

REALISTIC REPLICA WEAPON...
REALISTIC RECOIL...

**REALISTIC TRAINING!** 

ACME WORLDWIDE ENTERPRISES 1710 RANDOLPH COURT SE ALBUQUERQUE NM, 87106 (505) 243-0400

**NOT AN ACTUAL WEAPON!** 

and balance. Inert ammo can be fed into the body.

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### M60 7.62mm Variant

### **SENSORS**

- Trigger
- Charging Handle
- □ Top Cover
- Ammo Feed Cover
- Ammo Present
- □ Safety
- □ Bolt Back



Realistic replica is a non-gun, not a firearm, and can't be made to load

or fire a round. Replica emulates form, function, grips, controls, weight,

- □ Muzzle Flash
- Jam Round Light
- □ Barrel Removal
- □ Replica Laser

#### **ENCODERS**

- Azimuth Position
- □ Flevation Position

#### **MALFUNCTIONS**

- Sluggish Fire

RECOIL AT 500-600
ROUNDS PER MINUTE



CONTACT US TODAY FOR DETAILS

## **Turn-key Training**

#### **COMPLETE REPLICA WEAPON SYSTEM INCLUDES:**

- Replica Weapon Ultra realistic replica weapon with sensors
- <u>Gun Active Recoil (GAR®) Cradle</u> Weapon Cradle with integral, patented, all-electric, full-force, full-rate-of-fire recoil
- <u>Electronics Chassis</u> Provides power and electronic drives for gun sensor and recoil system. Chassis includes executable software and GAR® Manager Application.
- Weapon Mount Can be a tripod or specific vehicle or aircraft mount
- <u>Power and Signal Cables</u> Standard 25' Cables allow weapon training away from remotely located electronics and power source
- <u>Technical Data Package</u> Standard Operations & Maintenance Manual, Interface Control Document, Acceptance Test Procedures



POWER/SIGNAL CABLES

## Gun Active Recoil (GAR®) GAR® PATENT # 8690575 B1

The Gun Active Recoil ( $GAR^{\mathbb{R}}$ ) is ACME's patented, all electric system that provides full-force, full-rate-of-fire weapon recoil. The  $GAR^{\mathbb{R}}$  recoil system is built into the weapon cradle.

The ACME GAR<sup>®</sup> uses a 220 VAC (20 A) input and a standard Ethernet interface to the user's computer system.

The GAR<sup>®</sup> is composed of a weapon body cradle, mount, electronics chassis and associated power, and signal cables. The cradle replicates the actual weapon mount and contains all of the recoil motion components. The recoil assembly (mount and gun) are driven by an electric motor and linkage system mounted within the weapon cradle.

The all-electric system uses standard AC wall power, not pneumatics or blank cartridges. No pneumatics means:



7.62MM TYPE REPLICA WEAPON GAR® TOP VIEW

FULL FORCE RECOIL AT FULL RATE OF FIRE

Why ACME Replica Weapon Systems?

#### PROVEN, DEPENDABLE TRAINING SYSTEM

Great training capability is the prime requirement. The customer may have additional needs for the gunnery training system like infrastructure, logistics, storage, and simplified procurement. Here's how the gun system meets or exceeds those needs too:

- Eliminate the hassle of armory storage, check-out/check-in and continuous physical security for actual weapons
- Replica weapons are Non-Guns, NOT firearms. Replicas can't be made into firearms. No need to store in the armory.
- Simple, straight-forward power system. No messy, intensive pneumatics, no plumbing/wiring changes to the office building.
- Replica weapon system plug rights into the office wall. Simple, dependable, all-electric system.
- Proven and in use by US military now-not a development project
  - ° More than 300 ACME replica weapons systems delivered.
  - ° In training use with US Army, Air Force, Navy, Marines, and Coast Guard.
- Plug-and-play system. No time/money required for development, and no costly or demanding integration
- Self-contained system includes fully integrated hardware, software, firmware, and instructor application. Set up and fire!
  - ° ACME has specialized skills with aerial gunnery trainers
  - ° More than 16 years experience with helicopter gunnery trainers including CH-46, CH-47, H-60, UH-1, CV-22, H-65, & EH-101.
  - ° Delivered replica gun training systems for M2, M60, M240, GAU-2, GAU18, GAU-21, M3M, M134, XM218.
- Simple procurement process and commercially available
  - ° Buy right-off-the-shelf by Part Number.
  - ° Buy using a credit card if desired.

#### **WEAPONS EASILY MATE WITH VISUAL & TARGETING SYSTEMS**

ACME's a stand-alone Replica Weapon Training System is excellent for training weapons handling and use and response to malfunctions. The system can also be easily integrated to a visual and targeting system that enables gunners to engage targets.

