AGENDA

IALR Board of Trustees

MANUFACTURING ADVANCEMENT COMMITTEE

Thursday, January 29, 2026 - 10:45 am - Conference Room 203

I.	**Convening of Meeting** A. Welcome B. Call to Order and Confirmation of Quorum C. Call for Changes to Agenda	Mr. Ben Davenport
II.	**Approval of Minutes** A. October 30, 2025	Mr. Ben Davenport
III.	**Manufacturing Advancement Update**	Mr. Jason Wells
IV.	**Open Discussion of Concerns, Issues, and Observations**	Group
V.	**Adjournment**	Mr. Ben Davenport

Reference material included: "Manufacturing Advancement Update"

Future Committee Meetings

April 30, 2026

Future Plenary Meetings

February 12, 2026
May 14, 2026

Advanced Manufacturing Committee Members

Mr. Ben Davenport, *Chair*
Mr. David Bennett
Mr. Don Gibson, *Ex Officio*
Dr. Greg Hodges
Mr. Mark Holland
Dr. Cornelius Johnson
Ms. Connie Nyholm
Ms. Chris Pennington

IALR Staff

Mr. Telly Tucker, President
Dr. John Hughes, EVP of Operations
Ms. Pam Patterson, BOT Secretary
Mr. Jason Wells, EVP, Manufacturing Advancement

IALR BOARD OF TRUSTEES (BOT)

MANUFACTURING ADVANCEMENT COMMITTEE

Minutes – October 30, 2025 - 10:45 a.m. – Conference Room 203

Members Present	**IALR Staff Present**
Mr. Ben Davenport, *Chair* Mr. David Bennett Mr. Don Gibson, *Ex Officio* Mr. Mark Holland Dr. Cornelius Johnson Ms. Connie Nyholm, *arrived at 11:31 a.m.* Ms. Chris Pennington, *via Zoom*	Mr. Telly Tucker, President Ms. Pam Patterson, BOT Secretary Mr. Jason Wells, EVP, Manufacturing Advancement **IALR Staff Unable to Attend** Dr. John Hughes, Executive Vice President, Operations **Guests** None
Members unable to attend Dr. Greg Hodges	

Call to Order / Confirmation of Quorum / Changes to the Agenda

Mr. Ben Davenport, Chair, called the meeting to order at 10:45 a.m. on Thursday, October 30, 2025. A quorum was present. There were no changes to the agenda.

Attendance of Committee Members by Electronic Communication Means

Mr. Davenport announced that Ms. Chris Pennington would attend the meeting electronically due to the distance from her primary residence. The committee voted to allow Ms. Pennington to participate in the meeting via Zoom.

- **Motion**: Mr. Mark Holland made a motion to allow Ms. Pennington to participate in the meeting via Zoom. Mr. Don Gibson seconded the motion. The motion passed unanimously.

Approval of Minutes

- **Motion** – Mr. David Bennett made a motion to approve the Minutes from the August 7, 2025 meeting. Mr. Don Merricks seconded the motion. The motion was approved unanimously.

Manufacturing Advancement Update

Mr. Jason Wells presented the narrative report (Exhibit A) and the departmental updates (Exhibit B). The reports summarized the updates for Manufacturing Advancement, including organizational priorities, industry engagement efforts, program development, and operational strategies. The discussion focused on strengthening capabilities, improving communication, and expanding partnerships to support growth and competitiveness.

The report emphasized the need to improve communication protocols and ensure consistent documentation of conversations and relationships to maintain continuity and efficiency. Efforts to improve communication protocols and track interactions in Salesforce were ongoing. Strategic hiring and onboarding processes were identified as critical for building a mature leadership team capable of supporting the Institute's expanding initiatives.

The department experienced an increase in site visits and hosting of companies, which fostered collaboration and created mutual opportunities. Plans included attending additional conferences, with the first booth secured at a defense additive manufacturing show in Florida. A potential partnership with Virginia Tech was being explored to leverage research expertise and student involvement in project work. Recent branding efforts included placing the logo on a NASCAR *Build Submarines* car (RFK Racing) at the Martinsville race, reinforcing IALR's commitment to building brand equity.

Three critical roles were identified as essential for supporting industry initiatives and maintaining competitive business practices.

