



McCarran
INTERNATIONAL AIRPORT

McCarran International Airport

JASON CABRERA
AIRPORT MANAGER, SERVICE DESK
INFORMATION SYSTEMS

AMUG – MARCH 2020

MCCARRAN AIRPORT SYSTEM

1. McCarran International Airport
2. Henderson Executive Airport
3. North Las Vegas Airport
4. Jean Sport Aviation
5. Overton/Perkins Field

- **51.5 Million Passengers in 2019**
- **4th O&D**
- **9th Busiest in US**



RJ



1963

2012

1974

2006

1994

1998

1987

2008

PROJECTS

- CCTV
- CONSOLIDATED
MAINTENANCE /
WAREHOUSE FACILITY
- ROADWAYS
- T1 L2 EXPANSION

MODULES

ASSETS

WORK ORDER TRACKING

PREVENTATIVE MAINTENANCE

PLANNING

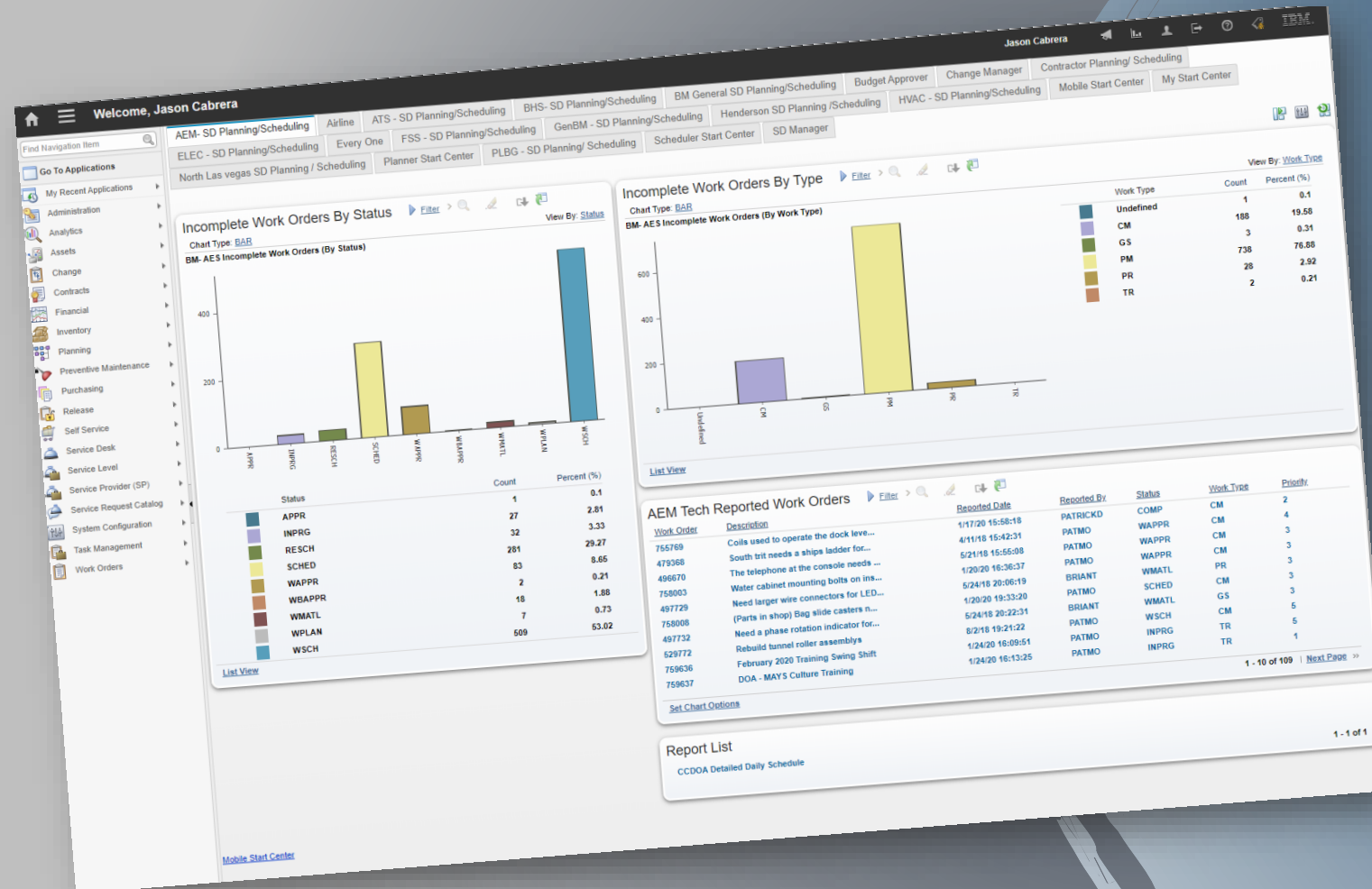
INVENTORY

PURCHASING

INVOICING

CONTROL DESK (IT)

