Remembering Brian Marsden

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I'm not quite sure when I first met Brian Marsden, but I know exactly when he came into my life in a memorable way. That was on Friday, the first of October 1965. In September two Japanese amateur astronomers had independently discovered a new comet, and by the end of the month we knew it was a sungrazing comet and that it would be about magnitude -7 as it swept around the sun, that is, it could be seen next to the sun in broad daylight. At that time I had been running the IAU's Central Bureau for Astronomical Telegrams for nine months, and Brian had just been hired from Yale and was supposed to begin work at the Smithsonian on Monday morning, the fourth of October. But our Friday press conference was not to be missed, and happily he came along for it, because he already knew more about the history of comets than I would ever know. I must admit, however, we both missed an important point. We mentioned that a brilliant tail might be seen at sunset in the western sky as Comet Ikeya-Seki whipped around the sun. Had we consulted Newton's Principia, with its diagram of a sungrazing comet, we could have guessed more correctly that the long tail would develop later, but never mind. It became, as predicted, bright enough to be seen a few degrees from the sun, and I remember that on the day of its perihelion passage Brian and I and others gathered at the 9" telescope on the observatory roof to see it. A few days later we saw the 20-degree tail of the comet in the pre-dawn sky.

For years I have been writing weekly letters to our family, and consulting my archive, I see that I didn't explicitly mention Brian in that first week of October, but there he is in a letter from Wednesday, Nov. 17, saying that the new man, Brian Marsden, had already been appointed associate director of the comet bureau and that eventually he would take it over. That he did, in 1968, and subsequently he directed the bureau for 32 years. It was not an easy task, for it required being on duty 24 hours a day, seven days a week. The astronomical community honored Brian in a few specific ways for this yeoman service, though I'm not sure they fully appreciated what an onerous responsibility he carried.

Brian was my favorite workaholic. I could go over to my office to pick up something late Saturday afternoon, and the chances were very high that his office door would be open and he would be beavering away with his desk full of

computers.

Now you may have noticed that I seem to know on which day of the week these various dates fell, and as Irwin Shapiro has already noted, Brian had an uncanny ability to calculate mentally and very quickly, the day of the week for any date. I don't have that mental wizardry, so I had to look them up on a computer calendar. Dennis DiCicco has told me an amazing story about Brian's ability to match week days with dates. Dennis had found a historic image of a comet in the observatory's plate collection, but he couldn't identify the surrounding star field using the date on the plate jacket. So he took the plate and its envelope to Brian's office. Brian glanced at the date written on the envelope together with the day, Tuesday, and after a few moments said, "But that date wasn't Tuesday — it was Wednesday." Sure enough, the astronomer wrote the date when he developed the plate and inscribed the envelope, but he remembered correctly that he had actually photographed the comet on a Tuesday night. With the correct date, Dennis quickly identified the star field.

I wasn't aware of Brian's ability to do this, so I never asked him on which day of the week I was born. I wouldn't have had to give him my birthday — he was already a walking encyclopedia of birthdays, and often reminded me when various of our friends was about to have a birthday. But my very last vivid memory of Brian involved another mental calculation. He was standing in the doorway of my office — not something unusual, because his office was right across the hall from mine and we often saw each other or ate lunch together. He knew I was working on Galileo's first observations of Jupiter's satellites, and I explained that I wanted an image of the observational orientation of the orbital planes in January of 1610. He thought a minute or two, and then suggested I try the Nautical Almanac for 1941. I can only say that the accuracy of the match is stupefying.

Our paths intersected in another way with the status of Pluto. Brian felt strongly that Pluto had been called a planet back in 1930 because of inadequate data, and he wasn't convinced that the error should be continued. Prior to the Prague IAU meeting I chaired a committee to look into the matter, and subsequently at the time of the meeting became temporarily famous. I boasted in a family letter that my name got 50,000 hits on Google, to which my youngest son retorted, "Don't let it go to your head, Dad — Brian Marsden has twice as many!" That, incidentally, is still the case. Because Brian was so articulate and informative, he was interviewed by the press more than any other member of the Center for Astrophysics staff, and it was not rare to find television cameras and lights parked outside his office. He was, literally, the public face of the observatory. The observatory was lucky to have had such a congenial, approachable, knowledgeable representative. Many of us miss the magic.

[Invited address given at the memorial service for Brian G. Marsden, Hancock Church, Lexington, Massachusetts, 2011 January 16]