- a Compliance Officer to ensure CMMC compliance for government contracts by October 2026
- a Grants and Contracts Specialist to manage proposals and contract development
- a Cost Accounting Expert to oversee financial modeling and forecasting

The team was working to identify and budget for a sixth ATDM training track on electrical systems. Curriculum updates will include fiber optic training to align with modern shipbuilding requirements. In addition, a potential welding program for the United States Coast Guard (USCG) was being pursued. Housing expansion was under consideration to support growing enrollment. The focus remained on delivering workforce training and technology deployment capabilities, differentiating from research and development efforts. The initiatives will strengthen IALR's industry presence, capabilities, and partnerships.

Mr. Wells mentioned that the department was currently engaged in approximately 40 projects, including internal training initiatives. He highlighted the use of Power BI (PBI) for creating dashboards to track project stages and resource allocation. Efforts continued to secure private sector funding to diversify revenue streams and provide stable financial support.

Open Discussion of Concerns, Issues, and Observations

There was no further discussion.

Adjournment

Mr. Davenport adjourned the meeting at 12:05 p.m.

Minutes Recorded By:	Minutes Approved By:
_____	_____
Pam Patterson BOT Secretary	Mr. Ben Davenport, Chair Advanced Manufacturing Committee
_____	_____
Date	Date

Attachments Included as Official Part of Minutes

Exhibit A - Manufacturing Advancement Narrative Report, October 2025

Exhibit B – Departmental Update: Manufacturing Advancement, October 2025

Manufacturing Advancement Report
Jason Wells, Executive Vice President
Amanda Hylton, VP Strategic Initiatives
January 29, 2026

Personnel Updates:

- ATDM
    1. Ledon Watkins – ATDM Nondestructive Testing Instructor
    2. John Bray – ATDM Precision Manufacturing Technician-Metrology-3rd shift
    3. Laura Brown – ATDM Career Services Coordinator I
    4. Jonathan Grubb – ATDM Welding Technician-2nd Shift
    5. Kenneth Gee – ATDM Transportation Specialist
    6. Lori Kelly – ATDM Nondestructive Testing Instructor
    7. Tia Yancey – Promotion, ATDM Manager, Student Success and Compliance
- CMA
    1. Richard Evans – CNC Machinist II – 1st shift
    2. Jacob Drewer – CMA Intern
- NASAM
    1. Braxton Todd – NASAM Additive Manufacturing Technician
- Open Positions
    1. Technical Specialist, CNC & Additive Manufacturing
    2. ATDM Precision Manufacturing Technician – CNC All shifts
    3. ATDM Precision Manufacturing Technician – CNC All shifts
    4. ATDM NDT Technician- 2nd shift
    5. CNC Machinist II – 1st Shift
    6. VP, ATDM
    7. ATDM Educational Compliance Coordinator
    8. CNC Machinist/Programmer-2nd shift

Accelerated Training in Defense Manufacturing

- Budget and Contracting
    - ATDM received the contract for the initial base period of two and half years with the two additional option years
        - Total budget for FY26 $35.5M
        - Currently training managers on budget management
        - support. Additional measures are being implemented to support oversight and guidance at the leadership level
        - Tom Loehr scheduled for a "Finance 101" w/ budget managers in February
- Recruitment

Return to Agenda

    - Students have come from 47 states plus Washington D.C., Puerto Rico, Australia, and Guam
- Training
    - Work to organize curriculum is underway with significant updates to the Canvas platform
- Industry Engagement
    - The number of participating companies is over 275
- Career Services
    - The team its largest career fair with over 40 companies participating this quarter
- Dedicated Training Facility
    - Construction remains on schedule for Phase Two of the building which will house the administration and support services for ATDM
    - The project is set for March 2nd move in date
    - Planning efforts are ongoing for managing the repair and erection of the USS Buffalo monument to be placed in front of the MTC by April/May
- Other Highlights/Items to Note
    - ATDM has graduated over 1,000 graduates
    - Salesforce integration continues with Cloud for Good representatives onsite in January
    - Efforts to determine the best path for accreditation are currently paused as MIB leadership determines the value. This is still being explored through Dr. Debra Holley, as a consultant to the team, internally as the process is lengthy and will require up to four years once a decision is made on the path forward

NASAM Additive Manufacturing Training

- As of January 28, 2026, we are four weeks into the second cohort of the Naval FY (Cohort 26-2; 9 students).
- Upcoming Cohort 26-3 has 12 students enrolled.
    - Class begins February 18, 2026.
    - Student check-in will take place Monday, February 16 and Tuesday, February 17.
- Salesforce communication and workflow integration efforts have begun.
- Multiple curriculum updates have been implemented after a series of meetings with NAVAIR's Integrated Technology Product Team and Dr. Antonia Paesano, Polymer Scientist working with NAVAIR on their AM integrations.
- Continuing work with the MA Marketing Team and NAVAIR Public Affairs on NASAM branding.