SELF SERVICE CENTER

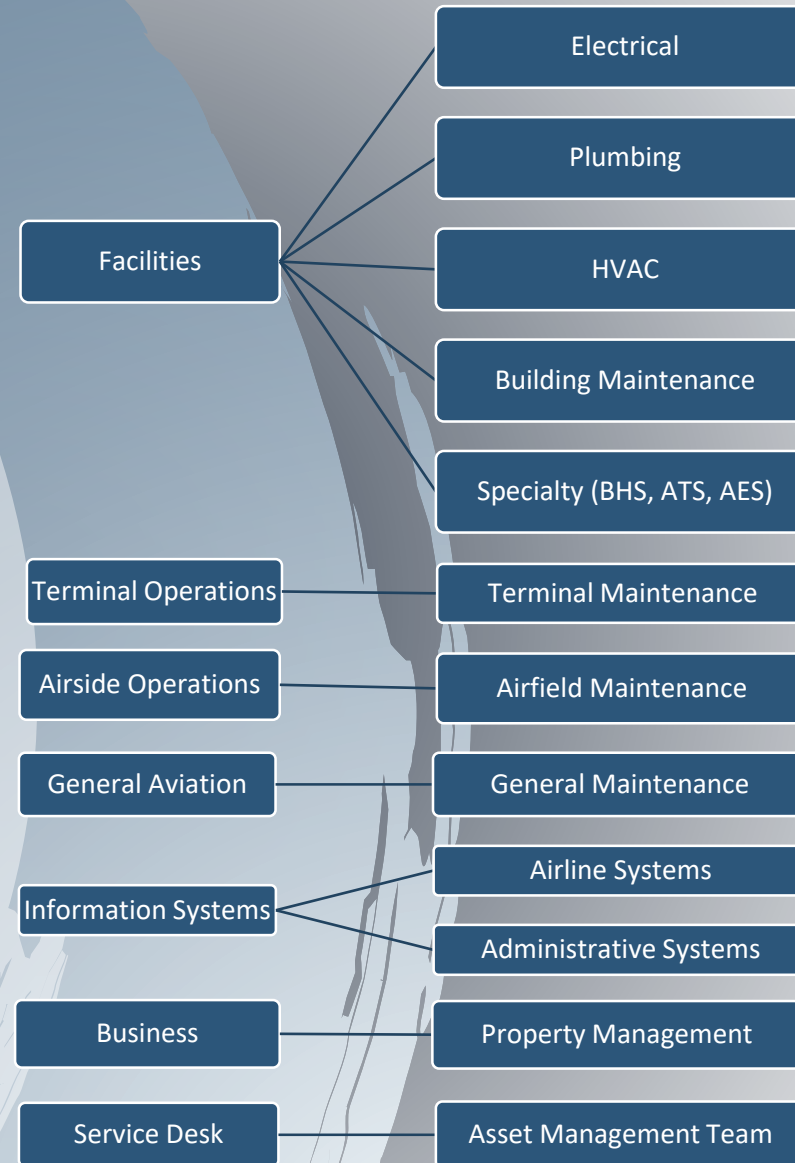


Work Management

6 Divisions

323 Team Members on Schedule

9 Planner/Schedulers



Accountability

- Divisional Monthly Performance Metrics
- Monthly Shop Performance
- Weekly Schedule Compliance
- Ticket Aging Reports
- Weekly IT Incident – Shared with our airline partners.
- Work Production Reviews
- Labor Utilizaion
- Buy-In at all levels



Continual Improvement

JANUARY 2020											
Asset Management Program	PLUM	ELEC	HVAC	AEM	BM	ATS	BM_SPEC	BHS	FSS	TOTAL	
PREVENTIVE MAINTENANCE											
TARGET PM WORK ORDERS	715	301	1709	575	517	317	67	1130	969	6300	
PM'S COMPLETED/CLOSED	713	229	1573	529	484	317	65	1099	915	5924	
PM'S OPEN	1	10	16	17	1	0	2	26	0	73	
PM'S CANCELLED	1	62	120	29	32	0	0	5	54	303	
% COMPLETED/CLOSED	99.7%	76.1%	92.0%	92.0%	93.6%	100.0%	97.0%	97.3%	94.4%	94.0%	
% OPEN	0.1%	3.3%	0.9%	3.0%	0.2%	0.0%	3.0%	2.3%	0.0%	1.2%	
% CANCELLED	0.1%	20.6%	7.0%	5.0%	6.2%	0.0%	0.0%	0.4%	5.6%	4.8%	
PLANNED PM HRS	260	1269	1963	1112	1753	1002	398	3027	596	11383	
ACTUAL PM HRS	374	639	2235	993	1531	1134	209	3026	768	10933	
CORRECTIVE MAINTENANCE											
TARGET CM WORK ORDERS	508	272	59	361	83	65	60	77	38	1523	
CM'S COMPLETED/CLOSED	494	222	45	325	63	63	56	76	35	1375	
CM'S OPEN	17	11	12	35	7	2	2	1	3	90	
CM'S CANCELLED	7	39	2	1	7	0	2	0	0	58	
% COMPLETED/CLOSED	95.3%	81.6%	76.3%	90.0%	83.1%	96.9%	93.3%	98.7%	92.1%	90.3%	
% OPEN	3.3%	4.0%	20.3%	9.7%	8.4%	3.1%	3.3%	1.3%	7.9%	5.9%	
% CANCELLED	1.4%	14.3%	3.4%	0.3%	8.4%	0.0%	3.3%	0.0%	0.0%	3.8%	
PLANNED CM HRS	449	990	303	281	697	0	151	3	53	2927	
ACTUAL CM HRS	735	1901	376	657	637	317	186	346	84	5241	
EMERGENCY MAINTENANCE											
TARGET EM WORK ORDERS	245	0	64	0	9	1	10	50	54	433	
EM'S COMPLETED/CLOSED	245	0	61	0	9	1	10	48	54	428	
EM'S OPEN	0	0	1	0	0	0	0	2	0	3	
EM'S CANCELLED	0	0	2	0	0	0	0	0	0	2	
% COMPLETED/CLOSED	100.0%	0.0%	95.3%	0.0%	100.0%	100.0%	100.0%	96.0%	100.0%	98.8%	
% OPEN	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	4.0%	0.0%	0.7%	
% CANCELLED	0.0%	0.0%	3.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	
PLANNED EM HRS	66	0	44	0	0	0	2	6	26	144	
ACTUAL EM HRS	310	0	52	0	17	3	14	238	119	755	
PROJECTS											
TARGET PR WORK ORDERS	0	0	5	3	3	0	2	1	1	15	
PR'S COMPLETED/CLOSED	0	0	2	2	1	0	2	0	1	8	
PR'S OPEN	0	0	3	1	2	0	0	1	0	7	
PR'S CANCELLED	0	0	0	0	0	0	0	0	0	0	
% COMPLETED/CLOSED	0.0%	0.0%	40.0%	66.7%	33.3%	0.0%	100.0%	0.0%	100.0%	53.3%	
% OPEN	0.0%	0.0%	60.0%	33.3%	66.7%	0.0%	0.0%	100.0%	0.0%	46.7%	
% CANCELLED	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
PLANNED PR HRS	0	0	32	12	142	0	132	0	2	320	
ACTUAL PR HRS	0	0	47	23	82	0	1237	20	35	1446	
GENERAL SERVICES											
TARGET GS WORK ORDERS	23	9	2	10	31	73	118	1	7	274	
GS'S COMPLETED/CLOSED	23	9	2	10	28	72	115	0	6	265	
GS'S OPEN	0	0	0	0	1	1	1	1	1	5	
GS'S CANCELLED	0	0	0	0	2	0	2	0	0	4	
% COMPLETED/CLOSED	100.0%	100.0%	100.0%	100.0%	90.3%	98.6%	97.5%	0.0%	85.7%	96.7%	
% OPEN	0.0%	0.0%	0.0%	0.0%	3.2%	1.4%	0.8%	100.0%	14.3%	1.8%	
% CANCELLED	0.0%	0.0%	0.0%	0.0%	6.5%	0.0%	1.7%	0.0%	0.0%	1.5%	
PLANNED GS HRS	9	5	80	75	325	0	250	0	7	752	
ACTUAL GS HRS	50	20	99	48	180	327	302	29	25	1084	

Service Desk Division/ Asset Management Program

Status: Production

Revised 07/05/2016

1





PM – Time vs Meter



Every 90k Cycles

[List View](#)
[PM](#)
[Frequency](#)
[Seasonal Dates](#)
[Job Plan Sequence](#)
[PM Hierarchy](#)
[Forecast](#)

