



**Barry Lawrence Ruderman
Antique Maps Inc.**

7407 La Jolla Boulevard
La Jolla, CA 92037

www.raremaps.com

(858) 551-8500
blr@raremaps.com

**Nova & Accuratissima Totius Terrarum Orbis Tabula Nautica Variationum
Magneticarum Index Juxta Observationes Anno 1700 Habitas Constructa per Edm:
Halley**

Stock#: 21442
Map Maker: Ottens

Date: 1745 circa
Place: Amsterdam
Color: Hand Colored
Condition: VG-
Size: 56 x 21.5 inches

Price: SOLD



Description:

Newly Revised Edition of Sir Edmund Halley's Foundational Map of the World - Rare Late State!

Edmund Halley's chart of the world is one of the most important world maps of the eighteenth century. The map is the first surviving map to show isogonic lines, or lines connecting points of equal magnetic variation in the oceans, a feature then considered of prime importance for determining longitude.

This late state, published by the Ottens firm, is very rare and significantly updated. It includes shipping routes from Europe to Batavia (Jakarta), Ceylon (Sri Lanka), and the Malabar coast, adjusted for the monsoons. There are also additions of a sighting of a southern continent and icebergs in the southern Atlantic and Indian Oceans, of the supposed southern continent discovered by Quiros in the early-seventeenth century, and an improved outline of Kamchatka and northeastern Asia.

The world map is presented in a long-strip format of a Mercator projection, which Halley called a nautical projection. Eastern Asia and Australia are repeated, so as to better show the flow of the isogonic lines. These lines radiate over the Atlantic and Indian Oceans, but not the Pacific. A note in the Pacific explains his innovation and why the lines stop as they approach the world's largest ocean:

The Curve lines which are drawn over the Seas in this Chart, shew the Variation of the Compass in all the known Seas, the double lines divide the tracts of East and West Variation & under them the Compass stands true without Varying. In any other place, the degrees of Variation is [sic.] seen by the number on the Line that passes over that place. I durst not presume to describe the like Curves in the South Seas wanting account thereof. (quoted from the English edition of Halley's chart, published by Emanuel Bowen, 1722).



Barry Lawrence Ruderman Antique Maps Inc.

7407 La Jolla Boulevard
La Jolla, CA 92037

www.raremaps.com

(858) 551-8500
blr@raremaps.com

Nova & Accuratissima Totius Terrarum Orbis Tabula Nautica Variationum Magneticarum Index Juxta Observationes Anno 1700 Habitas Constructa per Edm: Halley

The isogonic lines are certainly a distinctive feature of this map. They are joined on this state by wind directions arrows and narrow lines that shade the map between the Tropics of Cancer and Capricorn. Again, this is an early use of such map conventions and is a reference to Halley's important 1686 world map which included the trade winds.

While it was later learned that magnetic variation fluctuates with time and cannot be used to find longitude at sea, Halley's charts and his use of isogonic lines were considered an indispensable contribution to the study of navigation by savants and sailors alike. As Samuel Pepys asked rhetorically, "Mr Hawley—May he not be said to have the most, if not to be the first Englishman (and possibly any other) that had so much, or (it may be) any competent degree (meeting in them) of the science and practice (both) of navigation?" (as quoted in Thrower, 15).

The map also includes a wealth of geographic information. In the South Pacific is a half-hemisphere map of the North Pole. A helpful note explains, "That nothing might be wanting in this Chart we have added this Polar, partly to shew the Inclination of the Meridians toward the Pole, partly to avoid the too great contraction of our Scale" (ibid, translation taken from the English edition of the map).

Halley also includes several details that we now know are cartographic myths. California is shown as an island (see below). A tiny island near what is today Argentina is labeled as Pepys Island. Pepys was a contemporary of Halley's and had served as President of the Royal Society. This island was named in the 1680s by a buccaneer and lingered on maps for a century before naval explorers like Byron and Cook confirmed that it did not exist.

Another chimera is repeated twice in Northeast Asian waters. This late state has an updated outline of Kamchatka. However, unfinished coastlines remain of *Terre de Iesso* and *Terre de la Compagnie*. Iesso, or Yesso, is a name for Hokkaido and its size was usually exaggerated on maps of this period. Compagnie's Land, and its neighbor, Staten Land, were mis-discoveries found while searching for another mythic island, Gamaland (see below).

A final phantom coast is in the South Atlantic, where *Terra Australis* lurks near a track of one of Halley's voyages (see below). Farther east, icebergs are outlined. These, and Cape Circoncision, were discovered by the Frenchman Bouvet de Lozier in 1739, the first time that land had been spotted south of the 50th parallel south. He was not able to land, however, and did not circumnavigate his discovery, thus not clarifying if it was an island or part of a continent. This obscurity and potential made it of intense interest to geographers.



**Nova & Accuratissima Totius Terrarum Orbis Tabula Nautica Variationum
Magneticarum Index Juxta Observationes Anno 1700 Habitas Constructa per Edm:
Halley**

There are decorative details tucked into the blank and inland spaces of the map. For example, a poem, in Latin, graces the North Pacific in a temple-style cartouche and lauds the unknown inventor of the maritime compass. A similar framed cartouche carries another Latin poem, this one praising the consolidation of maritime power by Queen Anne (a holdover from the English edition), in Russia. Muses carrying the instruments of astronomy, navigation, and cartography grace the title cartouche in North America.

