

Battery Ball construction record for NSF with Commoning Board

Operator

Date

Ball S/N

OBS S/N

Cables

- Cable Eye OK
- Connect cables:**
 - 3-wire penetrator
 - 4-wire penetrator
 - 8-wire penetrator
 - Edgetech flylead
 - 4-wire cable
 - 6-wire cable

Batteries

BB1, 4 main quads, primary realease

Electronics item	S/N	type	Batteries S/N	voltage
Edgetech	<input type="text" value="33077"/>	D2/07/04	<input type="text" value="14-035"/>	
OBS recovery	<input type="text" value="20"/>	D2/04/06	<input type="text" value="14-269"/>	
Comm Board	<input type="text" value="1052"/>	D2/04/06	<input type="text" value="14-270"/>	
		D2/04/06	<input type="text" value="14-271"/>	
		D2/04/06	<input type="text" value="14-272"/>	
		P2, 1-4		<input type="text" value="14.65"/>
		P2, 3-6		<input type="text" value="14.66"/>

<input checked="" type="checkbox"/>	recovery address set (vaxx)
<input checked="" type="checkbox"/>	Edgetech RX (11.5kHz)
<input type="checkbox" value="No"/>	Edgetech RX changed?
<input checked="" type="checkbox"/>	initial ping
<input type="checkbox" value="0.6"/>	burn circuit resistance (<1 ohm)
<input type="checkbox" value="2/0.7"/>	burnwire voltage
<input checked="" type="checkbox"/>	"bu,1" is sent
<input checked="" type="checkbox"/>	"s1,1" stops burn
<input checked="" type="checkbox"/>	"en" is sent
<input checked="" type="checkbox"/>	"s1,1" stops burn
<input checked="" type="checkbox"/>	voltages on all 8 penetrator pins
<input checked="" type="checkbox"/>	disable Edgetech

OBS Release load test, pack S/N
Pack Model Number

14-035
D2/07/04

Reference documents

- D2/07/04 battery specification (Edgetech only, no recovery aids)
- Battery test box schematic
- Battery test box adaptor schematic

JAN 2014
 900390-22

Equipment

- DVM for voltage measurements
- battery test box with adaptors

Setup

- connect DVM to battery test box
- connect OBS adaptor to battery test box

Operator	DGD
Date	29 Jan 14
Mark serial number on battery and record it above on this sheet ✓	
No load voltages	
Make sure load switch is off	✓
Make sure diode test is disconnected, diode test switch to OFF	✓
Connect 4-pin Edgetech battery to adaptor	✓
Set switch to position 2, Record V2 unloaded	22.41
Set switch to position 3, Record V3 unloaded	11.09
Set switch to position 4, Record V4 unloaded	12.79
Load test	
Switch on load and wait 30 seconds	26
Set switch to position 2, Record V2 under load	19.25
Set switch to position 3, Record V3 under load	9.65
Set switch to position 4, Record V4 under load	12.46
Turn off load switch, disconnect battery from adaptor	✓

OBS Main Quad Battery Testing: S/N 14-269 Battery Pack Model: TLP-94131/D/OB1A

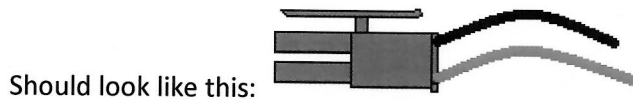
Experiment: ENAm Operator: DLD Date: 26 Feb 2014

Setup:

- Plug fixture USB cable into PC. (See ARD label on USB port on the PC) Allow the fixture to run through the first test to end before starting. This is only for the initial setup.
- Connect an external power supply to the Red and BLK banana plugs on the test fixture. Observe polarity. Red is positive, BLK is negative (or ground). Set power supply to +20V.

Test:

- Before plugging battery in the fixture, ensure that the connector on the battery is wired correctly.



- Plug the OBS Main Quad Adapter cable in the battery to be tested.
- Start *obsterm* in command window from the appropriate experiments directory using the command structure as shown below in red where *nnn* is the battery under test serial number.

```
obsterm.py -d00 -p3 -Fbatt_2014_nnn.txt
```

Record the voltages that are displayed on the screen into the appropriate box below.

BATTERY LOAD TEST

Quiescent voltage:	14.98
Loaded voltage:	14.13

DIODE LEAKAGE TEST

Diode HIGH voltage:	20.59
Diode LOW voltage:	20.55
Diode Difference voltage:	0.04

- Unplug battery under test. Test complete.
- To continue testing, type `clt-x, Y`, then hit `↑` cursor arrow. Enter new serial number for next battery and press `ENTER`.

