

Appendix A

MARITIME TERMINOLOGY IN 1912

As with any account that deals with maritime matters, much use is made of terms and phrases that may be somewhat unfamiliar to the non-nautical minded person. Furthermore, some terms and phrases used in 1912 differed from those that are used today. In particular, angular directions and helm orders seem to be the most confusing.

Angles and Bearings

References to angular directions were usually given in compass points or degrees. In all, there are 32 points in a circle (360°), with each point precisely separated by $11\frac{1}{4}$ degrees from the next point. Included in the set of 32 points are the four cardinal points: north (N), east (E), south (S), and west (W); four intercardinal points: northeast (NE), southeast (SE), southwest (SW), and northwest (NW); and eight secondary-intercardinal points such as north-northeast (NNE), east-northeast (ENE), east-southeast (ESE), and so on. There is one secondary-intercardinal point located between each cardinal and inter-cardinal point.

On a typical compass card of the period, points were marked in the shape of triangles of various sizes and diamonds. Marks for $\frac{1}{2}$ points and $\frac{1}{4}$ points were also put on the compass card as well as tick marks for degrees, the latter marked on the outermost scale of the card. In 1912, degrees were specified by quadrant such north with so many degrees east or west, or south with so many degrees east or west. As an example, a heading of 265° would be specified as S 85 W, while a heading of 305° would be specified as N 55 W. A typical compass card of the period showing a heading of N 22 E (022°) is shown in Figure A-01.

Because the axis of the earth's magnetic poles are not aligned exactly with the earth's axis of rotation, the direction of true north typically differs from the direction of magnetic north, depending on where you are on the earth's surface. This difference is known as magnetic variation. In the area where *Titanic* sank in April 1912, magnetic variation was about 24° west. What that means is that north on a magnetic compass with no other errors would actually point 24 degrees to the west of true north. However, because magnetic compasses are also affected by the distribution of iron and steel within a ship, they are also subjected to errors known as deviation errors that varied with the actual magnetic heading that the ship was on at a given time. These deviation errors were tested and somewhat compensated for when a compass was last adjusted. Typically, the remaining deviation error was only a few degrees, and was marked in a table or on a diagram that gave the deviation error in terms of degrees to be added or subtracted from the ship's heading that was read off of the compass card.

When a ship's heading to steer by was given it usually was specified in degrees as marked on either the ship's standard compass or on a steering compass. The standard compass, usually mounted on the upper bridge or on raised compass platform, was used to steady a ship on a desired magnetic course line and also used to take magnetic bearings of celestial objects and landmarks when needed. The steering compass was the compass by which the helmsman, the man at the wheel, used to steer the ship. It was located in an enclosed wheelhouse or in an enclosed part of the bridge. The difference between the ship's standard compass heading and steering compass heading was noted and both course headings were marked on a course board in the wheelhouse or on the bridge.

