North America (N.A.) TC Chapters of the Facilities and Gases Global Technical Committees

Liaison Report

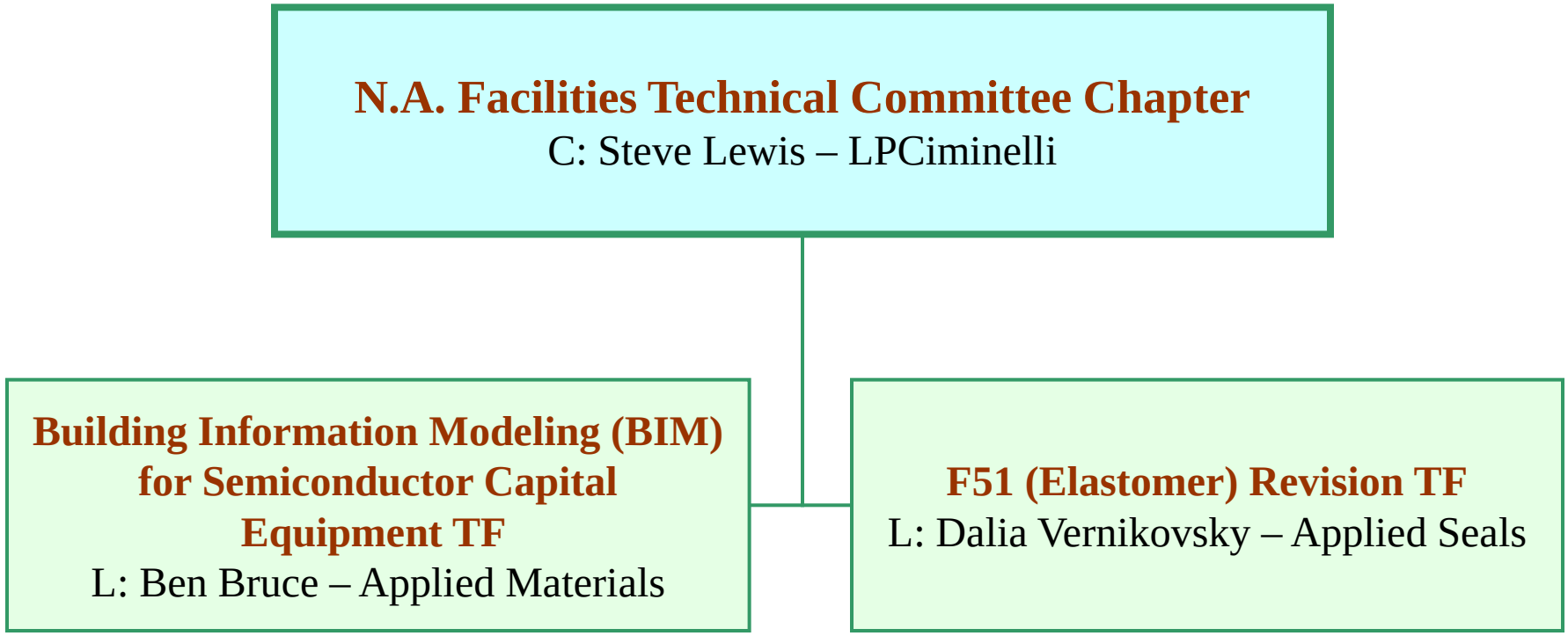
March 2016 v1

N.A. TC Chapter of the Facilities Global Technical Committee

Co-chair

Steve Lewis – LPCiminelli

N.A. Facilities Organization Chart



Meeting Information

- Last meeting
  - November 2 and November 3, 2015 at N.A. Standards Fall 2015 Meetings
    - SEMI Headquarters in San Jose, CA
- Next meeting
  - April 4 & 5, 2016 at N.A. Standards Spring 2016 Meetings
    - SEMI Headquarters in San Jose, CA

SEMI F51(Elastometric Sealing) Revision TF

- Document R5080B

  Ratification Ballot *Revision of SEMI F51-0200, Guide for Elastomeric Sealing Technology*

  – Published as F51-1115

  – The TF will follow up with feedback received for Document R5080B

Building Information Modeling (BIM) for Semiconductor Capital Equipment TF [1/2]

- A 3-D model will work with multiple different software applications and needs to reflect true dimensions of the semiconductor fabrication tool with its location and interface point.
- Drafting Doc. 5155, *New standard: Guide for Building Information Modeling (BIM) for Semiconductor Capital Equipment*
- **No TF report received, but TC Chapter approved that this activity is continuing.**
  - Prior minutes posted on: https://sites.google.com/a/semi.org/bim-tf/

Building Information Modeling (BIM) for Semiconductor Capital Equipment TF [2/2]

