

**DETAIL**

**3D**

**TEAM MEMBER 1**  
Track No: 0111  
LAT: 40.58 N    LON: 27.58 W  
COURSE: 44.4    SPEED: 2 M/S  
ALTITUDE: 1200 M

UAV 1

Team Member 1  
Team Member 2  
Team Member 3  
Enemy Unit 2  
Enemy Unit 1



ASGER  
HOLOGRAPHIC COMMAND & CONTROL SYSTEMS





## **ADVANCED SITUATIONAL AWARENESS FOR STRATEGIC COMMAND AND CONTROL**

**ASGER (Holographic Command & Control Systems)** is an advanced solution developed by **HAVELSAN**, which combines holographic extended reality technology and command and control capabilities.

It empowers commanders by presenting real-time data in a three-dimensional holographic format, enhancing decision-making with immersive and intuitive visualization.


**ASGER** seamlessly integrates with existing systems, offering a comprehensive operational picture, advanced decision support tools, and the ability to facilitate collaboration and real-time information sharing. Additionally, **ASGER** supports training and rehearsing scenarios, ensuring enhanced preparedness and effectiveness in military operations.

**ASGER** offers holographic After Action Review capability to commanders for analyzing operations.






**ASGER** stands out from other mixed reality systems by not isolating its users from the surrounding environment through special glasses. Instead, it enables decision-makers to seamlessly integrate both the headquarters/command center and the operational site by presenting a holographic reality, thereby maximizing the efficiency of decision-making processes.




Adapts to Land / Joint, Air and Navy Combat Systems



Contains all the necessary features for the best display of all level of operations with its user-oriented special software



Provides holographic command and control ability for the all platforms with its special auxiliary modules



Increases efficiency of operational preparation (planning, analysis), operations management and post-operational analysis to the highest level

**ASGER** provides advanced decision support tools, empowering commanders with data visualization, trend analysis, and predictive modeling capabilities. These tools assist in analyzing complex scenarios and evaluating different courses of action.



Can be installed on Specially  
Designed AR Glasses



Hardware Independent System



Customizable Module and Feature  
Options



Compatible with Military or Civil  
Command & Control Systems



Ensures Optimal Information  
Display



Management of Pre-operational  
Processes



Display of Live Operations



Replay of Past Operations

## ASGER OFFERS



Battlefield Management



Situational Awareness



Operation Planning / Management



Operational Analysis



Engagement Planning / Management



Navigation Planning / Management



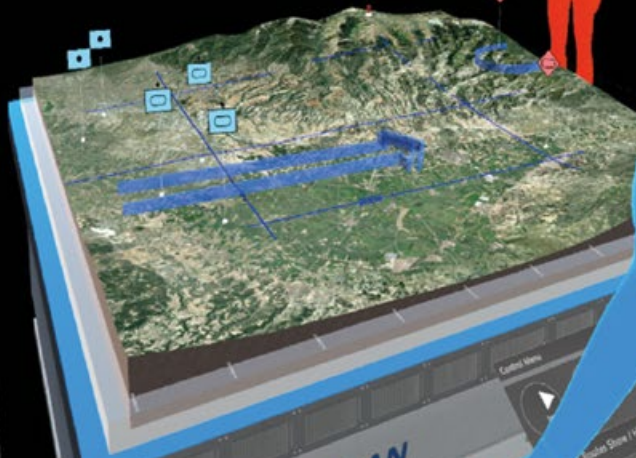
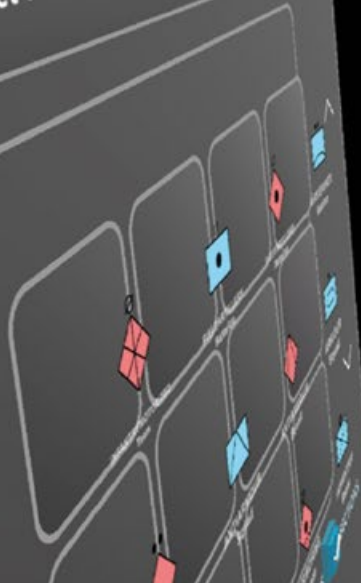
Common Operational Picture



