

# INFANTRY NEWS



OPERATIONAL TESTING has begun on the A3 digitized version of the Bradley fighting vehicle system (BFVS). The A3 extends the digital capability of mechanized infantry out to the year 2025, which will enable the Army to make appropriate changes in doctrine, organization, training, leader development, materiel, and soldier interface to increase force cohesion and effectiveness as the new century arrives.

The multi-phased test and evaluation program is a combined effort of the Infantry School as combat developer, the Program Manager-BFVS as the materiel developer, and the testing community, with the U.S. Army Test and Experimentation Command (TEXCOM) as operational tester.

The operational testing and evaluation will be conducted in four phases:

- ♦ The Operational Evaluation Phase (February-April 1997) includes two proof-of-principle tests at the contractor's facilities in California, plus gunnery at Aberdeen Proving Ground, Maryland.

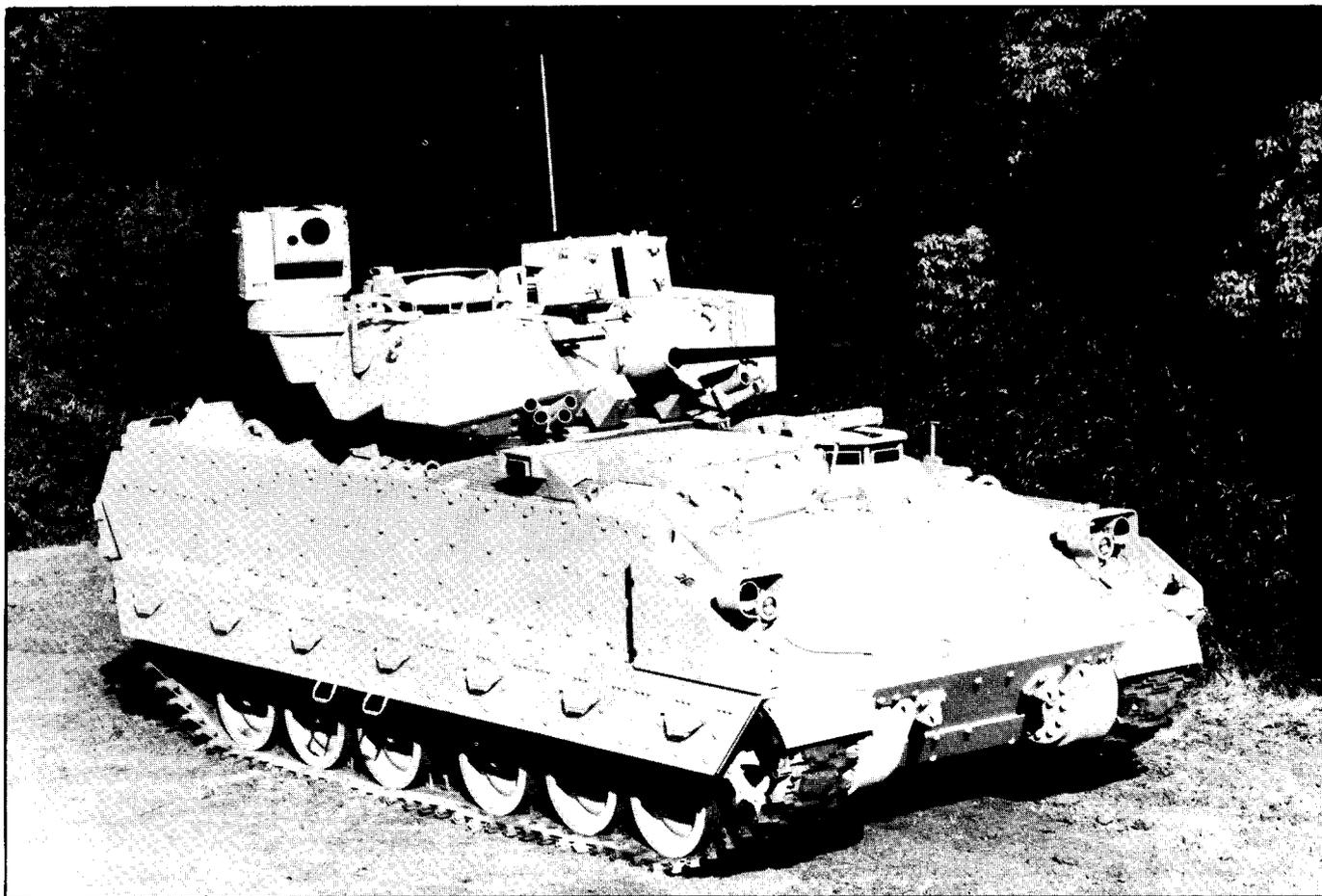
- ♦ Limited User Test #1 (1-12 December 1997), scheduled for Fort Benning, Georgia, is intended to validate interim software upgrades for command and control and fire control as well as position navigation. Gunnery for this phase will include Bradley firing Tables I through VIII.