Center for Manufacturing Advancement

- The CMA has moved forward with plans to initiate a second shift and positions have been posted.

Return to Agenda

- A partnership agreement was finalized with Mitutoyo to share lab space and cost within the CMA to include promotion of contract services.
- Work continued this quarter on dedicated optimization efforts that will be housed in 149 Slayton.
- Leadership engaged with Tom Loehr on structured plan to support optimization that included a pro forma budget and equipment and funding considerations.
- The CMA is finalizing details on a partnership agreement with a top level machine tool builder that would see a very large financial commitment along with some joint project and training opportunities.

Additive Manufacturing Center of Excellence (AM COE)

- The team attended a future-state road mapping exercise for the AM COE in Mobile, Alabama and visited the Austal shipyard
- Additional protocols for tours were implemented to support productivity, which includes increased security and a decrease in frequency of tours.
- The Hermle machine is up and running
- IALR has received funding to support an intern from each cohort of ATDM graduates for CNC and will soon add funding to support the same in Metrology.

Specialized Training

- We continue to see strong requests around specialized or focused training, efforts are underway to explore how to facilitate these requests as an additional revenue stream.
    - The first of these is for NDT training partnered with the Naval Welding Institute

Integrated Machining Technology

- Plans are underway to develop additional training to refresh the training program
- Currently seeking grant opportunities to evolve the program to include AM capabilities and start a digital aspect of the training
- Working with DCC to strengthen collaborations and increase conversations to better grow this program and others
- Newest cohort began in August with 14 students

Additional Highlights

- The division attended numerous conferences and meetings in support of the mission
- The division continued to host and support record numbers of tours and visits during the quarter, including the following:
    - Makino

Return to Agenda

- The Manufacturing Advancement leadership team continues to refine metrics and reporting mechanisms to help strengthen operational awareness with an overarching goal of Operational Excellence in FY26
- The team is currently engaged in pursuing a collaboration and grant effort with Virginia Tech. We are seeking to mature a concept of a Virginia Tech Innovation Cell and work study program for engineering students here on campus to support white collar needs and other mission critical efforts for the MIB.
- The Manufacturing Advancement leadership teams goals for the next 6 months include:
    - Eliminate single-point dependency in Industry 4.0
    - Fully operational second shift in AM CoE
    - Shop scheduling system & KPI deployment for Center for Manufacturing Advancement
    - Fully approved and operational 149 plan for optimization
    - Get ATDM fully staffed and stable in MTC
    - Defined multi-year budget model for workforce training
    - Staff training and process hardening in project management
    - Define and activate strategy-aligned digital team
    - Secure $500K commitments for business development
    - Elevate financial literacy
    - Mature Tour 2.0
    - Establish sustainable operating rhythm with marketing
    - Metrics-based bonus and recognition program for entire department

Return to Agenda

Contributions to the Strategic Plan

- **Accelerated Training in Defense Manufacturing**
  - Center of Excellence for Education & Workforce Development – ATDM is the pilot for a national network of accelerated training programs aimed at reducing "time-to-talent" for the defense industrial base (DIB) and filling critical skills gaps in defense manufacturing. As a national-in and national-out training platform, it partners with recruiting sources and industries nationwide
  - Globally Competitive Ecosystem – ATDM provides a robust level of industry engagement that allows industry to send students for training and place students in employment. As with previous models, such as Integrated Machining Technology, it has been shown that industry is interested in locating near training facilities to recruit workers at velocity and scale, which ATDM will produce. These trained individuals will support a workforce pipeline that will make the region more globally competitive
  - Collaborative Team Success – ATDM relies on external partnerships with recruitment sources, job placement entities, industry and technology partners. The multiple subcontractors involved in making the training a success provide opportunities to collaborate with other internal divisions

