

# Zero Trust for OT

Strategies to Build Adaptive Security and Trust for  
Operational Industrial Domains



# Our Speakers Today



**Mr. Daryl Haegley, SL, GICSP, OCP**

DAF Technical Director  
Cyber Resiliency Office for Control Systems (CROCS)



**Dr. André Florence, CISSP, CSSA, CDPSE, CISM, CGRC**

Sub-Authorizing Official  
AFSC Industrial Depot Maintenance (IDM) Boundary  
Doctor of Science, Cybersecurity



**Mr. David A. Forbes**

Director  
Cyber Physical Systems  
Booz Allen Hamilton



**Ms. Anusha Iyer**

Moderator  
SME, Identity Security for OT  
CEO & Founder of Corsha



# Why Zero Trust for OT?

## The Operational Gap Today

The DoD needs the ability to ensure critical infrastructure meets DoD Zero Trust requirements for Operational Technology (OT) and Systems protecting them from cyber attacks and enabling technology advancement in these realms securely.

## The Benefit to the Warfighter

Enable trustworthy, timely, increase of production and logistics support across the supply chain and critical infrastructure for the warfighter.

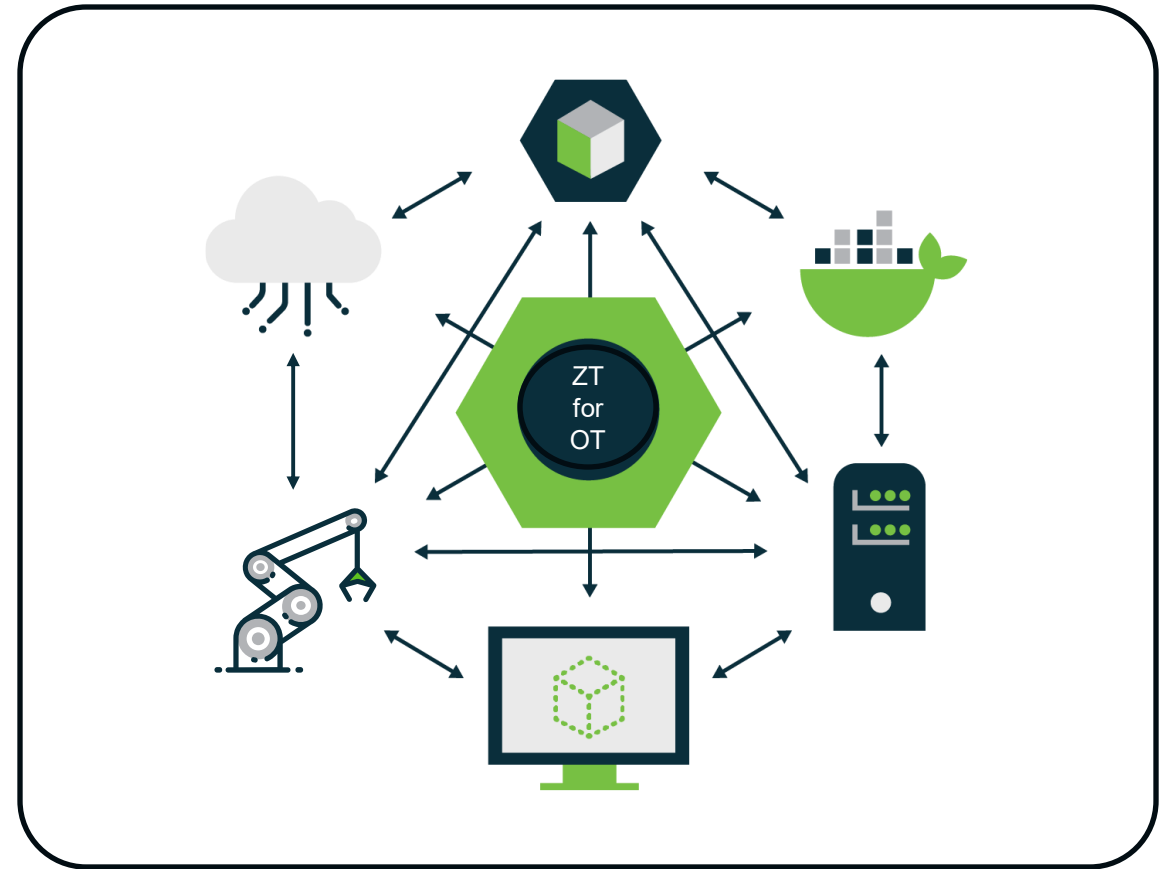
Enable safer, smarter, modernized industrial operations from the Depot to the Forward Edge.

