

# Business Technologies/Digital Shipbuilding Committee

June 30, 2020  
Virtual Meeting



# Welcome & Important Information

- BT Presentations for Today's Meeting
  - Are Located on the NSRP Meeting Event Page here
  - <https://www.nsrp.org/event/business-technologies-panel-virtual-meeting-june/>
- BT Panel Meeting Attendance - Membership Recording
  - Due to limited time, Group Introductions of membership attendees will be **SKIPPED**. However, a list of meeting Attendees will be provided by ATI to those in attendance.
  - All BT Meeting Attendees will be recorded through their login into the GoToWebinar event. This list will be provided by ATI to the BT Leadership account for Meeting attendance for future Panel voting.
  - For those on the phone please email Patrick Roberts [patrick.roberts@ssi-corporate.com](mailto:patrick.roberts@ssi-corporate.com) & Caroline Mueller [caroline.mueller@ati.org](mailto:caroline.mueller@ati.org)
- GoToWebinar - Muting
  - Muting & Unmuting will be initially controlled by the Meeting Organizers (nothing is wrong with your audio)
    - Muting During Presentations – To Eliminate any Background Noise that might not be intended
    - Muting & Unmuting can also be controlled by both the Organizers & each Panel Participant through the GoToWebinar App.
  - Muting is encouraged by all participants during the webinar
    - Want to control as much cross talk as possible.
- GoToWebinar - Questions
  - Questions can be sent to the Organizers through the GoToWebinar Chat for recording
  - Questions will be gathered the BT Leadership and addressed at the end of each Agenda segment / Presentation
  - Questions will also be answered directly during the GoToWebinar through Chat, as much as possible.
- Warning No Breaks in BT Panel Meeting Agenda
  - 2.5 hour meeting, on a tight schedule.

# Agenda

Time	Presentation	Speaker
<b>10:00</b>	<b>Convene Meeting</b>	
10:00	Introductions and Panel Business	Virgel Smith, Ingalls Shipbuilding Patrick Roberts, SSI USA Jamie Breakfield, Ingalls Shipbuilding
10:15	NSRP Brief & Update	Nick Laney, ATI
10:30	Laser Scan to CAD Analysis	Cody Griffith, Newport News Shipbuilding
11:00	Minimum Standardized Content to Enable a Navy Digital Enterprise	Mark Debbink, Newport News Shipbuilding
11:30	Model Based Product Support	Paul Koester, NAVSEA SEA 06L
12:00	Panel Project Solicitation Timeline	BT Panel Leadership
12:15	Panel Officer Voting Discussion	BT Panel Leadership
<b>12:30</b>	<b>Adjourn</b>	

# Business Technologies Panel Structure



Panel Chair: Virgel Smith

Panel Vice-Chair: Patrick Roberts

Committee Chair: Jamie Breakfield

This Panel targets the “Business Processes and Information Technologies (BPIT) Major Initiative” called out in the NSRP Strategic Investment Plan (SIP 7.3) & Technology Investment Plan, rewritten in January 2020 for FY20.

# Business Processes and Information Technologies – SIP 7.3.1 (Major Initiative)

- Definition
  - The Business Processes and Information Technologies Major Initiative focuses on emerging technology research and education, and the blending of process and technology to manage information and develop advanced solutions that support the product lifecycle from concept to disposal. This Major Initiative is executed through the Business Technologies Panel which includes the Digital Shipbuilding Committee.

<https://www.nsrp.org/wp-content/uploads/2020/02/NSRP-Technology-Investment-Plan-FY20-Approved.pdf>

# BPIT SIP 7.3.2 Sub Initiatives

7.3.2.1 - Digital Shipbuilding

7.3.2.2 - Cybersecurity Compliance, Solutions, Education  
& Awareness

7.3.2.3 - Information Management

7.3.2.4 - Emerging Technologies & Business Processes

# BPIT SIP Sub Initiative – 7.3.2.1

## 7.3.2.1 Digital Shipbuilding

1. Integrate Enterprise Processes and Tools to support digital shipbuilding including Internal and External PLM, Manufacturing Execution Systems (MES), Data Exchange, ERP, Modeling and Simulation
2. Enable the Digital Thread by integrating Digital Design tools, analysis, manufacturing (CAx) and sustainment technologies into the enterprise environment
3. Develop a fully integrated and collaborative Model-Based Enterprise (MBE)
4. Enable the Digital Twin across the External and Internal Enterprise
5. Leverage Cloud, Mobile, IIOT and Data Capture Technologies in the shipbuilding arena

