

A passage across the Poseidal Wall

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Abstract

We report on a passage across the Poseidal Wall, a region in the Formidine Rift where stars are so dilute that long-distance plotting becomes impossible. The passage connects two points, one in the Perseus Arm, and one in the Cygnus Arm of the Milky Way, which have a separation of 1749.0 ly. It consists of 108 jumps, only 12 of which are above 30ly, the maximum being at 32.7 ly. This should enable also mid-range ships with sufficient amounts of jumponium to make their way across the Formidine Rift.

Motivation

The Formidine Rift, which denotes the gap between the Perseus Arm and the Cygnus Arm of the galaxy, has been subject to extensive research in the past year [1]. Interest in the Formidine Rift and the region that lies beyond it has risen, after reports from Senator Kahina Tijani Loren emerged: Lady Kahina, who has taken on the alias "Salomé", reported on the private communication with an aged explorer, speaking of mysterious ongoings in or beyond the Formidine Rift [2], details of which are not known, but which some expect to be connected to the Thargoids, or the fabled and elusive world of Raxxla.

So far, much of the investigation of these rumours has been concentrated on the extension of the line from Reorte to Riedquat (dubbed the "R-R line"), far into the Cygnus Arm [3]. This is in the far West of the Formidine Rift, while the Rift itself is mostly unmapped. This is mostly due to the presence of the so-called "Poseidal Wall" (see Fig. 1), a region which prohibits reliable long-range route plotting, due to its low star density. So far, traveller across the Rift, or into the Cygnus

Arm beyond, have to take the route via the "Formidine Bridge", requiring them to make a roughly 5000 ly detour around the Poseidal Wall, in deiseal (clock-wise) direction of the galaxy.

To remedy this problem, which costs explorers quite a lot of valuable time, we report on a route through the Poseidal Wall, allowing explorers to reach the Cygnus Arm through the Formidine Rift much faster. The passage lies nearly in direct extension of a line from Sol to the Heart & Soul Nebulae.

Route plotting in the rift

So far, the study of the Formidine Rift and the Cygnus Arm has required quite some effort, in particular because of the sparsity of stars in the region. It is well-known that the algorithms provided by Universal Cartographics are optimized for route-plotting in the human inhabited areas. The algorithm becomes slower by several orders of magnitude in the galactic core, because of the large density of stars. In low star density, such as in the Formidine Rift, the algorithm stops working altogether for distances further than about 100 ly, claiming

nonexistence of jump routes. Plotting a course across the rift is particularly problematic because of this. The low star density essentially turns the rift into a maze, where explorers find themselves at a dead end, when the only stars in direction of travel are beyond

jump range.

The passage across the rift therefore had to be found by meticulous searching and back-tracking, since the standard navigational computers would not be able to find it automatically.



Fig1.: Area around the Formidine Rift, from Universal Cartographics

The passage

The passage itself begins at the system MYOIDEAU RF-N C20-1, about 9,500 ly distance from Sol. It consists of 108 jumps. Of these, 24 are above 27 ly jump range, and of these again only 12 are above 30 ly. With sufficient amounts of jumponium, this should allow even mid-range ships to make their way across the passage.

It should be noted that, if the ship attempting to cross has a range above 30 ly (as a dedicated explorer would be wise to have), the passage could be effectively be fewer than these 108 jumps – in our list we have attempted to plot a course which, if possible, avoids jumps above 30 ly, to make the passage accessible to not only those with high-end frame shift drives. To this end, we have, at several occasions, taken small detours

requiring only sub-30 ly jumps, where the same distance could have been bridged by one jump over 30 ly.

In other words, an explorer with a highly capable jump drive might find the passage to require fewer than 108 jumps.

The jump route is segmented into several stations, each of which are only a few jumps apart. A standard plotting computer should have no problem to find a route from one station to the next. The segments are so small that, in the route from one station to the next, at most one jump above 30 ly should be necessary (again: a ship with a higher jump range might plot a shorter route segment with more than one jump above 30 ly).

Also, it should be noted that the passage depicted here goes from the Perseus Arm to the Cygnus Arm. If one attempts to go the other way round by reversing the order of

stations, one should find that this is quite possible – however, the navigational computer might slightly change the jump segments from one station to the other, leading to slightly different routes. We interpret this as another sign of the difficulties for the navigational computers to reliably find the shortest connection in low-density regions of space.

The stations are, in particular:

- | | |
|---------------------------------------------------------------|-----------------------------------------------------------------|
| 1.) MYOIDEAU RF-N C20-1

