- Rechargeable batteries are not authorized.
- Lithium batteries are not authorized for aviation use.
- Brand name, high quality AA alkaline batteries are recommended for use. Military and other public use operators — whose operational protocols allow for the use of lithium batteries — may operate with lithium batteries as follows:
  - DO NOT heat, puncture, disassemble, test for capacity, short circuit, attempt to recharge, or otherwise tamper with the battery.
  - Batteries have a safety vent to prevent explosion. When they are venting gas, you will smell gas, your eyes may become irritated, or you may hear the sound of gas escaping. When safety vents have operated, batteries are fairly safe from bursting, but will be hot and must be handled with care.
  - Lithium batteries have a safety vent to prevent explosion. When they are venting gas, you will smell gas, your eyes may become irritated, or you may hear the sound of gas escaping. When safety vents have been activated, the battery is relatively safe from bursting, but will be hot and must be handled with care.
  - If the Battery Pack becomes hot to the touch, and you hear a hissing sound (i.e. battery venting) or smell irritating sulfur dioxide gas, IMMEDIATELY turn off the battery pack and disconnect the power cable from the mount. Wait until the battery has cooled before removing from its compartment. Check for damage. If not damaged, replace with a fresh battery.
  - DO NOT use water to extinguish lithium battery fire if a shock hazard exists due to high voltage electrical equipment which may be in the immediate vicinity.
- DO NOT use batteries, which look bulged, have leakage or have burst. Dispose of damaged batteries properly. Check the battery compartment for corrosion or damage. If corrosion or damage is present, have the battery Pack inspected and serviced by authorized maintenance personnel.
- ALWAYS refer to battery manufacturer's instructions for usage, maintenance. storage, disposal and safety.

### CAUTION

- DO NOT ship, or place the battery pack into storage with batteries installed.
- Ensure that connectors are dry prior to connecting to prevent any shorting of the system.
- Both hands should be used when attaching and detaching the NVG. Single-handed operation, or failure to use proper NVG attachment and detachment procedures could cause misalignment or damage to the NVG and mount.

### ACCESSORIES AND MAINTENANCE KITS

Description	ASU Part Number
Velcro Plate Only	9M1000-3
NVG Replacement Lanyard Only for Aviation Mount	9M1000-4
Spare Screw Kit x6 Universal Visor Screws (Supports Universal Visor Mount)	9M1000-1-1
Battery Counterweight - Small	9M1000-2-CW1
Battery Counterweight - Large	9M1000-2-CW2
Spare Screw Kit x6 Alpha Eagle Shroud (Supports Alpha Eagle Shroud Adaptor Kit)	9M1000-1-2
Spare Screw Kit x6 Quick Disconnect Screws	9M1000-1-3
QD Interface Rail Adaptor Only (Does not Include Lo Pro Shroud)	9M1000-1-10
QD Ground Interface with 3 Hole Low Pro Rail Shroud	9M1000-1-6
Maintenance Kit (Mount)	9M1000-1-MK
Maintenance Kit (Battery Pack)	9M1000-2-MK
Maintenance Kit (Mount & Battery Pack) Combines G32 and G33 kits	9M1000-MK
Visor Clip for Lemo Cord with Rubber Insert	9M1000-1-9
Hybrid 1/3 Hole Shroud w/Lanyard for Ground Helmet	9M1000-1-7
Lo Pro 3 Hole Shroud w/Lanyard for Ground Helmet	9M1000-1-8

### CARE AND MAINTENANCE

Clean the exterior surfaces of the Mount, Ground Adapter Plate and Battery Pack by brushing with a soft brush and/or wiping down the assemblies with a clean, damp cloth. If used in a salt water environment, lightly misting exterior with fresh water and immediately drying after use is recommended. ensuring that the Battery Compartment is sealed when doing so. If used extensively in a salt water environment, lightly lubricate stainless steel parts as needed. Ensure that electrical connectors are fully dry before reconnecting.

The Vertical Height Adjuster, dovetail interfaces and release mechanisms that are not kept free from debris may bind, and the mount may not move freely. Lubricate lightly with non-hydroscopic grease as needed.

