

## Re: Catching Vanguard 3

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- *From:* "Scott Smith" <[spsmith@xxxxxxxxxxxxxx](mailto:spsmith@xxxxxxxxxxxxxx)>
  - *Date:* Mon, 26 Nov 2007 08:27:53 -0600
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Marty,

Thanks for taking time to post the space junk report(s)! I enjoy doing the same from time-to-time.

Clear Skies,  
Scott Smith  
Ridgetop, TN

"Marty" <[movac5@xxxxxxxxxx](mailto:movac5@xxxxxxxxxx)> wrote in message  
[news:276-474A35C6-2014@xx](mailto:news:276-474A35C6-2014@xx)

Some in here may have caught on that I've been "collecting" views of 1950's space junk. Hardly spectacular stuff, but if you were a spellbound kid during the dawn of the space age, well... you older guys understand.

Tonight, "Heavens Above" predicted a relatively "bright" 9.2 magnitude pass of the Vanguard 3 satellite. Vanguard 3 was launched Sept. 18, 1959. It looked pretty much like a satellite is "supposed" to look... a 20 inch (50.8 cm) polished sphere with several antennas sticking out. What gave it a rather distinctive appearance was that it wore a magnetometer in a glass phenolic tube attached to the sphere, sort of like a sorcerer's hat:

[http://library01.gsfc.nasa.gov/gdprojs/images/vanguard\\_iii.jpg](http://library01.gsfc.nasa.gov/gdprojs/images/vanguard_iii.jpg)

[http://content.answers.com/main/content/wp/en/thumb/f/f4/250px-Vanguard\\_3.jpg](http://content.answers.com/main/content/wp/en/thumb/f/f4/250px-Vanguard_3.jpg)

According to Wikipedia...

"The objectives of the flight were to measure the earth's magnetic field, the solar X-ray radiation and its effects on the earth's atmosphere, and the near-earth micrometeoroid environment."

ANYWAY, I decided to go out and catch sight of this little bugger as it sailed though Aquarius... The moon was BRIGHT, barely past full, and I almost gave up while I was setting up. I actually had a hard time finding the water jar of Aquarius to start my starhop a bit further south to find Theta Aquarii, which the satellite was supposed to pass just south of at 7:57:27. It took me several tries to find the water jar, and at one time, some anonymous satellite passed through the FOV of my finder scope. Must be teasing me... Finally, I managed to find the asterism in my finder scope, and hopped south to Theta. Then I moved a little further east, flipped up to a higher power eyepiece to darken the

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sky a bit, and waited...

It was a little chilly out at 28 degrees, (-2 C) and I was feeling it in my fingers. Also, I was having trouble picking up a clear time signal on my shortwave, and I had to hold it in the air at an odd angle... I heard the voice say 57 minutes on the shortwave, and started counting beeps... then, at 7:57:30, a little dot sailed smoothly through my field of view! BINGO! According to the ground track, Vanguard 3 passed overhead a little south of Lubbock Texas... considerably south and a bit west of my house in West Central Iowa. I didn't attempt to follow it... in less than 10 seconds it would disappear into earth's shadow.

I looked around a bit, but there really wasn't much else to look at on a full moon night, so I broke everything down and hauled it back into the house. The scope is warming up now, waiting for me to put it to bed in it's footlocker.

It was a good night, and I have to admit, sometimes that full moon IS pretty...

Marty