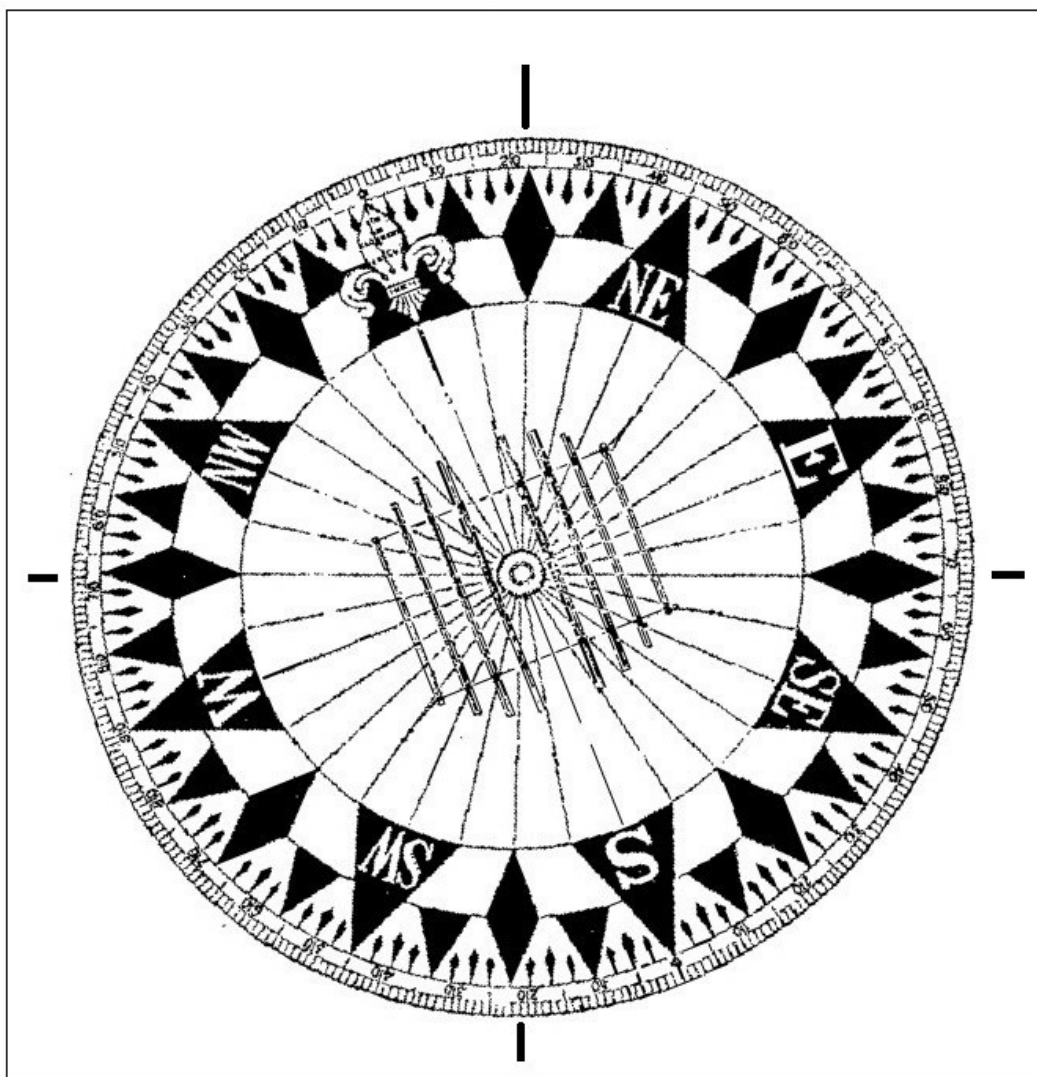


Fig. A-01. Magnetic compass showing a heading of N 22° E.

In modern times, courses are specified in 360-degree notation by three digits. For example, a ship heading due east true is said to be on a course heading of 090° T. With 24° west variation, the ship's magnetic heading would be 114° magnetic. Since in 1912 the magnetic compass was marked in degrees by quadrant, a ship that was steadied onto a heading of 114° magnetic would be said to be heading S 66 E by standard.

Angular directions to objects were specified by bearings, either compass bearings or relative bearings. If a compass bearing was specified, it usually was given by reference to points. For example, an object sighted a half point to the west of the northwest (NW) intercardinal point on the compass would be said to be bearing NW ½ W. If sighted one full point to the west of NW, it would be said to be bearing NW by W. If sighted one and a half points to the west of NW, it would be said to be bearing NW by W ½ W. And if sighted two full points to the west of NW, it would be bearing on the secondary-intercardinal point of west-northwest (WNW). Similarly for other points of the compass.

If a relative bearing specified an angle to an object, it would be given in relation to the head of one's own vessel. Unlike today, where relative bearings are a number of specific degrees measured clockwise from the head of the vessel to the object, relative bearings back in 1912 were almost always specified in points. For example, an object sighted exactly 22½