PM: 7589 HSD Metered Cycle Count Inspection Site: LAS Status: ACTIVE Forecast Exists? ☐

Work Order Generation Information

Use Last Work Order's Start Date to Calculate Next Due Date? ☐ Generate Work Order Based on Meter Reading (Do Not Estimate)? ☒ Generate Work Order When Meter Frequency is Reached? ☒

[Time Based Frequency](#)
[Meter Based Frequency](#)

Meter Based Frequency

Meter	Description	Frequency	Units to Go	Generate WO Ahead By	Alert Lead
CYCLECOUN	BHS Diverter Cycle Count	90,000.00	78,160.00		

Meter: CYCLECOUN >> BHS Diverter Cycle Count

Frequency: 90,000.00

Alert Lead:

Generate WO Ahead By:

Average Units/Day: 1,776.85

Rollover:

Last Work Order Information

Meter Reading: 948,864.00

Meter Reading Date: 2/23/20 22:59:54

Next Work Order Projections

Next Meter Reading: 1,038,864.00

Units to Go: 78,160.00

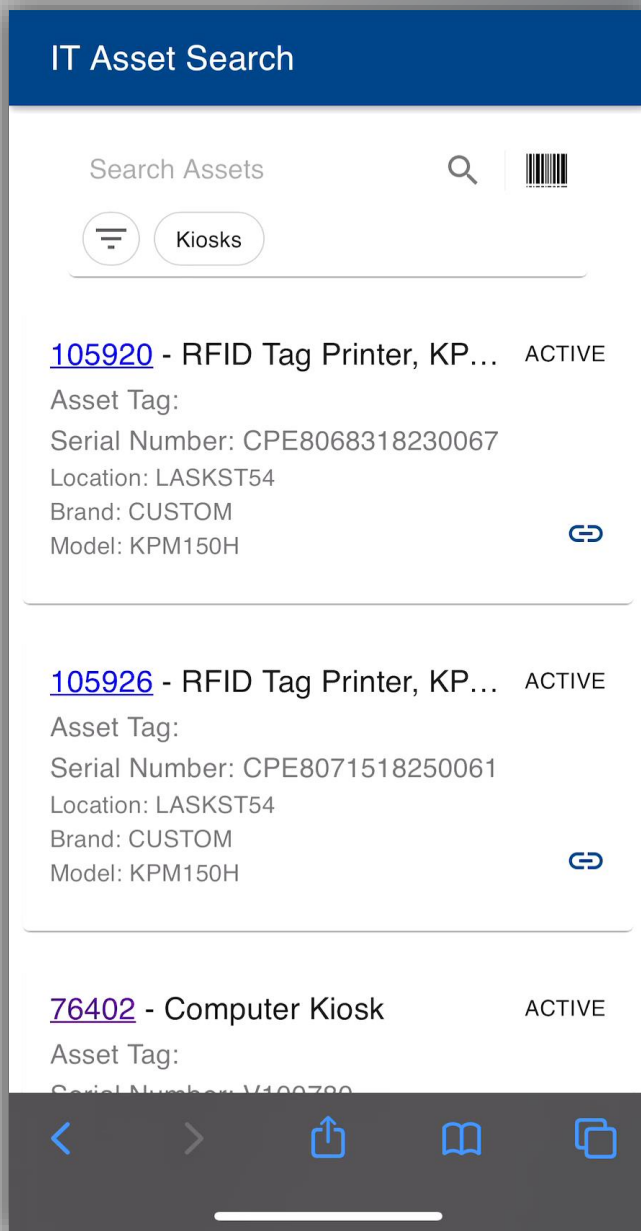
Estimated Next Due Date: 4/14/20

[New Row](#)

Next PM ETA – 4/14/20

McCarran
INTERNATIONAL AIRPORT

11



Up Next...

