

**I**N CASE YOU MISSED THIS SEASON's hysterics on the sports pages, Major League Baseball's problem is balls and strikes. The umpires are not calling them properly. A technological solution is at hand, but the forces that be in baseball will prevent its adoption.

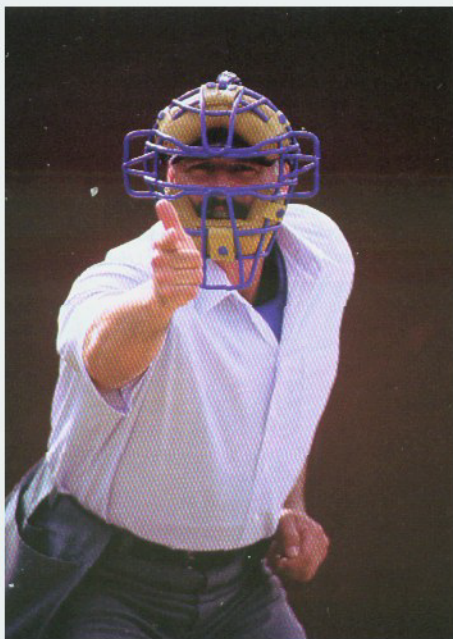
Major League umpires have great jobs. Their pay begins at a shade over \$100,000 a year for seven months' work. They have steady increases with seniority and extras for postseason play. They have a strong union and near-total job security. They get to appear on national television, where the fans of America can see them recurrently call strikes on pitches well off the plate, and call balls on pitches no higher than the batter's navel. Witness the TV commentaries wherein you are soothingly told that differences from one guy to the next are really okay, so long as each ump is consistent in his calls.

That's okay? Can one imagine a linesman at Wimbledon being allowed to consistently call "out balls" in? Yet the umps go on miscalling pitches even as the commissioner's office confronts them with a new technology that unambiguously differentiates between balls and strikes.

The technology, called PitchTrax, was developed by a small, over-the-counter-listed company named QuesTec, in Deer Park, N.Y. Using cameras mounted on both the third-base and first-base sides of the playing field, the system establishes multiple tracking points that capture the speed, placement and curvature of a pitch as it moves through space, and compares that trajectory to the strike zone appropriate to each batter.

For the moment the device is used only to train umpires. But why stop there? Why not upgrade it to an automatic pitch-calling system that would

# Kill the Umps



**The time has come for baseball to stop dithering and take on the umpires. We have the technology to do it.**

**BY DAN SELIGMAN**

take the umps out of this business? Edward Plumacher, the founder of QuesTec, hastens to say that he personally is not proposing any such revolutionary decision, which would manifestly have to be made by MLB itself. And MLB's official position, as rendered by the commissioner's office, is that the umpiring function is a cherished part of the game's traditions and not to be tampered with.

Umpire accuracy seems to be a sore point. This summer Richard (Sandy) Alderson, MLB's executive vice president for baseball operations, took heavy flak for sending out e-mails to umpires demanding better strike calls. The text of his messages has never been released,

but the ensuing argument—it culminated in a union grievance—made it clear that MLB was saying it had data showing many umps were calling too few strikes, especially at the high end of the strike zone, and that this led to higher pitch counts and longer games. Alderson said his office would expect an average of 270 pitches per game if calls were correct, down from the then-current 285.

My own analysis, based on total ball and strike calls by all umpires working Major League games as of late August, shows that pitch counts still average 285. But individual umpires' averages were all over the lot, from a low of 262 to a high of 312. Alderson is clearly correct in relating high pitch counts to less frequent strike calls. The correlation between number of pitches in a game and percentage of pitches called strikes is significantly negative, at  $-0.44$ .

The umpires were also all over the lot in the percentage of pitches called strikes—here the range was from 59% to 65%. In any one game anything is possible, obviously. But variations like these, averaged over many games, are strong statistical evidence of rule violations by many umpires.

Unfortunately for Alderson, the demand for more strike calls was a public relations fiasco. The umpires claimed that they were being asked for pitch-count "quotas," which would undermine the game's integrity, and insisted on the right to call pitches as their conscience dictated. The media bought heavily into this line, MLB quickly denied that high pitch counts would be held against umpires, and the union at that point claimed victory and called off the grievance.

Likely outcome: More years of lousy calls at the plate. The Luddites are winning this game. **F**