

Simulation : False
Vessel : Ranform Atlas
Date : Tue May 16 21:27:10 2017
Author : Berenguer Yoann
Version : beta 1.01

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Wings Condition monitoring

Wing QC checks

- Current
- Voltage
- Duty cycle
- Link quality
- Humidity
- Temperature

Wing plots

- Voltage
- Current
- Duty cycle
- Link quality
- Humidity
- Temperature

Wing motor statistics

- Wing response signature(s)
- Wing overall statistics
- Top 10 records versus test(s)
- Pool Performances versus test(s)
- Prognostic plot

Wing flag statistics

- Communication failure flag
- Operational condition flag
- Charge algorithm

IFS status

- IFS statistics
- Previous fault report(s)

Wing prognostics



Quality control

Scan interval :2.0 seconds

Records : from 0 to 58

Time window : from 0.0s to 116.0 s

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Current QC

Maximum current: 48.0 mA



Wing has been charging

Minimum current: -76.0 mA



Average current: -9.63 mA



Current variation: 124.0 mA



Charging capacity: -298.86 mA/H



Wing is depleting. Investigate flags and duty cycle

Voltage QC

Maximum voltage: 14.9 v



Minimum voltage: 14.9 v



Average voltage: 14.9 v



Cannot be used in production.

Voltage variation: 0.0 v



Duty cycle QC

Maximum duty cycle: 88 %



Minimum duty cycle: 0 %



Average duty cycle: 38.53 %



Link quality QC

Maximum link quality: 100 %



Minimum link quality: 100 %



Average link quality: 100.0 %



link quality variation: 0.0



Humidity QC

Maximum humidity: 24.0 %



Minimum humidity: 20.0 %



Average humidity: 21.65 %



Temperature QC

Maximum Temperature: 38.4



Minimum Temperature: 37.9



Average Temperature: 37.98





Plots display : Voltage, Current, Duty cycle

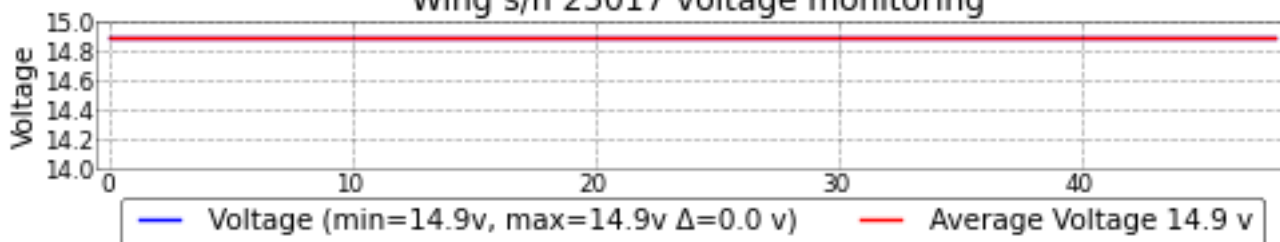
Scan interval :2.0 seconds

Records : from 0 to 58

Time window : from 0.0s to 116.0 s

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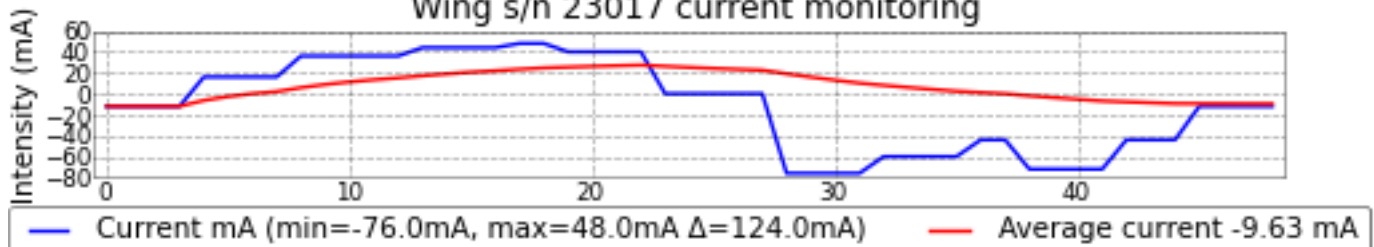
Wing s/n 23017 voltage monitoring



