

# Artificial Earth Satellites: A Catechism for Beginners

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**A**T the Manila Observatory, visitors ask many questions which bear on the appearance, motions, uses, tracking and kinds of satellites. A summary of their questions and of our answers may help others towards a clearer notion of this new phenomenon added to the heavens.

## APPEARANCE

What does a satellite look like?

An artificial satellite, in general, is so far away and so small that when it is seen it resembles nothing better than a moving star, sometimes a bright star (namely, one of zero or first magnitude) and sometimes a weak faint star (one of fifth magnitude). Many objects taken by the uninitiated for satellites are not such. A satellite cannot be seen in the daytime just as stars cannot be seen in the daytime. Balloons in the daytime, Venus in the twilight, airplanes, jet exhausts at night, even weather balloons with a small light in them, and finally stars peeping out from behind fast moving clouds—have all been mistaken for satellites, especially before it is known that the satellite shines with reflected sunlight,<sup>1</sup> and before it

<sup>1</sup> It is said that Sputnik III is not metal-colored (aluminum) nor is it white nor any neutral color. The Japanese reported that it was somewhat reddish, hence we suspect that the Russians may have painted it red.