Planes, Trains and Automobiles

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Nicole D’Angelo, Beth Rasmussen, and Cindy Raspiller
AGENDA

- Introduction
- Raytheon Overview
- Project Vision
- Project Overview
- Our Best Ideas
- Our Worst Ideas
- Hardest to Figure Out
- Standardization/Automation Benefits
- Questions
SPEAKER INTRODUCTIONS

Cindy Raspiller, SGE is the Director Environmental, Health & Safety (EHS) within Raytheon Integrated Defense Systems (IDS), responsible for sustainability, employee safety and EHS compliance. Cindy joined Raytheon in 1988 as the environmental manager at Amana. Cindy also served as sr. manager on the Corporate EHS staff, responsible for development of the company’s EHS Management System. She was division EHS manager for Raytheon Range Systems Engineering at the US Army Kwajalein Atoll. She holds a B.S. in Environmental Science and Resource Management from Lehigh.

Beth Rasmussen, P.E. is the Manager of Continuous Improvement for the Raytheon IDS EHS organization with 20 years of experience. Beth joined Raytheon in 1997 with a B.S. in Civil Engineering and a M.S. in Civil and Environmental Engineering both from MIT. Beth has professional experience in both EHS and Facilities. She has worked in six roles for Raytheon at six different locations. In her current role, Beth is responsible for using Raytheon 6σ and Lean tools to improve the IDS EHS organization.

Nicole D'Angelo, CHMM is an EHS Engineer for Raytheon IDS focusing on environmental program support and continuous improvement projects. Nicole joined Raytheon in 2015 and holds a B.S. in Civil and Environmental Engineering from Worcester Polytechnic Institute (WPI). She has professional experience in environmental consulting, environmental compliance, and oversight of day-to-day site safety. In her current role, Nicole is the IDS air program owner and the greenhouse gas (GHG) metrics lead. She is also a subject matter expert for environmental related modules for the EHSMIS project.
RAYTHEON COMPANY – A TECHNOLOGY AND INNOVATION LEADER SPECIALIZING IN DEFENSE, CIVIL GOVERNMENT AND CYBERSECURITY SOLUTIONS THROUGHOUT THE WORLD.

- 2015 NET SALES: $23 BILLION
- 61,000 EMPLOYEES WORLDWIDE
- HEADQUARTERS: WALTHAM, MASSACHUSETTS
OUR BUSINESSES ARE ORGANIZED BY KEY MISSION AREAS

INTEGRATED DEFENSE SYSTEMS
IDS
Headquartered in Tewksbury, Massachusetts, Integrated Defense Systems specializes in air and missile defense, large land- and sea-based radars, and systems for managing command, control, communications, computers, cyber, intelligence, surveillance and reconnaissance. It also produces sonars, torpedoes, and electronic systems for ships.

INTELLIGENCE, INFORMATION AND SERVICES
IIS
Headquartered in Dulles, Virginia, Intelligence, Information and Services provides cybersecurity products and services. It also offers a full range of training, space, logistics and engineering solutions for government and civilian customers, and produces air traffic management systems.

MISSILE SYSTEMS
RMS
Headquartered in Tucson, Arizona, Raytheon Missile Systems is the world’s premier missile maker, providing defensive and offensive weapons for air, land, sea, and space, including interceptors for U.S. ballistic missile defense. The business also builds net-enabled battlefield sensors and includes Raytheon UK.

SPACE AND AIRBORNE SYSTEMS
SAS
Headquartered in McKinney, Texas, Space and Airborne Systems builds radars and other sensors for aircraft, spacecraft and ships. The business also provides communications, electronic warfare and high-energy laser solutions, and performs research in areas ranging from linguistics to quantum computing.

FORCEPOINT™
Headquartered in Austin, Texas, Forcepoint safeguards users, data, and networks against the most determined adversaries, from accidental or malicious insider threats to outside attacks, across the entire threat lifecycle. Forcepoint protects data everywhere – in the cloud, on the road, in the office – simplifying compliance and enabling better decision-making and more efficient security. Forcepoint empowers more than 20,000 commercial and government organizations worldwide. Forcepoint is a joint venture of Raytheon and Vista Equity Partners.
CORPORATE RESPONSIBILITY

RAYTHEON DOES NOT MANUFACTURE OR SELL CLUSTER MUNITIONS, LAND MINES, OR NUCLEAR WARHEADS.