Voltage variation matrice



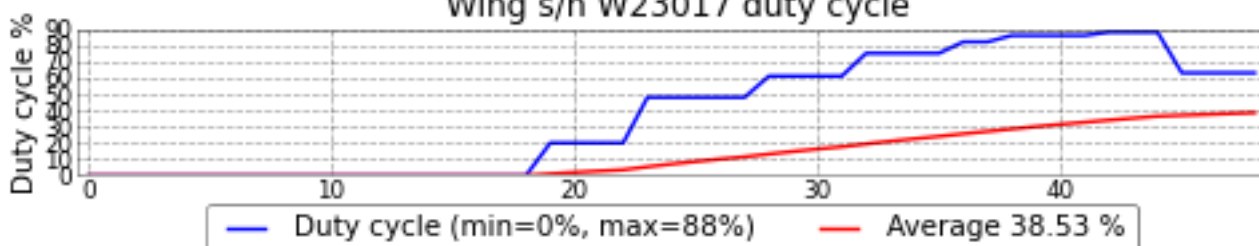
Wing s/n 23017 current monitoring



Average current matrice



Wing s/n W23017 duty cycle



Duty cycle matrice





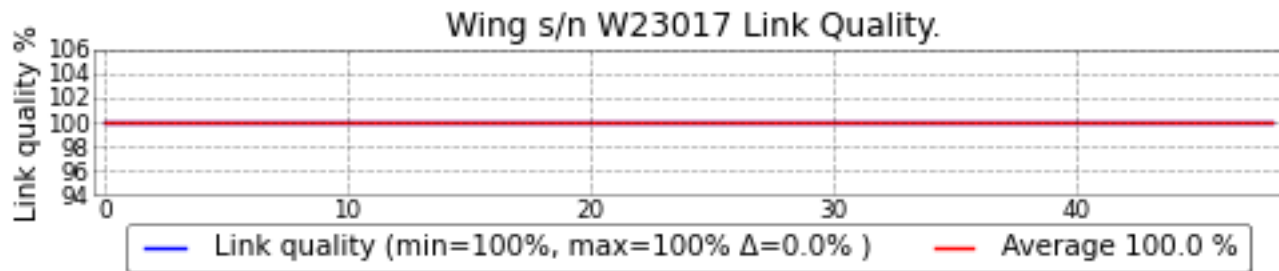
Plots display : LQ, Humidity, Temperature

