

## **Draft Minutes**

ASC OP/TF 2- Committee for Optics and Electro-Optical Instruments - Optical Imperfections  
Photonics West  
Intercontinental Hotel  
Stockton Room, 5<sup>th</sup> floor  
San Francisco, CA

Sunday January 23, 2022, 13:30-14:30 PST

### **1. Introductions and assign note taker**

Dave Aikens opened the meeting at 13:37 PST with introductions. Adam Phenis volunteered to take notes during the meeting. In attendance were Jay Nelson, Eric Herman, Dave Aikens, Brian Monacelli, Adam Phenis, Patrick Augino, Zach Strobehn, and Donna Howland.

### **2. Adoption of the draft agenda.**

Donna Howland moved we adopt the agenda v2, Adam Phenis seconded the motion, which carried unanimously.

### **3. Approval of minutes of the previous meeting.**

Pat Augino moved we accept the meeting minutes from the last meeting (February 2020), because we did not meet as planned at PW in 2021. Due to Covid, everything shutdown in 2020 and we are basically restarting the committee. Eric Herman seconded and the motion passed.

### **4. Overview of the state of affairs for surface imperfection tools and technology**

Dave Aikens gave an update on the state of surface imperfection tools and technology from his perspective. Presentation will be added to the meeting documents list on the OEOSC website. Dave's recommendations for the path forward is to revise OP1.002 to fix some of the deficiencies:

- *Clarify why the ANSI language is different from the MIL language*
  - *Accumulation and concentration rules*
  - *The visual cutoff rule*
- *Rectify missing imperfection rules*
  - *Sleeks*
  - *Area imperfections*
  - *Diamond Turning and Plastic optics imperfections*
- *Harmonize with the ISO visibility version*
  - *Scratch length limit*
  - *Scratch accumulation and Dig separation rules*

During discussion, Jay Nelson asked if Sleeks are similar to Striae. Dave Aikens replied that sometime sleeks do not matter similar to striae. Jay asked if the definitions/specs for Striae be

applied to Sleeks? Dave's response was that sleeks are pretty easy to find whereas Striae can be tough. Most optics drawings can ignore both, but for real precision optics, both can matter. They probably each need to be treated differently.

## **5. Presentation of potential revision of OP1.002 for discussion**

Dave Aikens presented his proposed revision of OP1.002

Review of changes:

Sleek – Merge of language from current standards literature

Sleeks vs scratches – clarification that sleeks do not count in visibility system but need to be accumulated in the measurement system.

Short scratches as digs – Dave Aikens tried to simplify confusion between when scratches and digs are separated. Proposed two millimeters. Question raised about what happens if the part is smaller than 2 mm? Potential solution is to use 2 mm or some ratio of diameter to scratch length

2.1.3.4.1 – Return to 2009 definition of digs to “apparent size”

2.1.3.7 – Sleeks don't count; add a note to both scratch and sleek definitions

2.1.5.3 – Scratch concentration. Proposed change is to be consistent with ISO standard.

Deviation from MIL and more in-line with ISO.

2.1.5.5.2 – Proposal to get rid of “dig concentration test 2” which is really the minimum dig separation rule for 20-10 surfaces. Can include note why this was removed and suggest that if the user wants this, then they should add a note.

2.3.1 and 6.4 Add in area imperfections and make sure that they are captured.

7.3 – comments withdrawn

Table 6 – Update to latest ARMY specs – Army's view that there is not a standard and they change it often

Jay Nelson moved that we should post the OP1.002 document for review. Changes provide clarity and reduce ambiguity. Pat Augino seconded and the motion carried.

*Action: Post Dave's presentation and the edited OP1.002 on the website as meeting documents*

*Action: Dave Aikens to make proposed draft for discussion at the next meeting*

## **6. Any other new business/new action items**

No additional items raised.

## **7. Time and place for next meeting of TF2**

Adam Phenis moved we have a teleconference on **July 22nd at 13:00 EDT**, Eric Herman seconded and the motion carried.

## **8. Adjourn**

Jay Nelson moved we adjourn, Donna Howland seconded, and the motion carried. We adjourned at 14:31 PST.