Tactical Sand Box

# Military Unit Inventory

Select Military Unit



HAVELSAN



## Tactical Graphic

Select Tactical Graphic



ACTIONS  EFFECTS ON ENEMY

Get Graphic

## H-CMS - Holographic Combat Management System

H-CMS is system integrable current Combat Management Systems, has modules as CTT (Collaboration Tactical Table) for commanders, HOPCONEX (Holographic Operator Console Expansion) for operator to enhance workspace to overcome physical limits and Holographic Map Table to process map issues as display, archive, save, load etc.

### Key Features

Holographic Tactical Picture

Operation Planning & Management

Geographical Situation Display

Engagement Planning & Management

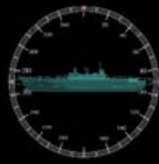
Holographic Navigation Planning & Management

CMS Support



HOLOGRAPHIC COMBAT MANAGEMENT SYSTEM

ASGER



**EMATIC**

RANGE : 200  
SPEED : 15 KNOT  
CREATION TIME : 10.30  
TIME : 10.40

**IFF**

MODE1 : 1234	MODE2 : 5643
MODE3 : 0	MODE4 : 0
MODE5 : 0	NATIONALITY : TR
PLATFORM ID : 0	ADDRESS : 12
ID : 101	

**AIS**

MMSI : 0	IMO : 0
TRACK NAME : 0	FLAG : 0
CI SIGN : 0	IMO : 0
TYPE : 0	LONG : 0
DEST : 0	
ETA : 0	

**ENVIRONMENT : AIR**  
TYPE : 5

**IS NUMBER : 0**  
**CALL SIGN : 0**

Ownership Data

**TCC-ANADOLU**

**ATMOSPHERE**

WIND DIRECTION : 0°  
WIND SPEED : 5 KNOT  
PRESSURE : 1 ATM  
TEMPERATURE : 25 °C  
HUMIDITY : 10%

**KINEMATIC**

HEADING : 30°  
COURSE : 270°  
REL COURSE : 270°  
SPEED : 20 KNOT  
REL SPEED : 25 KNOT

3D Digital Twin

Live Camera Views

**TRACK NAME**

PLANE

TRACK NO : 0001

**KINEMATIC**

SPEED : 15 M/S  
ALTITUDE : 1450 M  
COURSE : 356°  
LOCATION : 40.48N 27.60W

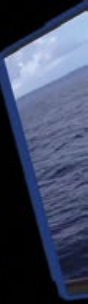
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PLANE