 8 jumps: 28.4 ly max
 | 11.) SCHEE HYPA FN-I C26-0

 2 jumps: 31.6 ly max
 |
| 2.) MYOIDEAU EN-S C17-1

 4 jumps: 28.8 ly max
 | 12.) SCHEE HYPA IU-S B51-0

 8 jumps: 27.8 ly max
 |
| 3.) MYOIDEAU ZG-U C16-0

 1 jump: 30.6 ly
 | 13.) SCHEE HYPA RO-P C22-0

 3 jumps: 32.1 ly max
 |
| 4.) MYOIDEAU XL-U C16-0

 6 jumps: 31.2 ly max
 | 14.) SCHEE HYPA JC-T C20-0

 1 jump: 32.7 ly
 |
| 5.) MYOIDEAU OZ-X C14-0

 5 jumps: 29.9 ly max
 | 15.) SCHEE HYPA SL-J D10-1

 7 jumps: 32.5 ly max
 |
| 6.) MYOIDEAU CH-D C12-0

 7 jumps: 32.1 ly max
 | 16.) HYPOAE AESCS UG-J B36-0

 6 jumps: 28.8 ly max
 |
| 7.) MYOIDEAU GW-N C6-0

 5 jumps: 27.5 ly max
 | 17.) HYPOAE AESCS KX-L D7-5

 2 jumps: 31.7 ly max
 |
| 8.) MYOIDEAU KM-W D1-2

 8 jumps: 32.4 ly max
 | 18.) HYPOAE AESCS XF-W C15-0

 2 jumps: 32.6 ly max
 |
| 9.) PHROEA HYPA PE-B B6-0

 13 jumps: 28.8 ly max
 | 19.) HYPOAE AESCS TZ-X C14-0

 5 jumps: 32.1 ly mx
 |
| 10.) SCHEE HYPA WS-L B55-0

 2 jumps: 24.3 ly max
 | 20.) HYPOAE AESCS RO-Z C13-0

 8 jumps: 22.0 ly max
 |
| | 21.) HYPOAE AESCS CL-P D5-0

 7 jumps: 19.9 ly max
 |
| | 22.) HYPOAE AESCS YE-R D4-2 |

The last station of the passage, HYPOAE AESCS YE-R D4-2, is well into the Cygnus Arm. From there on star density increases again, so that a standard navigation computer should have no problem continuing the journey onwards.

Words of warning

There are several precautions that the traveller through the passage should take before attempting to cross:

a) When approaching the initial system (station 1 on our list), the traveller should make sure they approach it from above the galactic plane (positive Y-coordinates). Below the plane lies a huge badland, stretching across thousands of light years. This enormous region of non-scoopable stars should be avoided, lest the weary traveller find themselves stranded at the edge of the Perseus Arm.

b) Almost all of the stars one finds within the passage are main sequence stars, and hence

can be harvested with a standard Core Dynamics Fuel Scoop. Between station 6 and 7 of our list, a small badlands can be encountered. At this point, the star density is high enough so that one can plot a manual course around it, though even with the route depicted here, there should be no more than three non-main sequence stars in a row.

c) Special attention should be given to the star system MYOIDEAU ZE-R C4-0, also to be found between station 6 and 7. The main gravity well is a double star, which can cause a ship jumping in to take critical heat damage, if the area is not cleared immediately. This obviously depends on the orbital constellation of the two stars, as well as the direction from which the traveller enters the system. Still, one should be wary of this potential danger.

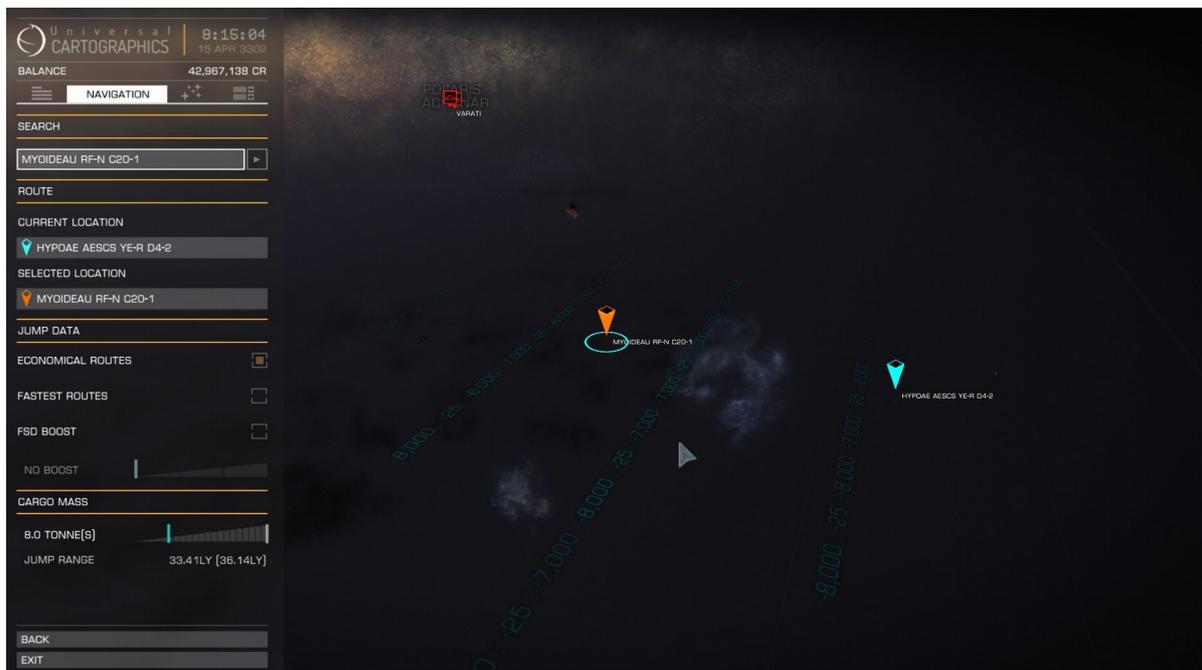


Fig.2: The two endpoints of the passage across the Poseidal Wall.

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Bibliography

[1] Discussion forum about the Formidine Rift

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[2] Elite: Reclamation by Drew Wagar

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[3] Site of the Formidine Mystery Expedition:

<https://docs.google.com/spreadsheets/d/1dtpJnRQHHcjwqRpBxFiI7YqGtPATAO3XJG82o-Iy-hQ/edit#gid=1451809702>