- **Defense Manufacturing Community Support Program**
  - Virginia's Go-To Partner for Business and Economic Growth – DMCSP supports the Virginia Maritime Industrial Base Consortium (VMIBC) as a leading hub for developing skilled workers and the engineering workforce for the maritime industry in Virginia; supports local, regional, state, and national economic development through the designation as a Defense Manufacturing Community (DMC) and the collaborative partnerships created through the VMIBC; IALR serves as the convener of partners to execute the DMCSP grant, providing the ability of IALR to be the go-to partner for the Virginia Department of Veterans and Defense Affairs in developing and enhancing workforce development pipelines that support Virginia's business and economic growth plans

Return to Agenda

- Center of Excellence for Education & Workforce Development – DMCSP supports education & workforce development through the DMC ecosystem which provides a K-12 to university and beyond workforce training system. This includes career connections, high school, community college, university and adult learner options for training students to support the Virginia maritime industry. DMCSP creates a pipeline for manufacturing engineering technologists and provides continuous improvement into training programs that rely on industry needs. The mission of the VMIBC (the designated DMC community) is to increase manufacturing capacity, capability, resiliency, and diversity in the maritime industrial base by creating a cross-region K-12 to university training pipeline for skilled workers and manufacturing engineers
- Globally Competitive Ecosystem – DMCSP advances and connects businesses in the region through a strong collaborative network of industry, government and academia. DMCSP will increase the supply of skilled labor and manufacturing engineers that will help to close manufacturing skills gaps, address manpower shortages, build manufacturing capacity and capability, and modernize the workforce to enable the industrial base to fully support the Navy's sustainment and shipbuilding needs. This will position the Commonwealth to be globally competitive in attracting manufacturing industries that are aligned to the skills within the pipeline
- Collaborative Team Success – DMCSP strengthens collaborative, regional education partnerships (ODU, P&HCC, Virginia State University and K-12 school divisions in Southern Virginia and Hampton Roads) and supports internal collaboration through the integration and expansion of GO TEC into the Hampton Roads region through the DMCSP partnership

- **NASAM**
  - Center of Excellence for Education & Workforce Development – Through efforts connected with ATDM, the Naval Aviation School of Additive Manufacturing will support active-duty military with Additive Manufacturing (AM) training directly related to Navy needs. These connections will also support the US Navy's effort to modernize the workforce and prepare for increasing AM production

- **Center for Manufacturing Advancement**
  - Virginia's Go-To Partner for Business and Economic Growth – The CMA supports Virginia manufacturers in their pursuit of manufacturing optimization and innovation. The CMA offers technical expertise, lab space, equipment and a collaborative environment to help existing and new Virginia manufacturers increase productivity that has direct economic impact. The CMA serves as a centralized resource of emerging, production ready technologies to help drive the success of Virginia manufacturers. The US Navy AM Center of Excellence within the CMA is expected to support additional companies in their ability to

Return to Agenda

produce AM parts for Navy submarines, including companies in Virginia
    - Center of Excellence for Education & Workforce Development – Through efforts connected with ATDM, the CMA's AM COE will connect ATDM graduates with Additive Manufacturing (AM) jobs directly related to the Submarine Industrial Base (SIB). These connections will support the recruitment and placement efforts of ATDM. These connections will also support the US Navy and the SIB's effort to modernize the workforce and prepare for increasing AM production
    - Globally Competitive Ecosystem – The CMA will allow businesses in Virginia to be globally competitive through innovations in current and new manufacturing processes. The AM COE at CMA will also support a globally competitive ecosystem through development of innovative additive manufacturing strategies, technical data and processes
    - Collaborative Team Success - The CMA serves as the go-to hub for manufacturing advancement and innovation for Virginia businesses and beyond. The CMA will bring internal and external partners together to form a cohesive group of manufacturing experts, technical partners, business leaders and government officials. These partnerships and collaboration will drive the projects and programs at the CMA. The projects and programs will lead to positive return on investment for IALR and project partners. Revenue generated through CMA projects will help support the Manufacturing Advancement division as a whole and help provide the required resources to remain industry relevant and globally competitive