PROTECTING HUMAN RIGHTS

100% HUMAN RIGHTS CAMPAIGN CORPORATE EQUALITY INDEX 100% 11 YEARS IN A ROW

OSHA RECORDABLE INJURY RATE*

SAFETY

RECORDABLE INJURY RATE -33%

LOST WORKDAY INJURY RATE -35%

* SINCE 2008

CONTEMPORARY GOVERNANCE STRUCTURE

- BOARD OF DIRECTORS GOVERNANCE
- ANNUAL MAJORITY VOTING FOR DIRECTORS
- INDEPENDENT LEAD DIRECTOR
- INDEPENDENT COMMITTEES
- SPECIAL MEETING PROVISION
- REGULAR SHAREHOLDER OUTREACH
- RIGOROUS PAY FOR PERFORMANCE

ANNUAL SAY-ON-PAY VOTE

LEADER IN SUSTAINABILITY*

ENVIRONMENTAL

GREENHOUSE GAS EMISSIONS -28%

ENERGY CONSUMPTION -18%

* SINCE 2008

EMPOWERING THROUGH EDUCATION

- INSPIRING TOMORROW'S PROFESSIONALS TO PURSUE CAREERS IN SCIENCE, TECHNOLOGY, ENGINEERING AND MATH
- SUPPORTING MILITARY FAMILIES, ARMED SERVICE MEMBERS AND VETERANS

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OSHA VOLUNTARY PROTECTION PROGRAM (VPP)

39 OSHA VPP “Star” Certified Sites

Employee Participation Drives Safety Excellence
SETTING THE STAGE
SETTING THE STAGE

• THE LAB RESULTS FROM YOUR WASTE-WATER SAMPLE INDICATE AN EXCEEDANCE FOR NICKEL
PROJECT VISION

Deliver a common, global EHS Management Information System (EHSMIS) software solution across Raytheon, increasing productivity, accuracy, compliance readiness and ease-of-use.
OUR GOALS:
EHS SUPPORTING RAYTHEON

GLOBAL GROWTH
Increase domestic and international business by focusing on electronic warfare; cyber; missile defense; command, control, communications, computers, cyber, intelligence, surveillance and reconnaissance; precision weapons and training solutions.

ENTERPRISE COLLABORATION
Build a one-Raytheon culture of disciplined collaboration for results.

COMPETITIVE ADVANTAGE
Develop deep customer relationships, drive flawless performance and deliver solutions that are more effective and affordable than those of our global competitors.

ONE COMPANY EHS SOFTWARE SOLUTION AROUND THE WORLD
CONNECTS TO RAYTHEON COMMON TOOLS
STANDARDIZE AND AUTOMATE
PROJECT
OVERVIEW

BENEFITS
- Common processes and applications
- Reduction in redundant systems
- Near real time data

BUSINESS OBJECTIVES
- Standardized processes
- Reduced maintenance/system costs
- Automation

HUMAN/TECHNICAL OBJECTIVES
- Single point of entry
- Improved compliance management
ONE STOP SHOPPING

Regulatory Requirements:
- OSHA
- EPA
- NFPA
- National Electric Code
- Unified Building Code
- State & Local Regulations

Sources of Data:
- 120+ site locations
- EHS
- Facilities
- Finance
- HR
- Third party vendors

EHSMIS
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EHSMIS

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APPLICATION COMPLEXITY REDUCTION

- Tools include: 3rd party apps, subscriptions, MS Tools, Cold Fusion, Oracle, SQL Server, various internally built
- Cost saving amount is conservative due to complexity of identifying costs for maintenance, support, hardware, etc.

EHS Tools: 186 Identified

- Keep, 24%
- Out of Scope, 10%
- Investigating, 59%
- Retire, 7%
ONE STOP SHOPPING
PROJECT APPROACH

**MANAGEMENT**
Full time IT Project Manager

**FINANCE**
Multi-year capital project

**STAFFING**
Staffed internally by IT, Business EHS, Corporate EHS

**TEAMING**
Software team

**IMPLEMENT**
Consulting firm as implementation expert
PROJECT APPROACH

Phase 1

Phase 2

Phase 3
OUR BEST IDEAS

BENCHMARKING

MODULE LEADS

STRONG TEAM WITH SUBJECT MATTER EXPERTS

BRINGING TO THE ENTERPRISE LEVEL

DEPLOY GLOBALLY
DEPLOY GLOBALLY

GLOBAL PRESENCE
OUR WORST IDEAS

CUSTOMIZATION
Fiscal Calendar
Organizational Structure

CUSTOM MODULES

DESIGN WORKSHOPS
Training First

LACK OF STANDARDIZED PROCESSES ACROSS BUSINESSES

TWO TOOL SOLUTION
HARDEST TO FIGURE OUT

- Licenses
- Matrix reporting structure
- Legacy tools
- Bringing it to the Enterprise level
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LICENSES

- WASTE
- JHA
- LOTO
- CONTRACTOR
- INSPECTIONS
- AUDIT

INSPECTIONS

JHA

WASTE

CONTRACTOR

LOT0

AUDIT
HARDEST TO FIGURE OUT

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BENEFITS OF STANDARDIZATION/AUTOMATION

SINGLE CORPORATE PROCESS VS. BUSINESS/SITE PROCESS

EASE OF USE

PLATFORM USABILITY

SCOPING

PERMISSIONS