OBS Main Quad Battery Testing: S/N 14-270 Battery Pack Model: TLP-94131/D/OB1A

Experiment: ENAM Operator: DLD Date: 26 Feb 2014

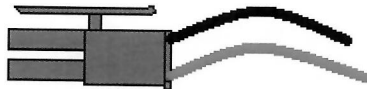
Setup:

- Plug fixture USB cable into PC. (See ARD label on USB port on the PC) Allow the fixture to run through the first test to end before starting. This is only for the initial setup.
- Connect an external power supply to the Red and BLK banana plugs on the test fixture. Observe polarity. Red is positive, BLK is negative (or ground). Set power supply to +20V.

Test:

- Before plugging battery in the fixture, ensure that the connector on the battery is wired correctly.

Should look like this:



- Plug the OBS Main Quad Adapter cable in the battery to be tested.
- Start *obstern* in command window from the appropriate experiments directory using the command structure as shown below in red where *nnn* is the battery under test serial number.

```
obstern.py -d00 -p3 -fbatt_2014_nnn.txt
```

Record the voltages that are displayed on the screen into the appropriate box below.

BATTERY LOAD TEST

Quiescent voltage:	14.98
Loaded voltage:	14.11

DIODE LEAKAGE TEST

Diode HIGH voltage:	20.59
Diode LOW voltage:	20.57
Diode Difference voltage:	0.02

- Unplug battery under test. Test complete.
- To continue testing, type `clt-x, Y`, then hit `↑` cursor arrow. Enter new serial number for next battery and press `ENTER`.

OBS Main Quad Battery Testing: S/N 14-271 Battery Pack Model: TLP-94131/D/OB1A

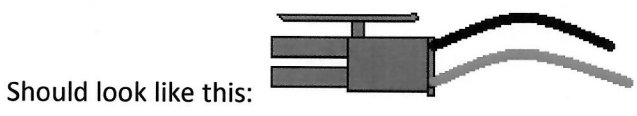
Experiment: ENAM Operator: DLD Date: 26 Feb 2014

Setup:

- Plug fixture USB cable into PC. (See ARD label on USB port on the PC) Allow the fixture to run through the first test to end before starting. This is only for the initial setup.
- Connect an external power supply to the Red and BLK banana plugs on the test fixture. Observe polarity. Red is positive, BLK is negative (or ground). Set power supply to +20V.

Test:

- Before plugging battery in the fixture, ensure that the connector on the battery is wired correctly.



- Plug the OBS Main Quad Adapter cable in the battery to be tested.
- Start *obstern* in command window from the appropriate experiments directory using the command structure as shown below in red where *nnn* is the battery under test serial number.

```
obstern.py -d00 -p3 -fbatt_2014_nnn.txt
```

Record the voltages that are displayed on the screen into the appropriate box below.

BATTERY LOAD TEST

Quiescent voltage:	14.98
Loaded voltage:	14.13

DIODE LEAKAGE TEST

Diode HIGH voltage:	20.59
Diode LOW voltage:	20.57
Diode Difference voltage:	0.02

- Unplug battery under test. Test complete.
- To continue testing, type *clt-x, Y*, then hit \uparrow cursor arrow. Enter new serial number for next battery and press **ENTER**.

OBS Main Quad Battery Testing: S/N 14-272 Battery Pack Model: TLP-94131/D/OB1A

Experiment: ENAm Operator: DLD Date: 26 Feb 2014

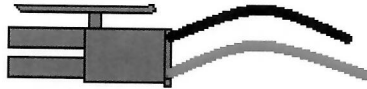
Setup:

- Plug fixture USB cable into PC. (See ARD label on USB port on the PC) Allow the fixture to run through the first test to end before starting. This is only for the initial setup.
- Connect an external power supply to the Red and BLK banana plugs on the test fixture. Observe polarity. Red is positive, BLK is negative (or ground). Set power supply to +20V.

Test:

- Before plugging battery in the fixture, ensure that the connector on the battery is wired correctly.

Should look like this:



- Plug the OBS Main Quad Adapter cable in the battery to be tested.
- Start *obsterm* in command window from the appropriate experiments directory using the command structure as shown below in red where *nnn* is the battery under test serial number.

```
obsterm.py -d00 -p3 -fbatt_2014_nnn.txt
```

Record the voltages that are displayed on the screen into the appropriate box below.

BATTERY LOAD TEST

Quiescent voltage:	15.00
Loaded voltage:	14.13

DIODE LEAKAGE TEST

Diode HIGH voltage:	20.59
Diode LOW voltage:	20.55
Diode Difference voltage:	0.04

- Unplug battery under test. Test complete.
- To continue testing, type `clt-x, Y`, then hit `↑` cursor arrow. Enter new serial number for next battery and press `ENTER`.