- The TF is assisting the PI&C committee to update SEMI E72, *Specification and Guide for 300 mm Equipment Footprint, Height, and Weight*
  - SEMI E72 is long overdue for 5-year review
    - Future plans and activities to update SEMI E72:
      - » Implementing Building Information Modeling (BIM) for equipment modeling and floor plans
      - » Future joint TF between the NA PIC TC Chapter and NA Facilities TC Chapter – Doc. 5817 is being revised by NA PIC TF
      - » Address issues such as variations in fab layout, factory, ceiling height, moving weight, and ergonomics for the equipment
      - » Standardization of definitions, concepts, and interfaces with input from suppliers, vendors and end users
      - » Revise SEMI E6 (Semiconductor Equipment Installation) and SEMI E52 (Facilities Services) at the same time

N.A. TC Chapter of the Gases Global Technical Committee

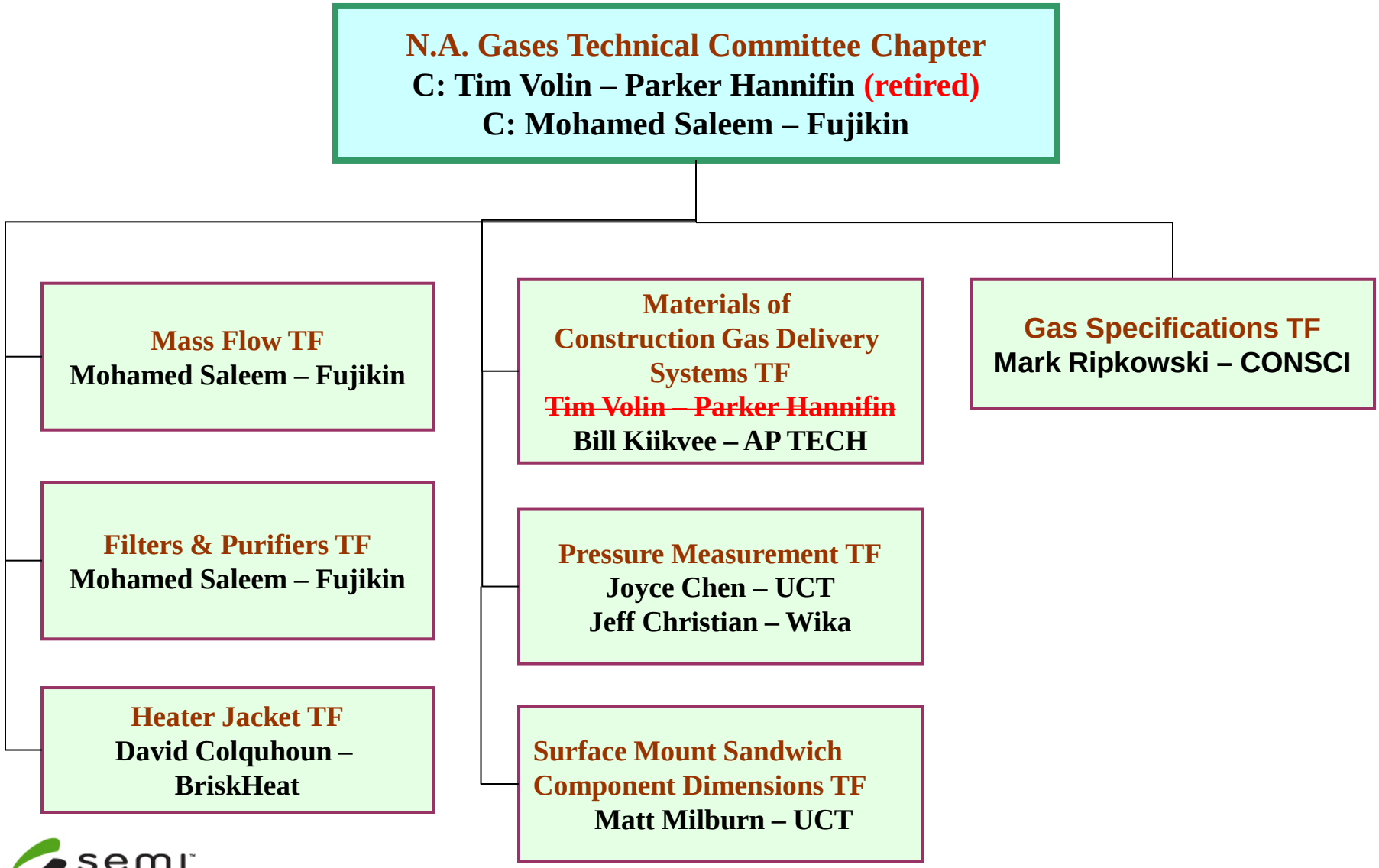
Cochairs

Tim Volin – Parker Hannifin

(Retired)