TRACK NO : 0001

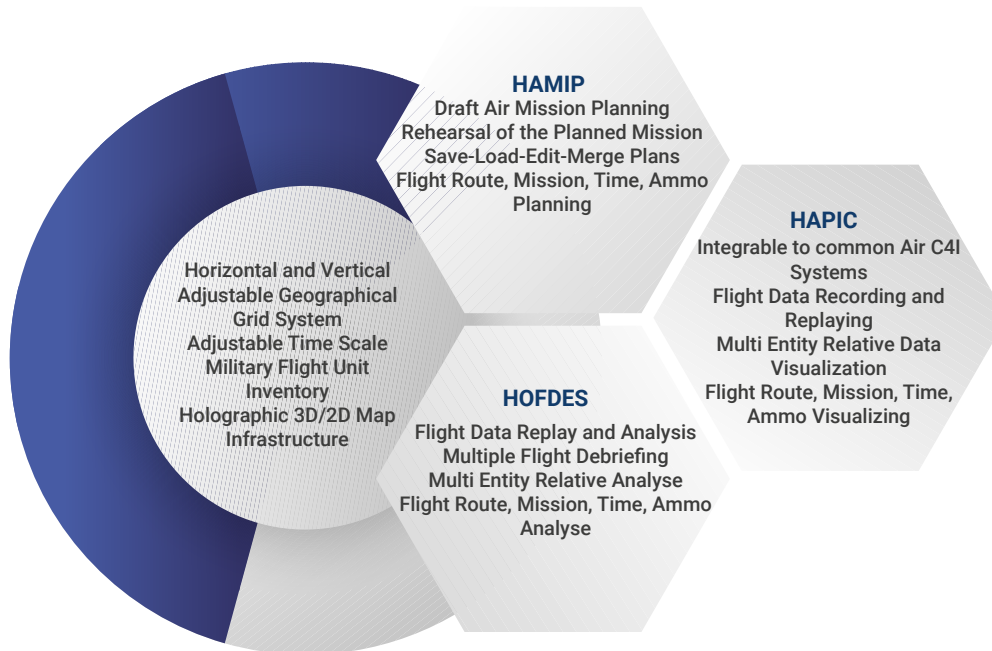
**KINEMATIC**

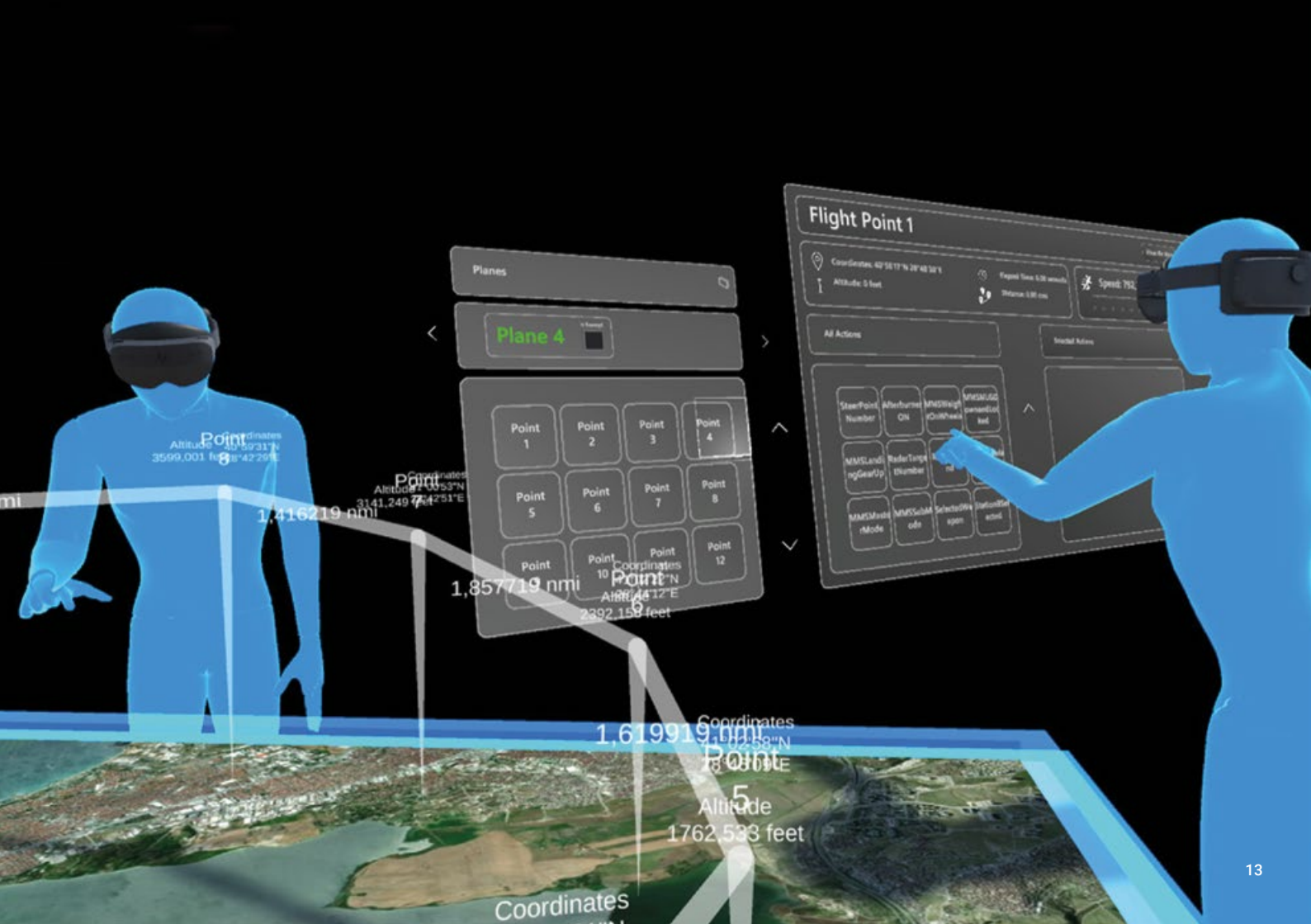
SPEED : 15 M/S  
ALTITUDE : 1450 M  
COURSE : 356°  
LOCATION : 40.48N 27.60W



