



Welcome to the OPTIFAB General Meeting

October 16, 2019

Meeting Agenda

- Welcome and Opening Comments
- Financial Report
- Membership update
- Workshop Recap
- Committee Reports
- New Business

APOMA Board Members 2019

Mike Mandina
President
Optimax Systems

Lee Steneken
President-Elect
Esco Optics

Kirk Warden
Past President
LaCroix Precision
Optics

Walt Czajkowski
Treasurer

Jim Sydor
Secretary
Sydor Optics

Justin Mahanna
Corporate Member
Universal Photonics

Chris Ghio
Associate Member
Ohara Corporation

David Mohring
Corporate Member
OptiPro Systems

Alexis Vogt
Academic Member
MCC

Board Member E-mails

Contact information

- Mike Mandina: mmandina@optimaxsi.com
- Lee Steneken: lee@escooptics.com
- Kirk Warden: kirk@lacroixoptics.com
- Jim Sydor: james@sydor.com
- Walt Czajkowski: czajkowskiwalt@gmail.com
- Justin J. Mahanna: justinm@universalphotonics.com
- Chris Ghio: chrisghio@oharacorp.com
- Alexis Vogt: avogt4@monroecc.edu
- David Mohring: dmohring@optipro.com
- Michele Stolberg: michlisa@frontiernet.net



Financial Review OPTIFAB 2019

APOMA Member Dues Status (10/15/19)

Member Dues Invoiced Yr. 2019	\$48,425
Member Dues Paid (to date)	\$41,425
Outstanding Payments	\$7,000

APOMA Yr. 2019 Proposed Budget

Postage, Supplies	\$150
Dues & Licensing	\$5,500
Tax & Accounting Fees	\$800
Web Site Maintenance	\$8,000
Administrative Assistance	\$8,000
Travel	\$7,500
Conventions (OptiFab)	\$8,000
Contributions	\$5,000
Workshop	\$0
Budgeted Expenses	\$43,450

APOMA Financial Status (10/15/19)

Cash on hand: \$200,467.83

Spent Year to Date: \$25,528.14

Membership Distribution

- Current memberships to date (139 members):
 - Academic: 34 members
 - Associate: 28 members
 - Corporate <15: 31 members
 - Corporate 16-60: 25 members
 - Corporate 61-125: 12 members
 - Corporate >125 employees: 9 members
 - Affiliate (non-N. American): 0 members

New Members in 2019

- Colorado Thin Films, Inc. (Corporate, 15 or less)
- ER Precision Optical Corporation (Corporate, 15 or less)
- INTEROPTICS, LLC (Corporate, 15 or less)
- SALVO TECHNOLOGIES (Corporate, 16-60)
- VisiMax (Corporate, 16-60)
- FLIR Systems Inc. (Corporate, 125+)
- Louisiana State University (Academic)



APOMA Committees

Committees and Current Chairs

- Apprenticeship – Alexis Vogt
- ISO10110 – Walt Czajkowski / Pat Augino
- ITAR – Kirk Warden
- Marketing – Lee Steneken
- Optifab – Justin Mahanna

Apprenticeship Committee

- Goal: Precision Optics Manufacturing Technician
 - Trade outline written in every state
 - Nationally recognized, apprenticeable trade
 - Designated number of training hours of & related instruction
- Current state:
 - NYS certified Precision Optics Manufacturing Technician
 - Intermediary program funded by the RTMA
 - Covers paperwork, grant funding, connecting to related instruction and helping companies register apprentices
 - Registers the program, interacts with NYS apprenticeship council

Apprenticeship Committee

- NYS Certified: Optimax Precision Optics Manufacturing Technician
 - 10 apprentices registered
 - Start a new apprentice every quarter
 - 3 year rotation
 - Trade outline describes the work processes that need to be learned, but does not define how they are taught
 - 1:1 ratio of apprentice to journey worker required
 - 6000 hours of experience & 144 hrs/yr of related instruction
 - Related instruction taught at Monroe Community College

Apprenticeship Committee

- RTMA Process:
 - JML Optical – 2 apprentices; cohort model
 - OptiPro – 5 apprentices; Sydor Optics
- Challenge: Availability of the required related instruction
 - MCC is the only community college awarding associate degrees in precision optics
 - Additional precision optics manufacturing CC programs needed
 - Front Range Community College in Boulder, CO
 - Sussex County Community College in Newton, NJ

