## Prolog

Necedah was a massive world. It was also a unique world. In all the universe, there was no other planet like it. It was the anomaly that arises when a 1/near-infinity improbability meets the near infinity of the universe.

Necedah started out as a brown dwarf, a collection of hydrogen gas too small to become a star. In mass, it was about 8% the mass of Earth's Sun. But in size it started out large, formed in a pocket of space by drifting gasses that intersected yet became intertwined by gravity. As it was coalescing into a rotating dwarf, it was also being pulled towards a nearby nebula made up of the remnants of a supernova. At ten-million years old as it started to enter the nebula, it was still a very young body. Just beginning its gravitational shrinking phase, it was still slightly wider than the diameter of Earth's Sun. But since it was collapsing, it was also emitting immense heat as the potential gravitational energy was converted into thermal energy.

The section of the nebula that the dwarf was now immersing itself in was unusual in its own right. It was a sparse cloud of molecules of a complex metallic substance that is only created in third generation supernovas. The properties of this substance was exceptional in that, when cold, it was neither attracted nor adhesive to other non-bonded molecules of the substance; however it had almost a nuclear hold on molecules that were already bound to it. Yet, when heated and the electrons were excited, the substance became highly attractive and with extremely strong bonding as the molecules merged together.

As the substance encountered the outer shell of the impacting dwarf, the substance became heated, and started bonding with other molecules, which in turn bonded with other molecules. As the outer gases of the rotating dwarf pulled along the adhering substance, it created a sheen of the substance wrapping around the dwarf, with the sheen floating on the pressure of the dwarf gasses below. And as it went through the cloud of the substance, the sheen became a sheet, and the sheet became a blanket, and the blanket became a casing. As the dwarf exited the substance space, it was encapsulated by thick shell of the extremely adhesive and strong substance. And since the adhesive properties of the substance was stronger than the centrifugal forces, the substance flowed into an almost perfect sphere that was over 11 miles thick, encasing a hydrogen brown dwarf almost a million miles in diameter. In journeying through the remainder of the nebula, the dwarf accumulated significant space dust to create a layer of space dirt over the substance. As the dwarf exited the nebula and then ventured through vast open interstellar space, it continued to gather a variety of different materials and elements, eventually creating a crust that was almost five miles thick, including what would be the equivalent of about a quarter mile of surface water.

In the void of space, the radiating heat was quickly absorbed by the coldness of space, eventually causing the sphere to cool. As it cooled the substance comprising the sphere became an almost inseparable, rigid mass, held in place and in form by the strong chemical bonds between them.

The substance had one additional special property to exhibit. It absolved and dissolved hydrogen gas. As it reached saturation point, it would emit the hydrogen out as well as absorb it. On the inner side of the sphere, the gas might escape out, only to be reabsorbed again. However, on the outer side of the shell, the hydrogen would escape, and when it encountered the heavier elements, it would quickly work its way up to the surface, then shoot off into space. This resulted in a slow bleed of the hydrogen out of the inside of the sphere. Over time, it bleed off almost half the mass of the original brown dwarf inside.

After drifting through space uneventfully for eons, Necedah approached a star system with a young Type G star at its center. Caught in the star's gravity well, it was left hurling towards the start in a near collision path. While Necedah had about the same diameter as the star, its mass was only about four percent of its new partner, making the star the undisputed dominant body in the system.

As Necedah journeyed inward in a hyperbolic encounter, it compounded the captivation in a near miss encounter with an orbiting rock giant planet, much smaller than Necedah, but about the same mass. The encounter causes Necedah to whip around the other planet in a strange dance that caused the other planet to fly out of the system in a similar hyperbolic trajectory while also pulling Necedah back towards it, but at a much slower speed. As the distance between the two increased, the pull decreased. Eventually, the soon to be forgotten planet flew off into the recesses of space, leaving Necedah in a nearly circular elliptical orbit around the star; an orbit that also resided in the "goldilocks zone", neither too hot or too cold to support life.

The many moons of the ejected giant were also left scurrying about; most lost, and in many directions. However, one, about a hundredth of the mass of Nededah, was captured, ending also in a near circular elliptical orbit around Necedah, providing ongoing stability to Necedah and its 10 degree axis incline to the central star.

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But Necedah did not survive the encounter unscathed. It's near perfect spherical body became amiss, with two bulges on either side of the planet. These bulges were a little shy of five-hundred-thousand miles across and almost an equal distance north-south, with a small bridge connecting them that came within hundred-fifty-thousand miles of the North Pole. In reality, to anyone on planet, this would have looked like a small arc of land near the North Polar Region. Although small in comparison to the bulges, the bridge was still sizable; about fifty-thousand miles wide, by about a hundred thousand miles long; with mirrored East and West South jaunting sides going down to the oval bodies on opposite sides of the planet.

Although without volcanos, the encounter and heat generated left the surface of Necedah with a fiery organic primordial sauce that would someday give life to Necedah. Then, the heat would subside and the atmosphere gave way to a rich nitrogen-oxygen mix. Likewise, the primordial ooze slowly transformed to oceans and land that supported increasing complex forms of life. A couple billion years later, intelligent life takes root, and a few tens of millennia after intelligent life forms, our story begins.

Someday, Necedah would end in a magnificent and cataclysmic implosion. But that is far, far after our story.

## Maps of Necedah

