



NEUROTRACKER AVIATION APPLICATION

EXECUTIVE SUMMARY

Modern military environments are highly complex and require aviators to make critical decisions under taxing conditions. To remain effective amid the unpredictability, warfighters in all domains will need to rapidly interpret dynamic situations and make accurate decisions under pressure.

The following summary addresses how NeuroTracker responds to these challenges and delivers a non-invasive system that uses 3D multiple object tracking to improve the efficiency of the neural networks that govern situational awareness, attention, executive function and cognitive stamina. The system has demonstrated transferability of training to enhance elite performance and decision making under pressure in clinical and practical performance studies. NeuroTracker optimizes the brain's ability to make sense of fast moving visual information, allowing quicker and more efficient decision-making under pressure.

1. PERFORMANCE ENHANCEMENT

Under conditions of stress and over-abundance of information, individuals are more prone to make errors in judgment and become overwhelmed. This behavior can be unpredictable and have resounding consequences on mission success.

NeuroTracker is a technology that provides aviators the ability to rapidly process dynamic scenes, while under physical and emotional stress. This ultimately mitigates the risk by allowing warfighters of all ranks

to excel in circumstances of rising complexity. The enhancement of awareness and focus also fosters proactive agility instead of relying on reaction, resulting in a cognitive edge over the opposition.

2. ASSESSMENT AND TALENT MANAGEMENT

The effective management of personnel requires the ability to accurately assess and monitor cognitive capabilities throughout an aviator's career life-cycle.



By providing accurate information on cognitive state, NeuroTracker allows for critical insight into warfighter readiness, performance prediction and assessing return to action level following injury or PTS.

This technology has also demonstrated the capacity of identifying elite performers for recruitment and training purposes.

3. ACCELERATED LEARNING AND RESILIENCY

In order to extract the maximum benefit from training programs, warfighters must be constantly engaged and primed for learning. The ever-present barriers to this are distraction and inattentiveness, which diminish the return of such programs and can inflate associated costs.

NeuroTracker's ability to enhance awareness and focus has been demonstrated by physiological and functional improvements to the brain; a neuroplastic response. This maximizes an aviator's attentional skills to help reduce attrition and enable greater yield from current and future training methods.

By combining NeuroTracker training with skill specific dual tasks (NeuroTracker Tactical Awareness Mode), the system replicates the stresses of combat and ultimately prepares the operator for the rising complexity of the modern battlefield.

OUR CLIENTS INCLUDE



TRAINING OPTIONS

NeuroTracker training is a software that can be deployed either as an on-site training system or as a private cloud solution.

NeuroTracker On-site:

Training conducted in an high-quality active 3D environment utilizing a 3D projector. The on-site software includes advances session modes and allows for a variety of dual-tasks.

NeuroTracker Private Cloud:

The NeuroTracker Private Cloud platform allows for users to train in a decentralized manner, using computers or tablets with anaglyph 3D glasses.