- **Specialized Training**
    - Virginia's Go-To Partner for Business and Economic Growth – As one of four HTEC training centers in the country, IALR serves as the Go-To teacher training facility for Virginia
    - Center of Excellence for Education & Workforce Development – The mission of HTEC is to provide a collaborative space in which we collectively develop, deliver, and disseminate the best educational methods and techniques for CNC education in the world. The goal is to drive the upskilling of manufacturing educators, and transform CNC classrooms into modern, high-tech advanced manufacturing labs that both encourage students to seek successful careers in CNC and related fields and ensure that these students are well-equipped when they enter the field. The goal of specialized training within the manufacturing advancement department is to be the Go-To training provider on CNC and related machine technologies, including the upcoming Industry 4.0 integrations within the CMA
    - Globally Competitive Ecosystem – As a partner for the HTEC network and Phillips Corporation, the training facility at IALR serves as a global benchmark as Haas expands into other countries and provides the potential to be a train-the-trainer provider for global Haas activity

- **Integrated Machining Technology**

Return to Agenda

- Virginia's Go-To Partner for Business and Economic Growth – IMT has supported extensive business and economic growth in the region by highlighting the ability of the region to train a workforce that can meet demands at multiple levels, from the work floor technician to front line management and beyond. The IMT program is the advanced level training and culmination of the workforce pipeline that begins in middle school. It has been identified as one of the reasons that multiple companies have located in the region and has been the catalyst for allowing IALR to support these companies through rapid launch space and concierge services
- Center of Excellence for Education & Workforce Development – The IMT program has been a national benchmark for advanced training in CNC machining for years and delegations from multiple states and countries have visited to learn more about how to execute similar programs. The continuous improvement and adoption of current technology allows this program to support the strategic goal of being a center for excellence for education & workforce development
- Globally Competitive Ecosystem – Technology in manufacturing is rapidly evolving. Providing relevant training in support of industry needs is critical as technology and processes continue to modernize. It is a key factor in providing a globally competitive ecosystem. IMT supports this goal by remaining at the forefront of technology and training and ensuring that students can enter the workforce and provide innovative solutions to workforce challenges

- **Additional Contributions to the Strategic Plan**
  - Excellence in Board Leadership - All projects strive for transparency with the Board by providing needs, successes and areas of support required that allow the board to serve as community champions, share successes and stories and support public and private funding support which promotes excellence in board leadership as the board carries out these strategic activities
  - Strategic Expansion of Applied Research and Culture of Learning - The Manufacturing Advancement division encapsulates a culture of learning in all projects. It fosters innovation and encourages continued efforts to remain current on the knowledge of existing and emerging

Return to Agenda

Manufacturing Advancement

Subcommittee Meeting: January 29, 2026

Current State of Affairs - Programs

IMT	NASAM	ATDM	AM CoE
- 11 Students enrolled through spring ’26 - 1 student interning at CMA - 6 students with secured job offers - Planned stakeholder meetings to discuss program updates	- 2nd cohort of the Naval FY w/ 9 students - Cohort schedule behind pace due to Government shutdown - New curriculum updates - Working on NASAM branding	- 4 cohorts in progress - 1,813 students enrolled to date - Approaching 1,200 graduates - Exceeded 1,000 students placed in the DIB - Placement and graduation continue to sit at ~85% - Over 1300 community service hours contributed - 65+ current staff members - 297 participating companies - Currently engaged in ISO certification	- Secured PO through October - Funding for staff growth/additional Cap Ex funding being processed - Total part prints 646 with an 80.4% Y0Y increase - 123 parts installed within the fleet - IALR team working 20 x 5 schedule - IALR gained 22% on part backlog - Operational Excellence initiative engaged

Departmental Impact & Strategic Progress

Executive Overview

Over the past 12–18 months, the Manufacturing Advancement division has transitioned from a **reactive, opportunity-pursuing model** to a **disciplined, scalable operating system** that delivers measurable outcomes across defense readiness, workforce development, and advanced manufacturing adoption.

