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6.2.3.1.1.2.14 (U) Incorporate appropriate displays to inform the crew of the:

6.2.3.1.1.2.14.1 (U) Arm/safe status.

6.2.3.1.1.2.14.2 (U) Number of missiles remaining onboard.

6.2.3.1.1.2.15 (U) Be designed for ease of loading. Removal of the missile launcher (pods) will not negate use of the wing store stations for other weapons. Empty missile launcher (pods) must be capable of being attached to or removed from the AAH by two men.

6.2.3.1.1.2.16 (U) Be capable of selective jettisoning of missile launcher (pods) by either or both crewmembers.

6.2.3.1.1.2.17 (U) Be designed to allow the missile to remain in a safe condition until a firing sequence is initiated.

6.2.3.1.1.2.18 (U) Be designed to allow for selective severance of the missile guidance link subsequent to launch.

6.2.3.1.2 ~~(e)~~ Area Target.

6.2.3.1.2.1 ~~(e)~~ The gun system will be a high rate of fire 30mm automatic cannon mounted in the forward fuselage area, which will have antipersonnel and antimateriel capability when used as an area or suppressive fire weapon. Probability of at least one hit in a 50-round burst against a stationary 3 x 3 meter, vertical target at ranges of 1 km, 2 km, and 3 km under daytime conditions will be 0.86 at 1 km, 0.39 at 2 km, and 0.2 at 3 km, respectively, on axis of the weapon system. A slight degradation (not to exceed four mils) will be accepted for both off-axis fire and AAH flight conditions other than that specified. Hit probabilities will be achieved from HOGE. Nighttime accuracies will be 0.82 at 1 km, 0.35 at 2 km, and .17 at 3 km, respectively, and will be obtained utilizing the same parameters as stated above for daytime.

6.2.3.1.2.2 (U) Provide coverage of 100° -120° in azimuth, left and right of the helicopter longitudinal axis, 40° to 70° in depression and maximum elevation coverage allowable due to helicopter structural design and superelevation necessary to achieve ranges of at least 3000 meters.

6.2.3.1.2.3 (U) Provide an ammunition payload of 800 to 1000 rounds (1200 round total storage capability available), and a single firing rate of 500 to 750 shots per minute optimized to eliminate sympathetic vibrations in the airframe. The subsystem will have a probability of ammunition fire-out of .92-.94 for an ammunition complement of 1000 rounds.

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- 6.2.3.1.2.4 (U) Not degrade performance capabilities of the AAH nor handling qualities as defined in paragraph 6.2.1.5 of this MN.
- 6.2.3.1.2.5 (U) Function satisfactorily in any normal operating attitude of the AAH.
- 6.2.3.1.2.6 (U) Be compatible with the electrical and avionics equipment of the AAH.
- 6.2.3.1.2.7 (U) Incorporate fail safe protective features to disable firing circuits in the event of component malfunctions.
- 6.2.3.1.2.8 (U) Not interfere with servicing, landing, takeoff, or ground handling procedures for the AAH.
- 6.2.3.1.2.9 (U) Utilize electrical/hydraulic power compatible with AAH design.
- 6.2.3.1.2.10 (U) Permit easy access for the purpose of clearing ammunition jams or removal of the weapon.
- 6.2.3.1.2.11 ~~(S)~~ Have dual purpose ammunition that will:
- 6.2.3.1.2.11.1 (U) Have antipersonnel/antimateriel high explosive ordnance designed to meet storage and transit requirements as defined in the appropriate regulations.
- 6.2.3.1.2.11.2 (U) Remain in a safe condition until the firing impulse is delivered. The projectile will remain unarmed for a safe arming distance of not less than 22-1/2 meters and all projectiles will arm at a range of not more than 100 meters.
- 6.2.3.1.2.11.3 (U) Weigh 0.6 to 1.2 pounds per round (linkless feed desired).
- 6.2.3.1.2.11.4 ~~(S)~~ Be capable of penetrating 3/4-inch thick, rolled, homogeneous steel armor from a minimum of 0 degrees to a maximum of 50° to 70° obliquity with afterplate effect sufficient to cause casualties to personnel in combat clothing four to six feet behind the armor plate in line with the trajectory. Penetration range will be optimized at 1500 meters. Antimateriel ammunition will provide a fragmentation effect in an optimum pattern to obtain a lethal antipersonnel effectiveness in an area of at least 150 to 300 square feet. This effectiveness will apply to a 5-minute assault casualty criteria to prone troops in average terrain analogous to central Europe.