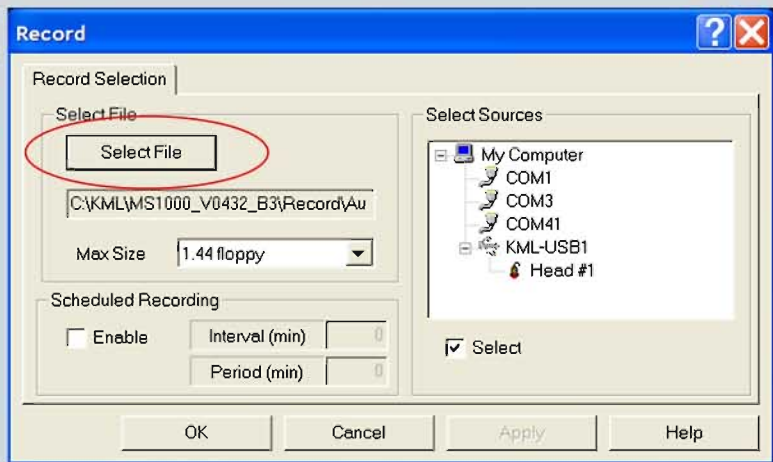




Data Recording

The MS 1000 program allows the operator to record the data with all integrated sensors. When the search or survey requires multiple scan locations and individual recording files, take the time to define the file name format before commencing the program. Be consistent in how the files are labeled and include in the nomenclature something that indicates the scan location. It is handy to keep a logbook and sketch of the survey area; on that sketch indicate each drop position and name.



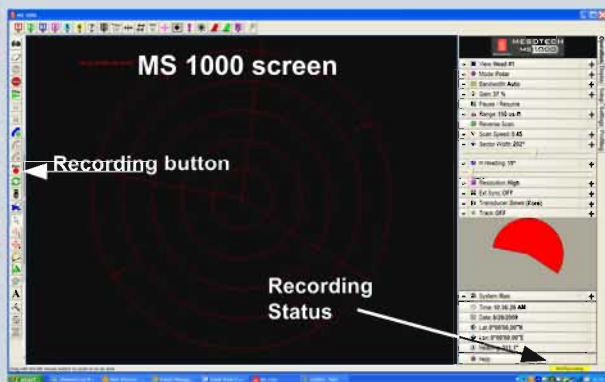
There are two ways to initiate recording:

- click on the **Rec** button in the vertical toolbar on the left side of the screen
- press the **REC** (record) button on the Remote Keypad



Left toolbar recording button

When the toolbar **Record** button is initiated, the **Record** window appears. By clicking on the **Select File** button, the user can type in a file name and choose where to store the recording (Desktop, My Documents etc.). Leave the **Max Size** at 1.44 MB (recommended). To initiate the recording press **Apply** followed by **OK**. The recording status indicator will change to green.



When the **Pause** button (on the left vertical toolbar) is activated, the recording halts but the sonar image continues to update. When the **Pause** button is clicked again, the recording resumes in the same file.

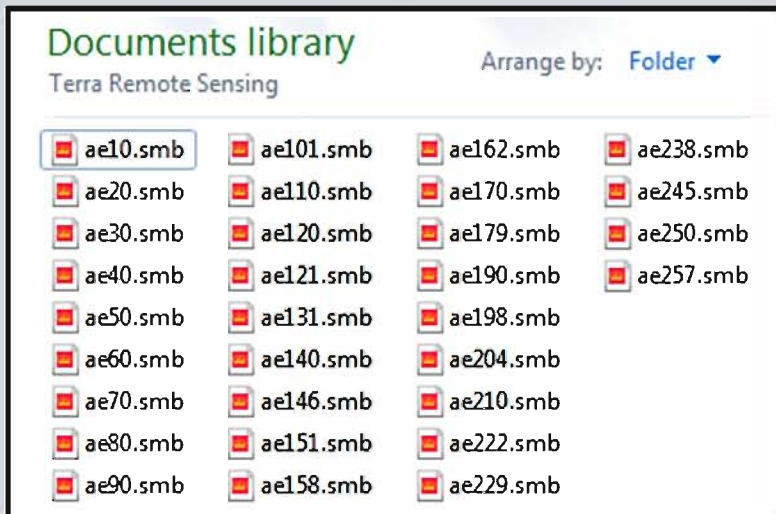


Left toolbar pause button



Left toolbar playback button

Example of named recording files referenced to a relative position



Files courtesy Terra Remote Sensing, Sydney, BC

The recorded data may be played back by initiating the **Play** button on the vertical toolbar. When clicked, a **Documents library** window opens showing all top level .smb files in that folder.

The Documents library (left) shows recorded files from a dock visualization survey. The operator used the dock designation 'a' and started at the east ('e') side of the structure. The numbers in each file indicate chainage in metres from the eastern corner of the dock. Hence, the file 'ae60' is a record collected at 60m (196.9') from the eastern "0.0" reference. Likewise, 'ae222' was recorded at 222m (728.3') from the origin.

