Dinkum Sands - in Search of an Island in the Far North

In June 1979, the Bureau of Land Management's Outer-Continental Shelf Department proposed to the state of Alaska's Department of Natural Resources that a feature in the Beaufort Sea, known as Dinkum Sands, be eliminated as a salient point determining the 3-mile offshore limit, separating federal and state offshore leasing. Dinkum Sands lies between Narwhal and Cross Islands, four to five miles from each, approximately eight nautical miles from the mainland. The 3-mile limit is a theoretical line marking the territorial sea boundary. All waters within this 3-mile area are considered under state jurisdiction for oil exploration, while outside the limit, oil leasing and drilling are under the auspices of the federal government. Islands extend the 3-mile limit or are encircled by a 6-mile area of territorial sea under state control, if the island is more than 6 miles from the mainland.

Alaska believed Dinkum Sands was an island and must be used to determine the 3-mile boundary. It was in such a strategic location that the outcome would determine the leasing rights of several thousand acres and millions, perhaps billions, of dollars in oil revenue. Several issues were raised that needed resolution before leases were issued and monies distributed. These issues were outlined in a Joint Statement and an agreement reached that monies be put into escrow pending resolution of these disputes.

The Dinkum Sands issue was Question (V):

"Is the formation known as Dinkum Sands an island constituting part of Alaska's coastline for purposes of delimiting Alaska's offshore submerged lands?"

The State and the US Government agreed that Dinkum Sands must be an island as defined in Article 10 (1) of the 1958 convention if it was to be used to form part of Alaska's coastline. Article 10 provides:

"1. An island is a naturally formed area of land, surrounded by water, which is above water at high tide."

The surveying problems were: establish the location of Dinkum Sands and determine if any portion of this feature was above high tide and if so, for what period of the year. A geographic position was established on the feature in August 1979. This was latitude 70°25'24"N., longitude 147°45'58"W.

Normally, tides are measured for 19 years, so variables are averaged out before sea level is determined. This time was impractical for Dinkum Sands. The Beaufort Sea is ice bound for eight or nine months per year, and never entirely free of ice. During summer, there are floating icebergs which are hazardous to any stationary object.

To establish high tide, recommendations from the National Ocean Survey (NOS) were that tide gauges be located at Cross and Narwhal Island and two gauges at or near Dinkum Sands. The experts felt this configuration would most accurately determine high tide in the shortest time. NOS recommended establishment of five benchmarks at each location to monitor movement of the gauges. The upper sections of monuments at Dinkum Sands were lost when the ice went out six weeks later.

The plan for erecting the tide stations was developed. A truck-mounted drill rig was to drill through the ice where the station 'legs' or stanchions were to go. The stations consisted of the gauge inside a metal shack, attached to the stanchions. When the ice went out on 1 July 1980, the stanchions at Dinkum Sands and Narwhal Island were pulled out or broken off. Only those at Cross Island survived. A less-sturdy station was rebuilt at Narwhal Island.

The gauge at Cross Island began gathering data 9 August 1980 and at Narwhal Island on 20 August. The gauge at Narwhal was destroyed by icebergs on 23 September. From 29-31 January 1981, an Electric Tape Gauge (ETG) and three benchmarks were established at Dinkum Sands. The first gathering of tidal data was 31 January. Less than one month later, a horizontal ice shift of 6 feet destroyed all benchmarks. From 7-8 April, six underwater marks were established. Tide monitoring at Dinkum Sands continued.

In March 1981, a vertical profile was performed on Dinkum Sands, tied vertically to the ETG and thereby related to the value established for high tide.

Where gravel was encountered, the geologist and attorneys determined if the gravel was the feature or suspended gravel, frozen in place during freeze-up. The State contended Dinkum Sands was above high tide during the ice-bound period, and lower in summer because the floating ice scoured the feature. The US contended the feature was elevated during freeze up by gravel-bearing waves being washed up, while freezing and the upper strata was only suspended gravel, mixed with ice. US officials contended that the feature was lower in summer because the build-up collapsed as it melted.

This survey was accomplished between 19-21 March 1981. A limited profile (five readings) was performed in June and a one-shot reading was taken in August at the feature 3 feet below water.

The data gathering continued through the spring. On 7 June, a fire and explosion at Dinkum Sands destroyed the tide station and shack. On 9 June, a Meter craft tide gauge was reinstalled and tied to the underwater marks. On 27 June, tide stations at Dinkum Sands and Narwhal Island were destroyed by shifting ice. On 4 July, the tide station at Cross Island suffered the same fate.
Through the summer, attempts were made to gather data at Cross Island, although the tide station was knocked over several
times by icebergs. NOS predicted that with 15 months data from Cross Island and three months data at Dinkum Sands, a
determination for high tide could be made with an accuracy of + 1.5 inches.

On 8 October 1981, a stability check was performed at Cross Island, closing out 2 1/2 years of fieldwork. Of hundreds of
elevations established, two fell inside the predicted error band, but below the value determined as high tide. It was apparent that
the issue of Dinkum Sands - island or gravel shoal - would be decided inside the halls of the US Supreme Court.

Special Master, J. Keith Mann, was appointed by the Court to review evidence and prepare a recommendation. This evidence
was presented to Mann in a courtroom at Stanford University from 16 July through 2 August 1984. This hearing concluded after
three weeks and the matter was in the hands of the Special Master and the US Supreme Court, designated as No. 84

Original in the Supreme Court of the United States, United States of America, Plaintiff v. State of Alaska. Mann delivered
his Report to the Supreme Court's October Term, 1995. Selected portions of his findings and recommendations are shown
below:

The evidence shows that Dinkum Sands is sometimes above mean high water and sometimes below, but not every such
change in elevation is automatically to change its status as an island or not. It may be that Dinkum Sands did qualify as an island in 1949-1950. If so, its status has changed since then. I conclude that, on the evidence available, Dinkum Sands is not generally above mean high water and so not above water at high tide in the sense required by Article 10 of the Convention. I therefore recommend a holding, in answer to
question 5, that Dinkum Sands is not an island constituting part of Alaska's coastline for purposes of delimiting
Alaska's offshore submerged lands.

Thus, eleven years after hearing the evidence, Mann made his recommendation to the Supreme Court.

On 19 June 1997, Justice O'Connor delivered the opinion of the Court. Below are selected portions of that opinion:

Because Dinkum Sands is not within three miles of the nearest islands or the mainland, it does not meet the requirements of
Article 11. Accordingly, Dinkum Sands has its own belt of territorial sea - and Alaska owns submerged lands beneath that belt - only if Dinkum Sands satisfies the requirements of Article 10 (1).

In sum, the Convention's drafting history suggests that, to qualify as an island, a feature must be above high water except in
abnormal circumstances.

In sum, we find no error in the Master's conclusion that Dinkum Sands is frequently below mean high water and therefore
does not meet the standards for an island.

Thus ended nineteen years of litigation, study and dispute over the height of a small gravel shoal compared to Mean High Tide
determined at great risk, involving complex survey methods and at tremendous expense. The only item left was dividing up the
escrow account.

A letter from the Minerals Management Service dated 1 November 2000, to the US Department of Justice contained the
following information:

On 24 July 2000, disbursements were made based on the Court's decision to the United States in the amount of $1,793,183,805.85 and to the State of Alaska in the amount of $5,472,498.66. These disbursements were made from
Section 7 escrow accounts established to safeguard receipts while allowing the parties to continue oil and gas leasing
during the pendency of litigation.

This breakdown of escrow funds amounted to 99.7 per cent being awarded to the United States and .3 per cent being awarded
to the State of Alaska.