# BPIT SIP Sub Initiative – 7.3.2.2

## **7.3.2.2 Cybersecurity Compliance, Solutions, Education & Awareness**

1. Increase awareness of Cybersecurity best practices for Enterprise Processes and Tools, Model-Based Enterprise (MBE), Internal/External PLM, data access, and data exchange
2. Introduce compliance solutions for Enterprise Processes and Tools, Model-Based Enterprise (MBE), Internal/External PLM, data access, and data exchange
3. Investigate solutions for protecting data systems including IIOT, Scanning Technologies, Mobile Technologies, Cloud Technologies and Autonomous Systems



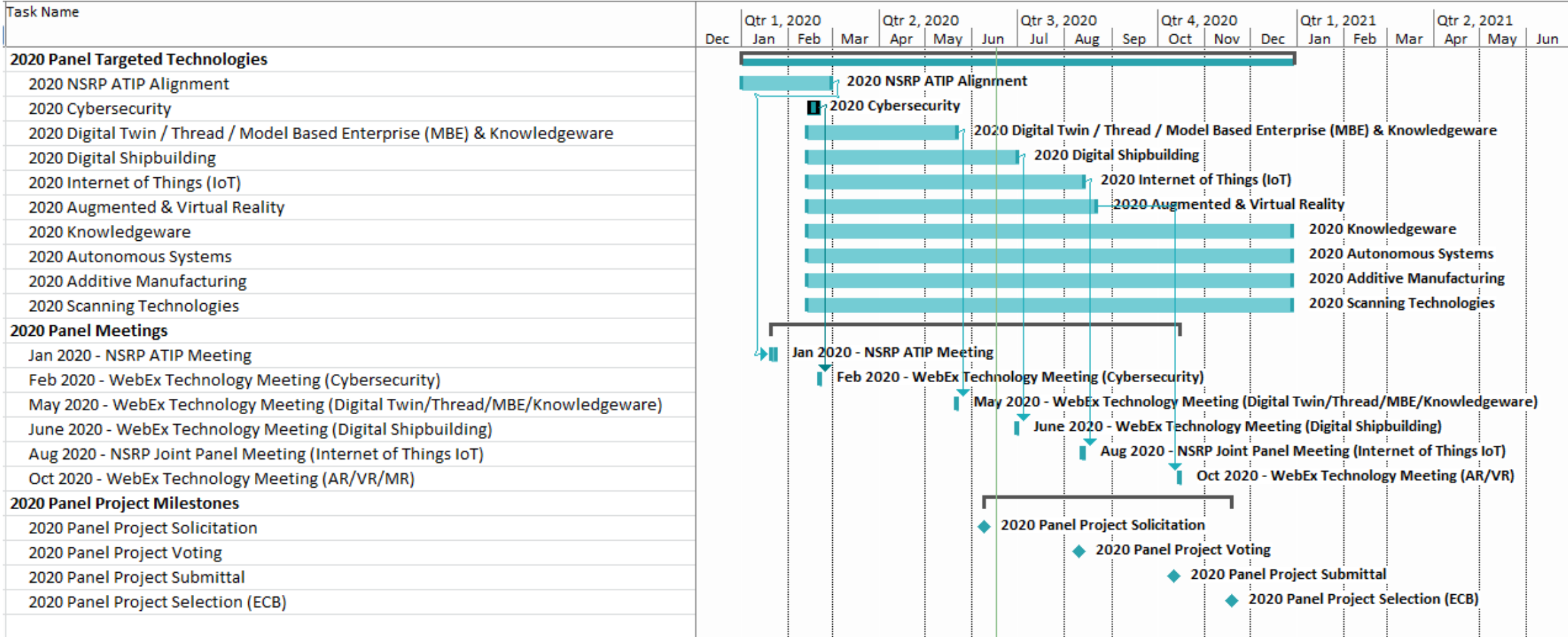
# BPIT SIP Sub Initiative – 7.3.2.4

## 7.3.2.4 Emerging Technologies & Business Processes

1. Explore the evolution and feasibility of these emerging technologies to improve shipyard efficiency, listed in order of priority:

1. Additive Manufacturing
2. Cloud Technologies
3. Autonomous Systems
4. Industrial Internet of Things (IIOT)
5. Mobile Technologies
6. Knowledgeware
7. Artificial Intelligence and machine learning
8. AR/VR/MR
9. Scanning Technologies
10. Robotics

# 2020 BT Panel Roadmap - Timeline



# Current Panel Activities

- Active Projects
  - (2019-483-002) Structural Interface for Automated Compliance Checking
  - (2020-355-001) Simulation Workflow Development for Additive Manufacturing  
*Joint Panel Project with SDMT*
- NSRP Panel Project Solicitation for 2021
  - Solicitation released 6/11/2020

