TECHNICAL BULLETIN NO. GPS-2025-002
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Effect of Standby Current on CSR Battery Life

Affected Radio Products:
HOOK3® Combat Survival Radio (CSR) 01-P58100R003 and 01-P58100R004

Topic:

This Technical Bulletin addresses the reduction in CSR battery life when are stored with a radio attached.

CSR Affected Batteries:

Type	GD Number
Rechargeable	60-P58221R
Non-rechargeable	60-P58140R

Background:

The CSR draws a small amount of battery current even when it is in the OFF state. The current, called Standby Current, is small, but a significant amount of battery life can be used up if the battery is stored with a radio connected for a long time. These factors are discussed in more detail below.

Basis Of Estimation

CSR primary & rechargeable batteries have different chemistries and therefore will have different battery life analysis. The CSR, however, will draw the same amount of standby current regardless of the type of battery attached.

Battery Capacity Reduction

The following tables show the estimated time for the capacity of each battery type to be reduced to either 75% of total capacity or completely discharged when connected to a radio in the OFF state at ambient temperature. These figures are approximate and may vary in practice.

General Dynamics recommends not storing the battery at temperatures greater than +55°C, due to the significant degradation in battery life. Note that the battery self-discharge increases significantly at extremely high temperatures.

Ambient Discharge Analysis	Non-rechargeable	Rechargeable
Months to 75% remaining	16.5	17.4
Months to 100% used	66.1	69.7

General Dynamics Recommendations:

To maximize battery life, General Dynamics recommends the following:

- Remove the battery from the radio when not in use and store with battery cap properly attached.
- Store batteries in cool, dry locations. For maximum battery life, the recommended range is +20°C.
- If batteries are connected to radios in the OFF state, store the radios in cool, dry locations.

Contacts:

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