Eric Bodden
Departmental Systems Administrator
Asset Management Team

ASSET MANAGEMENT TEAM

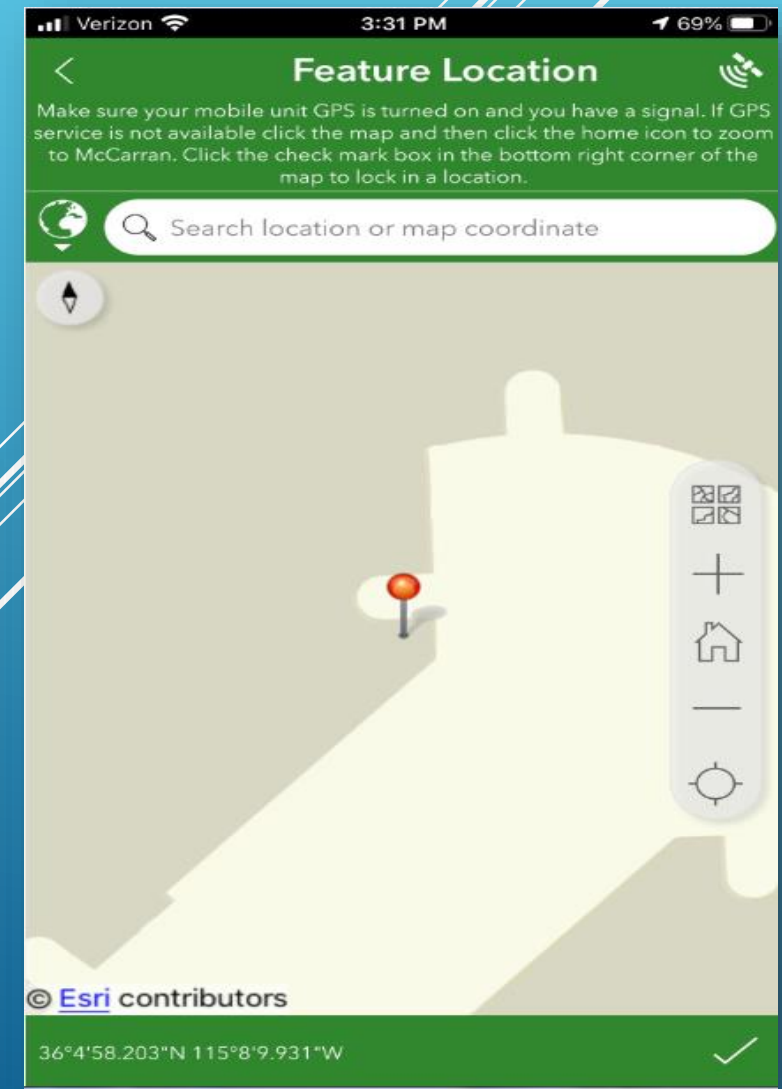
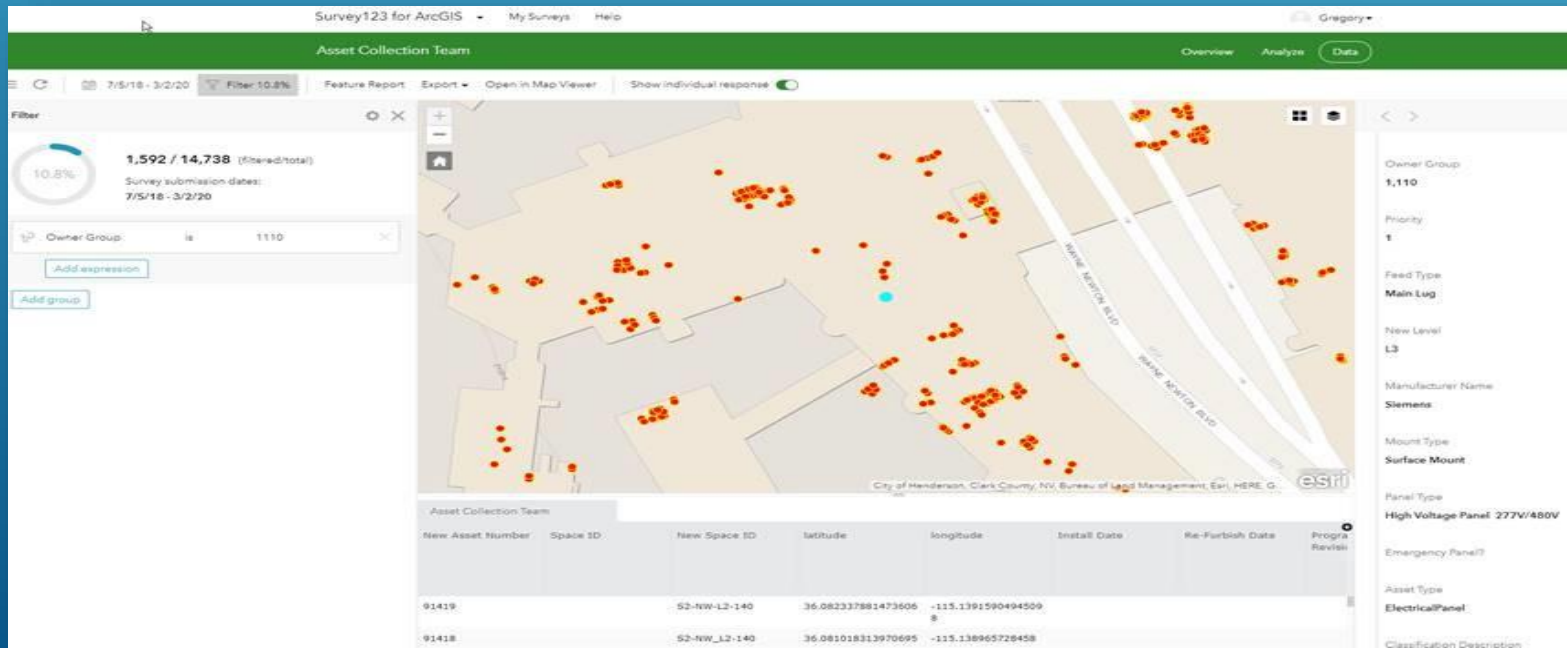
- **Maintain approx. 45,900 active assets**
- **Asset Mix of IT, Plumbing, Electrical, BHS, ATS, HVAC, BM, etc**
- **3500 PMs for assets**
- **320 plus personnel to maintain**
- **9 Planner/Schedulers, 2 Office Specialist, Auto CAD**

ASSET MANAGEMENT TEAM

- **Two year asset collection process**
- **Better knowledge of actual count and locations of asset**
- **Used Survey data to collect vital information and pin drop location**
- **Final stage will be accurate spare parts listing for asset**

ASSET MANAGEMENT TEAM

- Sample of pin drop for an asset location
- Hover over the pin and it will give you information about asset mix



ASSET MANAGEMENT TEAM

- MAXIMO Work order process completed on paper work orders, Maximo Data Entry Form

Maximo Data Entry Form				
Parent PM / WO #: 234605				
Scheduled Start: 8/27/16				
Reported Problem: Jet Bridge Weekly Inspection				
Assignments: AMBROCIOC				
Supervisor: PATMO		Work Group: 1009		
Work Description:				
Location/Space:	Asset # - Asset Tag:	Work Order Type:	Priority:	Route:
S2-NW-L2-JB/D50	18037 - OG-38293	PM	3	
Job Status:		Completed	In Progress	Not Started
TIME ENTRIES				
Labor	Date	Start Time	End Time	Duration (Hours)
AMBROCIOC	8-27-16	15:30	16:30	1.0
MATERIALS USED/NEEDED				
Description	Maximo Part #	Quantity	Storeroom	

Maximo Data Entry Form						
Parent PM / WO #: 234605						
Tasks						
Initials	Task ID	Description	Meas. Point	Value	Date	Obs.
AC	10	Visually inspect Jetway curtains, wheel assemblies and overall bridge f				
	20	Visually inspect baggage slide / wheel chair lift , for proper operations				
	30	Visually inspect PCA hose reels carts and yoke, for proper operations i				
	40	Visually inspect potable water cabinet, for proper operation and misir				
	50	Inspect cable hoist, for proper operation and missing or damaged part				
	55	Drive the bridge to detect any operational problems.				
	60	Check cab rotation.				
	70	Check canopy operation to its limits.				
	80	Check warning devices, Travel and Swing limit warnings.				
	90	Check cab floor in manual and automatic to verify proper operation.				
	100	-----Check Auto Level by completing steps A to E-----				
	110	A. Manipulate the wheel by hand, up and down.				
	120	A. It should turn freely and spring back to its neutral position.				
	130	B. Check that the screws holding the wheel to its shaft is tight.				
	140	C. Verify that the wheel is in good condition and the rubber is soft and pliable.				
	150	D. With the power on and the switch in the Auto Level position,rotate the wheel by hand.				
	160	D. The Auto Level light and alarm should come on in 4-8 seconds.				
	170	E. Reset alarm and repeat procedure rotating the wheel in the opposite direction.				
	180	Inspect the operator's console and power panel to ensure console buttons are in the proper position.				
MC	190	Fill out Maximo Data Entry Form for all repairs needed.				

