

# **What ever Happened to the Byrd "Snow Cruiser"? -- Analysis of the Evolution of the Bay of Whales, 1911- 1963**

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Analysis of a series of maps, sightings, satellite images, and aerial photos indicates that a ~5 km<sup>2</sup> section of the eastern side of the Bay of Whales containing the buried remains of several bases from the 'heroic era' of Antarctic exploration calved in early 1962. A small iceberg from this event (or closely-spaced events), with the remains of Little America III exposed in the ice face, was sighted in February 1963 near the western end of the Ross Ice Shelf front. More recent calving events, monitored by satellite images, confirm that most small icebergs generated in the eastern Ross drift westward and repeatedly impact the ice front, fragmenting as they move. This implies that a number of artifacts from the bases, such as the 1939-1940 Byrd Snow Cruiser, are likely strewn along the seabed near the 1962 ice front position. Major Ross Ice Shelf calving events of 2000 and 2002 have made much of the 1962 front area accessible to ships. Thus a search for the artifacts is technically more feasible for the next few years until shelf ice flow re-covers the area.