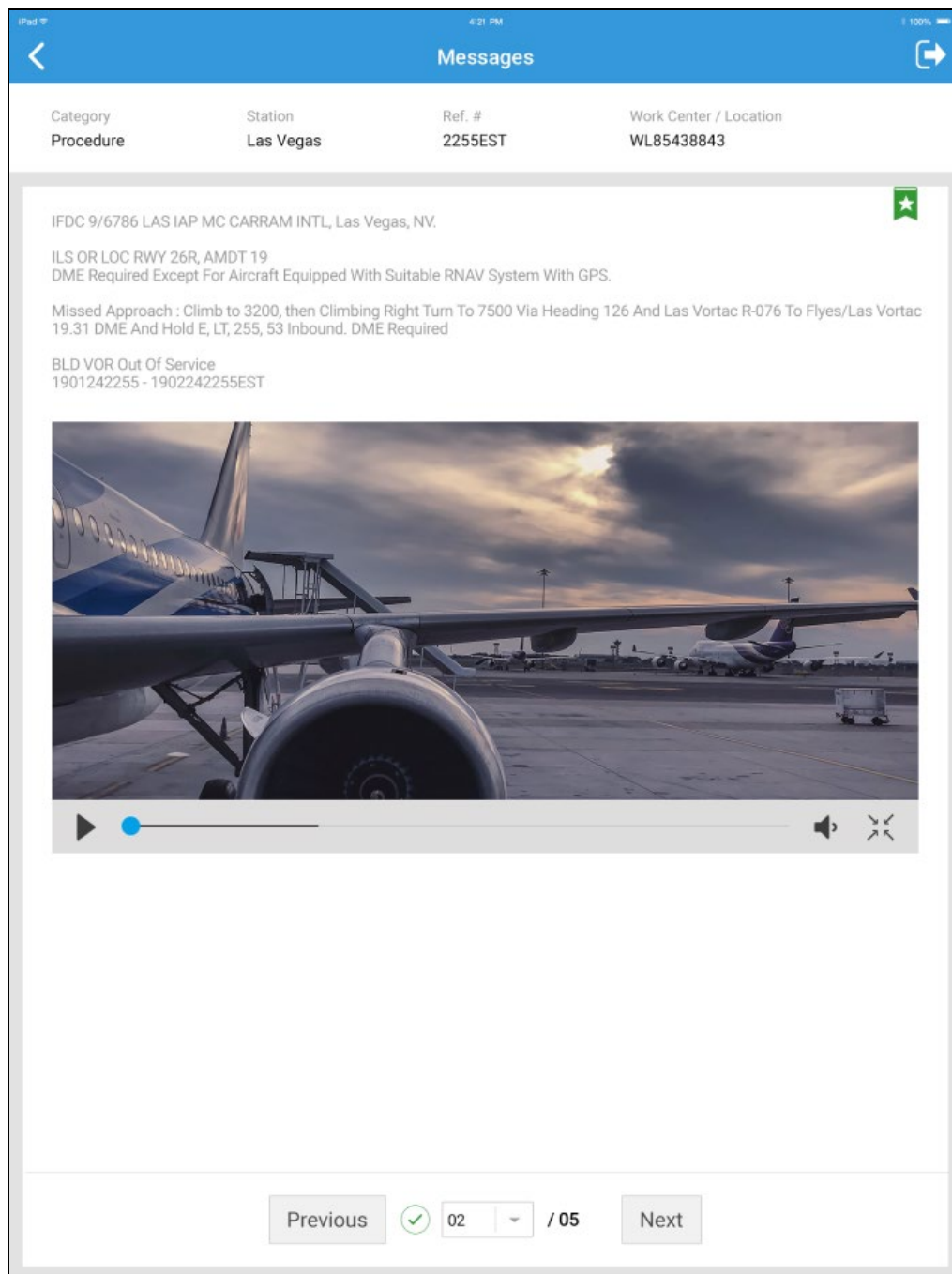


Figure 4.4. The Messages screen

2. To traverse to next pages more messages, select the page number from **Page Counter** at the bottom of the screen.
3. To navigate between previous and next pages, tap on **Previous** and **Next** between **Page Counter**.