Despite increasing program volume, regulatory complexity, and workforce pressure, the department has:

- Expanded its national defense footprint
- Improved delivery speed and financial discipline
- Scaled workforce outcomes while maintaining quality
- Reduced dependency on external consultants
- Created focused business development and opportunity capture capabilities
- Positioned itself for sustainable growth across MA, CMA, and ATDM, while growing a new line of effort and opportunity in Digital Manufacturing

Portfolio Scale & Demand Signal

Active & Emerging Workload Reflects Strong External Pull

- **Current Project Pipeline (17 Projects Committed)**
  - Defense, energy, and industrial partners
- **Primary Engagement Focus Areas (Ranked by Interest):**
  1. Digital Transformation
  2. Custom Training and Workforce Support
  3. Industry 4.0 and Automation
  4. Prototyping and AM adoption
  5. Strategic partnerships (149 Slayton)
- **Current Program Pipeline**
  - AI and Industry 4.0 training opportunity
  - Virginia Tech Navigate and AM2 Hub
  - NSWC Indian Head White Paper
  - Drone Manufacturing Training School

Key Takeaway for the Board:
Demand is not the constraint; **capacity, sequencing, and financial visibility are the governing factors**.

- **Current Project Pipeline**
  - Armed Forces Welding - Training
  - MIB Supply Chain Lean Manufacturing – Optimization
  - MIB Supply Chain Water Tigh Door – Industry 4.0
  - Aerospace & DIB NDT – Training and Space
  - Tech Partner Fixtures – 149 Partnership
  - Tech Partner Holders – 149 Partnership
  - Armed Forces Skilled Trades – Training (MOU)
  - AM OEM Collaboration – 149 Partnership
  - MIB Supply Chain – Prototyping Support
  - Nuclear Industry – AM Adoption
  - MIB Nuclear Supply Chain – Digital Assessment
  - MIB Supply Chain – Digital Support
  - MIB Nuclear Supply Chain AI Initiative – Digital Support
  - General Defense Contractor - Engineering

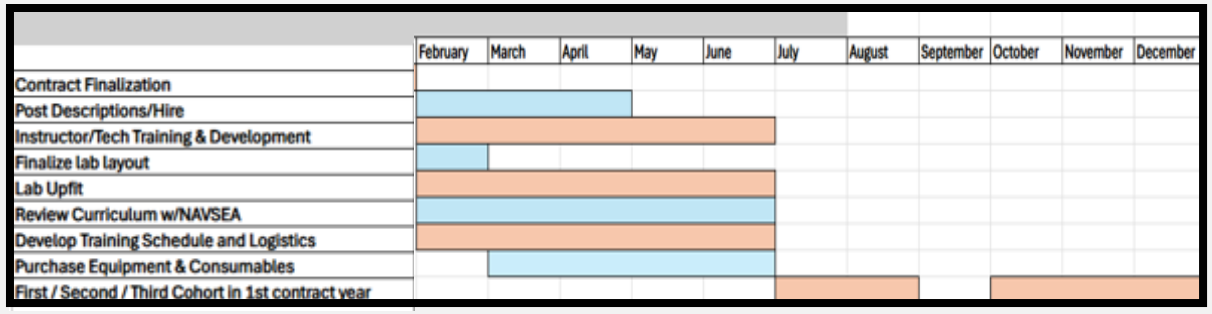
Wins Converted & Revenue Momentum

- **Programs Actively Moving Through Contracting**
  - NAVSEA Program Contract
  - DIB Supply Chain Custom AM Training
  - BPMI-funded projects (2 Projects)
  - 3 Nuclear Supply Chain Digital Maturity Assessment projects
  - Expanded industry NDT and metrology training programs
  - **Anticipated Capture: $1.9M in CY 26**

Board Signal:

This reflects a **healthy conversion funnel**, not speculative interest.

Nav Sea AM Afloat Program – Launch Timeline



IMPACT

- $6.7 million investment into the program
- IALR Impact: $1.4m (startup) / $900k year over year
- 3 additional job opportunities at IALR
- Further solidifies our role as a premier hub for manufacturing expertise and training
- Further solidifies our ability to cross-collaborate and offer solutions to the DoD's needs

Operational Discipline & Load Management

To manage growth responsibly, the department has continued to add definition to **Lines of Effort (LOE)** across major functions with scoped measured activities that drive continuous improvement:

