



# OPIR MISSION DATA PROCESSING

## Factory R&D

- Rapid Prototyping of New Algorithms
- Processing Chain Development
- Analyst Tools for Planning & Assessment
- Machine Learning, Optimization & Test

SHIELDS

MEATLOAF

## Ground System Processing

- Low Latency Mission Data Processing
- Dynamic Tasking, Detection, Tracking, Typing, Assessment, and Reporting
- Operational in Multiple Frameworks: TAPLab, OBAC, BOA, C2S
- Engineered for the future App-Framework SecDevOps ecosystems

DUSTE/ARROW

ARGOS & ORACLE

SPEER/ROCKI

SOFA III

## On-Board Processing

- Refactored for System on Chip (SoC)
- Algorithms Accelerated in FPGA
- Migrating to GPUs & Edge computers

SWEAP

BLACKJACK/CASINO

SSL

## ENABLERS



- 40+ Years OPIR Experience



- Machine Learning Tools  
- Training Datasets



- 200+ TB of Mission Data  
- Signatures & Truth Data



- Classified Networks  
- Cloud Expertise



- Community SMEs  
- Cleared Scientists & Developers



- SoC Dev Boards  
- Optics Laboratory