

trends to the west. This will be a very important discovery, and the lateness of the season is very advantageous for the exploration, if the summer should have proved an open one. My reason for believing in the extension of this land is, that such large quantities of ice-islands, which are frequently drifted to the north and west of Cape Horn, must have some land to form on, and we are aware that all the ice formed about the South Shetlands goes to the eastward.

7th. You must endeavour to reach the southward of Peter I. and Alexander I. Islands, or south of the Russian track.

8th. You will fill up the skeleton chart as you progress, and treat the main ice and ice-islands as if they were land, by inserting them on it, which will be an important addition to our knowledge, if we only obtain the line of ice in those seas; it does not appear ever to have been done by southern navigators accurately; had it been so, our task would have been more easy.

9th. I should think the winds from the west to the east will be so as to enable you to choose positions to shield your ship under the lee of the icy shore (if I may be allowed the expression).

10th. In the event of your reaching the main land, or a channel leading to it, if one offers, you will despatch the Flying-Fish, with such officers as you may think fit, to make the recognizance of it, if time should not allow a full survey.

11th. It is desirable that the extent and circumference of any islands which you may fall in with be ascertained, with their general character and productions, if any; specimens of rocks and sketches of their stratification will, if possible be taken. The islands of ice frequently show appearances of stratifications, with earth and rocks attached to them. Any thing gained from them will be interesting and valuable, with a particular notice whether the ice had been much worn away under them.

12th. The aurora australis has not been often seen; it is said to have been seen by Captain Cook near his *Ne Plus Ultra*, where you will commence. You will notice the extent and height of the ice, &c., and sketch, if possible, any remarkable refraction, with a description which will render it clear.

13th. You will note the observations of the thermometer in the sun and shade; also the temperature of the sea at such depths as you may judge best, with the sounding apparatus sent you.

14th. After having run to Palmer's Land, and not finding an opening or land, you will return to this harbour direct, where you will find this ship; and you will despatch the Flying-Fish to the harbour of Deception Island for information from me, which will, if possible, be left in a