

# RAAS

## FLEET STATUS REPORTING / DEFECT MANAGEMENT OVERVIEW



 AIS

[www.aviationintertec.com](http://www.aviationintertec.com)

# Fleet Status View

The RAAS Fleet Status view is available on demand, accessible at any time from the console home button located at the upper left of the RAAS screen (#1). The output format of the RAAS Fleet Status view is somewhat customizable to customer requirements. Regardless of specific output format the objective of the Fleet Status view is to provide decision support relative to fleet availability by presenting all maintenance event and flight limitation data in a single comprehensive on-screen interactive

report output. The Fleet Status view presents dynamic data, as current as is available in the RAAS database, and in this regard it is significantly more timely than an equivalent paper or PDF fleet status report that may be produced only periodically. The view may be filtered by aircraft type or tail, job card type, priority, planning category, serviceability status, and near due thresholds. Near due thresholds can be set for Calendar, Hours, and Landings limits. Near due items as defined by these thresholds

The screenshot displays the RAAS Fleet Status View interface. The top navigation bar includes the RAAS logo and various utility icons. A sidebar on the left contains navigation options: Item Management, Inspection Documents, Planning & Production, Technical Records, Status, and Purchasing. The main content area features a 'Show Filters' section with a dropdown for 'Aircraft Type, Aircraft SN' and a 'Sort' button. Below this, the data is organized into sections for different aircraft models: 146R1100, 1900D, 4518-81564-85, and 737-550. Each aircraft entry includes a status indicator (green or red), a list of 'Outstanding Airworthiness Items' with their JC numbers, and 'Scheduled Work Packs' with their status and remaining days. The interface also shows 'Next Cal Limit Due At' and 'Next Hrs Limit HSN' for each aircraft.

# Fleet Status View

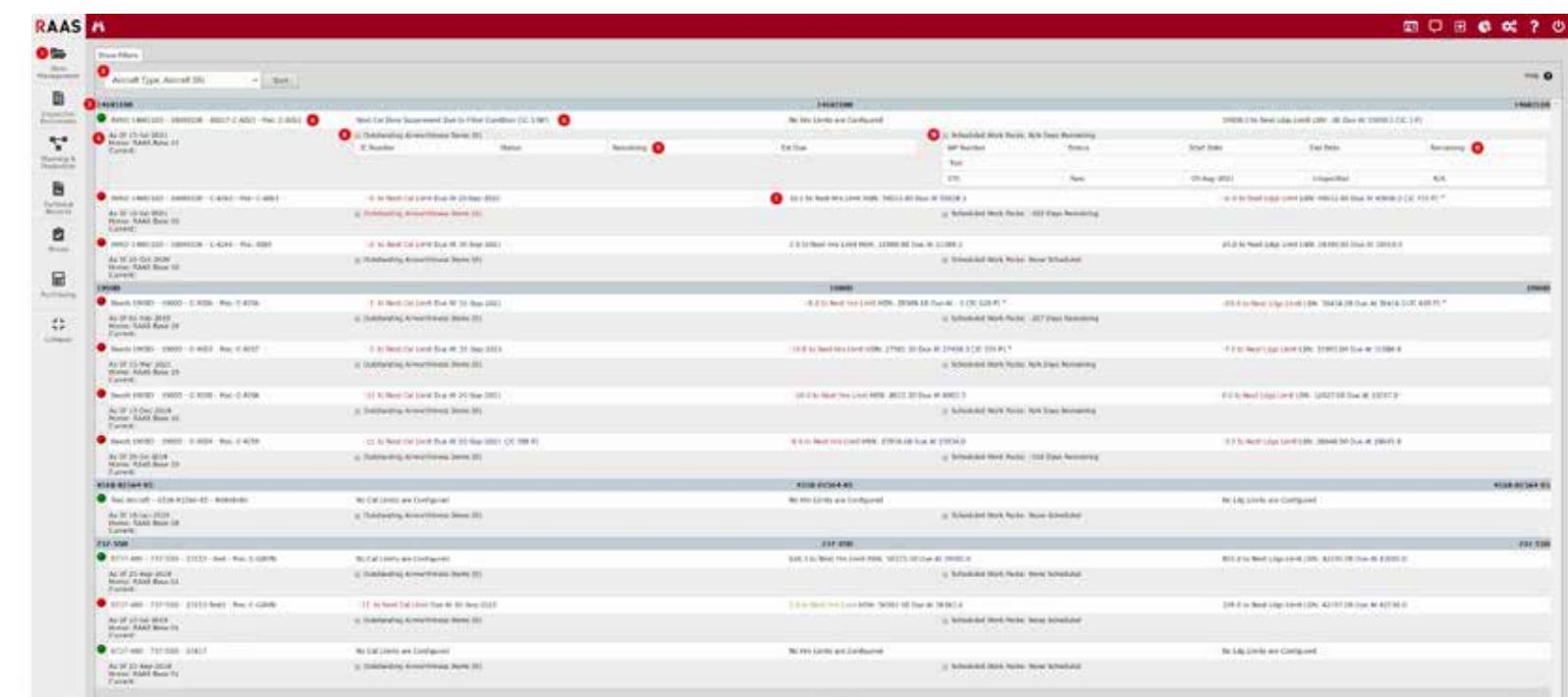
are color coded yellow throughout the Fleet Status view. Available sort criteria available include "Aircraft SN", "Most Hours Remaining", "Most Landings Remaining" and "Most Calendar Remaining" (#2).