Apprenticeship Committee

- MCC Optics awarded \$4.4M grant from Office of Naval Research
 - On behalf of the Office of the Secretary of Defense, for the Manufacturing Engineering Education Program
- Awarded \$177,000 (over 3 years) for a fulltime National Work-Based Learning Coordinator to:
 - Identify potential apprentice company sponsors and intermediaries
 - Oversee creation and dissemination of apprenticeship marketing materials
 - Guide companies toward establishing apprenticeships nationwide

Apprenticeship Committee

- Grant also funds:
 - **Goal 1:** Extensively enhance precision optics technician training with innovative approaches through adapted course delivery models, enriched curriculum, apprenticeship opportunities, and improved access for high school students
 - Development of online courses to use as the apprenticeship related instruction
 - Equipment (diamond turning, etc.)
 - **Goal 2:** Increase the number and diversity of optics technicians nationwide
 - **Goal 3:** Establish opportunities for student and faculty engagement with the optics industry

Apprenticeship Committee

- Seeking to hire:
 - 2 fulltime faculty
 - Program Coordinator (more on next slide)
 - Community Liaison,
 - National Work-Based Learning Coordinator
 - Administrative Assistant
 - Adjuncts

Job Opening in support of Training Grant

A fulltime **National Work-Based Learning Coordinator** will:

- identify potential apprentice company sponsors and intermediaries,
- oversee creation and dissemination of apprenticeship marketing materials, and
- guide companies toward establishing apprenticeships and dual enrollment programs nationwide.

Interested? Know someone who might be?

Job Openings

Please contact Alexis Vogt or Mike Mandina if you are interested or can recommend someone to fill one of these roles

- Alexis Vogt: avogt4@monroecc.edu
- Mike Mandina: mmandina@optimaxsi.com

Export Controls Briefing



CHANGES & TRENDS IN TRADE COMPLIANCE

For
American Precision Optics Manufacturers Association

October 16, 2019
Beverly Demma



Disclaimer

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Topics

- INCOTERMS 2020
- Defense Export Control and Compliance System (DECCS)
- Tariffs
- Sanctions
- Critical Technologies
- CFIUS

INCOTERMS 2020

- **Released and changes become effective as of Jan 1, 2020**
- **FCA (Free Carrier Alongside)**
 - A multimodal term (i.e. vessel , air, rail, truck)
 - Preferred INCOTERM
 - Can now require the Buyer to obtain an ‘on-board billing of lading’ where containerized shipments are involved
 - Protection for the Seller who carries the risk against damage until shipment is loaded

INCOTERMS 2020

- **DPU (Delivered at Place Unloaded) replaces DAT (Delivered at Terminal)**
 - Change occurred because of user confusion between DAT and DAP (Delivered at Place)
 - Clarifies the ‘physical’ place of delivery may be anywhere at the discharge point
 - And, legally delivery takes place once the goods have been unloaded and placed at the buyer’s disposal

INCOTERMS 2020

- **Insurance**
 - Under INCOTERMS 2010 the Seller was required to obtain the minimum coverage for both CIF (Cost, Insurance, Freight) and CIP (Carriage and Insurance Paid TO)
 - CIF a maritime term and used for trading bulk cargoes and utilized the Institute Cargo Clause C for its level of coverage
 - CIP is a multimodal term, often used for manufactured goods and may require a higher level of cover
 - Seller now required to obtain coverage of at least 110% of the value of the as outlined in Clause A

INCOTERMS 2020

- **Security**
 - Defines responsibility of Seller and Buyer for security related requirements at the Port
- **Carriage**
 - Recognizes the investment of a party's own logistics supply chain
 - Provides a provision that the relevant party must “contract or arrange at its own coat the carriage of the goods”

Defense Export Control and Compliance System (DECCS)

- **ACES Certifications will expire July 31, 2020**
 - DTrade Super Users will receive email notification on how to enroll in DECCS
- **DECCS will be a single, online portal for the user**
 - Replaces DTrade, EFS & MARY
- **Roll out is expected in increments**
 - Now in place for Commodity Jurisdiction and Advisory Opinions
 - Registration potentially December 2019
 - ‘One License Fits All’ early 2020