Asset Spare Parts				
Item Description	Quantity			
10253 AXLE, BUSHING, STAINLESS STEEL, 1-3/4"L X 1/2"D	0			
15719 Halogen lamps, M/H, Flood, 150W, PAR38, Medium, 830, MCP150/PAR38/U/830/FL/ECO PB	0			
3995 Lamps and Lightbulbs, Replacement, Strobe, FED-SIG # K149130A (Jetbridge)	0			
15346 WHEEL,CASTER, POLYURETHANE, RED, 5" (WHEEL ONLY)	0			
10472 Centrifuge control board or printed circuit board, BUS DISCH PWM2, 2912277.02	1			
10097 WHEEL, BOGIE TRUNNION PIN - 2102478	1			
9924 Trolleys or accessories, Sail Track Assembly, 2106502, Jetway	1			
9857 LEVEL, AUTO LEVEL,WHEEL, JETAWAY 2001940-500	1			
10473 Centrifuge control board or printed circuit board, Power Supply, PWM2, 2913278	1			
3973 Centrifuge control board or printed circuit board, JETWAY, SYSTEMS, 2911597	1			
Asset Meters				
Meter	Measurement	Unit	Reading Date	Inspector
L-INVERTER				
R-INVERTER				

ASSET MANAGEMENT TEAM

- **WO's are now on Maximo Mobile**
- **Electronic version of the paper version**
- **Able to capture real time information on assets**
- **Gather actual time on PM's; better able to schedule PM's and be more effective in PM hours**

Welcome **Greg Kim**



Perform Inspection

[Go to Map](#)

Manage Work Orders

[Manage Workorders](#)

Work Orders Summary

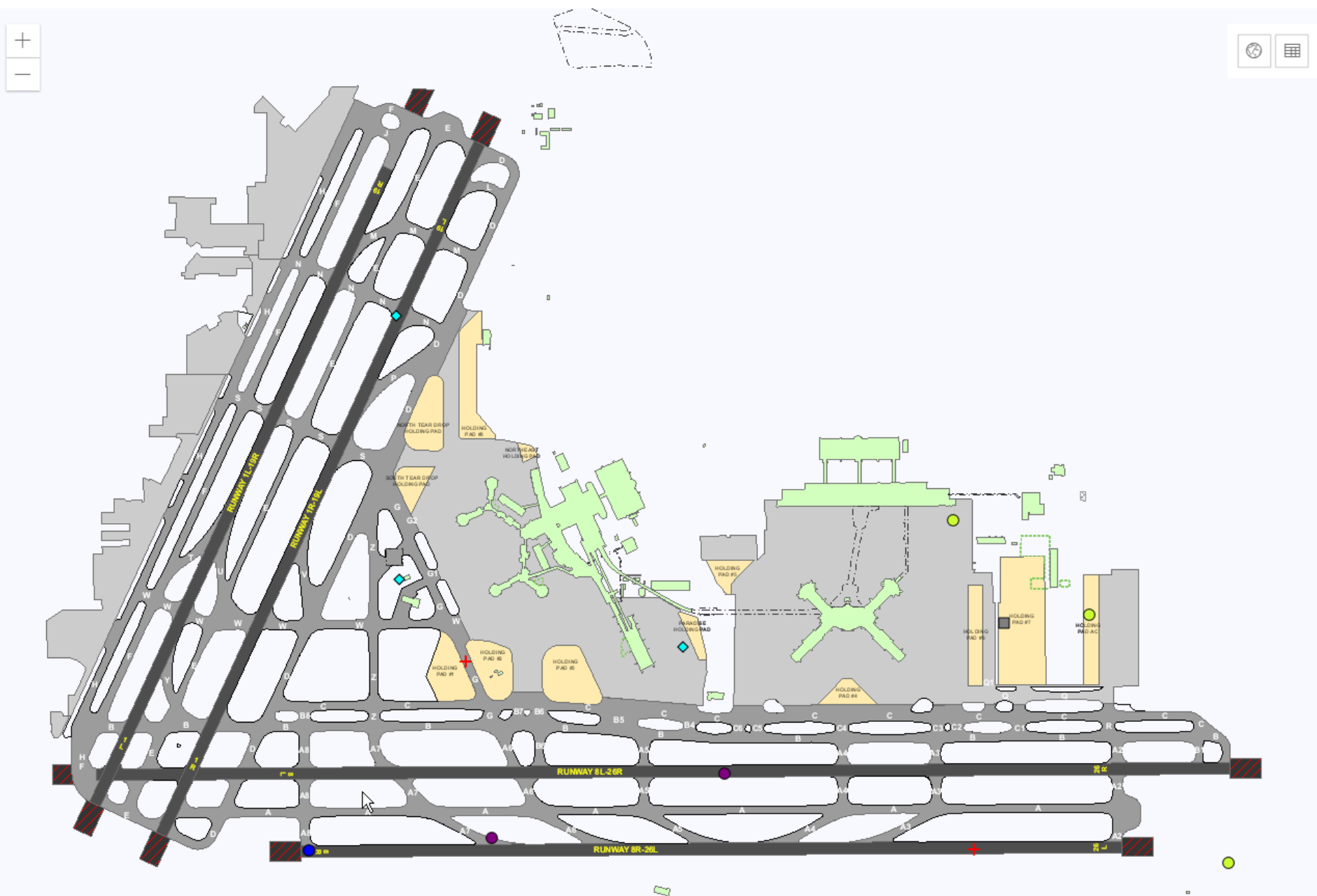
Active : **11**

Part139 Active Only : **11**

All Work Orders : **218**

Part139 All: **173**

Closed/Cancelld : **207**



Report Issue



Shift

Day



Facility

Pavement Areas



Conditions

Cracking/Spalling/Heaves



Describe Issue:

Crack at E15 ramp

Describe Location:

E15 Ramp

Priority :

1



Part139



Create Maximo SR

Upload Image:

