

TRIAD OF GROUND FIRES

With the increased range and speed of the Expeditionary Fighting Vehicle (EFV) and the MV-22, the breadth and depth of the battlefield is increasing immensely. Consequently, the Marine Corps must have weapons systems with correspondingly greater range, lethality, and tactical mobility than those previously available. A triad of indirect fire-support programs is moving the Marine Corps in that direction.

The first element of the triad is the M777E1 Lightweight 155mm towed howitzer that will replace our current M-198 howitzer beginning in 2005. The M777E1 is a joint USMC-Army effort that will meet or exceed all the requirements of the current system, while reducing its weight from 16,000 to 9,800 pounds. The M777E1's maximum range is 15 miles using unassisted projectiles or 18 miles using assisted projectiles.

The second element of the triad is the High Mobility Artillery Rocket System (HIMARS). The HIMARS will deliver high volumes of rocket artillery in support of the ground scheme of maneuver. The HIMARS will provide accurate, responsive general support and general support reinforcing fires at long range, under all weather conditions, and throughout all phases of combat operations ashore. Capable of firing the Multiple Launch Rocket System (MLRS) Family of Munitions (MFOM), the HIMARS will fire both precision and area munitions and is capable of ranges exceeding 36 miles.

The third system of the land-based fire support triad, the Expeditionary Fire Support System (EFSS), will accompany the MAGTF in any expeditionary mode of operations. It will be the primary indirect



fires system for the vertical assault element of the ship-to-objective maneuver force. The EFSS will be internally transported by CH-53 or MV-22 aircraft to allow the greatest range and flexibility of employment.

In addition to acquiring these primary fire support systems, the Marine Corps is developing other key adjuncts to the fire support triad that will enhance the capabilities of the fire support platforms. These programs include sensors such as the Ground Weapons Locating Radar (GWLR), the Target Location Designation Handoff System (TLDHS), and the Advanced Eyesafe Rangefinding Optic (AEROS). Additionally, the Improved Position Azimuth Determining System (IPADS) and the Profiler meteorological measuring system will improve location and weather data to ensure first-round accuracy. For the M777E1, the Modular Artillery Charge System (MACS) will reduce the number of propellant types used and Multi-Option Fuze Artillery (MOFA) will reduce the number of fuzes currently in the inventory. Finally, acquisition of M795 155mm high explosive projectiles and variants will increase the lethality and range of our munition inventory.

Ground based, indirect fires are irreplaceable when forces are joined in close combat. Nothing else is as responsive to the commander's needs, or as reliable. They are not weather or facility dependent. As such, they are key components of the reach and lethality of the MAGTF.