The Solomons and Terra Australis St. Spiritus

The final difference between this late state and [the earlier Ottens' issue of the map](#) is the addition of the Solomons and *Terra Australis St. Spiritus* in the Pacific. This is a call-back to the expedition of Pedro Ferdinand de Quiros, a Spanish navigator intent on discovering the southern continent.

Quiros was a skilled pilot who accompanied Alvaro de Mendaña on his second voyage to the Solomons in 1595-6 (the first voyage took place in 1567-9). After returning to Spain, Quiros convinced authorities that he could find *Terra Australis*, the southern continent, if they gave him ships and supplies. He set out in 1605 and eventually landed in Vanuatu. He mistook one of the islands for the fabled continent and called it *Austrialia de Espiritu Santo*; the name has been altered slightly here. The largest island in the chain is still called *Espiritu Santo* today.

Quiros intended to set up a colony on the supposed continent. He performed a series of elaborate possession rituals and founded a city he called *Nueva Hierusalem*. The "city" was nestled between two rivers which Quiros called the Jordan and the San Salvador (likely today's Jordan and Vitthié Rivers). However, his crew forced him to leave. Quiros returned to Mexico, but his second-in-command sailed west, through the strait now bearing his name. Due to state secrecy, however, the strait remained largely unknown until the 1760s.

Upon his return, Quiros revved up his campaign, lobbying once again for a voyage to return to his supposed southern continent. To gain support, Quiros wrote at least fifty memorials to advertise his successes and lay out his plans. Fourteen of these were printed between 1607 and 1614.

The most widely circulated was the *Eighth Memorial*. In it, he describes *Austrialia de Espiritu Santo* to be as wide as Europe, Asia Minor, the Caspian Sea, and Persia combined, "in its outline it quarters the entire Globe." Printed in Madrid in 1608 and Seville in 1609, the *Eighth Memorial* was reprinted in 1612 by Dutch cartographer Hessel Gerritsz in his *Detectio Freti Hudson*. It continued to be used as a source for mapmakers well into the eighteenth century, as seen here.



**Barry Lawrence Ruderman
Antique Maps Inc.**

7407 La Jolla Boulevard
La Jolla, CA 92037

www.raremaps.com

(858) 551-8500
blr@raremaps.com

**Nova & Accuratissima Totius Terrarum Orbis Tabula Nautica Variationum
Magneticarum Index Juxta Observationes Anno 1700 Habitas Constructa per Edm:
Halley**

Halley's voyage and his charts

Halley was a prolific publisher and his output included several important maps and charts, including his untitled world map of 1686 showing the trade winds. During the 1680s, Halley became increasingly concerned with the implications of magnetic variation for navigation. Not one to just read about a phenomenon, Halley sought command of a Royal Navy vessel, the *Paramore*, and took it on three voyages between 1698 and 1701. The first two, to the South Atlantic, were to study geomagnetism. The third, in the English Channel, focused on tidal phenomena. While his journals were not published during his lifetime, his charts from those voyages were.

The first chart he published was a chart of the Atlantic with isogonic lines, "A New and Correct Chart Shewing the Variations of the Compass in the Western & Southern Oceans as observed in ye year 1700 by his Ma/ties Command." Dedicated to William III, who died on March 8, 1702, the chart is usually dated to 1701, as Halley returned from his second voyage on September 18, 1700. It was printed by Richard Mount and Thomas Page of Tower Hill and engraved by John Harris. He presented the chart to the Royal Society on June 4, 1701.

The chart of the world's oceans which Halley created, of which the present chart is an example, would prove more influential and grow to greater prominence, appearing in several states, foreign editions, and even updated revisions. It was the first printed world map to employ isogonic lines. This is a rare late state of the chart, showing the longevity of its influence.

The chart first appeared in 1702, datable by the dedication cartouche in Africa that references "Prince George of Denmark, Lord High Admiral." The Prince Consort was elevated to that position on April 17, 1702.

The world chart contains fewer decorative details than the Atlantic chart, as well as a few additions. One of these is the Falkland Islands, which had been named as such by John Strong in 1690. Halley mentions Strong's journal in his own and this chart would help to fix that name to the archipelago.

Interestingly, although the world chart proved popular and was reissued, translated, and updated (see Montaine and Dodson's chart (1744) which extends the isogonic lines to the Pacific), the chart became scarce in all iterations over time. Indeed, by 1870, Halley's charts were so scarce that Sir George Airy, Astronomer Royal, exasperatedly exclaimed that, despite having seen references to "Halley's Magnetic Chart," he had "not ascertained that any writer had ever seen it...As I was desirous of making myself acquainted with a document so important in the history of magnetic science, I made enquiries in nearly



**Barry Lawrence Ruderman
Antique Maps Inc.**

7407 La Jolla Boulevard
La Jolla, CA 92037

www.raremaps.com

(858) 551-8500
blr@raremaps.com

**Nova & Accuratissima Totius Terrarum Orbis Tabula Nautica Variationum
Magneticarum Index Juxta Observationes Anno 1700 Habitas Constructa per Edm:
Halley**

every Academy in Europe, but could not find anywhere a copy of this Chart." He eventually did find an example of the world chart nearby, at the British Library; he seems not to have known of the existence of the Atlantic chart.

The present French state was issued by Reiner and Joshua Ottens in Amsterdam. It is widely considered to be the most visually attractive editions of the map, and one of the latest. It is also rarely seen on the market, as are Halley's charts in general. This is only the third time we have offered this state in thirty years of trading.

Detailed Condition:

Archivally backed, with restoration work along the lower margin, including areas of facsimile within the printed image.