

# Introduction

As I began to envision a book about the Schupmann telescope, many ideas of how to slant its emphasis were tossed about. Writing another telescope making tome which described all the steps in grinding and figuring lenses and mirrors, would simply repeat what is already well presented in so many other volumes. Done that way, the book would be straightforward: present a single design and, in great detail, describe its particular optical characteristics, construction, and alignment and leave it at that.

In the end I decided to follow a somewhat different path—that is, to tell a much broader story of the Schupmann instrument especially aimed at the advanced TN and serious observer who not only wishes to experience the building of a fine instrument, but may also want to employ his new medial to contribute to astronomical knowledge by sharing data with their fellow amateur and professional colleagues.

The reader will find no mathematical optical formulae here, no Bessel functions or fancy theories about atmospheric seeing—just a book about a fascinating telescope form, its historical development, various design prescriptions and their optical performance, special construction details, and something about its many possibilities. Optical theorists will, no doubt, find the book a bore. However, on closer inspection they may suddenly be struck with a neat thought, a thought that could open a bright new path for exploration. For the student of telescopes and their historical development, and in particular those historians of unusual telescope types, it is hoped that this book may find a home on their library shelves. There is surely something here to tickle their fancy.

All the ray trace work presented here was performed with OSLO-LT, software that is freely downloadable from the Internet. Although the learning curve was steep—especially for someone with no formal education in optical design like myself—with the gracious help of fellow STM member, Bert Willard, I soon managed to create and analyze all sorts of systems, tilts and all! I deeply thank the folks of OSLO for providing such a powerful design tool for the student optical enthusiast.

I especially want to hear of the plans of amateurs who decide to build a Schupmann medial or its distant cousin, the brachymedial. Errors do creep into any publication despite going over and over the manuscript. If you do build to a supplied prescription, and you have no way to check the design, please let me know and I will double check it and send you any corrections. I can be contacted through the Stellafane website.

In the end we are, in large part, simply messengers carrying the lore. Do have a wonderful experience with your Schupmann.

Jim Daley, Springfield Telescope Maker

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