Scan interval :2.0 seconds

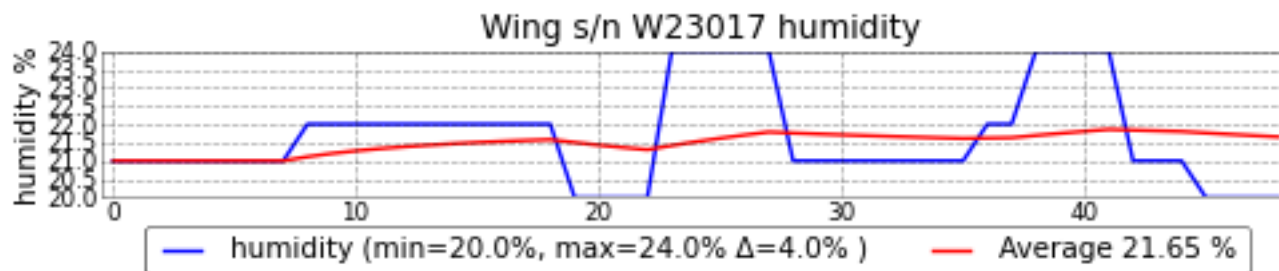
Records : from 0 to 58

Time window : from 0.0s to 116.0 s

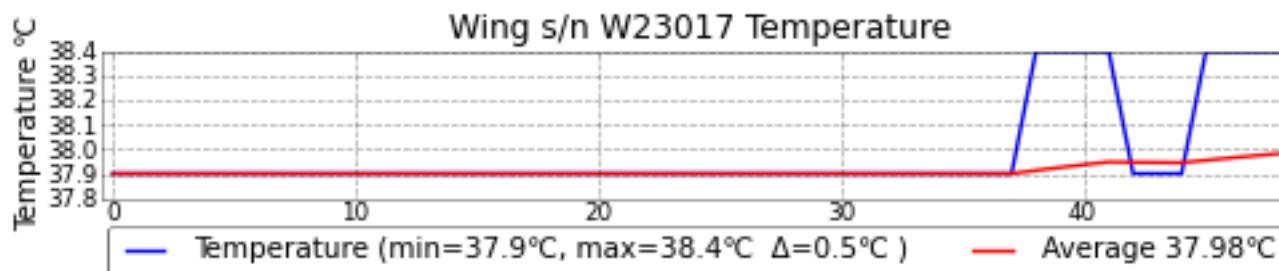
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Link quality matrice

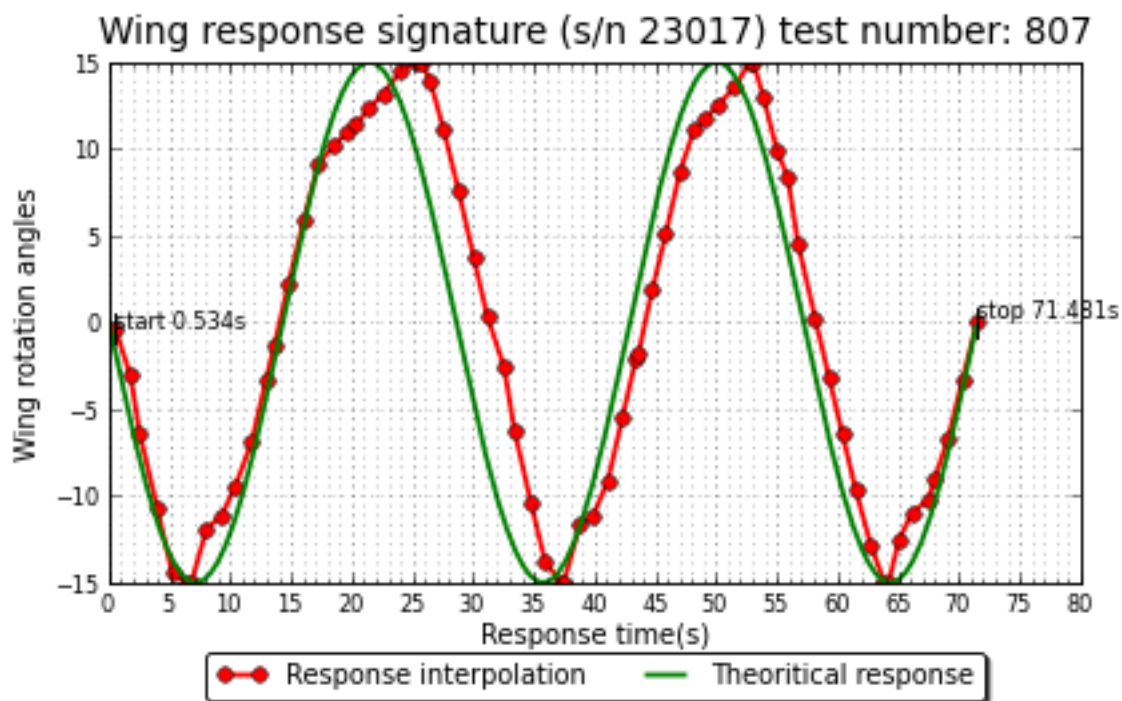


Humidity matrice



Temperature matrice





| Best performance | Result average | Worst performance |
|------------------|----------------|-------------------|
| 71.481s | 71.481s | 71.481s |

