DECISION SCIENCES INC.

LAURIE MONCRIEFF   11/6/24

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INDUSTRIAL BASE OPPORTUNITIES

➢Greater Visibility into the Defense Industrial Base (DIB)

➢ Enhanced Collaboration with Government and Industry

➢An Environment that Improves Supply Chain Resilience

➢A Government and commercial system with data to perform supply chain analysis

➢The ability to utilize data and a system to Mitigate Risks

➢Understanding of manufacturing minimum and maximum sustainment rates

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DECISION SCIENCES INC. (DSI)

➤ Established in 1986
➤ Small Tech Company - Headquartered in Fort Walton Beach, FL
➤ Awarded Numerous DoD and Commercial Contracts
  ➤ Multiple SBIR/STTR
  ➤ 4 Consecutive 5-Year Sole Source Army IB Efforts

➤ DSI Developed Industrial Preparedness Planning System of Record for Industrial Base Analysis

➤ Sponsored by the U.S. Army, Navy, and Office of Secretary of Defense (OSD) and fully supports the Joint Munitions Command (JMC)

OSD - IBAT is the Gold Standard for How to Perform Industrial Base Analysis

INDUSTRIAL BASE ANALYSIS TOOL (IBAT)

➢ Developed in 1990's with the Lean Aerospace Initiative

➢ Created a system with MIT utilizing agile and lean manufacturing

➢ Focused on supply chain visibility for Government and Industry

➢ Highlights supply chain shortages and risks

➢ In 2003 -began creation of a digital twin of ammo and munitions supply chain for the Joint Munitions Command

➢ Has been the program of record for 20 years.

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IBAT SYSTEM OVERVIEW

- ➢ IBAT System Includes:
  - ➢ Manufacturing and Facility Information
  - ➢ Inventory and Demand Data
  - ➢ Attribute Data
  - ➢ Metrics
  - ➢ Reports
  - ➢ Generated Output
  - ➢ Production Source Data

- ➢ Integrated into Comprehensive Industrial Base System

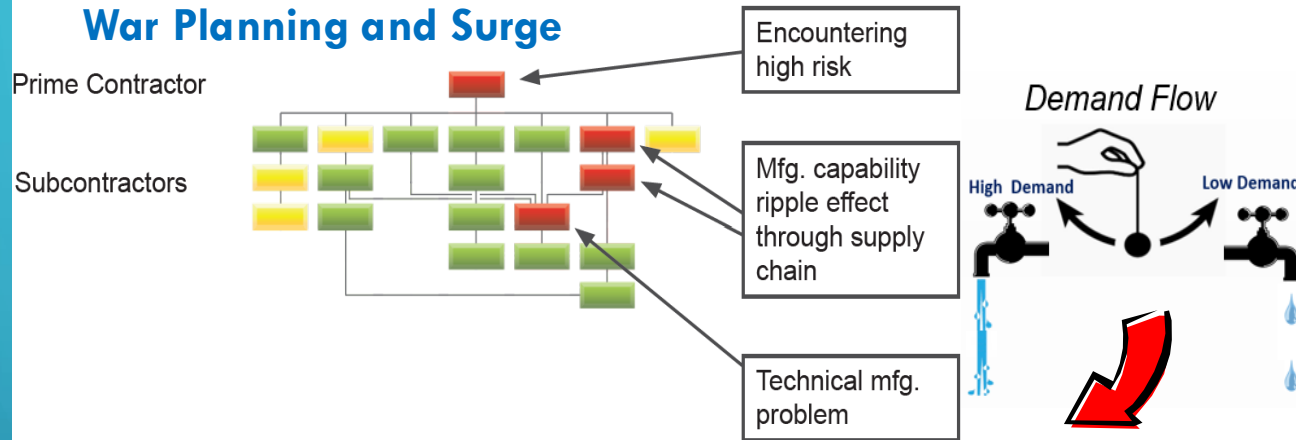| Information from End-Items to Rare Earth Minerals |
| Originates from Military Source Repositories from the Services |
| NIIN, DODIC, NSN, Pictures, Suppliers, Services, PM, CAGE codes, and more |
| Watch List, Single Point Failure, Foreign Source, Key and Critical Designations |
| Custom Reports, Quad Charts, Detailed Cut-away Charts, and more |
| Graphical Networks, Demand Parameters, Schedules and Due-ins, Inventory, Analytics (dynamic networks, advanced filtering, chokepoint analysis, and more) |
| Manufacturing Capabilities, Lead-Times, Cold and Warm Production Lines, Surge and Baseline Production Rates |

IBAT CAPABILITIES

KEY INFORMATION ON SUPPLY CHAIN INCLUDES:

➢ Lead times

➢ Production rates

➢ Capacities

➢ Critical bill of materials

➢ Supplier location – disaster mapping

➢ Risk analysis – war planning & surge

IBAT ANALYSIS &
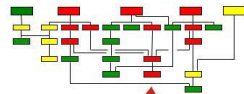# SUPPLY CHAIN RISK IDENTIFICATION

War Planning and Surge

Prime Contractor

Subcontractors

Encountering high risk

Mfg. capability ripple effect through supply chain

Technical mfg. problem

Demand Flow

High Demand — Low Demand

Facility Investments

Surge Requirements
Manufacturing Capacity Risk

Foreign Dependencies
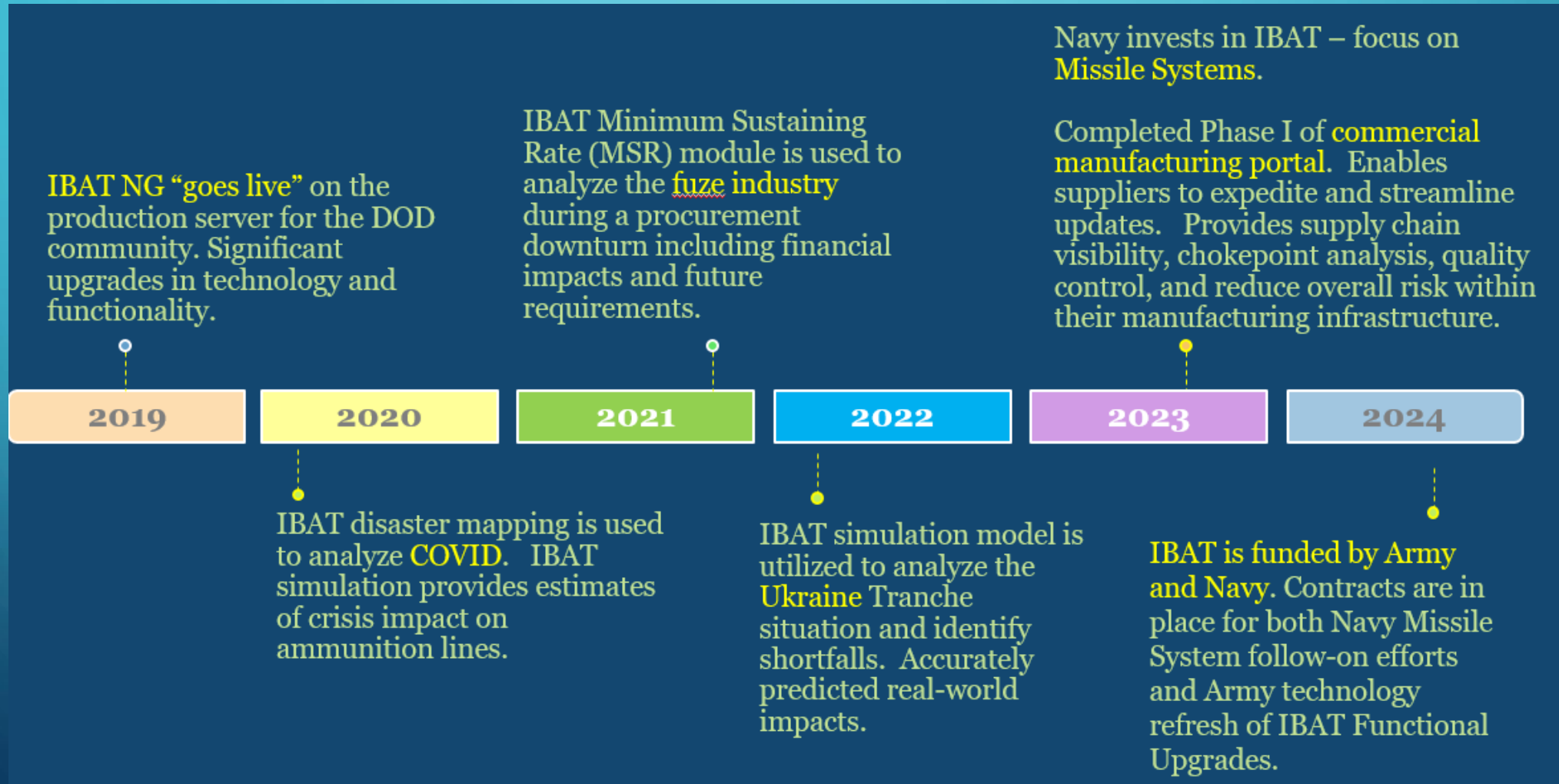Material Shortages Risk

No China – Add Mexico – Surge

Disaster Mapping

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IBAT DEMONSTRATION

IBAT SUCCESS STORIES & FUTURE TRANSITION

Navy invests in IBAT – focus on **Missile Systems.**

IBAT NG "goes live" on the production server for the DOD community. Significant upgrades in technology and functionality.

IBAT Minimum Sustaining Rate (MSR) module is used to analyze the **fuze industry** during a procurement downturn including financial impacts and future requirements.

Completed Phase I of **commercial manufacturing portal.** Enables suppliers to expedite and streamline updates. Provides supply chain visibility, chokepoint analysis, quality control, and reduce overall risk within their manufacturing infrastructure.

| 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |

IBAT disaster mapping is used to analyze **COVID.** IBAT simulation provides estimates of crisis impact on ammunition lines.

IBAT simulation model is utilized to analyze the **Ukraine** Tranche situation and identify shortfalls. Accurately predicted real-world impacts.

IBAT is funded by Army and Navy. Contracts are in place for both Navy Missile System follow-on efforts and Army technology refresh of IBAT Functional Upgrades.
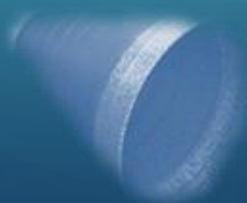
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GOAL FOR IBAT

Leverage decades of DOD investment and continuous improvement to develop an enterprise wide Supply Chain Digital Twin connecting critical systems across the joint command.

MORE PROJECTS ON THE HORIZON

➢ Commercial Portal   Aircraft Sector – COMFRC Supply Chain

➢ IBAT Commercial and DOD   Submarine Sector

➢ Missile and Munitions Sectors   Space

THANK YOU!

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