## HAVE - Holographic Air Virtual Environment

HAVE is an advanced solution developed by HAVELSAN, provides Holographic Air Picture Awareness (HAPIC) to track and monitor current flight during mission, Holographic Air Mission Planning (HAMIP) to plan and brief flight before mission and Holographic Flight Debriefing System (HOFDES) to debrief and analyse flights after mission for Air Forces C4I systems. HAVE modules can be used both as integrated with each other and as independent individual.





Point  
Coordinates  
Altitude: 3599.001 feet  
3599.001 feet  
34°59'31"N  
122°42'29"E

1,416.219 nmi

Point  
Coordinates  
Altitude: 3141.249 feet  
3141.249 feet  
34°53'N  
122°42'51"E

1,857.719 nmi

Point  
Coordinates  
Altitude: 2392.158 feet  
2392.158 feet  
34°12'E

1,619.919 nmi

Point  
Coordinates  
Altitude: 1762.533 feet  
1762.533 feet  
34°02'58"N  
122°08'E

Coordinates

Planes

Plane 4

- |          |          |          |         |
|----------|----------|----------|---------|
| Point 1  | Point 2  | Point 3  | Point 4 |
| Point 5  | Point 6  | Point 7  | Point 8 |
| Point 10 | Point 11 | Point 12 |         |

### Flight Point 1

Coordinates: 42°58'17" N 20°48'31" W  
Altitude: 5 feet

Flight Time: 0:00 minutes  
Distance: 0.00 miles

Speed: 752

All Actions

- |                   |                    |              |                |
|-------------------|--------------------|--------------|----------------|
| SteerPoint Number | MotorFuel ON       | MMSIWeight   | MMSIAltitude   |
| MMSIName          | RadarTarget Number | MMSIAltitude | MMSIAltitude   |
| MMSIMode          | MMSISubmode        | SelectWeight | SelectAltitude |

## **HOTBOX - Holographic Tactical Sandbox**

**HOTBOX** is an advanced solution developed by HAVELSAN, provides situational awareness and planning system for Land Forces / Joint C4I systems

