SYNTHETIC APERTURE RADAR (SAR)

∫ KIHOMAC

Improved Target Acquisition & Threat Assessment

Using software modules aligned with FACE™ Technical Standard 3.0, KIHOMAC is developing a Synthetic Aperture Radar component for integration into the A-10, greatly enhancing the target acquisition and threat assessment capabilities of the existing platform.

Architecture aligned with the FACE Technical Standard allows for portability, modularity, and reuse of existing software in future development efforts.
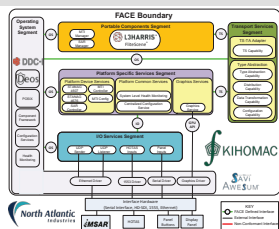
Using commercial off-the-shelf (COTS) equipment greatly reduces material acquisition time and cost.

About SAR

- Aligned with FACE™ Technical Standard, Edition 3.0
- Uses Low-Cost COTS Equipment
- Compatible with Existing MFCD
- Supports Future Expansion Using HD Displays
- Supports Moving Target Indicator (MTI) and Target Tracking Overlays on Either a Moving Map or SAR Images
- Pilot Input via HOTAS and Bezel Buttons (OSBs)

FACE™ Architecture Integration

See Reverse for Face Architecture Diagram

▪ KIHOMAC Software Development Facility
▪ KIHOMAC Office

About KIHOMAC

KIHOMAC is an Aerospace Manufacturing & Engineering company that, among its many disciplines, includes extensive experience with software design, development of flight and safety critical systems in accordance to DO-178 requirements and has embraced the FACE™ architecture model. KIHOMAC has been a FACE Consortium member since 2013.

FACE Boundary

Operating System Segment

OS

Portable Components Segment

MTI Manager

SAR Manager

L3HARRIS™
FliteScene®

Transport Services Segment

TS

TS-TA Adapter

TS Capability

DDC-I

OS

Type Abstraction

Type Abstraction Capability

Distribution Capability

Data Transformation Capability

Configuration Capability

Deos

OS

Platform Specific Services Segment

Platform Device Services

STANAG 4607

MTI Controller

STANAG 4676

MTI Config

SAR Controller

Platform Common Services

System Level Health Monitoring

Centralized Configuration Service

Graphics Services

Graphics Service

TS

POSIX

Component Framework

Configuration Services

Health Monitoring

IO

GPU API

OS

I/O Services Segment

UDP Sender

UDP Listener

HOTAS Inputs

Panel Inputs

∫ KIHOMAC

Ethernet Driver

1553 Driver

Serial Driver

Graphics Driver

SAVI AWESUM™

North Atlantic Industries

Interface Hardware
(Serial Interface, HD-SDI, 1553, Ethernet)

iMSAR®

HOTAS

Panel Buttons

Display Panel

KEY

— FACE Defined Interface

— External Interface

— Non-Conformant Interface