

TECHNICAL BULLETIN NO. GPS-2020-001

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GPS hardware change and affected software

Affected Radio Products:

AN/PRC-112G model CSAR Radios, part number 01-P46610J002, with software version 3.20.

Topic:

GPS parts obsolescence has driven a change to the GPS hardware components in the AN/PRC-112G radio. Although the typical user may not notice any change, the new parts required a software modification resulting in minor operational differences between the legacy radio and the updated one. These differences are as follows.

- The updated radio requires different software. To avoid confusion, this new software was given a version of 3.20. As of this writing, the software version for the legacy AN/PRC-112G is still 3.6. These two software images are not interchangeable. 3.20 cannot be loaded in a legacy radio. To view the software revision on the radio's display, follow this menu path: **Menu > More > More > 7 Maintenance > 1 Version Info**
- The updated radio requires an updated GPS-112 Program Loader (GPL). This updated GPL is version 4.2.0. Although, as of this writing, the current fielded GPL is version 3.4.0, the new 4.2.0 GPL is compatible with all AN/PRC-112G radios and it is the only version needed. 4.2.0 is the GPL software shipping with all new GPL kits. The updated GPL can easily be done in the field. Contact GD-MS at the POCs below for the GPL install files. There is no cost for this update and the files can be physically sent on CD or downloaded via the GD-MS secure file transfer portal.
- The new GPS chip set is an enhancement to the AN/PRC-112G's performance. Users typically experience faster acquisition times with the newer hardware. Most importantly, the new GPS does not need to have an Almanac and has no mechanism to Save or Load one like the legacy AN/PRC-112G. Therefore the Almanac screen in the GPS-112 Program Loader is non-applicable when a user tries to access it. Likewise, the radio's menu screen that reports the Almanac date is also non-applicable. All other features and functions of the AN/PRC-112G are unchanged. This includes full interoperability with all other HOOK2 and HOOK3 devices such as CSR radios, Quickdraw2s and SATCOM Base Stations.
- The updated hardware does not perform a power up BIT test and as such, has no mechanism to read BIT results. This may cause an error when testing the radio with the 3515-testset. This is a false failure and can be ignored or the BIT read test can be deselected at the beginning of the 3515 script.

General Dynamics Recommendations:

GD-MS recommends all HOOK2 customers operating AN/PRC-112G radios obtain and migrate to version 4.2.0 of the GPS-112 Program Loader software.

Contacts:

If you need additional information concerning this Information Bulletin or the AN/PRC-112G (all models), please contact: gdmsradiosupport@gd-ms.com