The colored sphere at the left of each aircraft row (#3) is intended to visually notify the user of the relative availability of each aircraft: red is displayed if the remaining value for any maintenance or airworthiness item is zero or less, or the aircraft has specifically been identified as unserviceable. Yellow is shown when an aircraft is considered serviceable and available, but that near due maintenance or airworthiness items exist. Green indicates no immediate maintenance concerns.

The first line in each aircraft row displays the next due significant/drop dead maintenance task in terms of Calendar, Hours and Landings (#4). Note that the next due Calendar limited task will likely be different than the next due Hours limited task, and that the next due Landings limited task will likely be different than either the next due Calendar or Hours limited tasks. The Hours and Landings sections also display the "current" airframe hours and landings totals, which are always relative to the "As Of" date at the far left. (#5). Explanatory text is shown when filter conditions suppress all next due tasks for a given limit. Clicking this text opens a window showing the details of the first suppressed task. A clickable link to the job card corresponding to a suppressed task is also displayed, provided that the job card exists.

Cases in which no tasks are defined for a limit are indicated as well. Planned maintenance items are provided with hover text showing constraint information as well as affected part details. Hover text for non-planned job cards consists of job card text. Red text "(Unserviceable)" is displayed for any aircraft whose status has specifically been set as such.

The Due data for each of the Calendar, Hours and Landings sections is linked to the task that is coming due next (#6). A user can click on the link to open a window, which in-turn shows the specific details of the maintenance task due. If the time remaining value in any of the Calendar, Hours and Landings sections is zero or less the time remaining value is color coded red (#7). Cases in which planned maintenance due values do not match those of an associated job card are flagged with a red asterisk including explanatory hover text. A red asterisk is also provided when primary limiters do not match.