Check the Battery Compartment and sealing gaskets on the cover and power switch for dirt or debris and clean if needed by wiping with a soft cloth. If battery door gaskets are worn or damaged and no longer provide a seal, the Battery Pack should be returned for repair and replacement of the gasket

A small amount of non-hydroscopic grease may be applied to the NVG Lock Release Bar Notch as needed to ensure smooth operation. When doing this. press the NVG Lock Release Button several times to lubricate, as illustrated



APPLY SMALL AMOUNT OF NON-

Lubricating the NVG Lock Release Bar

### WARRANTY STATEMENT

The Mount, Battery Pack and accessories (including Ground Adapter) are warranted by Aviation Specialties Unlimited (ASU) for the period of One Year. from date of purchase, for defects in material and workmanship. The following conditions apply:

- ASU has the option of repairing or replacing defective material.
- The customer is responsible for obtaining an RMA from ASU (see below) and for packaging and shipment of product to ASU.
- Upon repair or replacement, and at its own cost, ASU will return product to the customer via ground shipment to any continental United States destination. For international destinations, the customer will be responsible for the cost of return shipment.

To obtain an RMA, please contact ASU as follows: E-mail: gogglemaint@asu-nvg.com Phone: +1-208-287-5394

Website: http://www.asu-nvg.com/services/nvg\_service/

In order to expedite the RMA process, please identify the Item, Serial Number and provide additional information such as Purchase Order Number, Sales Order Number or a copy of the Packing List originally received with your product.

Please carefully follow the RMA instructions for marking, packaging and shipping when returning product.

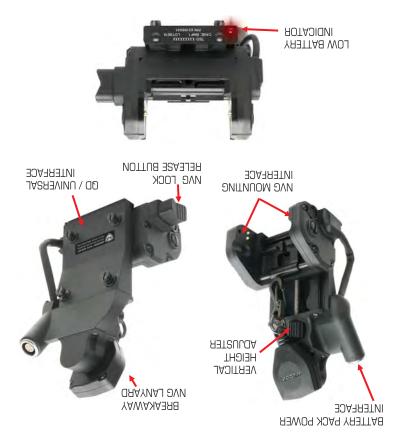
For information on the ASU "2-Year Extended Warranty" and "5-Year Labor Warranty", please contact your ASU sales representative, email sales@asunva.com, phone +1-208-426-8117, or visit the ASU website: http:// www.asu-nvg.com/home/build a guote/

### (Power Source) Battery Pack



PRODUCT IDENTIFICATION (CONT'D)

### Features of the AERONOX Mount / Battery Pack



### PRODUCT IDENTIFICATION

### INTERCHANGEABILITY

Mounts and Battery Packs are interchangeable between other Wilcox AERONOX units, legacy M949/F4949, or other ANVIS systems meeting TSO-C164, DO-275, MILSPEC or DEFSTAN test standards without any maintenance action required. Wilcox and other ANVIS mounts and battery packs meeting previously referenced standards may be used in any combination of mixed use. Units are serialized for tracking and Wilcox quality assurance purposes only.



**Aviation Specialties Unlimited, Inc. (ASU)** 4632 Aeronca Street Boise. ID 83705 WWW.ASU-NVG.COM Ph: 208 426-8117 Fax: 208 426-8975

Manufactured by:



### OPERATION AND MAINTENANCE QUICK REFERENCE FOR THE

# **AERONOX**®

Mount/Battery Pack (Accommodates F4949, M949, ANVIS 6/9 and F5050)







Battery Pack and

Quick Disconnect Ground Adaptor for Wilcox Shroud

Alpha Eagle Shroud Adaptor Kit.

A hard copy of the AERONOX Mount and Battery Pack Operators Manual can be procured by contacting Aviation Specialties Unlimited, Inc.

