ABBREVIATIONS AND ACRONYMS

Α

AA: air-to-air ABL: airborne laser ACGIH: American Conference of Governmental Industrial Hygienists ACP: air commander's pointer AD: air defense ALL: airborne laser laboratory AMC: Army Materiel Command AMEDD: Army Medical Department AMEDDC&S: Army Medical Department Center and School AMRDC: Army Medical Research and Development Command ANSI: American National Standards Institute APC: armored personnel carrier AR: Army regulation ArF: argon fluoride ARPA: Advanced Research Projects Agency (US Department of Defense) AT: antitank ATGM: antitank guided missile AVS: Aidman Vision Screener

B

BLPS: Ballistic and Laser Protective SpectaclesBMP: *Boyevaya Mashina Pekhoty* (Russian for "infantry fighting vehicle")BOLT: bomb, laser, targetBRAC: Base Realignment and Closure

С

C-CLAW: close-combat laser assault weapon CIE: International Commission on Illumination (Commission Internationale de l'Éclairage) CLGP: cannon-launched guided projectile COIL: chemical oxygen-iodine laser C-RAM: counter rockets, artillery, and mortar rounds C-RAMD: counter rockets, artillery, mortar rounds, and drones CSLO: confocal scanning laser ophthalmoscopy CW: continuous wave

D

DARPA: Defense Advanced Research Projects Agency (successor to ARPA) DF: deuterium-fluoride DoD: Department of Defense DoDI: DoD Instruction DPI: dual Purkinje image

Ε

ED₅₀: median effective dose EDL: electrical discharge laser ELRF: eyesafe laser rangefinder ELTEP: Emerging Laser Threat Eye Protection (program) Er: erbium-doped

F

FIST-V: fire support team vehicle FM: Farnsworth Munsell FM: field manual

G

GA: General Atomics GaAlAs: gallium-aluminum-arsenide GaAs: gallium arsenide G-BAD: ground-based air defense GBU: guided bomb unit GCP: ground commander's pointer GDL: gas dynamic laser GLATGM: gun-launched antitank guided missile G/VLLD: ground/vehicular laser locator designator

Η

He-Cd: helium-cadmium HEL: high-energy laser HELLADS: high-energy liquid laser area defense system He-Ne: helium-neon HF: hydrogen fluoride HMMWV: high-mobility multipurpose wheeled vehicle Ho: holmium

I

ICG: indocyanine green ICNIRP: International Commission on Non-Ionizing Radiation Protection ICRC: International Committee of the Red Cross IEC: International Electrotechnical Commission IFV: infantry fighting vehicle IRSF: intraretinal scar formation ISMT: indoor simulated marksmanship trainer

J

JLST: Joint Laser Safety Team JLTV: joint light tactical vehicle

Κ

KrF: krypton fluoride

L

LADS: laser area defense system LAIR: Letterman Army Institute of Research LAMC: Letterman Army Medical Center LAPD: Los Angeles Police Department LAV: light-armored vehicle LaWS: Laser Weapon System LCMS: laser countermeasures system LED: light-emitting diode LEL: low-energy laser LEP: Laser Eye Protection LGM: laser-guided munitions LLDR: lightweight laser designator rangefinder LMB: Lasers on the Modern Battlefield (conference) LOSAT: line-of-sight antitank

Μ

MAD: mobile Army demonstrator MD: mobile demonstrator MELIOS: mini-eyesafe laser infrared observation set MILES: Multiple Integrated Laser Engagement System MIRACL: midinfrared advanced chemical laser MLRF: miniature laser range finder MPE: maximum permissible exposure MRT: military ruggedized tablet MTHEL: mobile tactical high-energy laser MTU: mobile test unit MULE: modular universal laser equipment MVL: minimum visible lesion

Ν

NATO: North Atlantic Treaty Organization Nd:YAG: neodymium-doped yttrium aluminum garnet NFL: nerve fiber layer NHP: nonhuman primate NIR: near-infrared NOHD: nominal ocular hazard distance

0

OCT: optical coherence tomography OD: right eye (ocular dexter) OPA: optical phased array OS: left eye (ocular sinister)

Р

PEO: Program Executive Office PLC: pocket laser communicator PMB: papillo-macular bundle PRF: pulse repetition frequency PRL: preferred retinal location

R

RBS: Robotsystem R&D: research and development RDT&E: research, development, test, and evaluation RHME: retinal heating, moving eye (model) RNFL: retinal nerve fiber layer ROBS: rapid optical beam steering RPE: retinal pigment epithelium

S

SAM: surface-to-air missile SDI: strategic defense initiative SLO: scanning laser ophthalmoscopy SRI: Stanford Research Institute SSL: solid-state laser

Т

TD: technology demonstrator TEM: transverse electromagnetic THEL: tactical high-energy laser TIE: total intraocular energy TLOS: target location and observation system Tm:YAG: thulium yttrium aluminum garnet TOW: tube-launched, optically tracked, wire-guided TSL: tri-service laser

U

UAV: unmanned aerial vehicle UNFT: unified Navy field test USACHPPM: US Army Center for Health Promotion and Preventive Medicine (now the US Army Public Health Center) USAMRD: US Army Medical Research Detachment UV: ultraviolet

V

VA: visual acuity VEP: visual-evoked potential

W

WRAIR: Walter Reed Army Institute of Research