4.4 RISK ASSESSMENT

Typically, the pilot creates a trip, which is essentially flight journey. Then, the pilot proceeds to add crew to the trip.

The Risk Assessment feature of CrewAnywhere offers the following abilities to the Pilot, Co-Pilot and crew:

- ▶ Select the applicable questionnaire type to perform risk assessment after duty check-in
- ▶ Record responses to risk assessment form and mitigations comments
- ▶ Submit the assessment form for approval to supervisors
- ▶ Display of assessment level total score
- ▶ Review the required actions based on risk assessment

The users can specify search criteria to retrieve the risk assessment they wish to view or respond to. The risk assessment response can be completed in one or more sessions. The responses of the Flight Operations staff to the questionnaire are evaluated, any risk ascertained and categorized into three levels: Acceptable, Mitigable and High Risk. The response score levels are highlighted to the users by means of color-coded indicators. The supervisors can return the responses to the questioned employee for reassessment. These are termed as the **Action Required** risk assessments.

- ▶ The process parameter "Role for which auto approval of Risk Assessment is enabled" has been added under the entity type Mobility and the entity CrewAnywhere in the Set Process Parameters screen of the Define Process Entities activity of Common Master to specify roles for which the risk assessment is automatically approved.

Process Parameter: Role for which auto approval of Risk Assessment is enabled	
Process Parameter Value	Impact
Enter 1/ 2/3/4 or a combination of these separated by comma. 1 for Pilot 2 for Co-Pilot 3 for Instructor Pilot 4 for Crew	The risk assessment of the login user will be automatically approved, if his / her current role is same as the parameter value.

- ▶ The process parameter "Show default Mitigation Comments in new Risk Assessment and Risk Assessment in fresh status" has been added under the entity type Mobility and the entity CrewAnywhere in the the Set Process Parameters screen of the Define Process Entities activity of Common Master to automatically default mitigation comments for new risk assessment or risk assessment in Fresh status.

Process Parameter: Show default Mitigation Comments in new Risk Assessment and Risk Assessment in fresh status	
Process Parameter Value	Impact
Enter 0 for No	A new Risk assessment or risk assessment in the Fresh status will not display default mitigation comments, Comply button and other comments
1 for Yes	A new Risk assessment and risk assessment in fresh status will display default mitigation comments, the Comply button and other comments

- ▶ The process parameter "Show Response level score in new Risk Assessment and Risk Assessment in fresh status has been added under the entity type Mobility and the entity CrewAnywhere in the Set Process

Parameters screen of the Define Process Entities activity of Common Master to automatically evaluate and display response score for risk assessments in the Fresh status.

Process Parameter: Show Response level score in new Risk Assessment and Risk Assessment in fresh status	
Process Parameter Value	Impact
Enter 0 for No	A new Risk assessment and risk assessment in the Fresh status will not display response level scores
1 for Yes	A new Risk assessment and risk assessment in the Fresh status will display response level scores

- ▶ The process parameter "Is Signoff required in Risk Assessment?" has been added under the entity type Mobility and the entity CrewAnywhere in the Set Process Parameters screen of the Define Process Entities activity of Common Master to specify whether the employee must sign off the risk assessment form after completing response.

Process Parameter: Is Signoff required in Risk Assessment?	
Process Parameter Value	Impact
Enter 0 for No	Sign off by the employee after risk assessment response is not required.
1 for Yes	Sign off by the employee after risk assessment response is mandatory.

- ▶ The life cycle of risk assessment based on the status is explained in the next table

User Action	Status
Save of Risk Assessment	Fresh
Submit for Approval	Pending Approval
Approved by Supervisor	Approved
Returned by Supervisor	Returned
Rejected by Supervisor	Rejected
Cancelled by Employee	Cancelled

4.4.1 CREATING NEW ASSESSMENT

The login user can select an assessment, duly answer the questionnaires in the assessment and then submit the assess for evaluation.