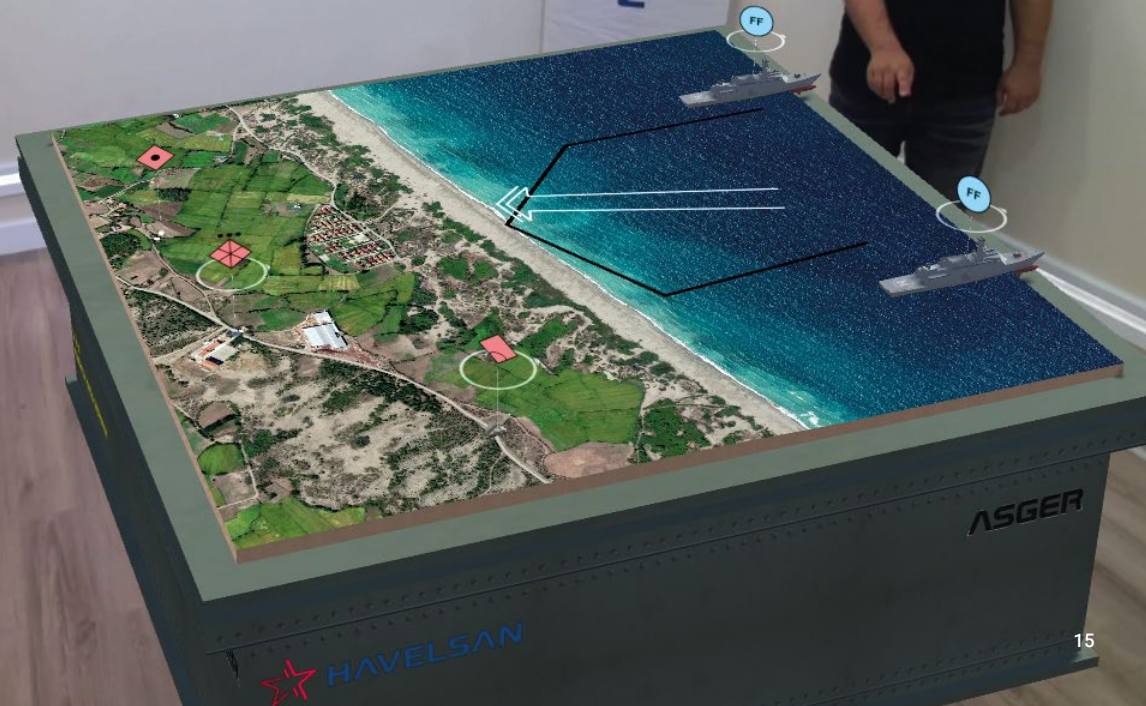
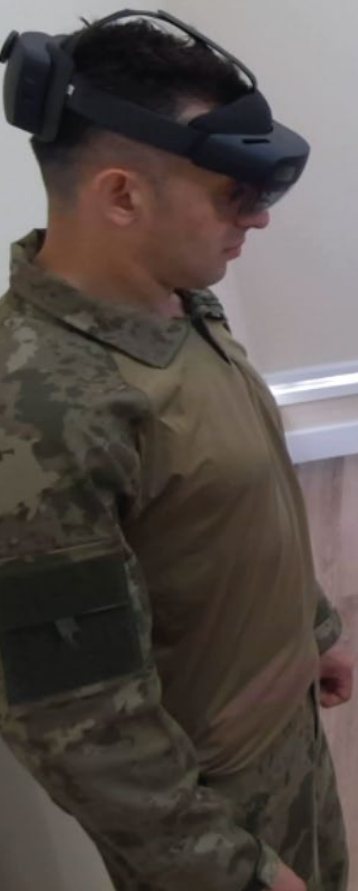
**HOTBOX-Situational Awareness** is a mixed reality based holographic situational awareness capability for C4I systems which can visualize the tactical area with tactical units as 3D holograms. The system provides floating hologram screens for displaying various information (text, image, video stream etc.)

### **Key Features**

**Plan Overlay Visualization**

**Plan Overlay Rehearsal**

**Situation Maps Visualization**



## HOTBOX - Holographic Tactical Sandbox

HOTBOX Holographic Planning / Wargaming is system for planning, rehearsing operations on holographic map to convert planning experience. Especially users can use system for IPB (Intelligence Preparation of Battlefield), MDMP (Military Decision Making Process), CoA (Course of Action) Development, Analysis and Comparison Steps

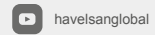
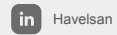
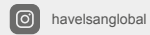
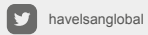








## Coding The Trusted Future



[www.havelsan.com](http://www.havelsan.com)