- ♦ Limited User Test #2 (April-June 1998) will be the critical melding

of technical improvements with combined arms requirements with a full-up software package. Gunnery for this test, which will go from Table VI through Table XII and include platoon-level force-on-force maneuver, is tentatively planned for Fort Hood, Texas.

- ♦ Initial Operational Test and Evaluation (May-July 1999) will include combined arms company team maneuver and gunnery. Sixteen M2A3 Bradleys and five digital M1A2 Abrams tanks will go up against 14 M2A2 ODS model Bradleys and five M1A1 tanks in force-on-force maneuver.

The operational test is expected to demonstrate the product improvements that separate the M2A3 from the M2A2 and the M2A2/ODS. The M2A3



is the basis for a medium weight class combat vehicle family that could include vehicles for future infantry, scouts and division cavalry, SHORAD-air defense, artillery fire support, and battle command at all echelons. It is also the first infantry digital match with the already digital M1A2 series tank.

Payoffs for the Army include the following Bradley improvements:

**Situational Awareness.** The A3 has commander/squad leader tactical displays, plus a commander's independent viewer (CIV), giving a closed-hatch 360-degree view through day/night, smoke and obscurants through a second-generation forward looking infrared (FLIR) capability. Commanders and dismounts can enter up to 10 tactical multiscale displays, delivering a 30-percent greater capability in situational awareness than the A2 series.

**Lethality.** In terms of lethality, the A3 packs day TV and second-generation FLIR for the gunner. The system delivers full-solution digital fire control and an auto-tracking, hunter-killer capability not found on earlier models. In terms of target detection, the CIV and FLIR deliver three times the acquisition capability of an earlier model Bradley.

**Survivability.** The A3 model BFVS has an enhanced driver's vision system plus overhead and NBC protection. The NBC gas particulate filter unit now extends to the dismounts as well as the crew. Redundant systems also aid survivability; for example, older model BFVs had only one turret processor unit while the A3 has a hull processor unit as well. If one computer is destroyed, the other keeps running the system.

**Sustainability and Reduced Operating and Sustainment Costs.** The A3 is built for sustainability and re-

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duced operations and sustainment costs; it has an embedded diagnostics and training package, plus software upgrades for direct support and general support units. The computerized maintenance systems boast a 95-percent fault isolation rate. Examples include integrated Built-in Test/Built-in Test Equipment that eliminates semiannual verification of the TOW 2 subsystem.

**Compatibility with M1A2 SEP.** The A3 can now interface digitally with the M1A2 main battle tank that is already in the field. The M2A3 series includes artillery, air defense, and command and control variants, all of which extend digitization on the battlefield.

**Outyear Battlefield Requirements.** In addition to being a replacement for the current infantry fighting vehicle, the M2A3 also enables ground combat forces to go into the next century with digital, interoperable information transmission systems for close combat, cavalry, air defense, artillery, and command and control.

For further information on BFVS A3 operational testing, contact TRADOC System Manager, Bradley Fighting Vehicle System, Fort Benning, GA 31905; (706) 545-5386/76, DSN 835-5386/76.

THE OFFICER CANDIDATE School (OCS) at Fort Benning has presented its 1996 Robert P. Patterson Award to Second Lieutenant Patrick P. Stobbe.

This prestigious award is given each year in memory of Patterson, who was commissioned a second lieutenant from the World War I equivalent of OCS. He attained the rank of major and was recognized for acts of gallantry and bravery by award of the Distinguished Service Cross, the Silver Star, and the Purple Heart. He went on to serve as a Federal judge and as Secretary of War.

The Patterson award is presented each year to the outstanding infantry graduate of OCS and the Infantry Officer Basic Course. The selection is made on the basis of leadership, academic effectiveness, aptitude, and character.

Lieutenant Stobbe is now assigned to Company B, 3d Battalion, 187th Infantry, 101st Airborne Division, Fort Campbell, Kentucky.

A TACTICAL NAVIGATION system for the Army's Bradley fighting vehicle is being produced under a recent contract. The contract is part of a retrofit program for the Army's Bradley fleet. Delivery of the systems is scheduled for the fourth quarter of 1997.

The low-cost, digital compass-based TACNAV is integrated with a global positioning system (GPS) receiver to provide vehicle crews and commanders with superior information on navigation and target orientation. TACNAV enables a crew to maneuver faster, synchronize operations, and locate targets rapidly and accurately.

In the past, compasses could not be used aboard armored vehicles because the metal interfered with accuracy. With TACNAV, automatic calibration capabilities have been embedded to compensate for the magnetic influences of the vehicle's hull, turret, and pitch and roll.

