It is believed that when the Vincennes' masthead subtends an angle of 25', you will be three miles from her.

After the signal is made to take stations, you will pursue that course which will lead you to it as soon as possible.

Immediately after the signal being made to measure azimuths, observations will be taken between the sun and vessels, during the taking of which observations, the ship's ensign will be hoisted at the peak.

You will, after we heave-to for the night, try the dipping-needles and deep-sea temperature.

You will calculate the time, so as to be near the flag-ship at night-fall, and any signals that are made will be repeated to the vessel farthest off. In case of appearance of bad weather, you will at once draw to close order of sailing unless otherwise directed.

It is desirable that all calculations should be made before the day closes. The current should be tried daily, either morning or evening.

I am, &c.,

CHARLES WILKES, Commanding Exploring Expedition.

Captain Wm. L. Hudson, U. S. Ship Peacock.

> U. S. Ship Vincennes, At Sea, August 8th, 1839.

Captain Hudson will assign watches to the scientific gentlemen and officers who are usually excused from watch, on the nights of the 8th, 9th, and 10th of August. One quarter of the heavens will be assigned to each person, who will note at once, on paper, any meteors that may appear, viz., their size; with or without train; their height; the points of appearance and disappearance; and the time of flight.

Although it may seem difficult to accomplish all of this on a meteor, yet it is possible and even easy, viz., by noting the star of the constellation near which it appears and disappears; counting until its disappearance; the arc may be accurately ascertained by a sextant; and the bearing of the two stars, its true direction; the counting compared with a chronometer will be the true time; and yet one has time to examine its length of train, brilliancy, &c.

Respectfully,

CHARLES WILKES, Commanding Exploring Expedition.

Similar instructions to Lieutenants-Commandant Ringgold and Pinkney.