Tariffs

- **Unlikely to go away**
 - Tariffs actions have coined a new phrase ‘economic protectionism’
 - Latest round of Chinese directed tariffs appear to be on hold for the time being
 - Be prepared for tariffs of 10% to 25% levied on European manufactured aircrafts, industrial products, and a variety of agricultural items
 - Could begin as soon as October 18th
 - If WTO agrees with the EU’s complaint against Boeing we may see ‘retaliatory tariffs’ on U.S. products

Sanctions

- Use of sanctions is increasing exponentially
 - Reflects the government's use of the Entity List to apply targeted sanctions to companies where there is a perceived threat to U.S. interests or national security
- Dept of the Treasury suggests implementation of a Sanctions Compliance Program

Sanctions

- Turkey
 - Sanctions effective immediately for Treasury and OFAC
 - As of the moment nothing has been issued by the Departments of State and Defense
 - Two Ministries – National Defense and Energy and Natural Resources;
 - Three Ministers – National Defense, Energy and Natural Resources and Interior

Sanctions

- China
 - Latest round added 28 Chinese entities to the BIS Entity List on October 9th
 - Effects exports, reexports and in-country transfers of all items subject to the EAR (yes, even EAR99)
 - Licensing required and there is a presumption of denial policy

Sanctions

- Russia
 - Continued review of 50% ownership rule
 - Determine your appetite for risk based on your product offerings
 - OFAC Directives 1, 2, & 3
 - State Dept – CAATSA Section 231(e)
- Venezuela
 - As of August 2019 129 sanctions on companies and individuals – includes PdVSA, government, central bank, gold industry and others



ITAR and EAR Compliance Specialists

Critical Technologies

- Nothing definitive to state what will be considered 'emerging and foundational technologies'
- Determination will be made via the Committee for Foreign Investments in the United States (CFIUS) and the Dept. of Commerce's Emerging Technology Technical Advisory Committee
- Some areas of consideration:
 - The development of emerging and foundational technologies in foreign countries;
 - The effect export controls may have on the development of such technologies in the United States; and
 - The effectiveness of export controls on limiting the proliferation of emerging and foundational technologies in foreign countries.



ITAR and EAR Compliance Specialists

Committee for Foreign Investment in the United States (CFIUS)

- September 17th Dept of Treasury published proposed regulations to implement provisions of the Foreign Investment Risk Review Modernization Act (FIRRMA)
 - Public comments must be submitted by Oct 17th; then final rules will be completed and implemented no later than Feb 13, 2020.
 - If implemented the Proposed Rules will provide CFIUS with increased jurisdiction to review and approve certain transactions with foreign investments in the U.S.
 - Possible creation of a ‘white list’ of countries that are ‘excepted foreign states’

Committee for Foreign Investment in the United States (CFIUS)

- Defines Critical Infrastructure – telecommunications/information services, utilities, energy, transportation (airports/ports)
 - Note: not every business in industries related to ‘critical infrastructure’ will be considered covered
- Sensitive Personal Data –related to those U.S. businesses that maintain or collect sensitive personal data of U.S. citizens
 - Such as financial data, consumer reporting agency data, health-related data, data used to issue government identification, etc.

Questions?



ISO 10110 - Update

- **Committee Meeting**

- Thursday 10/16
- 8:30 – 9:30 AM
- Highland Room C
- All members welcome

- **Meeting Focus**

- Challenges members face adopting the standards
- Are changes needed with current versions
- Resources members would like to have available

ISO 10110 Adoption Update

- Savvy Optics: Dave Aikens



2020 EEO Statement



Review: Technical Workshop 2018

Laser Tech Workshop
October 18 & 19, 2018



VINEYARD & WINERY
LIVERMORE, CA



- October 18 & 19, 2018
 - Garre Winery - Livermore, CA
 - LLNL Tour
-
- LLNL
 - Savvy Optics
 - Universal Photonics
 - OptiPro
 - Schneider Optical
 - SPICA
 - Optimax
 - Jayco Cleaning
 - Optotech
 - Eminess
 - QED
 - Ray Williamson Consulting



Technical Workshop

Laser Tech Workshop
October 18 & 19, 2018



VINEYARD & WINERY
LIVERMORE, CA



• Presentations:

- Materials Science of Optical Fabrication
- Novel Optics Polishing Using MRF
- Nano Scratching of Optical Materials to Determine Polishing Removal Function
- Predictive Models for Grinding and Polishing of Various Optical Materials
- ISO 10110 Standards, Optics, Quality and Profits
- Achieving and Superseding Laser Surface Requirements
- Ultrasonic Fabrication Methods and Applications
- Machining of Freeform Optics for Infrared Applications
- Laser Damage Testing and New Laser Damage Standards
- Ultrasonic Cleaning of Optical Surfaces
- Work Manufacturing Concepts for Large Cylinder Lenses
- Three-dimensional Configurable Optic Material for Precision CNC Optical Polishing
- Latest Advancements in MRF and SSI Technologies
- Additive Manufacturing of Glass Optics

Technical Workshop Discussion

Tech Workshop



APOMA is proud to present the Colorado Tech Workshop in Boulder, CO. Sessions will focus on problem solving techniques and training for all areas of optical fabrication.

Participants are also invited to tour Ball Aerospace's extensive manufacturing facility in Broomfield, CO as well as visit Front Range Community College's new Center for Integrated Manufacturing (CIM).

For more details visit APOMA.org.

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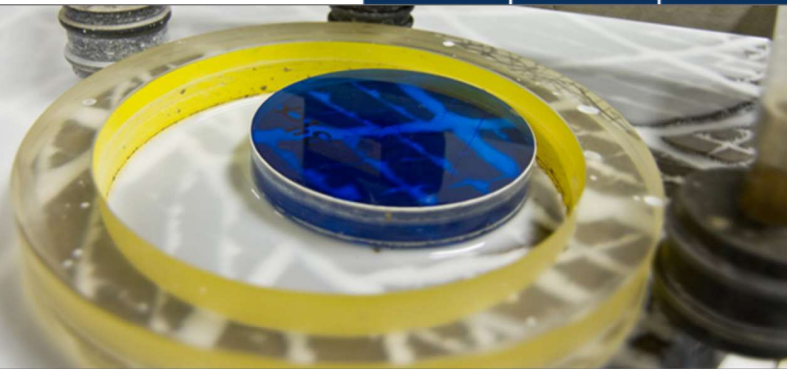
Old Website

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WHO WE ARE

The American Precision Optics Manufacturers Association (APOMA) is committed to promoting and advancing opportunities for the precision optics industry.

APOMA is the working group of the top U.S. optics manufacturers. Our members are front line and operations managers who turn to their peers in APOMA for best practices and technical guidance.

Visit the [member directory](#) to find an optical fabricator.

[Become an APOMA member](#)

[Join us at industry events](#)

MEMBER BENEFITS

MEMBER SPOTLIGHT

Founded in 1966, [Coherent, Inc.](#) is one of the world's leading providers of lasers and laser-based technology for scientific, commercial and industrial customers. Our Tinsley Custom Optics facility is a supplier of custom optical components and assemblies for diverse applications such as silicon annealing, directed energy, and astronomy. We provide components and subsystems for aspheric lenses, and mirror-based systems. The technology for creating these high-performance optical surfaces is based on a sophisticated, computer-driven manufacturing, testing and measurement technique called "Computer-Controlled Optical Surfacing" (CCOS). By pushing optical fabrication and polishing performance to higher levels, we enable customer success in exacting

OPTIFAB 2019 APOMA GENERAL MEETING:

