

One Good Target

With Some Other Sights Worth Seeing
While You're in the Neighborhood

September

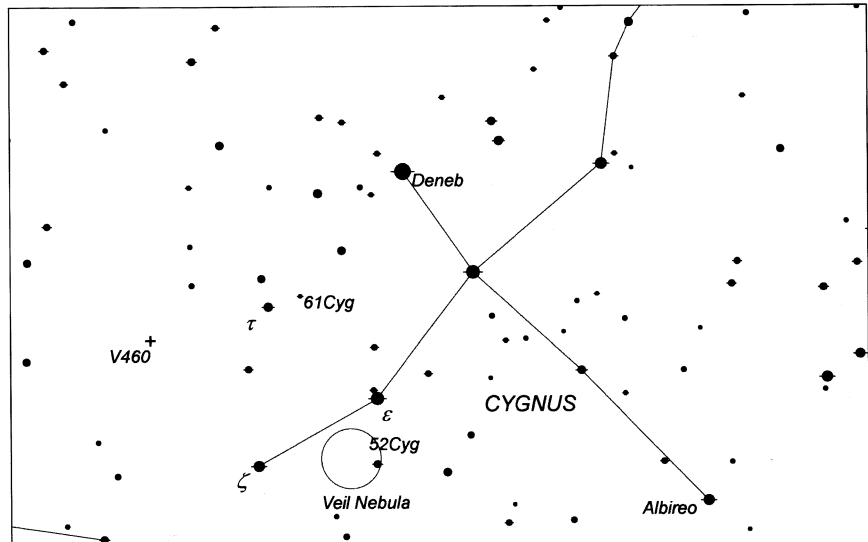
The Veil Nebula

With side trips to a couple colorful doubles and a carbon star

Around 8,000 years ago, a massive star in the part of the sky we now call Cygnus (The Swan) ran out of nuclear fuel, and ended its life in a core-collapse supernova explosion. The shock wave resulting from that event is still expanding outward in all directions. As it drives the remains of the dead star through the surrounding interstellar medium, we are able to see its leading edge as **The Veil Nebula**. The Veil is easy to find (but not easy to see), since it's within a 5° finderscope field of mag 2.5 Epsilon (ε) Cygni – the star marking the middle of the Swan's eastern wing – and the nebula's western edge overlies mag 4.2 star 52 Cyg.

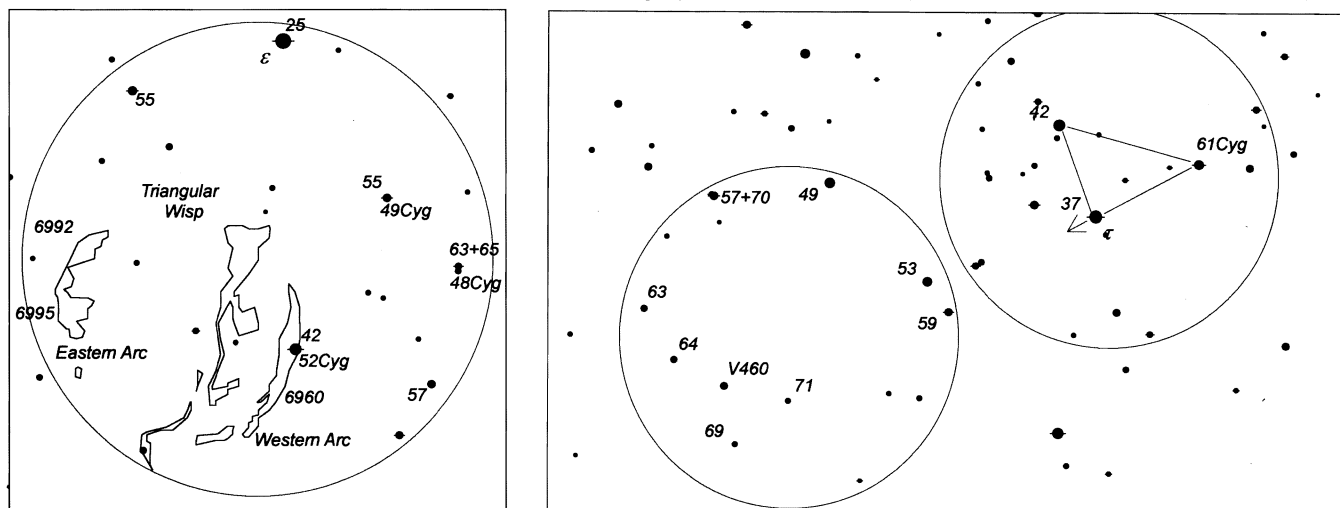
It's helpful to think of The Veil as three different targets, rather than just one: the eastern arc, the western arc, and the triangular wisp between them. Taken all together, it's a remarkably large structure, fully 3° across, which means it's 6 times as wide, 6 times as tall, and covers 36 times as much area as the full Moon – so you probably won't be able to see it all at once. You'll need patience and a dark sky, since all three parts are subtle, and slow to emerge – and they disappear whenever there's light pollution or moonglow nearby.