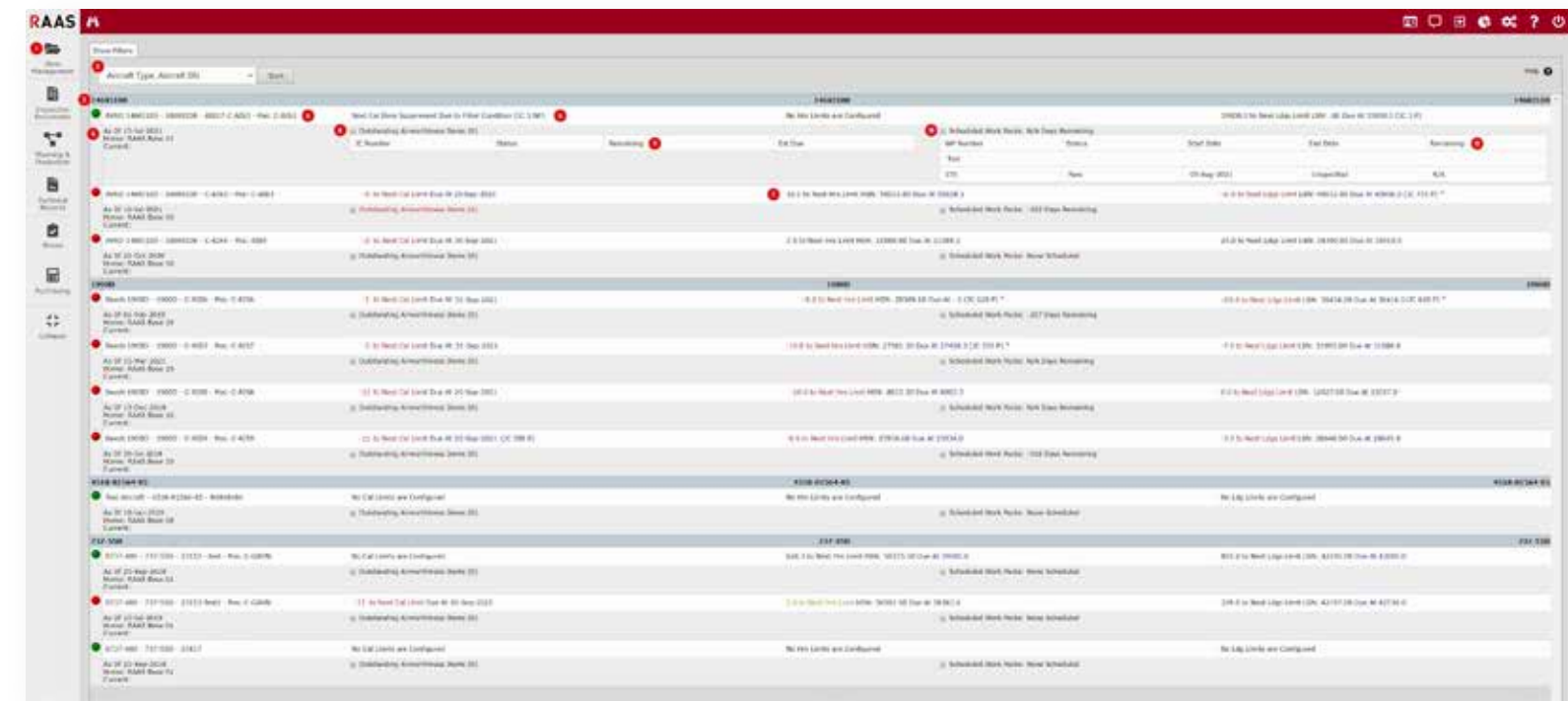
# Fleet Status View

In each aircraft row there is an expandable/ collapsible Outstanding Airworthiness Items section (#8). When this section is expanded it shows the list of outstanding airworthiness items for the aircraft as well as the relative time remaining of each. Click through links are available, opening a window that shows the specific details of the outstanding airworthiness item. If the time remaining value for any airworthiness item is zero or less the time remaining value is color coded red (#9).

Even if the Outstanding Airworthiness Items section is collapsed the title text of the section provides visual cues, including a sum-total of airworthiness items outstanding for the aircraft and the text itself will be colored red, yellow or black based on these conditions: the coloring of the Outstanding Airworthiness Items section will be red if any Airworthiness items exist and if any of them are due or overdue (0 or less remaining). The coloring of the Outstanding Airworthiness Items section will be yellow if any Airworthiness items exist and if any of them are within the Near Due threshold. Title text is black whenever it is neither red nor yellow.