An assessment is split into two kinds of questionnaires: Multiple Response Questionnaire and Single Response Questionnaire. The login user can choose to answer the required questionnaire and then proceed to answer the questions.

1. Tap on **Risk Assessment**. The **Risk Assessment** screen appears. Three tabs appears on tap of the page:
 - ▶ New Assessment
 - ▶ Assessment History
 - ▶ Action Required

2. Tap **New Assessment** to undertake an assessment. The list of Multiple Response Questionnaires followed by Single Response Questionnaires appears. See Figure 4.5.

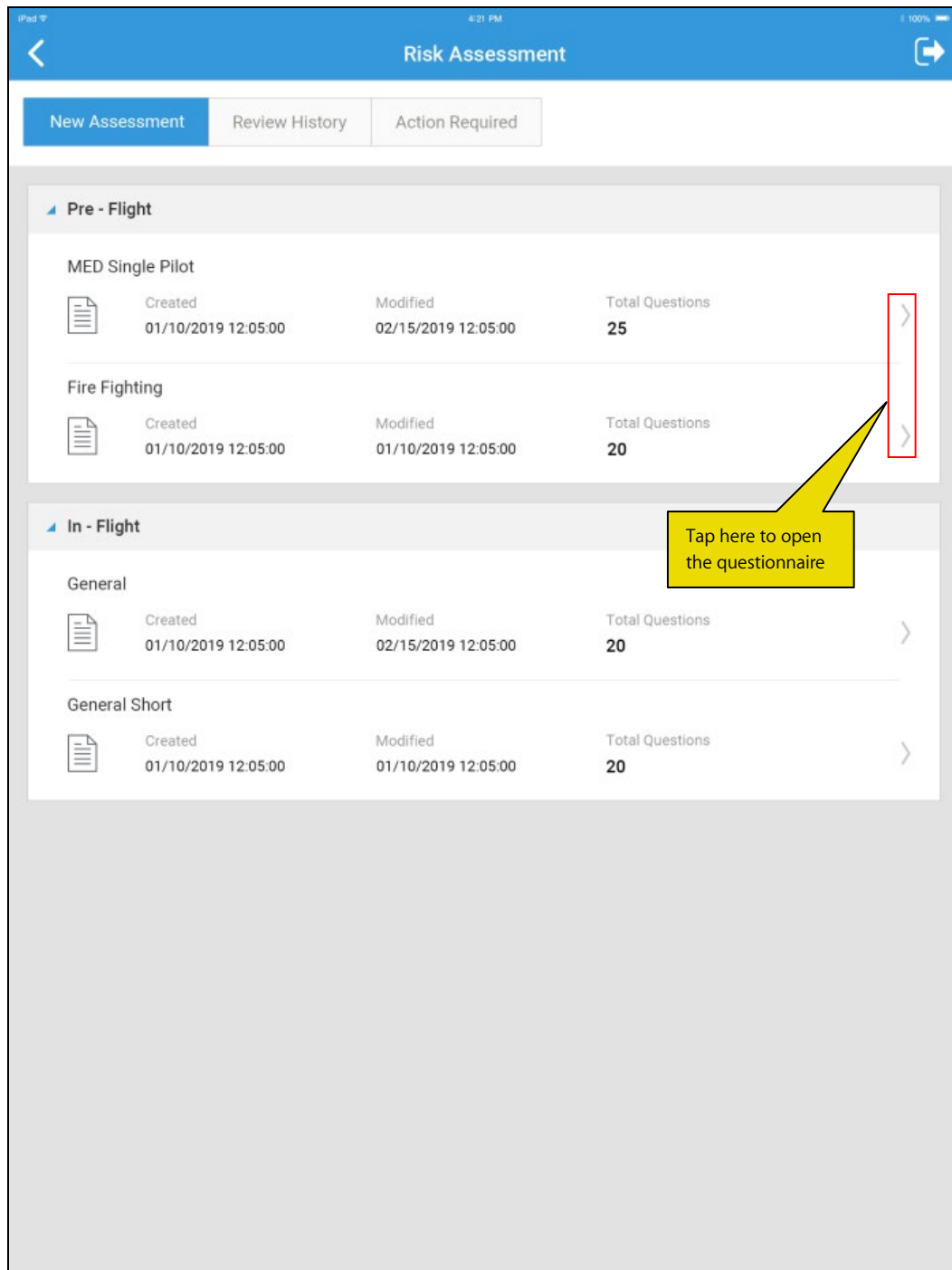


Figure 4.5: The Risk Assessment opening page

3. Tap to view the questionnaire. The **Risk Questionnaire** page appears with the list of questions and the single / multiple response options. See Figure 4.6.