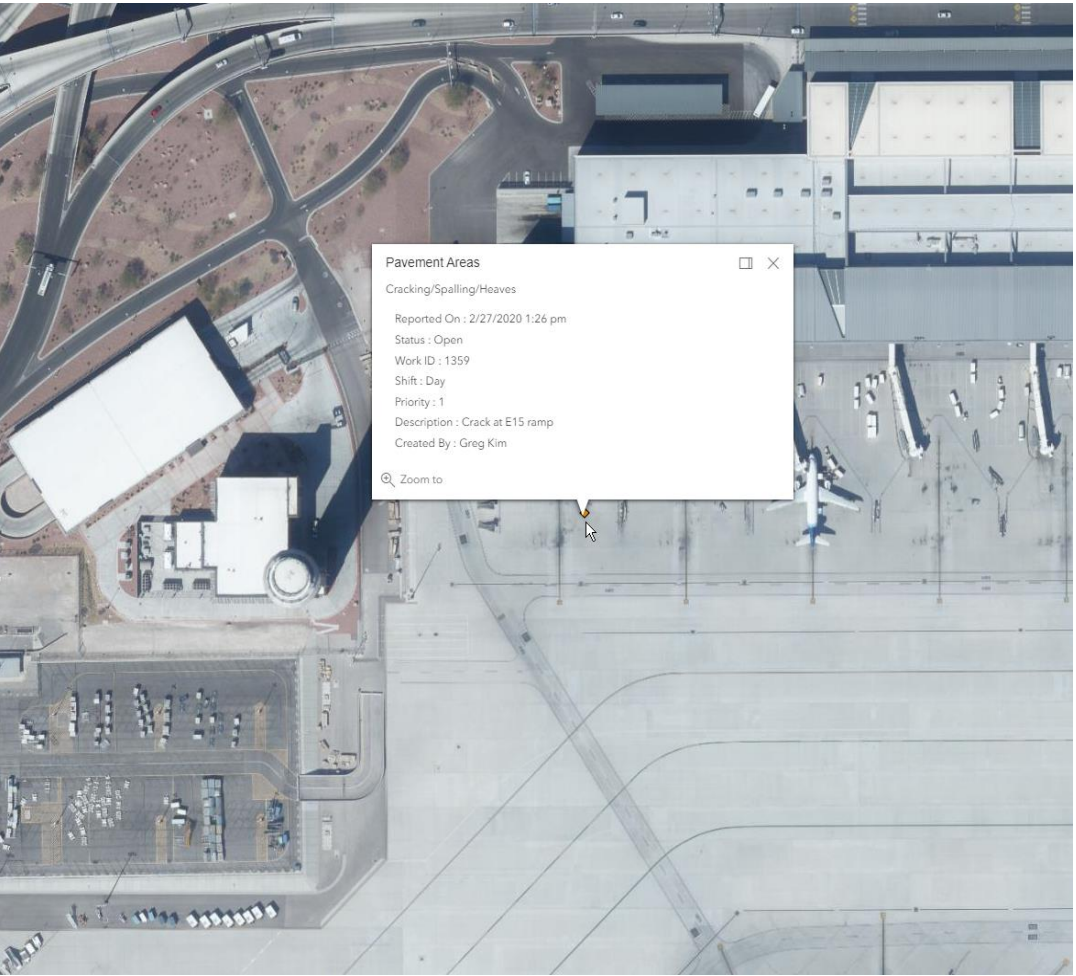
Choose File

No file chosen

Submit Issue



Cancel



Airport OperationsHomeMapAirOps Work OrdersDaily Inspection ReportPart139 ReportAirfield SignsDashboard

Manage AirOps Work Orders

Q

+ Add Work Order

+ Add Daily Log

Filter: Active Only

	WOID#...	Facility	Condition	Created	Issue	139	Status	MX-SR#	
▶	1359	Pavement Areas	Cracking/Spalling/...	2/27/2020 13:26	Crack at E15 ramp	Yes	Open	SR66838	Edit
▶	1358	Signs	Obscured/Operable	2/27/2020 12:08	TEST STEST	Yes	Open	SR66837	Edit
▶	1357	Markings	Clearly Visible/Standard	2/27/2020 11:48	testing map	Yes	Open	SR66836	Edit
▶	1356	Fueling Operations	Fueling Operations	2/27/2020 11:46	TEsting Map point with Work Order.	Yes	Open	SR66835	Edit
▶	1355	Fueling Operations	Fuel Leaks/Vegetation	2/27/2020 11:41	Fuel Leak... Bad Bad... Testing Point	Yes	Open	SR66834	Edit
▶	1354	Safety Areas	Frangible Bases	2/27/2020 11:27	ddddddddddddd	Yes	Open	SR66833	Edit
▶	1353	Pavement Areas	Hole 5 inch diameter 3 inch deep	2/27/2020 11:25	test point...	Yes	Open	SR66832	Edit
▶	1352	Markings	Clearly Visible/Standard	2/27/2020 11:22	test map point	Yes	Open	SR66831	Edit

◀◀12345▶▶

1 - 10 of 41 items

Airport OperationsHomeMapAirOps Work OrdersDaily Inspection ReportPart139 ReportAirfield SignsDashboard

Manage AirOps Work Orders

Q

+ Add Work Order

+ Add Daily Log

Filter: Active Only

	WOID#...	Facility	Condition	Created	Issue	139	Status	MX-SR#	
▶	1359	Pavement Areas	Cracking/Spalling/...	2/27/2020 13:26	Crack at E15 ramp	Yes	Open	SR66838	Edit

Created By : Greg Kim Shift : Day Location: E15 Ramp ALP : RAMP Maximo Location : A-RAMP

Priority : 1 X : 787024.187052451 Y : 26732918.29307425 Lat : 36.0852 Lng : -115.1404

Completed: null Resolution: null

[Add Attachments](#)

▶	1358	Signs	Obscured/Operable	2/27/2020 12:08	TEST STEST	Yes	Open	SR66837	Edit
▶	1357	Markings	Clearly Visible/Standard	2/27/2020 11:48	testing map	Yes	Open	SR66836	Edit

◀◀12345▶▶

1 - 10 of 41 items



Query

Find Service R



Find Navigation Item



Go To Applications

Available Queries

All Records

All Bookmarks

Active SRs with Canceled Work

Active SRs with Closed Incidents

Active SRs

Self Service Center Requests

My Group - Resolved SRs

My Group - SRs

My Group - SRs (Include Me)

My Group - Unassigned SRs

My SRs

Unassigned SRs

Changed Service Request in last 24 h...

Query to select tickets with timer start...

Service Desk - AVSETUP Queue

Service requests starting within the ho...

Common Actions



New Service Request



Select Owner



Take Ownership



Create KPI



Create Report

Use this application to view, create and modify service request records. To show My Location on the map, you need to allow the browser to share your location with the server. After the permission is granted, you may need to click the refresh button. [More information](#)