# Future Panel Activities

- Virtual Panel Meetings
  - Next meeting in July (tentatively July 30<sup>th</sup>) for Panel Project idea presentation
- Collaboration with other NSRP panels and other organizations
  - Planning for future In-person meetings
- Election & Voting for Panel Officers
  - Coming soon 2020

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## NSRP Update Debrief

June 30, 2020

Nick Laney, ATI



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## Laser Scan to CAD Analysis

June 30, 2020

Cody Griffith, Newport News Shipbuilding





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# Minimum Standardized Content to Enable a Navy Digital Enterprise

June 30, 2020

Mark Debbink, Newport News Shipbuilding



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## Model Based Product Support

June 30, 2020

Paul Koester, NAVSEA SEA 06L



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# BT Whitepaper Schedule

- 06/11/2020 – Panel Project Solicitation Announced
- 07/30/2020 – Panel Membership Present White Paper Ideas
- **08/12/2020 – White Papers Due to Panel Chair**
- 08/24/2020 – White Paper Voting Begins (Dependent on Panel Chair review)
- 09/02/2020 – White Paper Voting Ends
- **09/09/2020 – White Paper Submit to ATI**

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# BT Panel Leadership Election

## Requirements for nominees :

1. Be a qualified individual, from a U.S. private sector shipyard.
2. Be a member of the panel, in good standing.
3. Have sufficient time available to support panel activities (assume 10-15% of regular working hours, i.e., 200-300 hrs./yr.).
4. Have letter of support from their management.
5. Must be submitted with a Biography.
6. Positions are elected for a 2 yr. term.

Position	Requirement
Officers (Chair, Vice Chair, Committee Chair)	No more than 2 officers shall be employed directly by the same shipyard or agency.
Panel Chair	Must be from an ECB member shipyard.
Panel Vice Chair/Digital Shipbuilding Committee Chair	Preferred that the Panel Vice-Chair and Committee Chair be an employee of a U.S. private sector shipyard, but if that is not viable a qualified non-shipyard person may be elected to these positions.



# BT Panel Voting Guidelines

- 1 vote per ECB represented / member shipyard
  - Regardless of attendance at meetings
- 1 vote for per each organization member
  - Panel membership requirements must be met
    - Pat Roberts maintains current list ([patrick.roberts@ssi-corporate.com](mailto:patrick.roberts@ssi-corporate.com))
    - Company representatives (collectively) must be in attendance of 2 BT meetings within the previous 2 years and one meeting within the previous year to vote.
- 1 vote for Panel Leadership member
- BT Ballot realigned with new voting rules

# Panel Leadership Election Timeline

All Leadership Positions are up for Re-election

## Panel Chair & Vice-Chair Timeline

- 06/30/2020 – Call for Nominations for all positions
- 07/14/2020 – End date for Nomination submittal for Chair/Vice Chair
- 07/14/2020 – Voting Begins for Chair/Vice Chair
- 07/21/2020 – Voting Ends for Chair/Vice Chair
- Send nominations for leadership to [caroline.mueller@ati.org](mailto:caroline.mueller@ati.org)

# Panel Leadership Election Timeline

## Digital Shipbuilding Committee Chair Timeline

- 07/31/2020 – End date for Nomination submittal
- 07/31/2020 – Voting Begins
- 08/10/2020 – Voting Ends
- Send nominations for leadership to [caroline.mueller@ati.org](mailto:caroline.mueller@ati.org)
- Nominations must include Bio for individual and letter of support from company management

# Closing Remarks



# Event Reminders

- Upcoming Meeting & Events

- Jul 28 – 30, 2020 – MegaRust 2020; **Now Virtual**
- Aug 4 – 6, 2020 – ASNE Technology, Systems, & Ships Symposium; Arlington, VA
- Sept 14 – 17, 2020 – Fleet Maintenance & Modernization Symposium, Virginia Beach, VA
- Sept 22 – 23, 2020 - NSRP RA Selection / ECB Meeting; Summerville, SC
- Sept 29 – Oct 2, 2020 – SNAME Maritime Convention; **Now Virtual**
- Nov 17 – 18, 2020 – NSRP Panel Project Selection / ECB Meeting; Washington DC
- Nov 18 – 20, 2020 – FABTECH 2020, Las Vegas, NV
- Nov 19, 2020 – NSRP Day @ NAVSEA; Washington Navy Yard, DC
- Dec 15 – 17, 2020 – International Workboat Show 2020; New Orleans, LA

Thank you for attending!

Meeting adjourned