Figure 4.6: The Risk Assessment questionnaire.

4. Tap on the response option to answer the question
5. You can select the radio button against the question and enter **Mitigation Comments**.
6. You can mark the question as completed, if you have answered the question in full and do not wish to add anything further to the comments.
7. You can also add **Other Comments**.
8. You can choose to perform one of the following actions:
9. Just save the assessment record by tapping on the **Save** button
10. Send your assessment for evaluation to your supervisor by tapping on the **Submit** button

4.5 MANAGE TRIPS

The **Manage Trip** feature of **CrewAnywhere** enables the pilots to manage trips and associate crew to the trips for their journeys. However, the pilot must be a login user holding the relevant authorization to be able to manage trips and associate crew to trips. Trips are typically flight journeys that the pilots and the crew carry out as part of Flight operations. A trip is essentially a flight journey commanded by the pilots.

When a pilot adds crew from the selected work center, their Risk Assessment details also becomes accessible

This feature supports the following tasks to be executed by pilots:

- ▶ **Manage Trips:** You can retrieve all the previously created trips based on search filters. You can also left swipe and record response to risk assessment questionnaire for an yet-to-be-completed trip
- ▶ **Create New Trip:** A pilot can create a trip and then associate a crew to the trip for the flight / journey with or without flight requests.
- ▶ **Edit / View Trip:** A pilot can search and retrieve the required trips and then change or delete the crew members from a not yet completed trip. Or the pilot can just view the details of trips based on certain search criteria. However, a trip cannot be modified, if it has already been completed.
- ▶ The users can specify search criteria including Aircraft Reg. #, Call Sign, Trip No., Trip date, Employee Code, Departure-Arriving Station, Request No. and Status to precisely retrieve the trips you want to view or modify.
- ▶ The process parameter "No. of days considered to fetch trips in manage trip screen when no date filter is mentioned" has been added under the entity type Mobility and the entity CrewAnywhere for the users to specify the number of days for which trips can be retrieved in the event of the users not specifying any trip date in the **Manage Trips** or **Edit/ / View Trips** screen.

Process Parameter: "No. of days considered to fetch trips in manage trip screen when no date filter is mentioned"

Process Parameter Value	Impact
Enter a whole number	For example, if the value of the process parameter is 10 and the current date is 24 th June, the search will retrieve trips for the period starting 10 days prior to the current date.

- ▶ The process parameter "Is Trip reference in Risk Assessment mandatory for role "Pilot" has been added under the entity type Mobility and the entity CrewAnywhere to ensure that the pilots specify the trip # in the risk assessment form

Process Parameter: "Is Trip reference in Risk Assessment mandatory for role "Pilot"

Process Parameter Value	Impact
Enter 0 for No	Trip # field is not mandatory <i>in the risk assessment form</i>
1 for yes	Trip # field is mandatory for an employee mapped to the sales role of pilot.

- ▶ Once the trip / flight journey is completed and journey log created, the journey log # is back updated in the trip record based on risk assessment used in the journey. Then, the journey log # is linked to the trip and the trip status changed to Completed.

4.5.1 CREATING TRIPS

1. Tap on **New Trip** under **Trip Details**. The **New Trip** screen appears. See Figure 4.7.

Figure 4.7: The screen for creating trips

2. Enter the description for the trip in the **Trip Description** field.
3. Enter the date on which the trip must be flown in the **Trip Date** field.
4. Enter the in the **Request No.** field.
5. Enter the identifier of the aircraft that will undertake the trip in the **Aircraft Reg. #** field.
6. Enter **Call Sign** for the trip.
7. Tap on **Save** to save the details of the trip.

