

# **Mixed Reality Training**

REAL-WORLD ENVIRONMENTS
TO HELP YOU TRAIN LIKE YOU FIGHT

# We bring together virtual and augmented reality to create lifelike training environments and scenarios.

The nature of how we interact with computers is changing. Humans can now be safely immersed into virtual, augmented and mixed reality environments for a level of insight and interaction that was not previously possible.

## **Merging Realities / Maximum Results**

While the applications of this powerful capability are far-reaching, training is one of the best use cases for mixed reality technology. We see it being implemented by governments and companies around the globe to deliver effective, economical, hands-on training that is nearly impossible to replicate in the real world.

But the value of mixed reality training can only be realized when these tools are informed by live data and integrated across users, systems and platforms. By integrating mixed reality as part of a holistic live, virtual, constructive (LVC) training environment, today's U.S. Armed Forces can prepare using the same scenarios, obstacles and teamwork that they will use on the field of battle, no matter how it changes.

# **Leaders In LVC Training For Defense**

HII is intimately involved across the entire Defense landscape and the Service departments supporting Electromagnetic Spectrum (EMS) and Electronic Warfare (EW) operations for 30+ years. Our efforts contributed significantly to each of the Service EW/ EMS superiority initiatives as well as the multi-domain operational concepts being implemented today.

One key to our success is our unique analytical approach that is based on navigating through the Joint Capability Integration and Development System (JCIDS) process with the application of established systems engineering procedures.

This process enables the Development Planning (DP), Capability Planning & Analysis (CP&A) and Life Cycle Management (LCM) activities necessary for requirements generation, technology development, procurement, fielding and sustainment of effective weapon systems.



# **HII's Mixed Reality Training Solutions**

Training done right means the people who brave battle are prepared for whatever comes their way. Our engineers, technologists, program managers and subject matter experts apply an agile engineering methodology to every project and problem, saving time and money for our clients while delivering unparalleled mixed reality solutions to support your training objectives.



### **Synthetic Reality**

Using advanced 3D scanning and modeling tools, HII's designers create training environments based on your distinct specifications that vividly and accurately reflect the real-world environments that users will encounter on the field of battle.



#### **Virtual Reality**

We can develop custom virtual reality environments for any mission or objective, to deliver training that immerses users in the battlespace as if they were actually there, so they can use their senses to respond and analyze information more quickly and effectively.



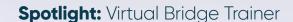
### **Augmented Reality**

By providing live or scripted data on a wearable device that overlays the real-world environment, our augmented reality training solutions let warfighters quickly fuse and respond to disparate sets of information for a true-to-life readiness experience.



### **Mixed Reality**

Our mixed reality trainers bring together the real world with computer-generated representations to allow users to seamlessly interact with both in a cohesive, interoperable environment that vividly mimics what they'll encounter in battle.



Few things can replace the experience of standing on the bridge of a U.S. Navy ship, maneuvering the maritime aspects of a joint operation with air and ground forces. By combining actual 3-D bridge models and using the commercial game engine Unity3D as a framework, we developed a first-of-its-kind trainer that allows users to virtually walk the bridge of a ship and interact with specific components in an LVC environment. The result is virtual reality training built from the specs of a real Navy vessel that can interact across platforms for a truly integrated training experience.