***This month's targets:
North at top,
stars to mag 5.2***



Begin with the **western arc (NGC 6960)**, which is easier to find (but harder to see) than the eastern one, since it passes right through **52 Cygni**, a light orange + blue pair (mag 4.2 + 9.4) separated by 6 arcseconds. You'll need 100x or more to split it, but for the nebula you need to keep the magnification much lower, so it can contrast with some dark sky. In a small scope, the most you'll see of the western arc is a subtle river of pale

light that seems to flow through the star, and is largely washed out by its glare. Filters help: a narrow-band filter (like the Lumicon UHC) or, preferably, an O-III filter will make the nebula easier to discern. You'll need an 8"+ scope to see it without a filter. In larger scopes, the western arc displays a fascinating structure, like delicate lace (hence its nickname, *The Witch's Broom*). Now pan 2½° ENE to find the **eastern arc (NGC 6992-6995)**, which is denser and easier to spot, although here too low power is mandatory for contrast, and a UHC or O-III filter will vastly improve the view. Burnham described the eastern arc as a "ghostly white rainbow" when viewed in 6" to 8" scopes under a very dark sky. It's a challenge target for unfiltered binoculars. Between the two arcs is the most difficult section, known as **Fleming's (formerly Pickering's) Triangular Wisp**.* You'll need an extremely dark sky and a big aperture (10" or larger) to make it out, even with a filter.



Finder/binocular charts (5° fields): Veil Nebula (left), 61 and V460 Cygni (right)
North at top, stars to mag 7.5, selected magnitudes shown, decimals omitted

While you're in the neighborhood, scan 7° NE of Epsilon to mag 3.7 Tau (τ) Cygni. Tau forms the southern point of a prominent 2° triangle whose western point is **61 Cygni**, a double star with a mag 5.2 primary and a mag 6.0 companion, both golden yellow-orange and separated by 30 arcseconds. It splits easily at low power – 30x should do it. It's the fourth closest naked-eye star, at a distance of 11.4 light years from the Sun, and the first star whose distance was measured by its parallax (by F.W. Bessel in 1838). Partly due to its proximity, it exhibits a large proper motion, appearing to move more than 5 arcseconds to the NE each year. This was first noted in 1792 by Palermo astronomer Giuseppe Piazzi, who later discovered the first asteroid, Ceres, in 1801. He called the star "stella volante," leading to its modern nickname, *Piazzi's Flying Star*.

Before packing up for the night, scan one finder field SE of Tau to find **V460 Cygni**, a semi-regular pulsating variable carbon star whose brightness fluctuates from mag 5.6 to 7.0 over a period of 180 days. It makes a nice pair with a mag 8.5 orange dwarf 9 arcminutes SW. It's a stable, calming view, and a fitting spot to wrap up our evening exploring the Veil and its neighborhood.

Rick Gering / September 2026

*The triangular wisp was discovered on a photographic plate by Williamina Fleming, one of the "computers" who worked at Harvard Observatory in the early 1900s. It came to be known as *Pickering's Triangular Wisp* after E.C. Pickering, the Observatory's director – but the widespread assumption that Pickering took credit for Fleming's work is completely untrue: his announcement of the wisp's discovery in Harvard Observatory Circular No. 111 (Feb. 16, 1906) unequivocally states that it was discovered by Fleming. While older literature refers to it by Pickering's name, Pickering himself never did so, and it is now usually called *Fleming's Triangular Wisp* to accurately identify its discoverer.