The screen displays **Work Center**, **Status** and **Journey Log** associated with the trip by default.

On successful recording of trip details, the system generates unique identifier for the trip and displays the value in the **Trip #** field.

The **Crew** details for the trip are displayed in the page once the crew is attached to the trip.

4.5.2 ADDING CREW TO TRIP

1. The **Crew** window appears on tap of the Add Crew button in the **New Trip** screen. See Figure 4.8.

New Trip

Trip # TR1234 - 1 Trip Date 01/03/2019 Request No. Aircraft Reg # N1234

Work Center Call Sign Departure Station NV Arrival Station LA

Status Journey

Crew

Work Center Job Classification Employee Name All **Get Crew**

	Employee Code - Name	Job Classification	Score	Date	Risk Assessment #	Aircraft Reg. #	Status
<input checked="" type="checkbox"/>	21662 - Eric	Pilot	8	12/01/2019	RS - 000938 - 18		
<input checked="" type="checkbox"/>	23476 - Rob	Flight Crew	12	12/01/2019	RS - 000923 - 18		
<input type="checkbox"/>	22342 - Ronald	Flight Crew	15	12/01/2019	RS - 001238 - 18		
<input checked="" type="checkbox"/>	22322 - James	Flight Crew	10	12/01/2019	RS - 000999 - 18		

OK

Save

Figure 4.8: The screen for selecting crew for trip

2. Under **Crew**, specify the search criteria to retrieve employees of your choice.
3. Tap **Get Crew** pushbutton to display the employees retrieved based on specified criteria.
4. Select the check box for the employee you wish to add as crew to the trip.
5. Tap the **OK** button.

4.5.3 TRIP LIST

The **Manage Trips** task enables you to search and find the trips of which you wish to view the **Crew** details.

The **Manage Trips** screen retrieves and displays the trips based on the search filters that you specify and the details of the crew associated with the trips.

