Scientific and Technical Photography at NASA Langley Research Center

by

Professor Andrew Davidhazy
Department of Imaging and Photographic Technology
Rochester Institute of Technology
Rochester, NY 14623

As part of my assignment connected with the Scientific and Technical Photography & Lab (STPL) at the NASA Langley Research Center I conducted a series of interviews and observed the day to day operations of the STPL with the ultimate objective of becoming exposed first hand to a scientific and technical photo/imaging department for which my school prepares its graduates. I was also asked to share my observations with the staff in order that these comments and observations might assist the STPL to better serve its customers.

Meetings with several individuals responsible for various wind tunnels and with a group that provides photo-optical instrumentation services at the center gave me an overview of the services provided by the Lab and possible areas for development. In summary form these are some of the observations that resulted from the interviews and daily contact with the STPL facility.

1. The STPL is perceived as a valuable and almost indispensable service group within the organization. This comment was invariably made by everyone. Everyone also seemed to support the idea that the STPL continue to provide its current level of service and quality.

2. The STPL generally is not perceived to be a highly technically oriented group but rather as a provider of high quality photographic illustration and documentation services.

In spite of the importance and high marks assigned to the STPL there are several observations that merit consideration and evaluation for possible inclusion into the STPL’s scope of expertise and future operating practices.

1. While the care and concern for artistic rendition of subjects is seen as laudable and sometimes valuable, the time that this often requires is seen as interfering with keeping the tunnels operating at maximum productivity. Tunnel managers would like to shorten down-time due to photography have services available during evening hours and on short notice. It may be of interest to the STPL that tunnel managers are incorporating ever greater imaging capabilities in their facilities. To some extent this could mean a reduced demand for traditional photographic services.

2. The photographic archive is seen as a Center resource. Archiving of images, as well as data, is a matter of concern to the investigators. The early holdings of the Photographic Archives are quickly deteriorating. The relative inaccessibility of the material held in the archives is problematic.

3. In certain cases delivery or preparation of digital image files instead of, or along with, hardcopy is already being perceived by the STPL’s customers as desirable. The STPL should make this option available, and the fact that it has, or will have, this capability widely known.

4. The STPL needs to continue to provide expert advice and technical imaging support in terms of application information to users of traditional photographic and new electronic imaging systems. Cooperative demo projects might be undertaken to maintain or improve the capabilities of the Lab.

5. STPL personnel do not yet have significant electronic imaging or electronic communication skills and improvements in this area could potentially have a positive impact on the Center.

6. High speed photographic or imaging services are often mentioned by the STPL as being of primary importance to their mission but the Lab supports very few projects calling for high speed imaging services. Much high speed equipment is in poor state of repair. It is interesting to note that when the operation of lasers, digital imaging or quantitative techniques are requested these are directed another NASA department. Could joint activities be initiated to solve problems?

7. The STPL could acquire more technical assignments if examples of the areas where they posses expertise would be circulated around the center. The fact that the STPL owns high speed video capability could be “advertised” among its customer base if there truly was an interest in making up a customer base in this area. The STPL could participate in events like TOPS as an exhibitor, as well as a documenter, of the event.