- **CMA (Center for Manufacturing Advancement)**
  - Lean (5S, production scheduling)
  - Cost justification and capital modeling
  - Business planning for 149 Slayton
  - Staffing for second shift
  - CMMC implementation
  - Reduced external consultant reliance
  - Forecasting models now in place
- **Workforce Development**
  - NAVSEA lab upfit and program builds
  - AR Welding and Ship Fitting programs
  - Online and supplemental training expansion
  - FY27 budget modeling underway
  - Cross-curriculum alignment and IMT upgrades
- **Project & Digital Enablement**
  - Project management tools deployed
  - Salesforce implementation
  - Digital literacy campaign
  - Cloud and algorithm development
  - AM CoE digital strategy and dashboards
  - Digital team growth and training
- **ATDM Transformation**
  - New AR Welding and Ship Fitting programs
  - Program compression and throughput gains
  - Move to MTC and culture integration
  - ISO certification process initiated
  - Structured tutoring and curriculum redesign
  - Placement pathway optimization

Measurable Outcomes & Department Wins

- **Operational & Workforce Impact**
  - Reduced CMA backlog by **22% (4 weeks)**
  - Over **1,000 graduates placed**; average placement rate **85%**, with two cohorts exceeding **90%**
  - Managed increased applicant volume while expanding training shifts
  - Met or exceeded 2025 enrollment targets
  - Hosted the **largest ATDM career fair to date** (40 companies, 66+ employers engaged)

Board Signal:
This is a **maturing organization**, not a startup operation.

- **Strategic & Institutional Progress**
  - Monthly PMR meetings institutionalized
  - Department vision and charter established
  - MOU signed with U.S. Army Ordnance School
  - Additional NAVSEA AM program landed on campus
  - Confirmed three technology partnerships for 149 Slayton
  - 10-month PO and SOW secured for AM CoE
  - Fiscal modeling and accountability embedded across leadership
  - Connected MTC Buildings 1 & 2 on schedule
  - 113 ATDM volunteers contributing **1,300+ community service hours**

Strategic Challenges
Goal: Transparent and Managed

No Surprises Management

Risk Area	Mitigation in Place
Government contracting timelines	Early engagement, standardized intake
Financial visibility	Forecasting by LOE, fiscal modeling
Staffing availability	Second shift, cross-training, phased hiring
ATDM compression	Curriculum redesign, structured tutoring
Communication at scale	Defined processes and leadership cadence

- Government contracting shifting demand signals
- Expeditious approval timelines need better responsiveness
- Financial visibility across growing complexity
- Staffing availability and cost alignment for continued scaling
- Bandwidth to pursue with process
- Marketing and message clarity
- Continued ATDM compression without quality loss
- Internal communication reaching and connecting
- Staff perceptions as growth accelerates

Key Message:
These are **scaling challenges**, not structural failures.

Focused Goals (Next 6 Months)

- **Industry 4.0**: eliminate single-point dependency
- **AM CoE**: fully operational second shift
- **CMA**: shop scheduling system & KPI deployment
- **Optimization**: fully approved and operational 149 plan
- **ATDM**: fully staffed and stable in MTC
- **Workforce Training**: defined multi-year budget model
- **Project Management**: staff training and process hardening
- **Digital**: define and activate strategy-aligned team
- **Business Development**: secure $500K commitments
- **Strategic Initiatives**: elevate financial literacy
- **Executive Assistant**: mature Tour 2.0
- **Marketing**: establish sustainable operating rhythm
- **EVP**: metrics-based bonus and recognition program

Board Asks & Decisions Coming

Enabling Disciplined Growth & Long-Term Impact

1. Enable Creating Next-Generation Digital Manufacturing Pathway
Support workforce models aligned to digital, automated, and advanced manufacturing realities.

2. Endorse Targeted Capacity Investments
Authorize forward-looking investments and budget forecasting to enable optimization without reactive spending.

3. Confirm Financial Visibility Standards
Align on financial and KPI transparency required to govern effectively across multiple funding streams.

4. Authorize Growth Sequencing & Delegation
Permit leadership to pace growth and delegate authority to maintain speed, accountability, and execution quality.

5. Support Strategic Staffing Investments
Enable proactive hiring and talent development aligned to asset growth and program demand.

Footer:
These actions ensure controlled scale while protecting quality, financial discipline, and institutional credibility.

Priority Opportunity – Case Study

John Deere: From Equipment Manufacturer to Precision Technology Company

The crisis (early 2000s–2010s):
John Deere was facing shrinking margins, cyclical demand, and increasing global competition. Heavy equipment had become commoditized. Competing on iron alone was no longer a winning strategy.

