

**Notes. -**

1. **Dimensions.** - All dimensions are in inches.
2. **MS Part Number.** - The MS part number of the battery shall be MS18122-1.
3. **Outline.** - The battery shall conform to requirements of MS18093 for size number 3 except as follows:
 - A. **Latches.** - The battery shall not include any latches on either side but may include latches on the front and back within the limits shown above.
 - B. **Cinch Band.** - The optional cinch band, if used, shall be within the limits shown above.
 - C. **Hold-Down Hooks.** - The battery shall not include any hold-down hook or bar, and the top of the cover shall be flat except for protrusions within the limits shown above. Dimension C of MS18093 shall apply to the battery as shown above.
4. **Vent Tubes.** - The battery shall include two vent tubes in accordance with MS18093 except that one of them shall be on the back of the battery as shown above instead of on the left. The battery may include a dummy vent tube in accordance with the left vent tube shown on MS18093 except that it shall be within the limits shown above.
5. **Nominal Capacity.** - The nominal capacity of the battery shall be 40 ampere-hours.
6. **Weight.** - The weight of the battery filled with electrolyte shall not exceed 40 pounds.
7. **Mounting.** - When the battery must be mounted for testing it shall be clamped in the tray by a flat bar 2.100 \pm .100 inches wide across the center of the cover from left to right. The hold-down bar shall be clamped to the tray by two vertical 3/8-24 threaded rods with nuts tightened to 110 \pm 10 inch-pounds. The center of each rod shall be on the axis of the hold-down bar 1.0 \pm .1 inch from the side of the battery measured in the lower 8/10 of the height of the battery. The hold-down bar and the device clamping it to the tray shall all be made entirely of electrically conductive materials.
8. **Specification** - The batteries shall conform to requirements of MIL-B-8565 for maintainable, receptacle-connected, tray-mounted, light duty batteries as modified above and as follows:

General: Replace "design standard" wherever it occurs, with "procurement standard."

4.7.13 **Life:** The number of cycles shall be 30.

4.7.21 **Altitude** - The pressure shall be 8.9 inches of mercury (simulating an altitude of 30,000 feet) instead of condition C.

4.7.25 **Special Tests** - Add:

4.7.25.1 **Step Discharge** - The battery shall be subjected to a 30-second discharge. The current shall be maintained at the value listed below for each period listed below during the discharge. The potential during each period of the discharge shall not be less than the value listed below.

Period of Time, Seconds	0-5	5-10	10-15	15-20	20-30
Current, Amperes	480	350	300	215	100
Minimum Potential, Volts	14.0	15.8	16.6	17.7	19.2

4.7.31 **Additional Qualification Tests** - Add:

4.7.31.1 **Low Frequency Vibration** - The battery shall be subjected to 500 \pm 5 hours of vibration along its vertical axis with a frequency of 18.5 \pm 0.5 Hz and a maximum acceleration of 12 \pm 1 g. During this vibration, the battery shall be subjected to 20 45-minute discharges

This standard has been approved by the Naval Air Systems Command, Department of the Navy, and is mandatory for use by that activity. All other military activities are required to employ this standard where applicable.

P.A. Navy - AS	TITLE BATTERY, STORAGE, AIRCRAFT, VIBRATION-RESISTANT, LIGHT DUTY, 40 AMPERE-HOUR, 24-VOLT	MILITARY STANDARD
Other Cust		MS18122(AS)
Procurement Specification MIL-B-8565	SUPERSEDES:	SHEET 1 OF 2