List

Map - Side by Side

Map - Below

Service Requests



1 -















20 of

60373



Service Request	Reported Date	Actual Finish	Summary	Reported By	Internal Priority	Priority	Service	Status
<input type="text"/>	>> <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	>> <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
SR66838	2/27/20 13:26:03		Pavement Areas - Cracking/Spalling/Heaves	gregk			AIROPS	QUEUED
SR66837	2/27/20 12:08:47		Signs - Obscured/Operable	dongk			AIROPS	QUEUED
SR66836	2/27/20 11:48:18		Markings - Clearly Visible/Standard	dongk			AIROPS	QUEUED
SR66835	2/27/20 11:46:51		Fueling Operations - Fueling Operations	dongk			AIROPS	QUEUED
SR66834	2/27/20 11:41:40		Fueling Operations - Fuel Leaks/Vegetation	dongk			AIROPS	QUEUED
SR66833	2/27/20 11:27:15		Safety Areas - Frangible Bases	dongk			AIROPS	QUEUED
SR66832	2/27/20 11:25:06		Pavement Areas - Hole 5 inch diameter 3 inch deep	dongk			AIROPS	QUEUED
SR66831	2/27/20 11:22:16		Markings - Clearly Visible/Standard	dongk			AIROPS	QUEUED
SR66830	2/27/20 11:17:20		Safety Areas - Frangible Bases	dongk			AIROPS	QUEUED
SR66829	2/27/20 11:15:52		Pavement Areas - Hole 5 inch diameter 3 inch deep	dongk			AIROPS	QUEUED
SR66828	2/27/20 09:33:41		Pavement Areas - Cracking/Spalling/Heaves	gregk			AIROPS	QUEUED
SR66827	2/26/20 15:49:56		Safety Areas - Frangible Bases	dongk			AIROPS	QUEUED
SR66821	1/8/20 09:49:15		Management, Business Professionals and Administrative Services, Business Administration Services, Business Facilities Oversight, Receiving or inventorying services	WILLIAMFL			INVTRY	NEW
SR66813	12/17/19 10:44:01		Standard Monitor	SCOTTRO			SUPPORT	NEW
SR66809	12/13/19 15:25:24		Standard User Package	WILLIAMFL			SUPPORT	NEW
SR66808	12/13/19 14:14:26		Hardware Request Self-Service	WILLIAMFL		3	SUPPORT	QUEUED
SR66802	12/12/19 08:42:29		Hardware Request Self-Service	WILLIAMFL		3	SUPPORT	QUEUED

Airport Operations Daily Inspection Report - 3/2/2020 (From 06:00 To 05:59)

+ Add Daily Log		Print Log		Date Filter: 3/2/2020						
	Time	Initial	Title	Remarks	Inc#	WOID	139	Log Type	Citation	
▶	06:00	TO	Assumed 260 Duties - Day Shift	Received briefing from grave shift, reviewed current airfield status, shift logs, work orders and NOTAMs.			No	Daily	No	 
▶	06:00	JH	Assumed 220 Duties - Day Shift	Received briefing and AED from grave shift, reviewed current airfield status, shift logs, work orders and NOTAMs.			No	Daily	No	 
▶	06:10	JH	Wildlife Activity Report	Wildlife Activity Report completed; Observed 5 Gulls on HP3. Birds flew away after a few mins. Wildlife report filed 			No	Daily	No	 
▶	06:30	JH	RWY/TWY Inspection	Initiated 14 CFR, Part 139 RWY/TWY inspection. Completed at 0742L. RWY 1L started 0725L completed at 0727L RWY 1R started 0658L completed at 0701L RWY 26L started 0655L completed at 0657L RWY 26R started 0645L completed at 0645L			No	Daily	No	 
▶	07:05	JH	Other	Advised ACC to MOHL tenants due to forecasted high winds			No	Daily	No	 
▶	07:09	TO	Perimeter Inspection	Checked fence fabric and perimeter gates.			No	Daily	No	 
▶	07:00	JH	Gate	Perimeter Gate #32 Opened at 0730. Secured by			No	Daily	No	

McCarran International Airport - Safety Self-Inspection Checklist

Date :

3/2/2020

Day :

Monday

Create PDF

Grave Inspector :

Brian Freeburg

Day Inspector:

Kevin Carpenter

Swing Inspector :

Select Inspector...

Grave Time:

00:30

Day Time:

06:30

Swing Time:

14:00

Comments / Weather:

Cloudy, Wind, and Rain Temp. 67/49 Winds N at 16kts, Humidity 62%

Facilities	Conditions	Incidents	Resolution
Pavement Areas	Pavement lips over 3"		
	Hole - 5" diam. 3" deep		
	Cracks/Saplling/Heaves	528 (11/26/2019) 532 (11/27/2019) 634 (2/24/2020)	
	FOD: Gravel/Debris/Sand		
	Rubber Deposits		
	Ponding/Edge Damages		
Safety Areas	Ruts/Humps/Erosion		
	Drainage/Construction		
	Support Equipment/Aircraft		
	Frangible Bases	526 (11/25/2019)	
	Unauthorized Objects		
Markings	Clearly Visible/Standard	387 (8/26/2019) 388 (8/26/2019) 390 (8/26/2019) 391 (8/26/2019)	