Also in each aircraft row is an expandable/ collapsible Scheduled Work Packs section (#10). When expanded this section shows the list of planned work packs for the aircraft, where a work pack is a collection of jobs and tasks scheduled for accomplishment by in-house maintenance production teams or perhaps a third-party MRO. Relative time remaining is shown for each event, and available click through links open a window showing the contents

of each work pack. If the time remaining value for any scheduled work pack is zero or less the time remaining value is color coded red (#11).



# Discrepancy Console

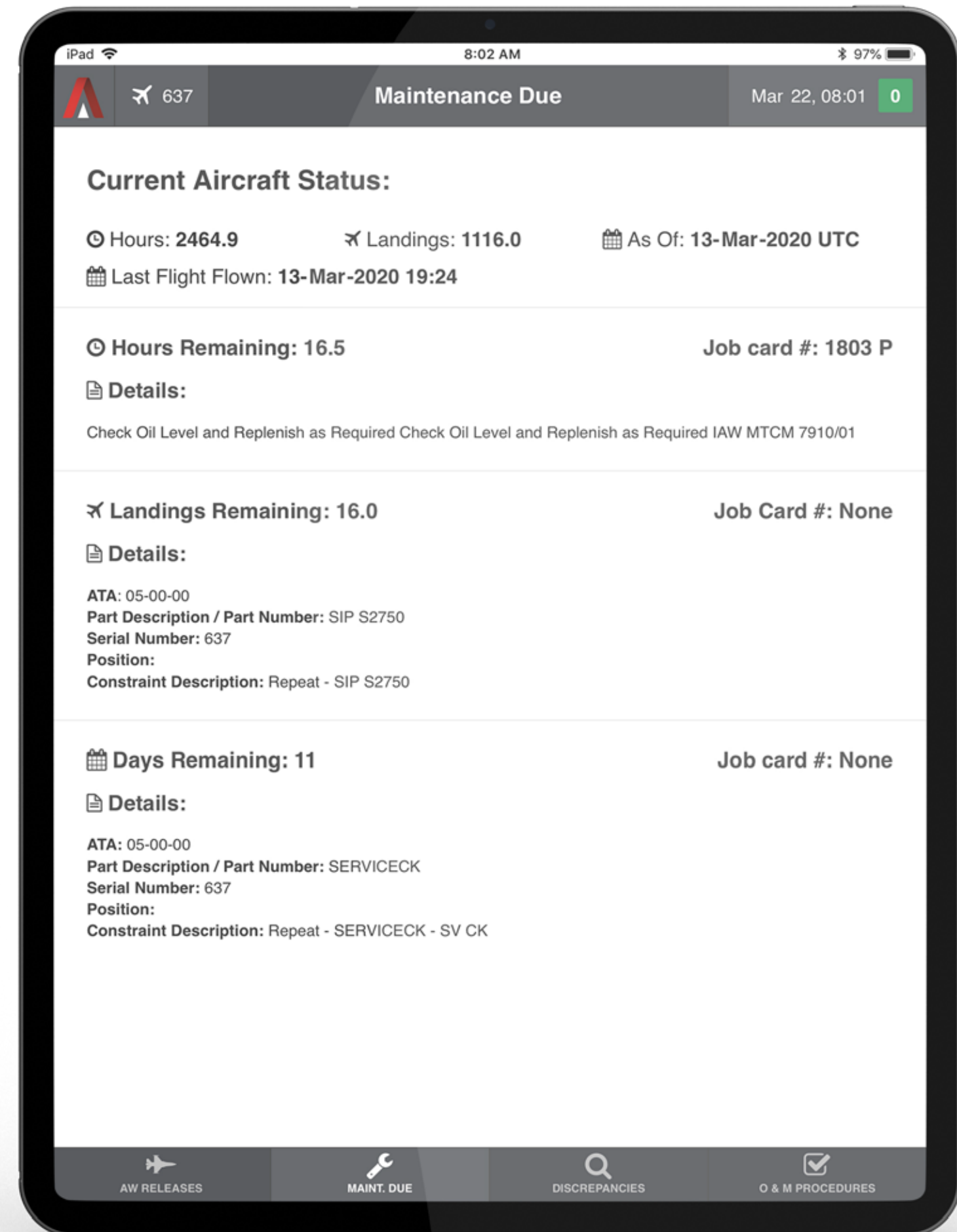
The RAAS Discrepancy Console is essentially an “inbox” for defect reports. It is through this user interface that Maintenance Control and Tech Ops personnel are able to review defect reports, identify corrective action, and if necessary defer defects that are airworthiness or MEL status. Defect reports are traditionally received via a flight journey log, radio communication or sometimes through verbal report. RAAS itself accommodates three methods of defect reporting including a) manual defect report creation directly via the RAA Discrepancy Console, b) through flight journey log details input via the RAAS Flight Logs module and c) through the RAAS Electronic Maintenance Log tablet app for the cockpit.

