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SERVICE BULLETIN

SB-082718 REV A

DATE ISSUED: 9/14/2018
DATE EFFECTIVE: 9/14/2018
SUPERSEDES NOTICE: None.
SUBJECT: Fuel Tank Sump Line Modification

AIRCRAFT AFFECTED: **MODEL:** ICON A5
S/N: 00022 through 00036

REQUIRED ACTION: Replace existing fuel sump system with latest version of system.

TIME OF COMPLIANCE: Next Annual Condition Inspection, 100 hr inspection, or next time fuel tank access panel is opened for service, whichever comes first.

Revision History: None.

PURPOSE:

ICON is committed to designing, manufacturing, delivering, and supporting a high-quality Light Sport Aircraft, providing a level of safety well beyond expectations. During routine maintenance of the aircraft, it was discovered that the fuel sump line tie block disbonded due to poor bond prep of the fuel tank surface. The failure location is shown in the Figure 1 and 2. On two aircraft, this condition has resulted in limitation of the fuel sump effectiveness beyond acceptable limits. This Service Bulletin provides instructions to modify the fuel system to correct this condition.

WARRANTY:

ICON Certified Service Providers: Please submit an invoice for warranty reimbursement of labor and parts on completion of this service bulletin. Please reference service bulletin number SB-082718.

1. Removal and replacement labor of 7.0 Hours will be reimbursed.

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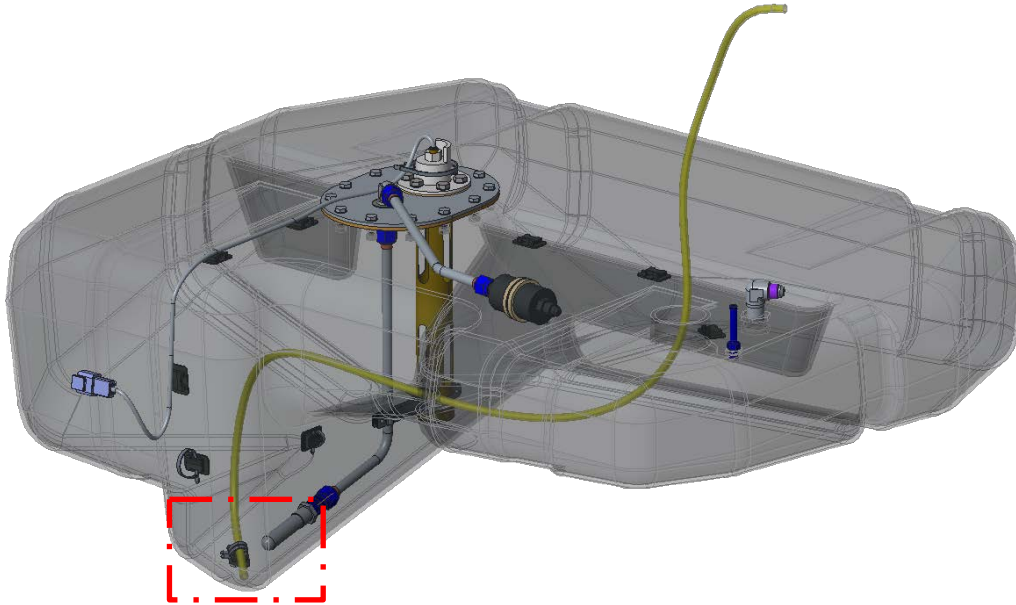


Figure 1: Fuel sump tie block location.

