Subject: Marksman/Ranger 2 V3.01 CASIUS Processing Error

Summary:

A CASIUS calibration error has been found.

It has been proven that the V3.01.xx Marksman/Ranger 2 .CAS file is correct, but that all pitch/roll/heading measurements imported into CASIUS have an offset. When a .CAS file is saved by CASIUS, the resulting file contains the wrong pitch/roll/heading measurements.

The result of the error is that a fixed angular offset is added to the transceiver pitch/roll/heading corrections. This leads to an apparent shift in beacon positions, the extent of which depends on water depth. A spin test (normally done as part of the CASIUS calibration) would reveal the offset.

Products & Versions Affected:

This angular bias affects all V3.01.xx versions of all variants of Marksman/Ranger 2, these are as follows:

- Marksman LUSB
- Marksman MRAMS
- Marksman Dual Redundant
- Ranger 2
- Ranger 2 Pro

The error is not present in any version of V2.01.xx (or earlier) nor V3.00.xx. There are no implications for Dimona or Ranger 1 users.

Note: A vessel running V3.01.xx will only be affected if this was the version used for the CASIUS processing. A CASIUS done using an earlier version is still good, assuming it is not reprocessed.

The Solution:

There is no requirement to repeat the CASIUS calibration, even if this has been carried out using V3.01.xx. Sonardyne can re-process the stored CASIUS data and advise if new corrections are required. A spin test is recommended to confirm the new results if possible.

A patch is immediately available for all Marksman/Ranger 2 V3.01.xx users, this must be installed before any new CASIUS processing. The problem is fully resolved in the V3.01.10 release. This is scheduled for release week commencing 6th February 2012.

Marksman/Ranger 2 V3.01.xx users should contact the Sonardyne Customer Support Team on support@sonardyne.com for further advice.