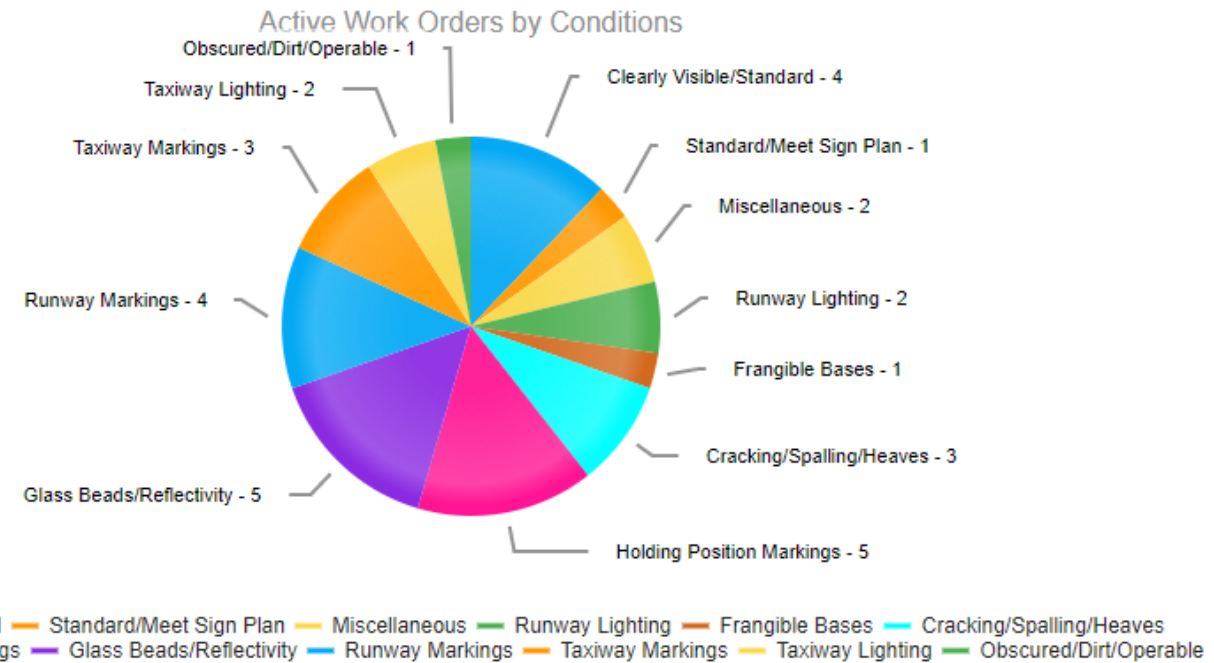
Part 139 Dashboard

Active By Facility - Chart

Active By Conditions - Chart

Active WO Created By - Chart

DailyLog Search



Plumbing

Airport Equipment Specialists

BM Special Trade

Building Maintenance

HVAC

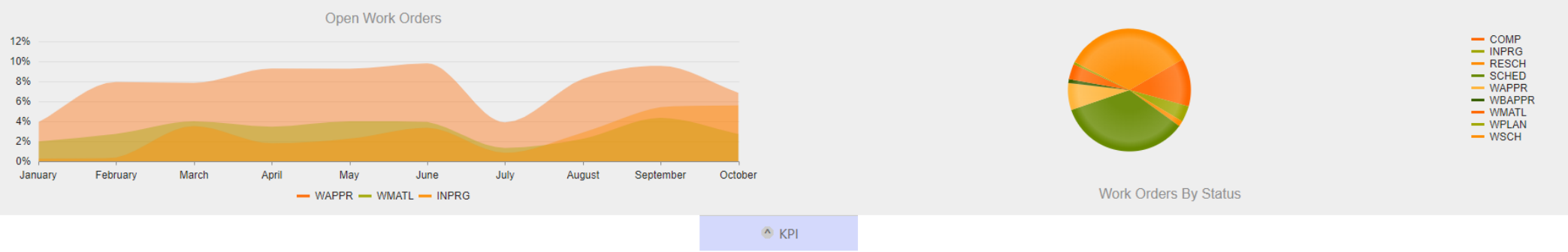
BHS

ATS

FSS

Property Monitor

Electrical



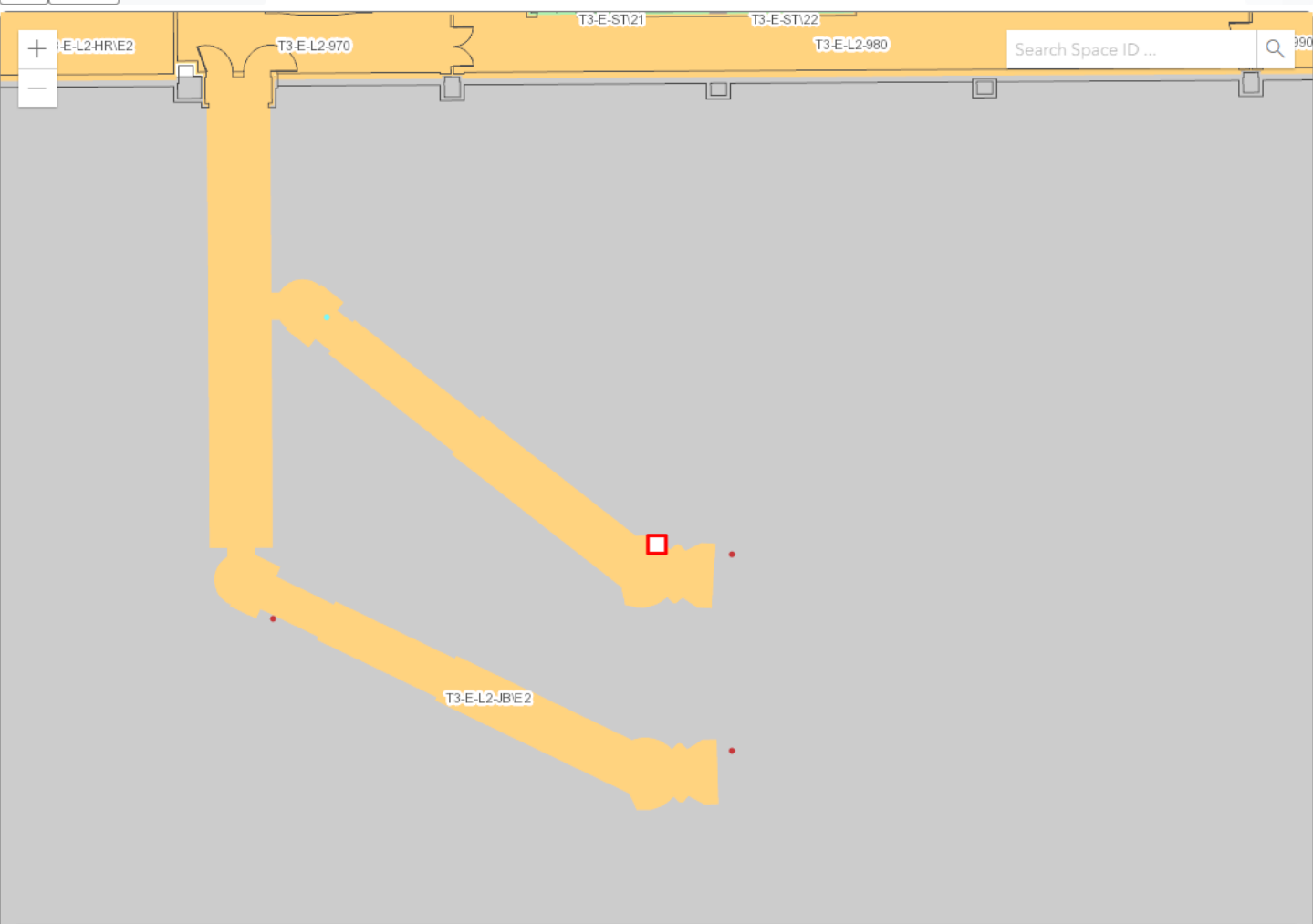
Airport Equipment Specialists



KPI

Airport Equipment Specialists

L2 LAS Clear Selection X



Work Order Status

COMP INPRG RESCH SCHED WAPPR WBDGTREV WMATL WPLAN WSCH <other>

Assets

Search...			
Asset Num	Asset Tag	Description	Location
16685	PWC JB E1B	Potable water cabinet	T3-E-L2-JB\E1
16686	PWC JB E2B	Potable water cabinet	T3-E-L2-JB\E2
16687	PWC JB E3B	Potable water cabinet	T3-E-L2-JB\E3
16688	PWC JB E5B	Potable water cabinet	T3-E-L2-JB\E5
17930	DL 14 T3 W	Dock Levelers	T3-W-L0-400
17931	DL-12	Dock Levelers	S2-RA-L1
17932	DL-11	Dock Levelers	S2-RA-L1
17933	DL 17 T3 E	Dock Levelers	T3-E-L1-700
17934	DL 19 T3 E	Dock Levelers	T3-E-L1-800

Total Assets: 1157

Work Orders

Filter by status: All Search...					
WO #	Description	Asset #	Location	Status	Work Type
699855	E2B PWC has 1 broke off Mounting Bolt into Bogie Wheel Torque Tube-needs extracted out	16686	T3-E-L2-JB\E2	WAPPR	CM

Total Work Orders: 1

One more application...

AMS Mobile