The Hunga Tonga volcanic eruption on 15 January 2022 produced the most powerful explosion since the ~50 megaton (MT) Tsar Bomba in 1961. Analysis of Lamb waves emitted during the climactic eruption stage provided an equivalent explosive yield of ~200 MT. Events of this scale are rare, with few occurrences outside of large meteor impacts, volcanic eruptions, and thermonuclear weapons. We use data from Hunga Tonga to improve and modernize our understanding of the hydrodynamics and atmospheric physics of explosive events on this scale, and provide a comparison with historical data.