# How is OT different than IT?

Unique Challenges

The New Front Line

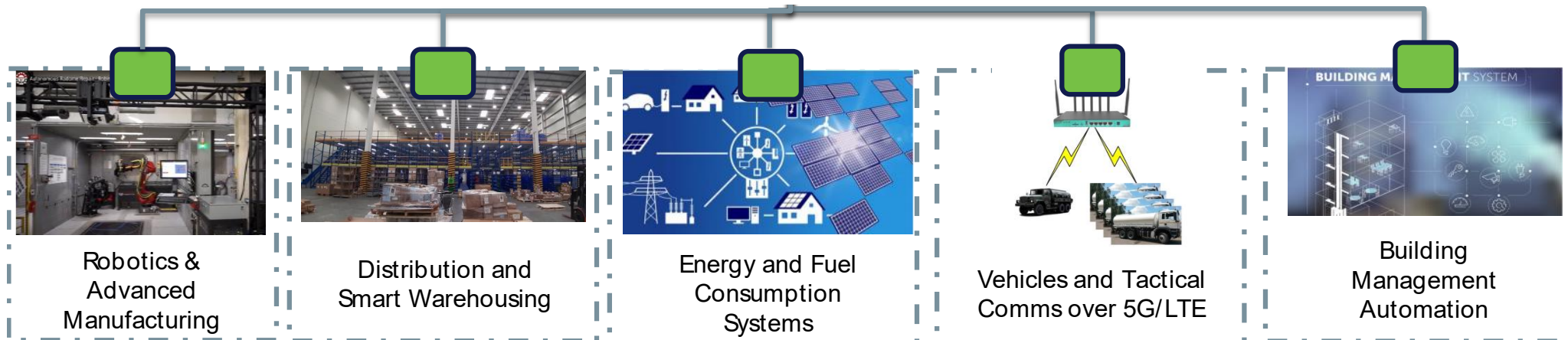
Zero Trust with Zero Downtime



# OT Risk Mitigation Strategies

## Joint Force Strategies

- ✓ Adopt common OT risk frameworks across branches
- ✓ Embrace forthcoming Zero Trust for OT Fan
- ✓ Coordinate threat intelligence sharing specific to OT
- ✓ Establish standard segmentation and access policies for operational domains.



# 5 Fundamentals for Zero Trust for OT



## **Identity and Authenticate Everything and Everyone**

Issue unique credentials for devices, sensors, operators, vendors, and automation systems.



## **Segment and Microsegment**

Enforce logical boundaries between critical assets, lines, and zones; isolate insecure, un-patchable devices



## **Enforce Least Privilege**

Every user and device should only have the minimum level of access required to perform their specific, authorized task



## **Monitor and Analyze Continuously**

Correlate data from identity, network, devices, and operational sensors for early detection and response.



## **Assume Breach**

All critical assets must be protected as if an attacker is already present inside the network

# Governance, Policy & ATOs – Oh my!

## Complexity and Alignment

- ↳ Multiple compliance bodies and frameworks
- ↳ RMF often treats OT like IT in policy, leading to misaligned controls
- ↳ Need to account for unique safety, reliability, and availability needs

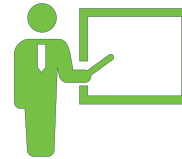
# Where do we go from here?

**End Goal:** Shift from siloed defenses to coordinated, adaptive zero trust security for all operational systems



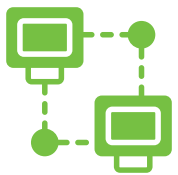
## **Standardized Architecture**

Develop common patterns for identity, segmentation, and monitoring across agencies.



## **Joint Training & Exercises**

Include OT-specific Zero Trust scenarios in cyber and operational exercises.



## **Shared OT Threat Data**

Build a centralized, multi-service OT vulnerability and threat repository.



## **Public-Private Partnerships**

Leverage vendor and research innovation for OT security advances.