Mohamed Saleem – Fujikin

N.A. Gases Organization Chart



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Ballot Review Summary

Document #	Document Title	TC Chapter Action
5876	New Standard - Test Method for Determining the Critical Pitting Temperature of Stainless Steel Surfaces Used In Corrosive Gas Systems by Use of a Ferric Chloride Solution	**Passed** TC Chapter
5816A	Line item Revision to SEMI F30-0710 - Start-Up and Verification of Purifier Performance Testing for Trace Gas Impurities and Particles at an Installation Site with title change to Test Method for the Start-Up and Verification of Purifier Performance Testing for Trace Gas Impurities and Particles at an Installation Site	**Passed** TC Chapter **Update on December 10 –** Failed A&R review due to procedural violation

New Activities

- New SNARFs:
  - Doc. 5964, Line item revision to SEMI E56-0314, Test Method For Determining Accuracy, Linearity, Repeatability, Short-Term Reproducibility, Hysteresis, And Dead Band Of Thermal Mass Flow Controllers
  - Doc. 5963, Line Item Revision To SEMI F62-0701 (Reapproved 1111) Test Method For Determining Mass Flow Controller Performance Characteristics From Ambient And Gas Temperature Effects

Upcoming Ballots

Document #	Document Title	When
5964	Line item revision to SEMI E56-0314, Test Method For Determining Accuracy, Linearity, Repeatability, Short-Term Reproducibility, Hysteresis, And Dead Band Of Thermal Mass Flow Controllers	Cycle 9, 2015 or Cycle 1, 2016
5963	Line Item Revision To SEMI F62-0701 (Reapproved 1111) Test Method For Determining Mass Flow Controller Performance Characteristics From Ambient And Gas Temperature Effects	Cycle 2, 2016
3440B	New Standard: Test Method for Pressure Measurement Devices	Cycle 2, 2016

Gases Task Force Reports [1/5]

- Heater Jacket TF
  - No report given or received yet.
  - Currently working on a Materials and Recommendations document.
    - Requesting support from the committee to draft SNARF.
- Mass Flow Controller (MFC) TF
  - Drafting two ballots:
    - Doc. 5964, Line item revision to SEMI E56-0314, *Test Method For Determining Accuracy, Linearity, Repeatability, Short-Term Reproducibility, Hysteresis, And Dead Band Of Thermal Mass Flow Controllers*
    - Doc. 5963, Line Item Revision To SEMI F62-0701 (Reapproved 1111) *Test Method For Determining Mass Flow Controller Performance Characteristics From Ambient And Gas Temperature Effects*

Gases Task Force Reports [2/5]

- Pressure Measurement TF
  - Update for Document 3440B, *New Standard: Test Method For Pressure Transducers In Gas Delivery Systems*
    - The TF discussed the following for the Document:
      - Continue with the “test method” Standard (SEMI Draft 3440B) through the incorporation of IEC 61298-2:2008
      - Create a SEMI “stand-alone” Document
      - Define transducer and/or instrumentation selection based on its point in the application
- Surface Mount Sandwich Component Dimensions TF
  - Document 5595, *New Standard: Guide for the Development of Dimensional Standards for “Sandwich” Surface Mount Components,* published as SEMI C88-0815
    - TF is now in dormant stage.

Gases Task Force Reports [3/5]

- Filter and Purifiers TF
  - Doc. 5667A (*New Standard: Test Method for Determination of Moisture Dry-Down Characteristics of Gas Delivery Components*) published as C91-1115
  - Doc. 5244B, Revision to SEMI F21, *Classification of Airborne Molecular Contaminant Levels in Clean Environments*
    - Entegris still working on updating the Document. Pall offered to help. The TF Leader will send the Draft Document to Pall and together attempt to modify it for balloting.
      - There is no further activity and the TF will follow up with Pall

Gases Task Force Reports [4/5]

- Materials of Construction of Gas Delivery Systems TF
  - The TF reviewed Draft Document 5876 and recommended it for balloting.
    - 5876: *New Standard: Test Method for Determining the Critical Pitting Temperature of Stainless Steel Surfaces Used in Corrosive Gas Systems by Use of a Ferric Chloride Solution*
    - Approved by ISC A&R, being processed by SEMI Publication
  - The TF needs volunteers to preform reviews for the following Documents:
    - SEMI F6, *Guide for Secondary Containment of Hazardous Gas Piping Systems*
    - SEMI F13, *Guide for Gas Source Control Equipment*
    - SEMI F14, *Guide for the Design of Gas Source Equipment Enclosures*

Gases Task Force Reports [5/5]

- Gas Specifications TF
  - The TF reviewed the ratification ballot results of Doc. R5671C and R5673C for following up.
    - Doc. R5671C Revision of SEMI C3.12-1109, *Specification for Ammonia (NH3) in Cylinders, 99.998% Quality*
    - Doc. R5673C Revision to SEMI C3.34-1109, *Specification for Disilane (Si2H6) in Cylinders, 97% Quality*
  - Editorial feedbacks were incorporated via Publication Improvement Form (PIP), and being processed by SEMI Publication

Thank you!

For more information or to participate in any N.A. Facilities & Gases activities, please contact:

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