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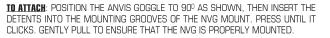
22 January, 2020

### INSTALLATION

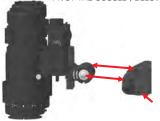
# To Attach the Ground Adapter to a Helmet Fitted with a Wilcox 56100G38



- 1. SLIDE THE MOUNT RELEASE LEVER TO THE RIGHT USING THE RIGHT FOREFINGER TO UNLOCK THE MOUNT RELEASE.
- 2. INSERT THE TOP MOUNTING GUIDE. 3. ROTATE THE MOUNT DOWNWARD
- UNTIL IT SEATS. 4. SLIDE THE MOUNT RELEASE LEVER TO THE LEFT USING THE RIGHT THUMB TO SECURE
- 5. PRESS THE MOUNT FIRMLY AT THE BASE TO SEAT, ALLOWING THE MOUNT TO ACHIEVE ITS POSITION.



ROTATE THE NVG TO EITHER THE 'OPERATIONAL' OR 'STOWED' POSITION. ENSURE THE NVG PROPERLY LOCKS IN BOTH POSITIONS (SEE "TO PIVOT THE GOGGLE", BELOW).



To Attach / Detach the NVG to the AERONOX Mount :

TO DETACH: **DEPRESS** LOCK RELEASE ΔΝΠ BUTTON PIVOT THE ANVIS GOGGLE TO 90°, THEN PULL OUTWARD WHILE THE HOLDING GOGGLE.



Attaching / Detaching the NVG

Attached

### To Pivot the Goggle:

TO LOWER THE NVG: TO THE OPERATIONAL DEPRESS THE NVG LOCK RELEASE BUTTON AND PIVOT DOWNWARD. THEN RELEASE THE BUTTON.



**NVG** Operational

TO STOW THE NVG: WHILE DEPRESSING THE NVG LOCK RELEASE BUTTON, PIVOT THE GOGGLE UPWARD. THEN RELEASE THE BUTTON



**NVG** Stowed

### To Attach the AERONOX Mount to the Ground Interface Plate:

To Attach the Aviator Visor Clip to the Aviator Helmet Visor:

SLIDE THE CLIP ONTO THE

TOP RIM OF THE AVIATOR

VISOR FOR HOLDING THE

POWER CABLE.



Clip Installation

TO ATTACH: INSERT THE FOUR PINS ON THE BACK OF THE MOUNT INTO THE HOLES ON THE GROUND ADAPTER PLATE AS SHOWN, THEN SLIDE THE MOUNT DOWNWARD

Clip Installed

RELEASE BUTTON, THEN LIFT AND REMOVE THE MOUNT FROM THE HELMET INTERFACE.

## UNTIL IT LOCKS.



TO DETACH: DEPRESS THE LOCK

### To Attach and Detach the AERONOX Mount Directly to the 4-Hole Interface of an **Aviation Helmet:**



Depicted with Aviation Helmet: Mounting with Ground Plate Interface is Identical

### TO ATTACH: INSERT THE FOUR PINS ON THE BACK OF THE MOUNT INTO THE HOLES ON THE HELMET INTERFACE AS SHOWN, THEN SLIDE THE MOUNT DOWNWARD UNTIL IT

TO DETACH: DEPRESS THE LOCK RELEASE BUTTON, THEN LIFT AND REMOVE THE MOUNT FROM THE HELMET INTERFACE

### To Replace the Batteries:



RAISE THE LOCK RELEASE BY PIVOTING OUTWARD, THEN PIVOT THE METAL RETAINING PIN AWAY FROM THE TOP OF THE BATTERY

> ENSURE THAT THE GASKET SEAL THE BATTERY COMPARTMENT IS CLEAN. WIPE FREE OF ANY DEBRIS.

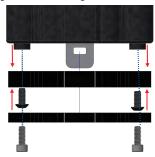


INSFRT BATTERIES IN COMPARTMENTS WITH THE POSITIVE "+" SIDE FACING UP. USE FRESH (NO-TIME) ALKALINE (RECOMMENDED) BATTERIES IN THE ALTERNATE (LEFT) COMPARTMENT BEFORE FLIGHT. SOME BATTERIES THAT HAVE BEEN USED AND STILL HAVE MANY

HOURS OF LIFE REMAINING MAY BE USED IN THE PRIMARY (RIGHT) COMPARTMENT AS SHOWN

SECURE THE BATTERY COMPARTMENT COVERS, ENSURING THAT BOTH LOCKING TABS ARE SEATED INBOARD AND OVER THE RAISED PORTION ON THE TOP COVER. PUSH DOWN ON

### Attaching the Counterweight(s) to the Battery Pack:



INSERT SCREWS INTO SLOTS ON THIN PLATE, THEN INTO SCREW HOLES ON THICKER PLATE, ALIGNING THE SLOTS OR THE THICKER PLATE WITH THE MATING INTERFACE ON THE BOTTOM OF THE BATTERY PACK.

