

Neil Gehrels, A Thoughtful Man

(May 22, 2018)

Good morning. For those of you who do not know me, I am Ken Sembach, Director of the Space Telescope Science Institute. I am honored to be able to share a few thoughts with you this morning, and thank the organizers of this wonderful symposium for asking me to do so.

Neil Gehrels was a thoughtful man. I mean this in the many senses of the word: pensive, reflective, considerate, attentive, sympathetic, helpful, unselfish. Many of you in this room knew Neil better than I. He and I had different areas of scientific interest, different career paths, and different managerial responsibilities. Nevertheless, I feel like I knew him for a long time, as there was always something comfortable and familiar in the conversations we had together.

My first memorable encounter with Neil was at an Astrophysics Senior Review of Operating Missions about 10 years ago. I was filling in for a missing committee member, and Neil was presenting the case for continued funding of the Swift Observatory. During his presentation he outlined the many successes of the mission, and the steps that he and his team were taking to ensure that Swift would not only continue to deliver scientific discoveries, but to do so in a way that was innovative and responsive to the science community's needs. The committee enthusiastically endorsed continued funding but challenged Neil to implement many of the proposed cost savings and innovative science enhancements within the baseline budget available. There would be no augmentations that year.

Having served as both presenter and committee member in such situations, I paid particular attention to Neil's responses during the question and answer period following his presentation (which was excellent). He was knowledgeable, reflective, and patient in his responses. He accepted both criticism and praise with humility. He clearly had the interests of the scientific community foremost in his thoughts, and while he may have had strong opinions about how best to satisfy those interests, he was a good listener and did not rush to judgement or shut down when alternate ideas were proffered. This, I noted to myself at the time, is a thoughtful man – someone who values the thoughts and opinions of others.

Over the following two years, Neil and the Swift team rose to the challenge, carefully considering and implementing a new path forward, reducing the mission's costs by about a factor of two and automating operations, while increasing Swift's scientific productivity and synergies with other missions. As a result, the next Senior Review recommended not only extending the mission but augmented funding as well to continue this trajectory.

Over the years the Swift observatory has been a remarkable scientific success, giving us new insights into the transient high-energy universe and forever changing how we think about objects ranging from comets to exploding stars half way across the universe. When Thomas Zurbuchen announced during the NASA Town Hall at the 2018 winter AAS meeting that Swift would be renamed the Neil Gehrels Swift Observatory, I felt a rush of emotion that I suspect many of you felt as well when you heard this news – joy, pride, a sense of closure. It was the obvious thing to do. It was the right thing to do. I could not think of a more fitting honor for someone who unselfishly poured his heart and soul into that mission.

It was only in the past few years after Neil became the WFIRST Project Scientist that I had a chance to interact with him more and get to know him a bit better – to have a chance to talk with him and see how he approached work and life in general. It was the same thoughtful approach I had seen in action years earlier. We talked regularly and shared thoughts on how to make science trades, how to broaden science perspectives, and how to communicate the amazing possibilities for exploring the universe that this mission would offer.

Neil and I shared a common passion – service to the science community. At the AAS meeting shortly before his passing, this passion and his unselfish focus on how best to serve the scientists who would use WFIRST were evident. Neil seemed tired – he looked stronger than he had in recent months, but we had to sit as he had been standing much of the day. He was concerned about the fate of the mission and whether there would be sufficient interest in the astronomical community to keep it moving forward during tough times, in particular during that year's fiscal budget negotiations. There were many interests at play – those of the formulation science teams, the astronomical community, the science centers, technical, national, international, budgetary – not all compatible at the time. He asked me what I thought and how we might engage others to advocate for the transformative science WFIRST would produce, as he firmly believed that was the unifying factor upon which the mission's fate was dependent. He encouraged me to reach out to David Spergel, to jointly develop a plan. He didn't ask – it was something more along the line of "I think it would be a really good idea if you and David talked about some of this." I didn't realize it at the time, but that may have been his considerate way of saying that he wasn't going to be able to do this much longer himself. It would be the last conversation I'd have with him. Neil faced his illness with courage and dignity.

Many of you have shared treasured memories and stories of Neil. We should continue to do that, because by doing so we honor him and enrich our lives and the lives of others who follow. There are lessons to be learned. For me, the thing that I remember most and wanted you to know today was that Neil Gehrels was a thoughtful man – in all senses of the word – passing along wisdom and encouraging others while facing the worst kind of adversity. That is a lesson I treasure.