Pool average speed : 60.249 seconds

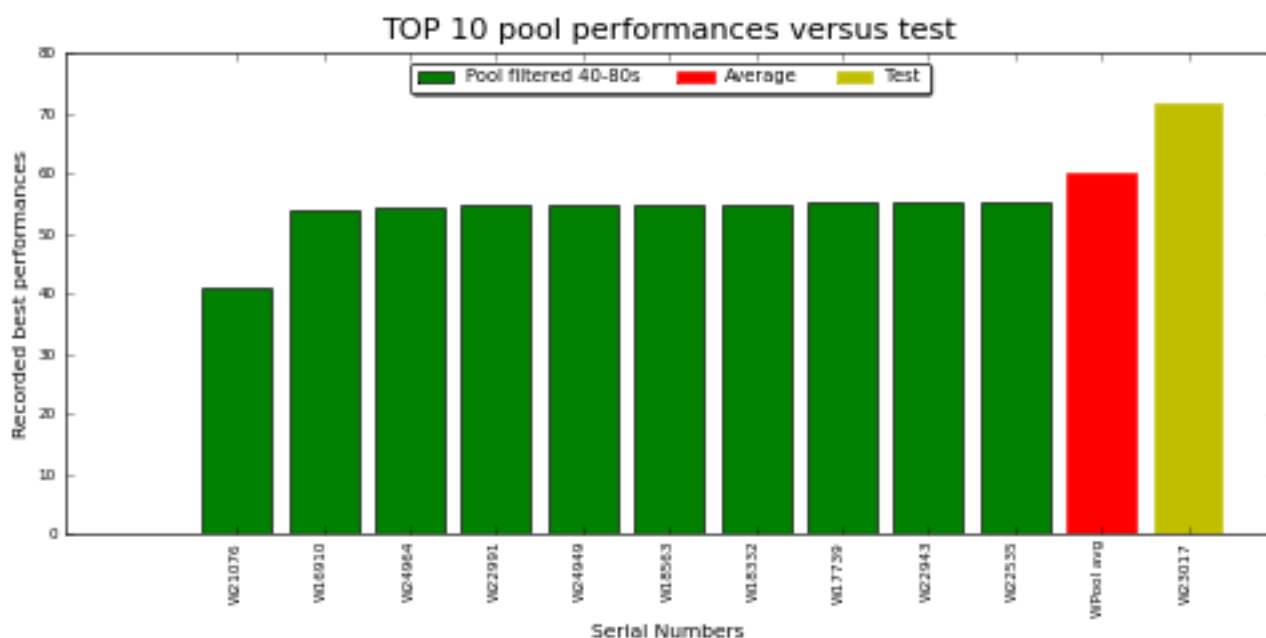


Speed (this test) : 71.481 seconds



Warning! motor speed is lower than average

Pool classement : 99/102

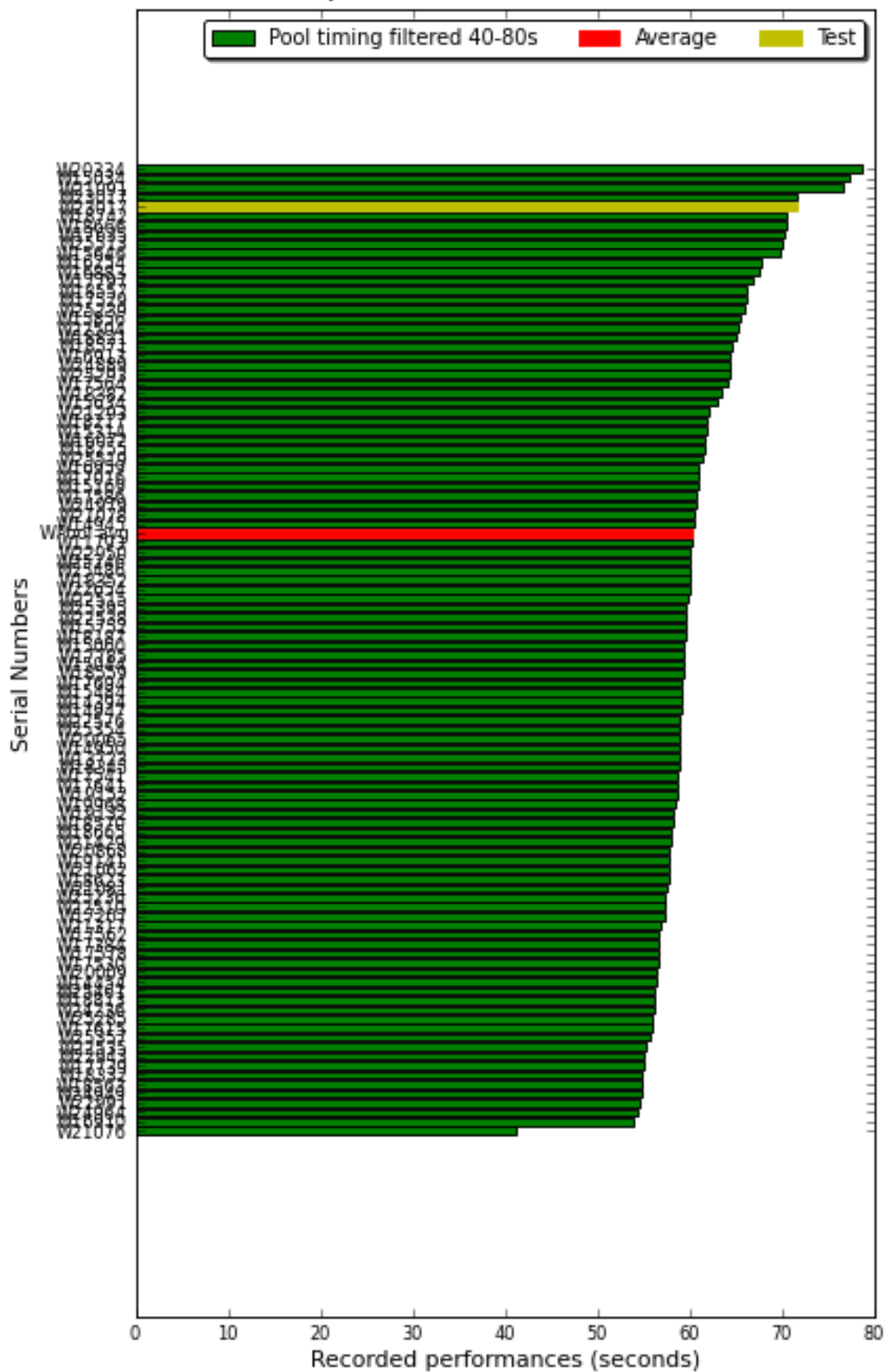




Signature plot recorded.
Scan interval :2.0 seconds
Records : from 0 to 58
Time window : from 0.0s to 116.0 s

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Pool performances versus test





Wing flag statistics
Scan interval :2.0 seconds
Records : from 0 to 58
Time window : from 0.0s to 116.0 s

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Communication status : Comm OK

