INTERNATIONAL BALLISTICS SOCIETY

Launch Dynamics

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The field of launch dynamics is an area alternatively called Transitional Ballistics or Intermediate Ballistics, the study of launch dynamics constitutes those processes contributing to the determination of the flight body dynamic state at entry into free flight. Consideration is given to launcher and projectile/missile motion during the acceleration phase, disengagement from the launcher, muzzle flow, and sabot discard. In addition, attention is given to early free flight geometry change including fin and control surface deployment or lateral vibration of flexible flight bodies. A related area of interest is the study of muzzle exhaust phenomena including muzzle blast and flash, smoke and other obscurants, and weapon firing signatures across the frequency spectrum. Experimental, analytical, and numerical approaches are employed to uncover the fundamental physics relating to projectile and missile launch.

The International Ballistics Society is interested in all areas and applications of launch dynamics. Experimental, analytical, and numerical approaches are employed to uncover the fundamental physics relating to projectile and missile launch.