

Draft Minutes

ASC OP/TF 7 –Committee for Optics and Electro-Optical Instruments – Laser Damage, Standardization Round Table Discussion

September 17, 2014 02:30 EDT

1. Welcome and Introductions

In attendance were Donna Howland, Trey Turner, Michael Thomas, Detlev Ristau, Lars Jensen, Wolfgang Riede, Jeff Bude, James Chung, Aiko Ode, John Bellum, Lars Mechold, Jason Yager, Alexei Kozlov, Semyon Papernov, Clemeus Heese, Toucho Ivanov, Jon Arenberg and Andrius Melninkaitis

2. National and International Standards Development for laser damage specification and testing overview

Donna, Trey and Mike gave an overview of National and International Standards Development. ISO, ANSI and OEOSC were discussed. Task Force groups and ISO TC groups and how they interface were discussed. It was announced that at Photonics West 2014, ASC OP voted to create TF7 Laser Standards Task Force. Purpose of the Task Force was discussed; these may include, but are not limited to, publishing new US standards for Lasers, advising TAG on ISO laser standards, and potentially converting international standards to US standards. The process for developing new ANSI and ISO standards was reviewed.

3. Andrius Melninkaitis shared a presentation on Statistical Effects

Andrius Melninkaitis from Vilnius University, Laser Research Center in Lithuania gave a presentation on Statistical effects in Laser-Induced Damage Threshold (LIDT) Testing. He shared that there are 4 main potential sources of LIDT errors. Those include:

- fluence instability from energy fluctuations and/or beam diameter and random walk fluctuations
- pulse duration
- uncertainty in statistical frequency
- error of fitting regression

4. Time and place for next meeting

Next meeting on Sunday, February 8th for 1 ½ hours in San Francisco in conjunction with Photonics West.