



### “Ball! High and tight...off the inside corner”

I am not content with the strike zones in major league baseball today. According to the *Official Baseball Rules (1998 Edition)*, which can be found on the Internet at <http://www.majorleaguebaseball.com/library/rules.sml>,

“The STRIKE ZONE is that area over home plate the upper limit of which is a horizontal line at the midpoint between the top of the shoulders and the top of the uniform pants, and the lower level is a line at the hollow [*sic*] beneath the knee cap. The Strike Zone shall be determined from the batter’s stance as the batter is prepared to swing at a pitched ball.”

As I understand this definition, the strike zone extends from the letters (i.e., the armpits) to the knees in height and with an area equal that of the plate. When was the last time you saw a strike called on a pitch over the plate between the letters and the belt? What exists today is a squashed version of that volume that expands with good pitchers and contracts with poor ones.

At first, it looked like a routine curve when I opened one of the daily messages from Rita Rogers, the keeper of manuscripts for *Optical Engineering*. Unless there is something unusual, the e-mail for a new submission contains no text—just an icon of an Adobe Acrobat document indicating there is an electronic image of the submission sheet, title page, abstract, and references attached. After I open it in Acrobat Reader I scan the contents, decide on an area, and assign an Associate Editor. But not this time. This was no curve, but a wicked knuckleball that was just outside...or maybe not.

The subject of the paper brought me up short. I read the abstract carefully then scrolled to the references—none were in any traditional optics literature. I noticed that an earlier version of the paper had been given at an SPIE conference two years earlier. There was no Associate Editor that could handle this one, so I asked Ms. Rogers for the complete paper and the listing of papers for the conference at which the original Proceedings paper had been delivered. One might argue that since the paper was given at an SPIE conference, there ought to be a Society

journal that would publish the material. But there are a small number of conferences that SPIE organizes to enable the optical engineering community to keep abreast of developments in other fields, although the topics are not directly related to optics and its myriad applications. For example, several years ago conferences were presented on high-temperature superconductors because advances in this field would eventually affect detector technology.

I read the entire paper and reviewed the references, which were all in an area of theoretical physics. I looked at the titles of the papers presented at the conference at which the original presentation was given. The connections to optics or optical engineering were tenuous at best. I concluded that *Optical Engineering* was not the best journal for this article. I inserted a line to the standard letter that accompanies the declination of a manuscript. It said that “despite the fact that this paper was originally published as an SPIE Proceedings, the journal is not appropriate for this type of paper. I would suggest that you submit to a journal that is more oriented toward” a field of physics (not specified here to preserve the anonymity of the author). Ball! Outside!

About a month later I was told that the author has decided not to renew his SPIE membership because *Optical Engineering* declined to consider his paper for publication. Hmm.

What should be published in *Optical Engineering*? What are the limits of coverage? The field of optical engineering is mighty broad! But are there limits? Rules? Guidelines? Where is the strike zone?

The first principle of scholarly publication is that authors can submit a paper to whatever journal they think is appropriate. It is up to the editor of a journal to define the areas that will be reviewed and accepted. So there will always be some papers that challenge the boundaries. Those around the corner of the plate.

The incident served to crystallize for me the obligations that an editor, the Associate Editors, and the reviewers have to exclude (or include) material submitted for publication in this journal. Some of the work we receive involves research in fields of which I confess I only understand the rudiments. I am grateful to have persons like Andy Tescher and Bahram Javidi on the Board of Editors when an image processing paper pops up in Adobe Acro-

bat. But there are a few submissions every month that don't fall into fields covered by the Associate Editors. I assign those papers to myself and then go looking for reviewers. Those that fall in the gaps, I can take care of with little trouble. It's the ones on the edges that give me pause. Do these topics, however tenuous the links, represent some aspect of optical engineering? Should I try to set specific guidelines and define which fields are acceptable? I don't think so. Our field is evolving and so must this journal. *Optical Engineering* is intended to serve the members of SPIE, first, and then the optical engineering community, as a whole.

In my opinion the boundaries of a journal's coverage should be treated pretty much like the edges of a strike zone. You set them up and try to keep your calls consistent and fair. You hope that most players will figure out the boundaries from the contents of the journal and the areas of interest of the Board of Editors. Sometimes, one of the players picks up his ball and goes home. Most keep on pitching.

**Donald C. O'Shea**  
Editor

### **Rudolf Kingslake Medal and Prize**

The Rudolf Kingslake Medal and Prize is awarded annually in recognition of the most noteworthy original paper to appear in *Optical Engineering* on theoretical or experimental aspects of optical engineering. The 1997 Kingslake Medal and Prize is awarded to **Gleb Vdovin, Simon Middlehoek, and Pasqualina M. Sarro** for their paper entitled "**Technology and applications of micromachined silicon adaptive mirrors**" which appeared in the May 1997 issue. Adaptive optics have revolutionized many aspects of electro-optics systems. High cost has, however, been a significant hurdle. Vdovin, Middlehoek, and Sarro have developed and demonstrated a technology for low-cost, high-quality micromachined adaptive mirrors. Their paper reports on that work, which will bring adaptive optics technology within the reach of many additional applications and will therefore have a major impact in the electro-optics community.

#### **Rudolf Kingslake Medal and Prize—Past Recipients**

1974	Irving R. Abel and B. R. Reynolds
1975	J. M. Burch and C. Forno
1976	Richard E. Swing
1977	David B. Kay and Brian J. Thompson
1978	Norman J. Brown
1979	J. R. Fienup
1980	G. Ferrano and G. Hausler
1981	Robert A. Sprague and William D. Turner
1982	David M. Pepper
1983	James R. Palmer
1984	Gene R. Gindi and Arthur F. Gmitro
1985	Armand R. Tanguay, Jr.
1986	Arthur D. Fischer, Lai-Chang Ling, John N. Lee, and Robert C. Fukuda
1987	Chris P. Kirk
1988	Ares J. Rosakis, Alan T. Zehnder, and Ramaratnam Narasimhan
1989	Pochi Yeh, Arthur Chiou, John Hong, Paul H. Beckwith, Tallis Chang, and Monte Khoshnevisan
1990	Paul R. Prucnal and Philippe A. Perrier
1991	Brian E. Newman
1992	Aden B. Meinel and Marjorie P. Meinel
1993	Harvey M. Phillips and Roland A. Sauerbrey
1994	Jose M. Sasian
1995	Arnold Daniels, Glenn D. Boreman, Alfred D. Ducharme, and Eyal Sapir
1996	Pär Kierkegaard