

The International Space Station in My Back Yard

by Janelle Burgardt

Astronomy is regarded as a scientific endeavor, but it also has metaphysical and artistic aspects. You never know just what aspect of the universe you'll experience—sometimes, you get a surprise.

I like to watch the International Space Station fly over. When I've watched it fly from northwest to southwest in the evening sky, its color changes, going from distinct orange to creamy silver as it moves away from where the sun has set. Its brightness changes, too, depending on the angle of the sun's rays on the station. As additional components have been added, it's gotten consistently brighter, and now routinely reaches -4.0 magnitude. When I watch it, the metaphysical kicks in: there are *human beings* up there, living and working on that bright, fast-moving star. How cool is that!

On a recent pass, the orbit was to take the ISS up 80°, bringing it nearly overhead. It occurred to me that I should get my trusty binoculars and see if I could find the Russian supply ship that was to follow it by a few minutes. So, the chiggers and I were in my back yard waiting for the ISS, hoping to stabilize the binocs with the help of my fence. When the bright object showed up on schedule, I found it in my binoculars and -got a surprise. Not only did I see an incredibly bright cylinder, but on each end I saw shadowy rods perpendicular to the cylinder. It took me a few seconds to realize that I was seeing the solar panels. They're dark brown in pictures, but *there they were*, in enough detail to tell that each panel was made up of separate panels, not a solid unit. It was challenging to follow it—it's moving at 17,500 mph, and crossed the sky near the zenith in under 6 minutes. The look of the panels changed as their angle changed relative to my back yard. It was so fascinating that I forgot all about the supply ship. I was thrilled, and exclaimed the coolness of my experience to my husband for quite awhile. He, as usual, paid attention for about 5 seconds, but wisely nodded his head as he's wisely learned to do.

I'll be out again tonight with my binoculars. Try it sometime. I use the Satellite Flyby calculator on the right panel at www.spaceweather.com. Enter the zip code where you'll be observing, and find the ISS.