1. Tap **Trip List** under **Trip Details**. The **Manage Trips** page appears. See Figure 4.9.

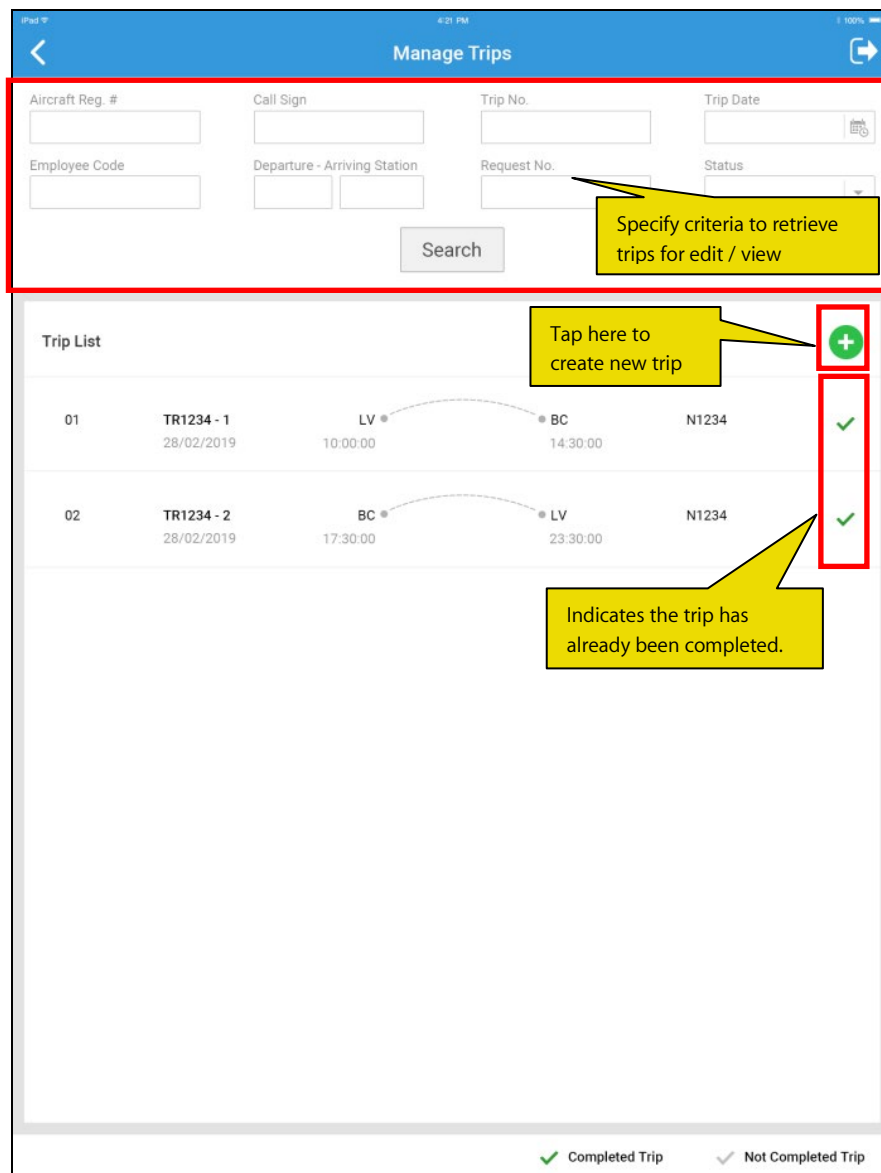



Figure 4.9: The screen for managing trips

You can specify search criteria filters to retrieve trips that your choice.

2. To retrieve trips flown by a specific aircraft, enter the **Aircraft Reg. #** field.
3. To retrieve trips with specific call sign, enter, enter the **Call Sign** field.
4. To retrieve trip with a trip number, enter **Trip No.** field.
5. To retrieve trips flown on a specific date, enter the **Trip Date** field.
6. To retrieve trips associated with a specific crew member, enter the **Employee Code** field.
7. To retrieve trips flown between specific stations, enter arrival and departure stations in the **Departure-Arrival Station** fields.
8. To retrieve trips flown against a specific customer request, enter the **Request No.** field.
9. To retrieve trips in a specific status, select Open or Completed from the **Status** field
10. Tap on **Search** to retrieve and display the trips that match the search criteria
11. To view crew details of the retrieve trips, tap on the  icon.

4.6 PILOT INFORMATION

The Currency Information screen for the login user during different periods of time, such as current month, quarter or year is displayed in the screen: Up-to-date Information including the following can be viewed by the mechanics (for the login user) in this screen:

- The sum total of Flying Hours flown
- The sum total of Day and Night Landings undertaken
- The details of certificates earned
- The restrictions imposed on the login user with regards to FH, Landings and other flight operations

4.6.1 VIEWING CURRENCY INFORMATION

1. Tap on **Currency Information** under **Pilot Information**. The **Currency Information** page appears.

INDEX

A

Adding crew to trip, 33
Adding responses to questions of questionnaire, 15
Approve Risk Assessment, 17
Approving Risk Assessment, 17
Assign Station/Work Center, 13
ASSIGNING ROLES, 11

C

Checking into CrewAnywhere from Dashboard, 23
Creating New Assessment, 28
Creating Notification Messages for Flight Operations, 11
Creating Trips, 32
CrewAnywhere Mobile App, 20
Currency Information, 35

D

DEVICE REQUIREMENTS, 5

L

Logging into CrewAnywhere, 21

M

Maintain Notification Messages, 11
Maintain Risk Assessment Questionnaire, 14
Maintaining Notification Messages, 10
Manage Trips, 31, 33
Managing Risk Assessment, 18

N

Notification Messages, 24

P

Pilot Information, 35
Prerequisite Data for CrewAnywhere, 6
PREREQUISITE MASTER DATA, 6

R

Reading Notification Messages, 25
Review Risk Assessment, 18
Reviewing employee risk assessments, 18
Risk Assessment, 26
RISK MANAGEMEN, 8

T

Trip List, 33

V

Viewing Currency Information, 35

W

Working with Dashboard, 23

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