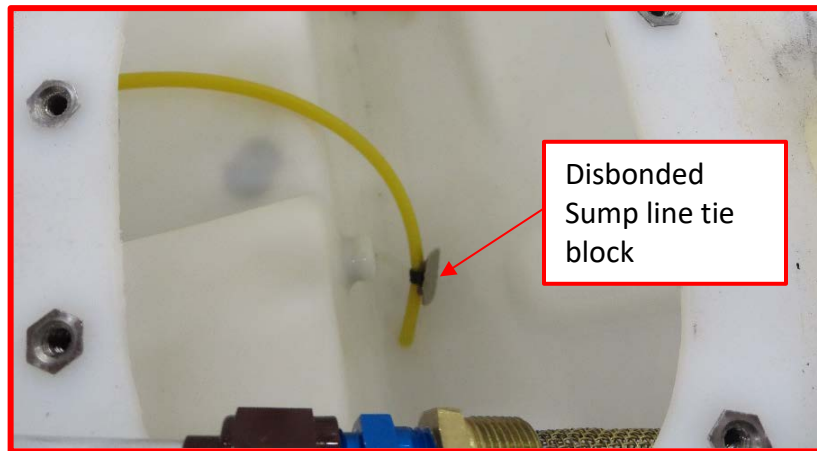


Figure 2: Fuel sump line disbonded from fuel tank.



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PARTS LIST:

Order only parts that are required

Table 1: Parts List

Part Number	Part Description	Quantity
ICA012856	Clamp, Fuel Sump to Fuel Pickup	1
ICA011512	Fuel Tank Access Plate Gasket	1
ICA012913	Clunk, Fuel Sump	1
ICA012859	Fitting, Straight, .188 Id Tube To .250-28	2
ICA012096	Tubing, Tygon Plastic, Fuel & Lubricant, .188x.313	50"
TY23MX	Cable-Tie, Nylon 6-6, 18lb, Ty-Rap	A/N
ICA012861	Sealant, Gasket, Fuel Resistant	A/N
Loctite 243	Thread locker	A/N
15300010	Hose, Crimp, CRES, OETICKER 0.344	1

Fuel Sump Replacement instructions:

Special Tools:

1. N/A

Disassembly Instructions:

1. Disassemble the aircraft as required to permit accessibility, inspection, adjustment, maintenance, and repair in accordance with the latest release of the Aircraft Maintenance Manual, ICA000833.
 - a. This will require:
 - i. Pumping of usable fuel from fuel tank.
 - ii. Removal of baggage floors.
 - iii. Removal of seat backs, removal of seat bases is permissible if required.
 - iv. Removal of baggage side panels (LH side only).
2. Disconnect the fuel filler neck by loosening the worm clamps at the top and bottom of the fuel filler neck. Refer to Figure 3.
3. Disconnect the fuel sump line by removing the indicated sump hose crimp in Figure 3.

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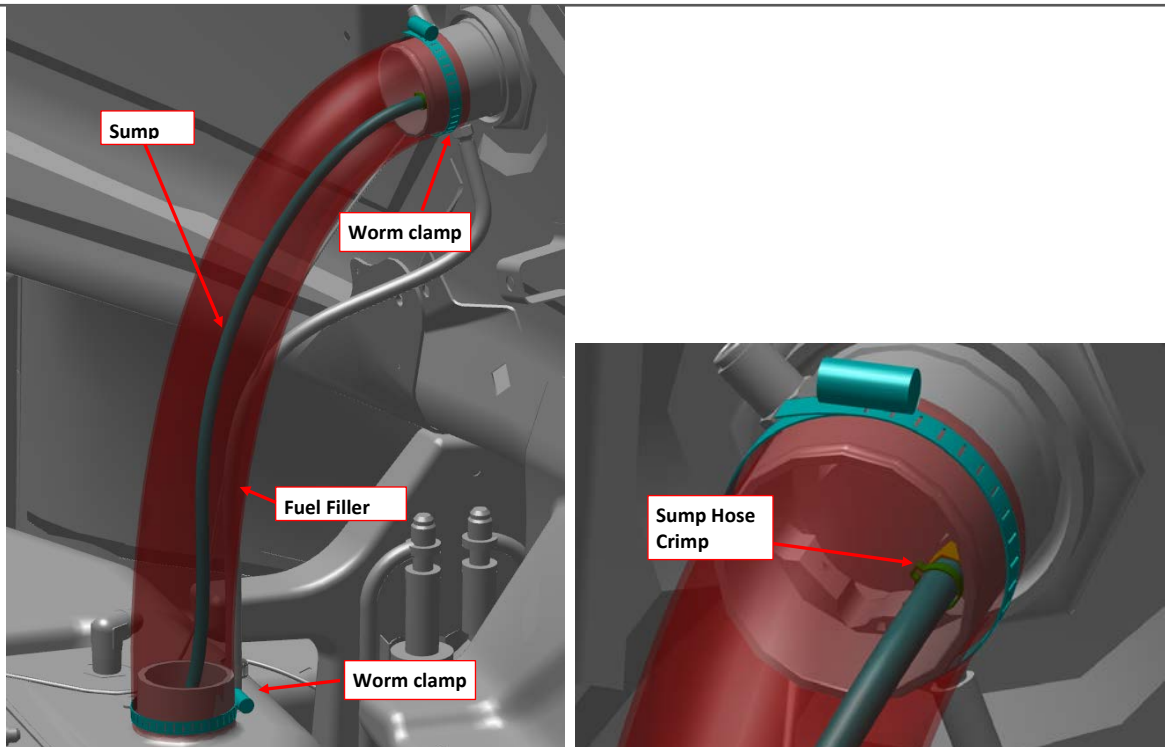


