Gunner/Crew Chief Station

Link Simulation & Training’s Gunner/Crew Chief Station (GCCS) training system is designed to hone helicopter gunnery and in-flight crew skills during realistic, high intensity virtual combat training.

The GCCS can be configured to provide door gunnery training for medium or heavy lift transport helicopters in the worldwide fleet.

The enclosure used for the GCCS varies depending on customer applications. For mobile, collective training systems the GCCS is enclosed in a manned module within a trailer. For standalone operation, the GCCS is enclosed in a separate container to support fixed or deployable training requirements.

In either standalone or networked modes, Link’s GCCS solution enables crews to master individual and crew coordination task training in multi-ship operations at a greatly reduced cost versus live fire aviation training. The Link GCCS supports training in day or night simulated environments, in addition to night vision goggle operations.
**GUNNER/CREW CHIEF STATION**

**Major Component Characteristics**

The GCCS structure replicates a basic aircraft interior for each crew position, including the aircraft seat, inertial reels and weapon. Actual aircraft gun mounts are used to support functionality.

A helmet-mounted display provides GCCS crewmembers with a high-resolution image of the synthetic battlefield. Through the use of sophisticated image masking techniques, each crewmember is provided with the correct visual representation for his position in the aircraft.

Out-the-window visuals are generated by a Link-developed image generation system. Link software is executed on a commercially available, Pentium-based, rack mounted personal computer. The video is created using commercially available, high-end graphics cards.

An off-the-shelf head tracker system supports six-degree-of-freedom head tracking over a 360º field-of-view.

The GCCS is currently designed to support a non-functional replica machine gun produced to guidelines for an unserviceable weapon. The machine gun replica is instrumented to sense position and trigger pull for computer simulation of firing effects. An actual gun mount and helicopter seat are integrated to enhance realism.

Although the weapon is non-functional, individuals can practice combat loading and clearing of the weapon’s chamber.

The Link GCCS replicates the crew communication system used in the actual aircraft platform. This off-the-shelf system can be linked to other simulation systems to support networked training operations.