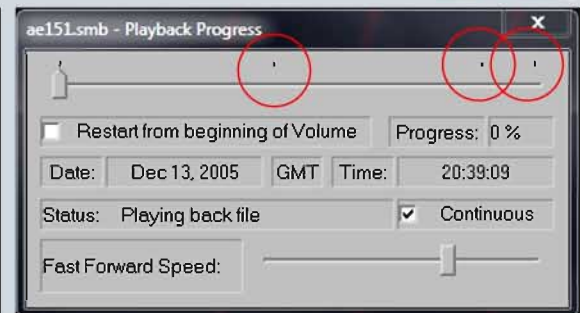
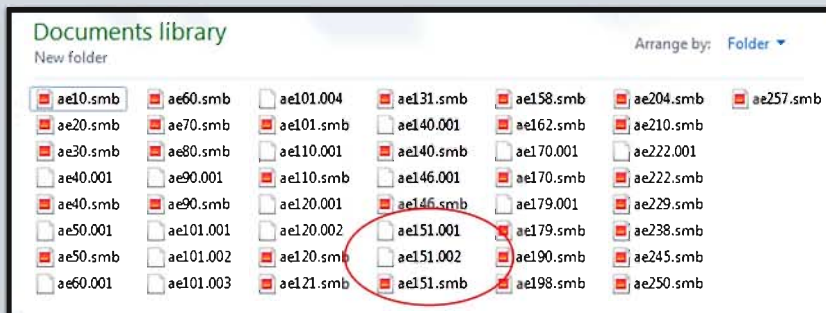
This type of label consistency makes it easy to pinpoint exactly where the record was collected



Data Recording Continued:

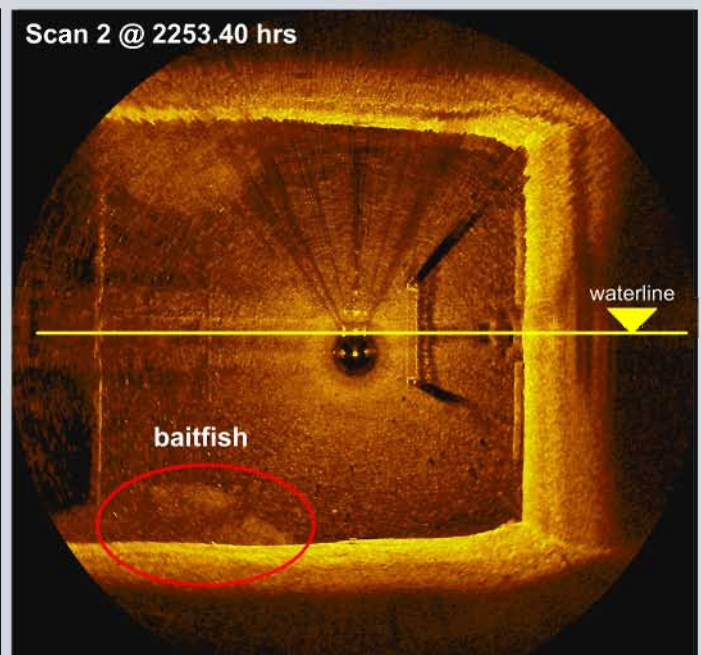
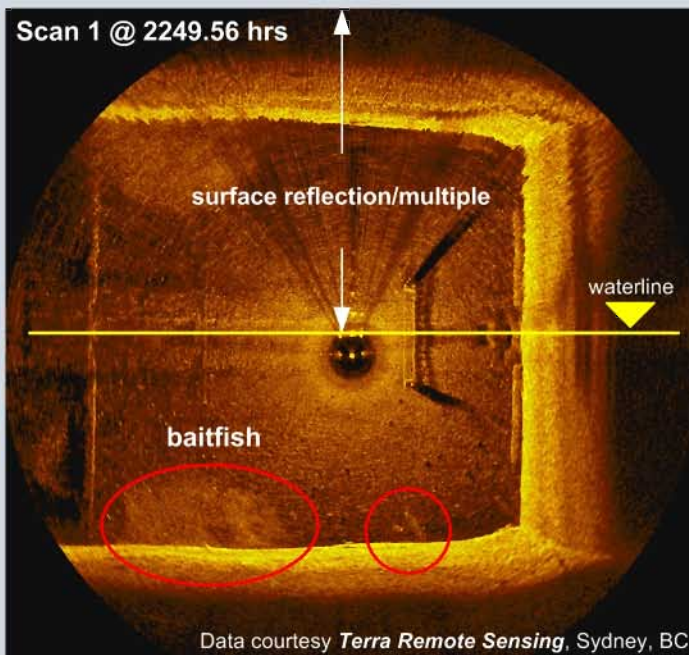
If a select file name is not entered by the operator, the MS 1000 program assigns a Greenwich Mean Time (GMT) identifier to the recording file.

The first file has the assigned name/time identifier followed by the suffix *.smb*. When the **Max Size** is reached during recording, the MS 1000 software automatically fragments the record into another file. The subsequent one contains the same name with the suffix *.001* (and then by *.002* etc). The maximum number of files it fragments into is 999. The recommended Max Size of 1.44MB is suggested in the event there is a computer failure. After each file is recorded it transfers from RAM to the computer's hard-drive. If a large Max Size is selected, it may take an hour or more to fill. Should the computer stop working, the data - temporarily stored in RAM - is unrecoverable. Having smaller files also allows the operator to select and copy important data from any of the files collected under the one recording name. A 1.44MB file is easily e-mailed in the event the data must be transmitted to a company or client.



All the files are shown when the **Documents library** is accessed through Windows Explorer. In the example shown, record 'ae151' comprises a *.smb* followed by *.001* and *.002*. The **Playback Progress** window has corresponding ticks showing the same number of files. The first two are filled to capacity (each 1.44MB in size); the last is a partially filled fragmented file.

Take the time to record at least two scans at the selected range. Fish and other floating or water-column targets are easily identified as they move from scan to scan whereas bottom targets remain stationary.



Data courtesy Terra Remote Sensing, Sydney, BC

The two images are from file 'ae10.smb' and reveal moving targets. Baitfish observed in both but are easily identified because of their changed position. For this survey the head was mounted with the body perpendicular to the wall and deployed in a frame approximately 1m (39") beneath the surface. All data above the marked waterline is a surface reflection.