Figure 3: Fuel filler neck disconnection

4. Disconnect exterior supply line. Refer to Figure 4.

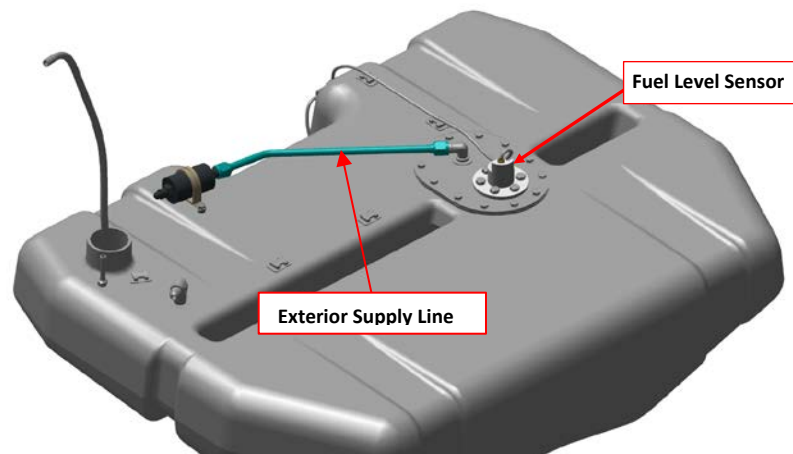


Figure 4: Fuel tank supply line

5. Remove zip ties securing the electrical harnesses on top of the tank, remove bolt securing ground wires (refer to Figure 5), and disconnect fuel level sensor.

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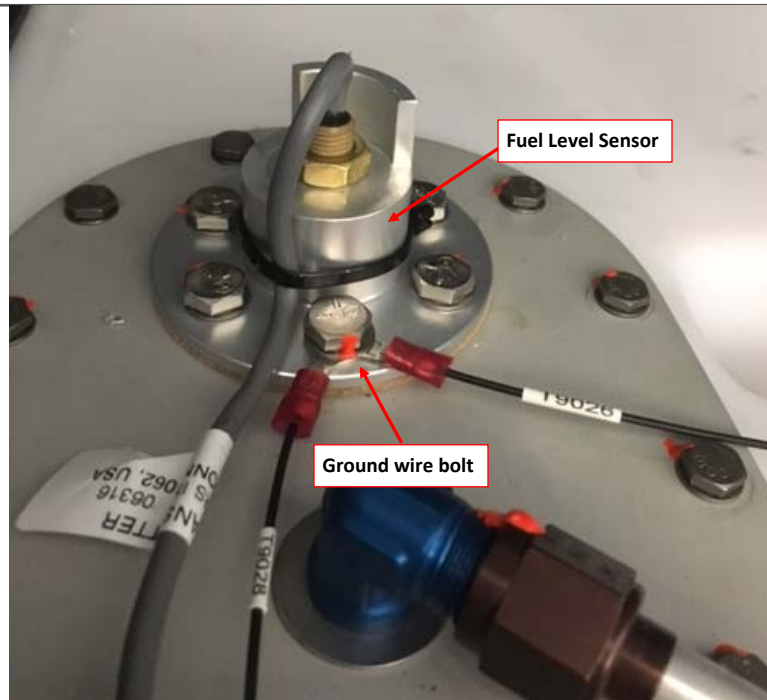


Figure 5: Ground wire bolt.

