PPPS 2019



Contribution ID: 687

Type: Invited

ASELSAN Electromagnetic Launch Laboratory: First Shot

Thursday 27 June 2019 10:00 (30 minutes)

ASELSAN Inc. has been conducting experimental research on electromagnetic launchers since 2014. A 1 MJ first generation and 3.25 MJ second generation Pulsed Power Supplies are built and tested with 25 mm x 25 mm square bore EMFY-1 Electromagnetic Launcher at open area test range by ASELSAN. In 2018 ASELSAN constructed a laboratory in Ankara to conduct experiments up to 2 MJ muzzle energy. For this goal stored energy of the second generation pulsed power supply will be increased to 8 MJ. ASELSAN started to use this laboratory with new EMFY-2 Electromagnetic Launcher since beginning of 2019.

This paper describes ASELSAN Electromagnetic Launch Laboratory and represents results of the first shot of EMFY-2 Electromagnetic Launcher fed by 3.25 MJ PPS in this laboratory.

Keywords: Pulsed Power Supply; Electromagnetic Launch; Electromagnetic Launcher; Hypervelocity; Railgun

Author: Mr KARAGOZ, Mustafa (ASELSAN)

Co-authors: Dr YILDIRIM, Baran; Mr YURDAKUL, Emre Burak; Dr DURNA, Emre; Mr CAVBOZAR, Ozgur; Mr GOCMEN, Ulas; Dr TAN, Evren; Mr CEVIK, Yasin; Mr CIVIL, Anıl

Presenter: Mr KARAGOZ, Mustafa (ASELSAN)

Session Classification: 8.1 Electromagnetic Launch

Track Classification: 8.1 Electromagnetic Launch