

# Data Reconnaissance™

## AI-Enabled Data Extraction & Analysis

### BACKGROUND

Data Reconnaissance™ combines AI-enabled data extraction and analysis to meet the demands of DoD clients. Siloed data is extracted, aggregated, and converted into a computer-readable format before our Booz Allen team applies data science, analytics, and machine learning techniques tailored to the specific mission. Our proven approach employs an automated, high-precision knowledge management solution using the latest innovations in text extraction, natural language processing (NLP) and machine learning to make data ingestion, classification, search, and retrieval more efficient, solving a myriad of analytics challenges.

### MULTI-MISSION CAPABILITIES

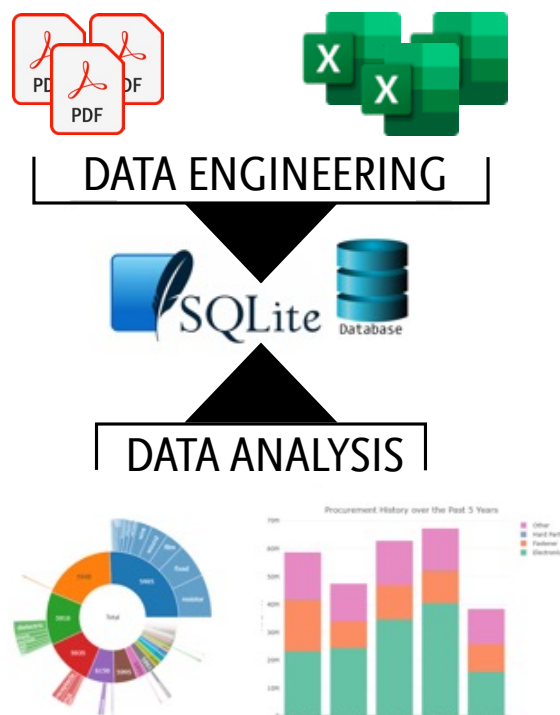
- Hazardous material identification (HAZMAT)
- Automated drawing/task order (TO) updates
- Digital engineering
- Technical data package (TDP) updates
- Engineering change proposals (ECPs)
- Supply chain risk management (SCRM)
- Obsolescence management
- Part commonality assessment
- Data mining
- Anomaly detection

### KEY BENEFITS

- Open-source tools enable customization and efficiency.
- Machine learning algorithms align to mission parameters.
- Task automation shifts focus to mission-critical decisions.
- HTML reports and custom dashboards simplify data understanding.
- Tech approach removes data size and format limitations.
- Agile execution drives efficiency, speed, and cost reduction.

### TOOLBOX

- R and Python programming
- Structured Query Language (SQL) programming
- Visual Basic for Applications (VBA) programming
- Power Business Intelligence (BI) and Tableau
- SQL-based database management
- Access and SQLite
- Microsoft (MS) Power Apps



## DATA ANALYSIS

NMWR 9-2520-234

NATIONAL MAINTENANCE WORK REQUIREMENT CONTAINING  
NATIONAL MAINTENANCE REPAIR STANDARDS

FOR

POWERTRAIN ASSEMBLY  
ALLISON MODEL XTG411-4

Transmission Assembly with Container (PIN 5705890)  
(NSN 2520-01-413-1885)

Transfer Assembly, Transmission Input with Container (PIN 5705891)  
(NSN 2520-01-282-1228)

U.S. ARMY TACOM  
TACOM LIFE CYCLE MANAGEMENT COMMAND  
Warren, Michigan  
November 21, 2006

TMS

Drawings

Parts Lists/BOM/TO

Item	SMR Code	National Stock Number	CAGEC	PART NUMBER	Nomenclature	QTY
1	PAFHH	2520-01-282-1228	19207	5705891	TRANSFER ASSEMBLY AND SHIPPING CONTAINER	1
2	PAFZZ	5310-00-820-6653	80205	MS15318-50	WASHER, LOCK	40
3	PAFZZ	5310-00-763-8920	96906	MS151867-20	NUT, PLAIN, HEXAGON	40
4	XAFHH		19207	8352228	UPPER SECTION ASSEMBLY	1
5	PAFZZ	5330-01-258-3044	19207	8352259	GASKET	1
6	XAFHH	2520-01-387-5836	19207	11650298	TRANSFER ASSEMBLY	1

## AUTOMATED MARKUPS

Drawings

## DATA ANALYSIS

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## AUTOMATED MARKUPS

- Automatically redlines & highlights technical documents supporting Engineering Change Proposals (ECP)
- 1,000-page document processing time ~1.5 minutes
- Ability to add markups including replacement part numbers, specification numbers, etc.
- Dynamic code enables a repeatable process to perform multiple, automated reviews & updates
- Works with Interactive Electronic Technical Manuals (IETMS)

- Automatically updates thousands of pages of TMs, NMWRs, DMWRs, RPSTLs, and other logistics documentation
- Leverages Natural Language Processing (NLP) to learn historical variations of part numbers and nomenclature
- Learns and improves over time as data is aggregated and analyzed

### CURRENT USERS

PEO  
Ground Combat  
Systems

JPEO  
Armaments  
& Ammunition

PM  
Close Combat  
Systems

Army Installation  
Management  
Command

Air Force  
Nuclear Weapons  
Center

Air Force  
LGM-30G  
Minuteman III

NASA

### ABOUT BOOZ ALLEN

Trusted to transform missions with the power of tomorrow's technologies, Booz Allen Hamilton advances the nation's most critical civil, defense, and national security priorities. We lead, invest, and invent where it's needed most—at the forefront of complex missions, using innovation to define the future. We combine our in-depth expertise in AI and cybersecurity with leading-edge technology and engineering practices to deliver impactful solutions. Combining more than 100 years of strategic consulting expertise with the perspectives of diverse talent, we ensure results by integrating technology with an enduring focus on our clients. We're first to the future—moving missions forward to realize our purpose: **Empower People to Change the World®.**

### CONTACT US

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