6. Remove bolts that secure access plate and remove the access plate assembly from the fuel tank. Refer to Figure 6.

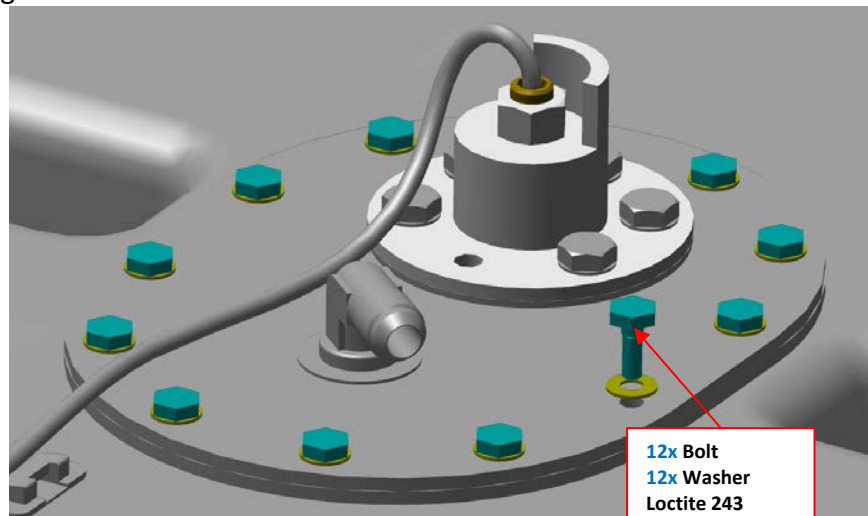


Figure 6: Fuel Tank Access Plate.

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Installation Instructions:

1. Identify the male end of the fuel sump to fuel pickup clamp (ICA012856). The male end is the wider side of the tapered threads. Apply Loctite 243 in 360° bead to the lead threads of the male fitting. Thread the clamp onto finger strainer (ICA011804) to finger tight torque, then using the wrenching flats on the clamp and a second wrench opposing the torque on the finger screen orient the clamp as shown in Figure 7 below. Turn the clamp at least ½ turn tighter from finger tight, then continue tightening to orient fitting as shown, adding no more than a full turn. **Do not** loosen to achieve alignment.
2. Install straight tube fittings (ICA012859) into the clamp. Apply Loctite 243 prior to installation and torque fittings to 25-30 inch-lb.

