

After my visit to the German radiotelescope I went directly to Cologne airport and flew from there via Zurich to Israel, to keep a long-standing appointment with scientists of the Weizmann Institute in Rehovot. It was a scientifically exciting time, although I only succeeded to transmit one, the following story, to the *Daily Telegraph* for publication.

The research work of Professor Ari Ben Menachim of the Weizmann Institute was in my opinion of great value to give London advance warning of flood danger. Using a grant from the United States Air Force, he had developed a mathematical formula which used slight variations of pressure at the bottom of the ocean, to predict the height of the resulting waves at the nearest coast.

The danger of London being disastrously flooded arose from the combination of heavy rains coming down the Thames and at the same time a storm surge in the North Sea coming up the Thames. Their meeting in the estuary would raise the water level considerably, and with the storm surge being stronger than the outflow of the rain water, the only way for the water to go would be up the Thames. Thus it would cause flooding of the London Underground Railway System, a grave potential danger to the Capital and the thousands of Londoners using it daily. All these facts I knew well, having often written about them, and they had been experimentally verified in large-scale model experiments.

When I learnt of Professor Menachim's formula of prediction, I realised its importance for giving London greater warning of impending disaster and considered it vital to transmit it to London. It was published in the *Daily Telegraph* on 14 May 1971. Menachim knew little of London's danger, which I explained to him, as he was concerned about *tsunamis*, the giant waves in the Pacific Ocean caused by underwater earthquakes. Their effects on the shores of Hawaii were equivalent to the storm surges in the North Sea.

The practical engineering was simply to place a car-wheel size pressure sensor at the bottom of the ocean, transmit its movements through a small cable to a buoy on the surface from where the results of any measured movement were broadcast to the warning centre on shore. Menachim developed a Piston Theory that tsunamis were caused by an uplifting of the ocean floor, and he used the ocean bottom devices developed and made by A. van Doorn at the Scripps Institute of Oceanography at La Jolla in California.

London's danger of flooding was removed by building a large barrage across the Thames which had a number of movable gates to let ships pass.