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M-2465 .44 Magnum Mega Class Mk. I (MMC) Security Sidearm

The M-2465 Magnum Mega Class sidearm is a chemical-propellant, .44-calibre caseless and Gauss-coil assisted handgun featuring an integrated Oxygen-Injection Compressor module (OIC) to ensure effective operation in vacuum. Though the majority of small arms assigned to the Marathon security team were military-grade weapons requisitioned from standard assembly lines, the MMC was designed by the UESC Marathon project's Security Engineering Department. This was done in order to meet a new specification issued in 2463 for a standard-issue security staff weapon which would maintain reliability in the varied conditions to which staff were projected to be exposed in theoretical combat scenarios, though the final model is not an entirely original design. The MMC Mk. I was finalized in 2465, incorporating lessons learned from the Third Martian War.

The MMC Mk. I design is based on the M-2441 UESG military standard-issue sidearm, a weapon favoured by both sides in the Third Martian War and the failed MIDA coup of 2466. It chambers the same 10.9x33mm caseless cartridge, though the M-2465 version integrates a 275-grain Teflon-cased bullet with a tungsten core, optimizing both stable flight path and armour penetration. Like the M-2441, the MMC Mk. I integrates a short-stroke double-action hammer and a removable and replaceable 5000-joule Rotary Gauss Coil module (RGC), allowing a muzzle velocity of 1430 m/s (4691.6 ft/s). As with the M-2441, the MMC Mk. I automatically reverts to chemical propellant alone if the RGC becomes damaged or burnt out, at an output of 944 m/s (3083.9 ft/s). A single RGC battery powers 400 rounds, or fifty full magazines. Loading is via military standard eight-round box magazines.

The MMC's integrated Oxygen-Injection Compressor module (OIC) is one of the chief innovations of the Marathon SED, and in addition to its primary function of allowing vacuum functionality of the sidearm also improves the forward balance of the otherwise rear-heavy pistol. The OIC contains a removable air compressor and oxygen cartridge, which rapidly feeds from available air supply in atmospheres (both natural and artificial) when the weapon safety is deactivated. A full OIC cartridge is sufficient to provide reliable firing for 400 rounds. The four OIC intake vents double as gas outputs for the pistol's chemical propellant, though the high efficiency of modern propellant ensures that the venting hazard is minimal compared with that of a 20th-century revolver's cylinder gap. The OIC's rapid release system ensures that oxygen

cartridges can be quickly replaced in the event of extended combat in a vacuum environment. Modular ammunition cases contain RGC batteries, OIC cartridges, and box magazines.

The MMC Mk. I frame is of titanium and polymer construction. The grip is both wider and more ergonomic than the military base model and contains more efficient recoil dampeners in the grip base, where energy transfer to the user is maximized. This ensures comfortable fit and optimal weapon balance. An attachable 5.5 power adjustable holotelescopic sight is standard with UESC Marathon security stocks.