### Products not Prototypes ACME Gun Training Systems in use for:

- **CUSTOMERS**
- US Coast Guard
- US Air Force
- □ US Army
- □ US Navy
- USMC
- Air National Guard
- Canada Defense Forces
- UK Royal Navy

#### TRAINERS

- □ Ground Simulators
- Vehicle Simulators
- Shipboard Simulators
- Helicopter Simulators
- Armored Vehicle Sims

#### **TRAINING**

- Basic Weapon Skills
- Marksmanship
- Mission Training
- Malfunction Training
- Adversary Threat
- Convoy Training

#### **VISUALS**

- □ Virtual Reality
- Augmented Reality
- Direct View Displays





Realistic Recoil at the Grips



Realistic Rate of Fire



Full Suite of I/O Sensors

## **GAR Manager Application**

### PRECISE CONTROL FOR INSTRUCTORS

The heart of GAR® products is the GAR® Management Console web application that can be used to monitor and test each of the systems.

The GAR® Manager is much more than simple Input/Output reporting. It's a...

- Intuitive Instructor Control Enables precision control of the gunnery training environment
  - ° Settable ammunition and rate of fire
  - ° Insertable, variable malfunctions
- <u>Trainee Skills Monitor</u> Monitoring gunners performance, actions, sequences
  - Ensure reloading, charging, clearing, safing sequences are accomplished in the proper order.
  - ° Real-time weapon positioning enable the instructor to monitor gunner's scanning and firing patterns.
- Real-Time Performance Monitor
   Monitoring system health and status and continuous interaction with the Host Computer

#### Maintenance and Troubleshooting Device

° Enables the weapon capabilities to be remotely actuated, enabled, and disabled regardless of the weapon inputs. This is a great troubleshooting tool to isolate and confirm individual channel performance.

The GAR® Management Console can be accessed using any web browser application.

GAR® MANAGER
APPLICATION INCLUDED
WITH EVERY ACME REPLICA
WEAPON SYSTEM



ACME's GAR® Manager System continuously monitors the weapon and ammunition status and enables or disables the weapon based on the status.

The GAR<sup>®</sup> Manager enables instructors to set the ammunition count through the software and the system decrements the ammunition available as the weapon is fired.

The GAR® Manager also ensures the reloading process occurs in the proper sequence required to enable the weapon to fire.

The GAR<sup>®</sup> Manager also enables the instructor to set time delays for malfunctions or even override the weapon if necessary.

ACME's GAR<sup>®</sup> Manager System enables the instructor to insert or schedule specific malfunctions through the software interface such as weapon jams, misfires, round cook-off, or runaway firing.

# Training with ACME's Replica Weapon



#### WEAPON HANDLING TRAINING

Use ACME's replica weapon system to train and practice basic weapon handling skills including preflighting the weapon for use, arming/safing, loading, grips, charging, aiming, sight pictures, dry fire, trigger control, burst firing, and reloading. Teach new gunners how to prepare for and overcome the effects of recoil. Use the replica weapon as a first line of training to cement the fundamentals long before going to the armory or range with an actual weapon.

#### **EMERGENCIES/MALFUNCTIONS TRAINING**

Use the ACME replica weapon system to train gunners to successfully respond to and overcome weapon malfunctions. Practice safely with a full range of malfunctions that simply can't be accomplished with actual weapons. Easily insert a malfunction to teach students to immediately identify the failure. Insert a series of malfunctions to validate student skills during their solo check-outs to qualify on the weapon.

#### **TARGET TRAINING**

Practice engaging targets cost-effectively with unlimited, 'virtual' bullets. Save millions of dollars in ammunition, weapon and range costs. Teach firing patterns and lay down fire in response to specific targets and situations. Practice dealing with the recoil forces on the gun in a long fire-fight.

#### MISSION TRAINING

Put all the gunnery skills together to practice specific missions with ultra-realism. Limit ammunition to mimic as-actual, mission quantities. Add in realistic targets and engage while immersed in the simulator Practice crew-resource skills between gunners and others. Then, add in a realistic malfunction to ensure crews can deal with the emergency and the mission needs successfully.

#### WEAPON SKILLS

- Weapon Preflight
- Safety Inspections
- Arming/Safing
- Loading
- -Ammunition Feed
- Charging Techniques
- Aiming
- Trigger Control
- Burst Firing
- Leading Targets
- Suppression Fire

#### **MALFUNCTIONS**

- □ Jam
- Cookoff
- □ Runaway
- Sluggish Fire
- Misfire

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