NDIA and DoD Joint Working Group

Cyber Security for the Advanced Manufacturing Enterprise

NDIA Systems Engineering Division Meeting
August 26th, 2015

Manufacturing is a Cyber-physical Business
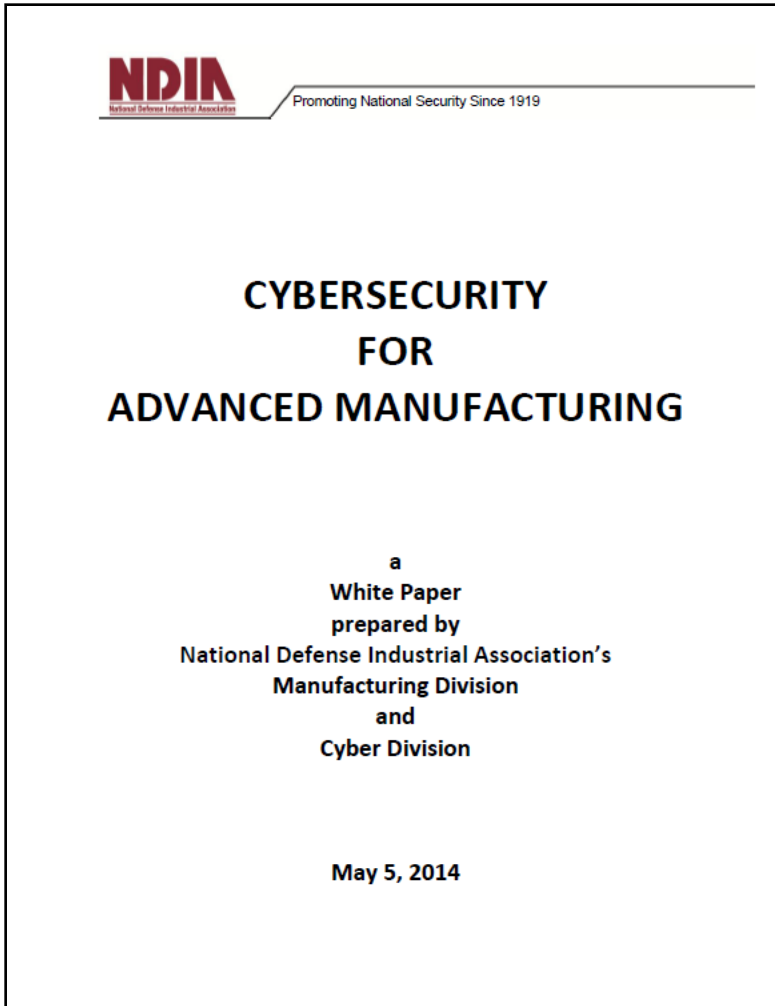

Industry Week

Common Visions

Smart Manufacturing,

Industrial Internet,

Industry 4.0, ...

The Internet of Things!

Advanced Manufacturing is:

- <u>Driven by a "Digital Thread"</u> of product and process information – *valuable intellectual property (IP)*
- <u>Networked</u> at every level to gain efficiency, speed and quality
- <u>Targeted</u> by global cyber threats

NDIA
National Defense Industrial Association
Promoting National Security Since 1919

**CYBERSECURITY
FOR
ADVANCED MANUFACTURING**

a
**White Paper
prepared by
National Defense Industrial Association's
Manufacturing Division
and
Cyber Division**

May 5, 2014

www.ndia.org/Divisions/Divisions/Manufacturing

Manufacturing Concerns:

- **Theft of technical info** -- can compromise national defense and economic security

- **Alteration of technical data** -- can alter the part or the process, with physical consequences to mission and safety

- **Disruption or denial of process control** -- can shut down production

A risk management problem. Need resilience!

Joint Working Group - Cybersecurity for Manufacturing
NDIA Cyber, Manufacturing, SE and Logistics Divisions

- **NDIA White Paper revealed the threats to the "*digital thread*" that transits defense contractors' manufacturing operations networks and control systems**

  - Theft of technical info -- can compromise national defense and economic security

  - Alteration of technical data -- can alter the part or the process, with physical consequences to mission and safety

  - Disruption or denial of process control -- can shut down production

- **NDIA has formed a new Joint Working Group to work with DoD**

  - Four NDIA divisions: Cyber, Logistics, Manufacturing and Systems Engineering

  - Corresponding Government offices: DoD CIO; Joint Staff J4, Knowledge-Based Logistics Division; Manufacturing & Industrial Base Policy; and Systems Engineering

- **Launch meeting is being scheduled for September or early October**

  - Its not too late to get involved

NDIA JWG 2.0 Members
As of August 18, 2015

NDIA

Dave Chesebrough (C)   Gib Gibson (C)

Jason Gorey (C)   David Higgins (SE)

Larry John (M)   Tom McCullough (SE)

Tom McDermott (SE)   Mike McGrath (M)

Kaye Ortiz (M)   Chris Peters (M)

Devu Shila (M)   Tim Shinbara (M)

Joe Spruill (L)   Sarah Stern (SE)

Rebecca Taylor (M)   John Toomer (C)

Mary Williams (M)   Jeff Wolske (SE)

Government

Brench Boden (M)   Don Davidson (C)

Melinda Reed (SE)   Bob Pickett (L)

Organizations represented:
AEFI
AMT
ANSER
Boeing
BriteWerx
DBS
GA Tech
Lockheed Martin
MTEQ
NCMS
Raytheon
Six O'Clock Ops
The Lucrum Group
UTC

C=Cyber; L=Logistics; M=Manufacturing; SE=Systems Engineering