Operational status : Op OK

Power deactivated : 2.04%

Power activated : 97.96%

Charge disabled : 2.04%

Charge enabled : 97.96%

Power NOT received : 2.04%

Power received : 97.96%

Element : - Not charging Severity: 1 Notice

Element : - Voltage value Severity: 4 Fail

Element : - Voltage drop(s) Severity: 0 Pass

Element : - Comms issue Severity: 0 Pass

Element : - Duty cycle Severity: 0 Pass

Element : - Link Quality Severity: 0 Pass

Element : - Humidity Severity: 0 Pass

Element : - Temperature Severity: 0 Pass

Element : - Motor speed test Severity: 1 Notice

Element : - Operational flag Severity: 0 Pass

Fail



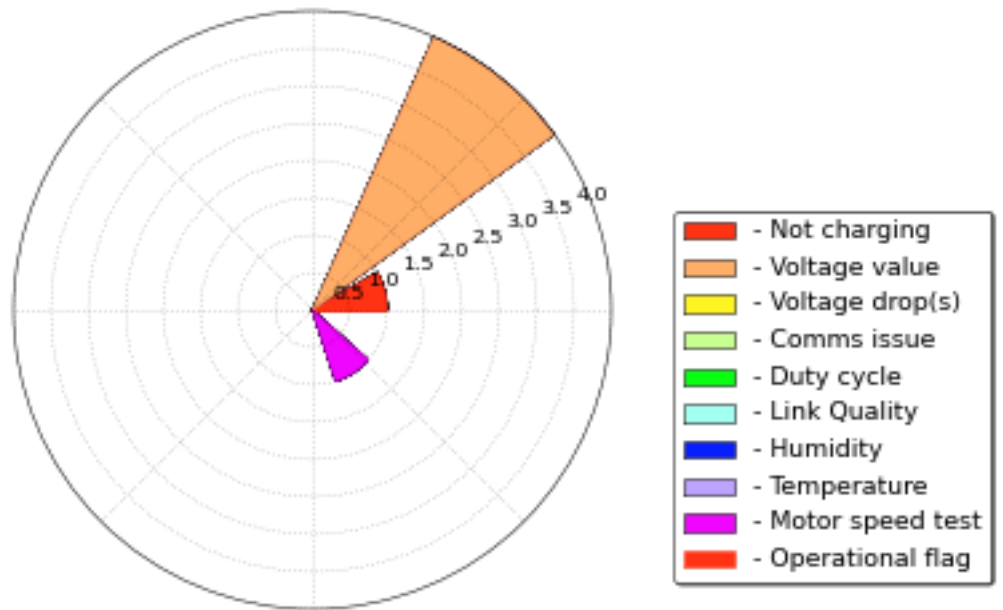
Prognostic graph & QR code

Scan interval :2.0 seconds

Records : from 0 to 58

Time window : from 0.0s to 116.0 s

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IFS

Scan interval :2.0 seconds

Records : from 0 to 58

Time window : from 0.0s to 116.0 s

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Item found in IFS

| | |
|-----------------------|--|
| Description | eBird? SmartWing |
| Vessel | ATS |
| Part number | 1021571 |
| Serial number | W23017 |
| Alternate ID | 5381870 |
| Operational condition | Non Operational |
| Operational status | Not Applicable |
| Latest transaction | Moved to location ATS-3-3298-EBWRK at site ATS |
| Date created | 2014-01-16 10:28:45 |
| Date changed | 2017-05-06 19:36:46 |

Active work order

| | |
|-------------------|------------------------------------|
| WO number | 62007886 |
| WO status | Released |
| Vessel | ATS |
| Registration date | 2017-05-10 12:45:28 |
| Location | SOS |
| Description | eBird? SmartWing |
| Cause details | None |
| Directive | Motor stuck or broken shaft |
| Symptom | 522 Motor, axle, gearbox failure |
| Cause | None |
| Error type | None |
| Discover code | 40 Equipment Malfunction |
| Origin code | 23 |
| Fault description | Need testing |

Found : 3 historical work order(s)

| | |
|-------------------|--|
| Alternate ID | 5381870 |
| Location | SOS |
| WO number | 62003428 |
| WO status | FINISHED |
| Registration date | 2016-03-27 07:17:53 |
| Error description | Removed during deployment project 2015123 Colombia |
| Error details | Removed due to bad comms |
| Real_F date | 2016-03-27 07:18:59 |
| Origin code | 23 |
| Reported by | YOABER |
| Vessel | ATS |



IFS report for s/n W23017
Scan interval :2.0 seconds
Records : from 0 to 58
Time window : from 0.0s to 116.0 s

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| | |
|-------------------|--------------------------------|
| Alternate ID | 5381870 |
| Location | SOS |
| WO number | 62007834 |
| WO status | FINISHED |
| Registration date | 2017-05-06 19:35:15 |
| Error description | Test onboard. |
| Error details | Reporting MotorStuck flag set. |
| Real_F date | 2017-05-07 22:44:47 |
| Origin code | 23 |
| Reported by | JORHEL |
| Vessel | ATS |

| | |
|-------------------|--|
| Alternate ID | 5381870 |
| Location | SOS |
| WO number | 62003428 |
| WO status | FINISHED |
| Registration date | 2016-03-27 07:17:53 |
| Error description | Removed during deployment project 2015123 Colombia |
| Error details | Removed due to bad comms |
| Real_F date | 2016-03-27 07:18:59 |
| Origin code | 23 |
| Reported by | YOABER |
| Vessel | ATS |

Found : 0 transport order(s)



QR code

Scan interval :2.0 seconds

Records : from 0 to 58

Time window : from 0.0s to 116.0 s

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The QR code contains the following informations

S/N:W23017

PART_NO: 1021571

ALTERNATE_ID: 5381870

Status: Fail

- Not charging : Severity=1

- Voltage value : Severity=4

- Motor speed test : Severity=1