The screenshot displays the RAAS Discrepancy Console interface. The top navigation bar includes 'RAAS' and 'Planning & Production > Discrepancies'. A sidebar on the left contains navigation icons for 'Item Management', 'Inspection Documents', 'Planning & Production', 'Technical Records', 'Stores', 'Purchasing', and 'Collase'. The main content area features a search and filter section with fields for 'New', 'Open', 'Job Card', 'Rectified', 'Nullance', 'Aircraft', 'System', 'ATA', 'Priority', and 'Key Word'. Below this is a table of discrepancies with columns for Discrepancy #, Aircraft, Date, Title, ATA, Priority, Log Number, Status, and Originator. The table lists 18 items, including reports from Trek Air, 146R1100, and 146R1100-C-AIS3. At the bottom, there are 'Sort By' dropdowns and buttons for 'Export', 'Cause of Delay Report', and 'Add Discrepancy'.

Discrepancy #	Aircraft	Date	Title	ATA	Priority	Log Number	Status	Originator
18	Trek Air - C-AIS1	12-May-2017 10:34	Taxi Light INOP	33-09-00		47-86653	Closed 67 NP	Maintenance
8	Trek Air - C-AIS1	12-May-2017 16:18	RGM-3356	05-00-00		47-86653	Job Card 68 NP	Flight Crew
1	146R1100 - C-AIS4	18-Jun-2017 16:59	Daily Inspection IAW NCA039 DI Form	05-00-00			Rectified	Flight Crew
37	146R1100 - C-AIS4	01-Jul-2018 15:01	RGM-3373	34-00-00		31-99151	Rectified	Flight Crew
42	737-550 - 27153	10-Jul-2018 15:32	RGM-3396	32-41-01			Rectified	Flight Crew
34	146R1100 - C-AIS3	18-Jul-2018 14:58	RGM-3454	33-00-00		20-88502	Rectified	Flight Crew
16	146R1100 - C-AIS3	23-Jul-2018 14:16	RGM-3478	33-00-00		26-88506	Rectified	Flight Crew
21	146R1100 - AIS17-C-AIS3	27-Mar-2020 11:47	RGM-3596 20200327	33-40-00			Rectified	Flight Crew
23	146R1100 - C-AIS4	28-Apr-2020 14:41	RGM-3608	00-00-00			Rectified	Flight Crew
26	146R1100 - C-AIS4	29-Apr-2020 15:53	RGM-3626	11-11-11			Nullance	Maintenance
27	Trek Air - C-AIS1	29-Apr-2020 19:50	RGM-3671 20300348	00-00-00	Cat D		Job Card 70 NP	Contract
29	Trek Air - C-AIS1	29-Apr-2020 16:53	RGM-3731	11-11-11			Job Card 71 NP	Maintenance
31	Trek Air - C-AIS1	30-Apr-2020 09:42	RGM-3762	11-11-11			Rectified	Flight Crew
41	146R1100 - C-AIS3	15-Sep-2020 14:43	RGM-3801	23-20-00			Rectified	Flight Crew

