I used to own a Questar. I considered it poorly designed and of limited usefulness for astronomy. I would not recommend it to anyone as an astronomical telescope. Let me elaborate.

I never remember the model names, but mine was the one with 3.5-inch aperture, equatorial mounting, star-map dew cap, neither special coatings nor quartz primary, vintage 1968. It did not have the option to separate the tube from the fork arms and attach it to a photo tripod. My objections to the design included the following:

(1) It is too heavy. Rigidity comes from geometry, not mass, and for a given degree of rigidity, less mass is better, because it raises the resonant frequencies of vibration, and high-frequency vibrations damp sooner than low-frequency ones, and have less amplitude for a given energy. Much of Questar's weight could be eliminated -- in some cases perhaps with a hack saw -- and would result in an instrument no more susceptible to vibration, and far easier to transport and mount satisfactorily. I would have expected the designers of a telescope with so many other features that encourage portability, to have worked harder on making it light.

(2) It is fairly easy to get it out of collimation, and all but impossible to recollimate without sending it back to the factory. Compound systems with fast primaries are in essence generically sensitive to collimation problems -- that's not Questar's fault -- but it smacks of incompetence to produce such an instrument with no easy means of realignment by the user, in the field. I would have expected the designers of a telescope with so many other features that encourage portability, to have worked harder on making it robust.

(3) It is too compact: Specifically, the fork arms are too short. When mounted as an equatorial, you can't observe south of about -30 degrees declination because the tube collides with the drive housing, and that cute little around-the-corner finder has its field of view completely blocked thereby when the declination goes much south of 0. Furthermore, whether mounted as an equatorial or as an altazimuth, it is difficult to observe when the tube is nearly parallel to the fork arms (that is, near the north celestial pole or the zenith, depending on how mounted), because one's nose and chin collide with that same drive housing.

Making the fork arms an inch longer would have solved these problems. (Extending the fork arms by means of simple spacer blocks is a simple modification, well within the mechanical means of most people -- all you need is some scrap aluminum extrusions, a drill, and maybe some taps to create threads in the drilled holes. And incidentally, cutting up aluminum extrusions to make the spacer

blocks is another possible use of a hacksaw to improve a Questar.) Making the fork arms a little longer still, so that the instrument could swing through them and point at declination -90 degrees, would solve these problems, and still allow the telescope to fit in the same size case as the original, for transportation and storage.

It approaches incompetence for Questar not to have caught such a glaring flaw before committing the instrument to production: I would have expected designers with a sense of professionalism to become familiar with the intended use of the product. Did the person responsible for this blunder ever actually use a telescope?

(4) The finder is blocked by the fork arms when the optical tube assembly is rotated any great amount about its long axis, to reposition the eyepiece. Considering that the finder is small, and is of limited usefulness at southerly declinations, I would certainly want to attach a better one if I still owned my Questar.

In fairness, the instrument had many good features. I liked the "in-and-out" Barlow lens, and the ability to switch between finder and main telescope at the touch of a knob, without moving the eye. The instrument's mechanical fabrication was good, the optics were well-baffled (most compact instruments fail severely on this last; I don't believe any of the Meade or Celestron Schmidt-Cassegrain or Maksutov designs do nearly as well), and the optics on my Questar were excellent when they were in collimation. (Not all Questars are so good -- I have had occasion to look through three or four when excellent seeing and stable temperatures permitted optical testing on a star by comparing interference patterns inside and outside of focus. One had a noticeable zone at about 50% of radius, and the others were immaculate. Probably even the zoned one would rate the description "good optics".)

It's awfully expensive, though. Most of that goes for fit and finish, which is irrelevant to performance. I have no quarrel with people who choose to lay out substantial sums for aesthetics, but I would hate to see a beginning amateur astronomer buy a Questar and expect performance comparable to that provided by commercial Schmidt-Cassegrains or Newtonians of similar price. It is simply not true, that you can pour money into a small telescope and achieve the performance of a large telescope.

I have done substantial amounts of astronomical observing with each of over twenty instruments. The Questar 3.5 certainly shows no sign of magic performance. It is in the same league as was my Meade 4-inch Schmidt-Cassegrain (an early model 1040), my Celestron/Vixen 102mm refractor (f/9.8, conventional doublet), or the 4.25-inch f/5.5 Newtonian I built in junior high school. My Celestron/Vixen 90 mm

fluorite refractor is noticeably better (and cheaper, and almost as portable). My six- and eight-inch Newtonians blow the Questar 3.5 out of the water optically. (Optics by me, not that I am a particularly good amateur optician, just that aperture wins.)