SECURE THE SCREWS PROVIDED CW UNTIL HAND TIGHT

### **Attaching the Battery Pack to the Helmet:**



### **Detaching the Battery Pack from the Helmet:**







Step 1 Step 2 FOR HELMETS WITH A DOVETAIL INTERFACE INSTALLED, SLIDE THE BATTERY PACK ONTO THE DOVETAIL UNTIL IT CLICKS AND REMOVE BY DEPRESSING THE RELEASE LEVER. THEN SLIDING UP.

### **Attaching the Battery Pack Power Cable to the AERONOX Mount:**

ENSURE THAT CONNECTORS ARE DRY PRIOR TO CONNECTING TO PREVENT ANY SHORTING OF THE SYSTEM.

> ALIGN "PIN 1" WITNESS DOT ON CONNECTOR WITH RED "PIN 1" DOT ON PORT; SLIDE CONNECTOR INTO PORT UNTIL IT CLICKS.



### **OPERATION**

### To Adjust the Vertical Height of the AERONOX Mount:



USING CAUTION NOT TO OVEREXTEND THE TRAVEL OF THE HEIGHT ADJUSTMENT KNOB, ROTATE HEIGHT ADJUSTMENT KNOB TO THE RIGHT TO RAISE THE MOUNT; LEFT TO LOWER.

### **Attaching and Detaching the NVG Lanyard:**





Lanyard Attached

### To Activate or Deactivate the Mount:



Low Battery Test:

Indicator

The following procedure is used during preflight to determine if the Low Battery Indicator is properly functioning. A proper test is performed when the Low Battery Sensor which is housed in the Battery Pack illuminates the Low Battery Indicator on the Mount.

- **Step 1.)** Connect the Lemo Connector of the Battery Pack to the
- **Step 2.)** Place two (2) AA Batteries in each side of the battery pack.
- **Sten 3.)** Lift the battery pack cover on one side to break electrical
- **Step 4.)** Place the Selection Switch (ON) to the side with the cover latched. The Low Battery Indicator should not be flashing.
- **Step 5.)** Move the selector switch to the side with the raised cover. The Low Battery Indicator should be flashing.
- **Step 6.)** Place the Selector Switch in the (OFF) position, then close the Battery Pack cover.
- **Step 7.)** Repeat steps 3 thru 6 for the opposite side.

If the Low Battery Indicator does not flash during Step 5 on each side of the battery pack, do not fly with the battery pack. Have the battery pack

### Recommended AFE/ALSE Test Procedure for the Low Profile Battery Pack:

This procedure utilizes Government/FAA Certified Equipment to test the operation of the Battery Pack. This process utilizes the Portable Digital NVD Test Kit (ANV-126A) and Inline Volt Test Adapter (ANV-126-047).

- **Step 1.)** Remove batteries from the Battery Pack.
- **Step 2.)** Insert the battery pack adapter from the ANV-126-047 into the Battery Pack.
- **Step 3.)** Set the Selection Switch on the Battery Pack to the side containing adapter from the ANV-126-047
- **Step 4.)** Connect the Battery Pack to the NVG mount to be tested, then place the Power Source Selection Switch to the external battery pack position.
- **Step 5.)** Connect NVG power adapter from the ANV-126A to the NVG mount and the ANV-126A goggle battery test port.
- **Step 6.)** Set the ANV-126A to "battery test"
- **Step 7.)** Set the adjustment slide on the ANV-126-047 fully to the
- **Step 8.)** Turn on the ANV-126-047, slowly move adjustment slide from right to left.
- Step 9.) Note the voltage indicated on the ANV-126A when the Low Battery Indicator on the NVG mount activates.