The pivot:
Rather than doubling down on manufacturing efficiency alone, Deere made a deliberate decision to **become a technology company that happens to build equipment**.

They invested heavily in:

- Software engineering and data science
- Sensors, GPS, and IoT embedded in machines
- Cloud platforms and analytics
- Autonomous and semi-autonomous systems
- This wasn't an add-on—it became core strategy.

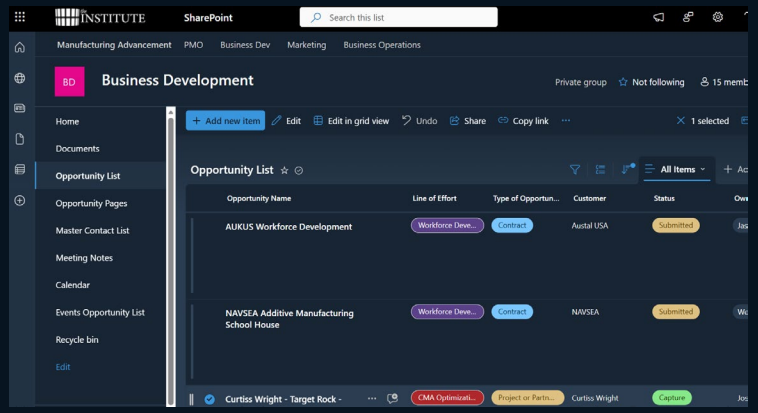
What changed fundamentally:

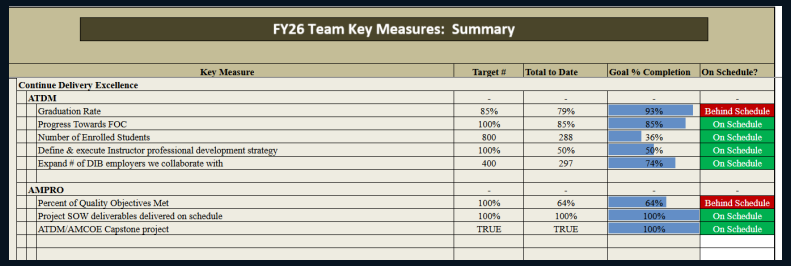
- Tractors became **data platforms**
- Equipment sales became **lifecycle solutions**
- Customers stopped buying machines and started buying **outcomes** (yield, efficiency, predictability)

- **Key moves that mattered:**
  - Launched **Precision Agriculture** systems (GPS-guided planting, variable-rate application, real-time yield mapping)
  - Built proprietary software platforms (Operations Center) to collect and analyze farm data
  - Shifted talent mix dramatically toward software engineers and technologists
  - Used data to lock in long-term customer relationships and recurring revenue

- **The result:**
  - Deere moved from cyclical, margin-pressured manufacturing to **high-margin, technology-enabled recurring revenue**
  - Customers became deeply integrated into Deere's ecosystem
  - Deere now competes less on price and more on **intelligence, insight, and performance**
  - Today, Deere is widely viewed as a **leading ag-tech company**, not just an equipment manufacturer

The manufacturers that win long-term will not be the ones that build the best parts, but the ones that build the best intelligence around them, John Deere proved that.





FY26 Team Key Measures: Summary

Key Measure	Target #	Total to Date	Goal % Completion	On Schedule?
Continue Delivery Excellence				
ATDM	-	-	-	-
Graduation Rate	85%	79%	93%	Behind Schedule
Progress Towards FOC	100%	85%	85%	On Schedule
Number of Enrolled Students	800	288	36%	On Schedule
Define & execute Instructor professional development strategy	100%	50%	50%	On Schedule
Expand # of DIB employers we collaborate with	400	297	74%	On Schedule
AMPRO	-	-	-	-
Percent of Quality Objectives Met	100%	64%	64%	Behind Schedule
Project SOW deliverables delivered on schedule	100%	100%	100%	On Schedule
ATDM/AMCOE Capstone project	TRUE	TRUE	100%	On Schedule

Closing Board Message

- Manufacturing Advancement is now operating as a **strategic engine**, not a collection of projects.
- The focus going forward is **controlled scale, financial health, and long-term sustainability,** ensuring that growth strengthens the institution rather than stresses it.

“The most successful companies are those that consistently create new growth rather than defend past success.”
- Clayton M. Christensen, The Innovator’s Dilemma