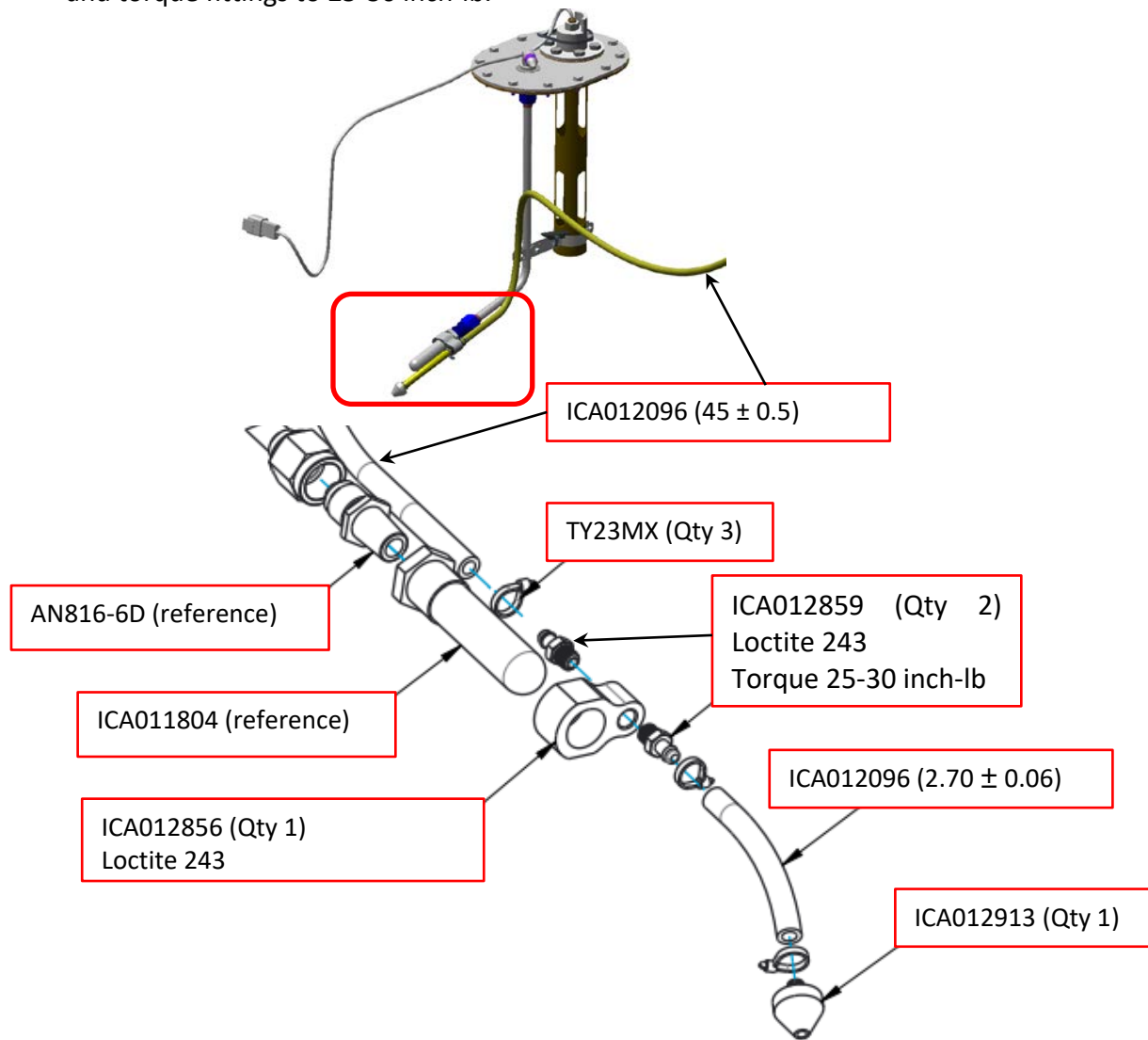


Figure 7: Fuel tank sump modification

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3. Cut a length of Tygon tubing (ICA012096) to length of 2.70 ± 0.06 -inches and attach it to the straight fitting with a TY23MX ty-rap. Refer to Figure 7.
4. Install the clunk (ICA012913) on the opposite end of the 2.70 ± 0.06 -inch length tubing and ty-rap the fitting side of the clunk with a TY23MX ty-rap. Refer to Figure 7.
5. Cut a length of Tygon tubing (ICA012096) to a length of 45 ± 0.5 -inch length and route it through the tank and secure it in the filler neck. Refer to Figure 8. Temporarily Allow the opposite end to be loose in the tank near the low spot of the tank.
6. Position the assembled fuel tank access plate assembly near the port and connect the fuel sump tube to the straight fitting on the clamp and secure with a TY23MX ty-rap. Refer to Figure 8.