# Electronic Maintenance Log Tablet App

As an option RAAS offers Electronic Maintenance Log (EML) iOS/Android/Windows apps for the cockpit. Our EML apps are designed to allow defect reporting from the aircraft while in flight, closure and/or deferral of defects, display of recently accomplished work and cleared defects, and lists of next due items. The app is able to function in real-time or can work as an offline utility that will sync data to the main RAAS host once your tablet gains cellular or WiFi access. Defect data is synchronized to the main RAAS host, which specifically will result in new defect reports arriving in the RAAS Discrepancy Console and status updates related to existing defects being pushed up to the tablet.



# Discrepancy Escalation / Deferral

Once received, defect reports are typically evaluated to determine if the defect can be rectified through direct action, if the defect report is a nuisance report, if the reported defect is an airworthiness concern, and if rectification of the defect must be deferred to a later date. In situations where the defect is either considered an airworthiness concern or must be deferred to a later date, then an appropriate RAAS user would escalate the defect report to the next level, referred to as a Job Card. The Job Card is essentially a work order line item that is assigned a number, allows for parts/ material and human resource planning, and ultimately allows the RAAS user to schedule accomplishment of the defect rectification. Full visibility of outstanding defects as well as planned scheduled maintenance is available in various areas in RAAS including Fleet Status Reporting.

The screenshot displays the RAAS interface for managing discrepancies. The main window shows a list of discrepancies with columns for Discrepancy #, Aircraft, Date, Title, ATA, Priority, Log Number, Status, and Originator. A detailed view of a discrepancy is shown, including Log Details (Aircraft, Log Date, Flight Log No., Flight Number, Origin, Destination, Main Log No.), Discrepancy Information (Title, System, Priority, Originator, Enviro. Status, Description), and Delay Details (Caused Delay, Rep. Delay Reason, Minutes Delayed, Det. Delay Source, Consequence Notes). The discrepancy is titled 'Taxi Light INOP' for aircraft C-AIS1 on 13-May-2017.

Below the main window, a 'Prior Maintenance Input' section shows a table with columns for Serial Number, Hrs, Old, New, Cyc, and Date. The table contains one row for 'Auxiliary Power Unit, APS2000 - 170101-106 - SP-E912124 - POS: APU' with Log Number 120681 and Log Date 13-Jan-2019.

Below the table, a 'Work Completed By' section shows the following information:

- Stamps: Standard Release: AMO 1-99 Global Aviation Services (1-99)
- Originator: Flight Crew
- Affected Part: AC - Boeing 737-400 - B737-400\* - 24573 - POS: C-FLER Constraint: N/A Limiter: N/A
- Tech Logs: AC - Boeing 737-400 - B737-400\* - 24573 - Pos: C-FLER

# Historical Defect Reporting

RAAS is approved for commercial aircraft maintenance operations under virtually all of the world's significant regulatory authorities. A functional pre-requisite for the levels of approval RAAS has achieved is Continuous Airworthiness Monitoring, which is essentially a suite of reporting and analysis features that evaluate current and historical maintenance activities to help identify trends within the maintenance organization with a view to increasing fleet dispatch reliability while reducing maintenance costs. For these purposes defect management data in RAAS is accumulated into a historical data repository, and is continuously available for detail analysis.

The screenshots illustrate the RAAS Defect Analysis interface, which includes a table of defect hits, a bar chart showing hits per ATA grouping, and a pie chart showing the ATA breakdown. The interface also features export options (Export As Excel, Export As Excel Data, Export As Word) and a dropdown menu for the report file (CoreReportsCR2011/SnagAnalysis.rpt).