

POSSIBLE OBSERVATION OF DEEP-SCATTERING LAYER

Translation from Swedish Original into English

M/s « Dagmar Salén »

En route Bandar-Mashur/Kwinana

April 15th 1956

To: Professor Hans PETERSSON

Oceanographic Institute, Stigbergstorget 8, Göteborg

We, the undersigned, who almost simultaneously observed two extremely peculiar natural phenomena, are writing to you hoping to hear your view and your explanation regarding this matter, which appears to fall within your field.

The motor tank-ship « Dagmar Salén », owned by the Salén-Combine (address: Styrmansgatan 4, Stockholm), left Bandar Masur (Iran) on April 9th, 1956, intending to reach its next destination (Kwinana, in West Australia) via Minicoy. On April 14th at 17.15 GMT (local ship-time: 21.15), the approximate position of the ship was lat. N. 12° 00', long. E. 69° 30' over a depth of about 2 000 fathoms.

On this occasion, there was a dead calm, and the sky was free from clouds, with the stars shining. No complication from reflected moonlight, nor meteor falls, etc., were observed. In the wake behind the ship, the water was slightly phosphorescent, but no strong phosphorescence, as is not uncommon in tropical waters, was observed.

At the time mentioned above, Mrs. Strömberg, wife of the 2nd mate, was standing on the starboard wing of the bridge looking over the water surface. Fairly close to her, « Jungman » Korvo was on look-out, while inside the navigation cabin were the Captain, 1st mate and 2nd mate.

Suddenly Mrs. Strömberg and Jungman Korovo saw the water begin to « boil » from thousands upon thousands of fishes, apparently of the size of mackerel. Never having seen a similar phenomenon before, Mrs. Strömberg stood as if paralysed for a couple of minutes before it occurred to her to call the ship's officers out from the navigating cabin. They emerged and witnessed a phenomenon like those mentioned in Rachel L. Carson's book, « The Sea Around Us », in which she describes how large shoals of fish can rise up to the sea-surface at night and make it « boil ».

After we had been watching the fish shoal for about 2 to 3 minutes, we suddenly became aware of a second phenomenon which none of us had earlier witnessed, or even heard of or read about. At a distance of about 300 to 400 metres from the ship to starboard, some 70° to 80° away from the sense of rotation (?), there arose from the underlying depths a « bubbling » shine as from a cornucopia. Close to the water surface, the light cone spread over the surface to a large circular illuminated area of a diameter of between 100 and 150 metres.

The light then suddenly became extinguished without any gradual reduction in intensity. The phenomenon was repeated thrice at intervals of between 2 to 4 minutes. The different lightspots did not coincide.

Naturally these observations have made us ponder greatly, and a number of different explanations may be assumed. Can there possibly have occurred a volcanic eruption on the sea-floor with a mass of gas rising to the surface, where the gas may have caused phosphorescence like that caused by the ship-waves? However, no vibrations were observed in the hull of the ship, nor were any waves observed such as might have been caused by a submarine eruption. Some of us have hazarded the opinion that the light was caused by phosphorescent fishes or plankton rising in great masses to the surface. In any case, none of us feel capable of explaining the light-phenomenon observed, and we can only warrant for the correctness of the observations by our affixed signatures. We shall be grateful for any explanation from your side.

Respectfully,

(Signed)

STURE ISENBERG (Commanding the ship).

RUNE FREDIN (1st Mate).

TORSTEN STROMBERG (2nd Mate).

IRENE STROMBERG (Mrs.).

ALF KORVO (Jungman).

Comment.

The officers on board the « Dagmar Salén » appear to have observed one of the rare occasions when the « deep scattering layer », observed already in 1947 from the Swedish Deep Sea Expedition with the « Albatross » as well as from other research ships, breaks through to the ocean surface with its phosphorescent plankton organisms and its fish shoals feeding on them. Observations of this kind appear to be well worthy of being brought before the general public through the « Marine Observer ».

Göteborg, June 7th, 1956.

(Signed) HANS PETTERSON.

Leader of the Swedish Deep-Sea Expedition.