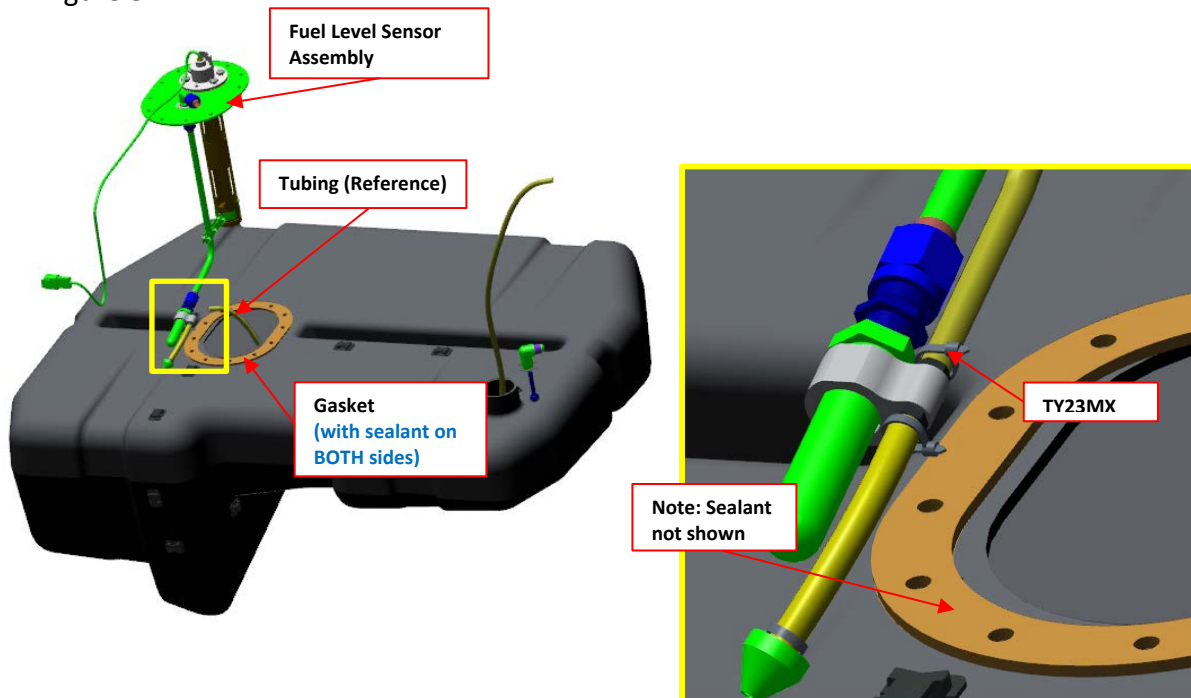


Figure 8: Sump line routing and connection

7. Clean gasket surface of fuel tank with isopropyl alcohol and reinstall the fuel tank access plate. Use a new cork gasket and apply sealant (ICA012861) to the gasket in one continuous bead approximately 0.030 to 0.060 inches thick to both sides of the gasket in the pattern shown below. Loctite 243 and torque fasteners to 25-30 inch-lb. Ensure the clunk falls to the lowest part of the tank.

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Figure 2: Fuel tank gasket sealant pattern (apply to both sides of gasket)

8. Reinstall any removed TY23MX Ty-wraps that were removed to secure electrical components.
9. Reinstall ground wires and bolt. Torque to 40-45 inch-lb. Refer to Figure 5.
10. Reconnect fuel level sensor.
11. Reconnect exterior supply line. Torque to 110-130 inch-lb. Refer to Figure 4.
12. Connect sump line to sump port with a new hose crimp (15300010). Refer to Figure 3.
13. Assemble fuel filler neck with worm drive clamps. Torque clamps to 10-13 inch-lb. Refer to Figure 3.
14. Continue to reassemble the aircraft in accordance with the latest maintenance manual.



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MAKE THE FOLLOWING LOGBOOK ENTRY:

“Service Bulletin (insert subject bulletin number) has been complied with and installation is reported to ICON Aircraft Customer Support and Service, Ref. FAA Exemption 10829B”.

If you need assistance relocating your A5 to your home base or temporary storage arrangements, please contact ICON Aircraft and ask for Customer Service and Support.

If you are no longer in possession of this aircraft, please forward this information to the present owner/operator and notify ICON Aircraft, Owners Center at:

ICON Aircraft
2141 ICON Way
Vacaville, CA 95688
(855) FLY-ICON
support@iconaircraft.com

Please include the aircraft registration number, serial number, your name, and if known the contact information of the new owner/operator.



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Flight Sciences Manager

9/14/2018

NAME	TITLE	DATE