**WHEN: WEDNESDAY, OCTOBER 16, 2019
FROM 8:30-9:30AM**

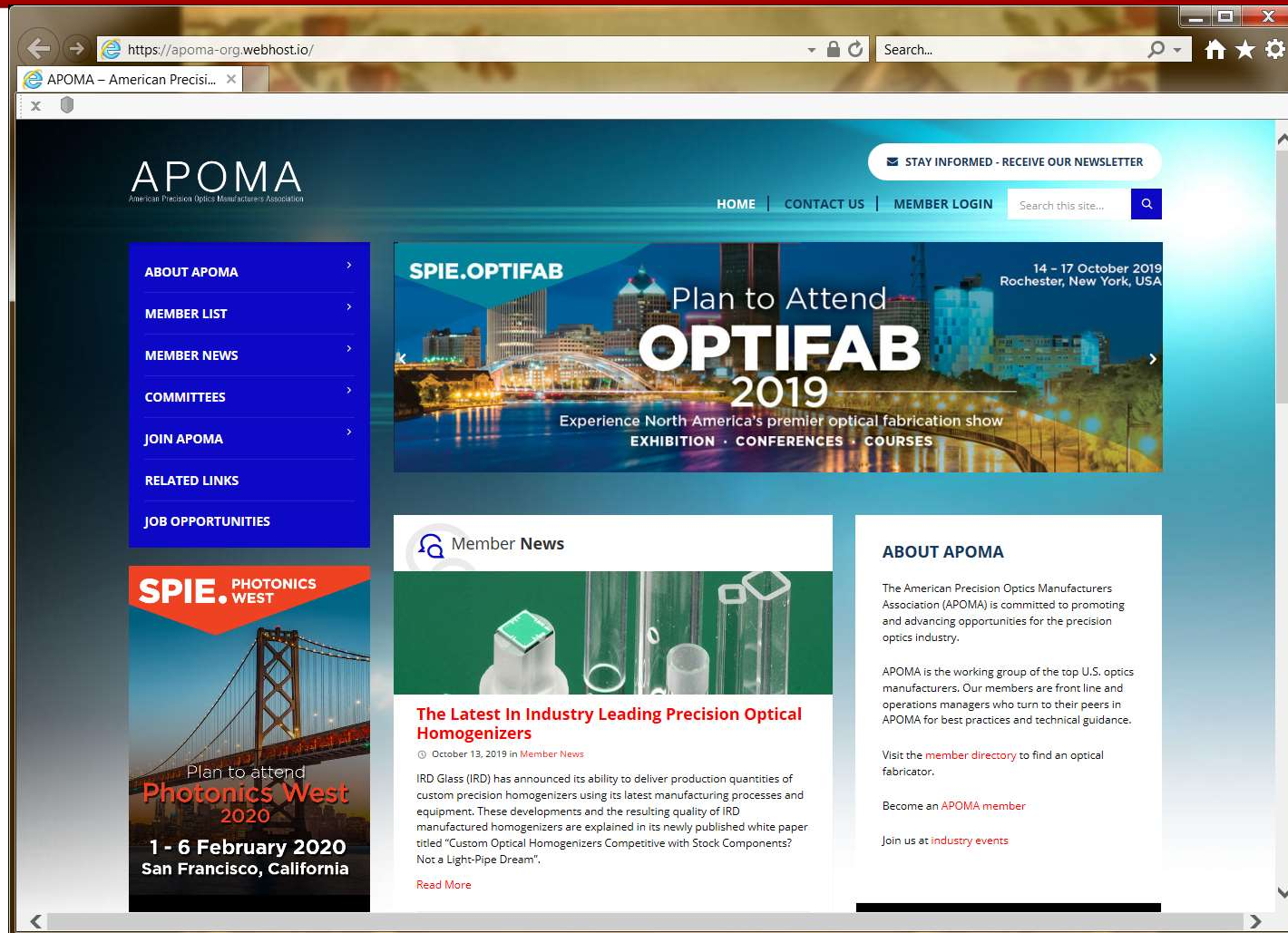
**WHERE: ROCHESTER RIVERSIDE CONVENTION
CENTER, MEETING ROOM: HIGHLAND E/F -
ROCHESTER, NY**

**IMPORTANT INDUSTRY UPDATES WILL BE
PROVIDED ON:**

- Precision Optics Manufacturing Technician Apprenticeship Efforts;
- APOMA 2020 Tech Workshop

APOMA
American Precision Optics Manufacturers Association

New Website



APOMA Benefits

- OPTIFAB (North America's largest Optical Fabrication Exhibition) member discounts
- Exclusive Technical Workshops
- APOMA website that directs business to you
- APOMA e-Newsletter
- Developing a national Precision Optics Manufacturing Technician Apprenticeship
- Courses to generate awareness and adoption of ISO 10110 by the US optics industry
- Updates and advocacy specific to optics manufacturers for EAR and ITAR regulations
- Access to technical papers & conference proceedings
- Networking and learning opportunities from other members



