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Abstract for an Invited Paper for the SHOCK11 Meeting of the American Physical Society

## Multi-Shock Experiments and Modeling of PBX 9502 Reactants TARIQ ASLAM

The multi-shock response of PBX 9502 is examined. In particular a set of experiments utilizing multi-component impactors of low density material (TPX) followed by high density material (Ta) are used in a 2-stage gas gun to shock compress PBX 9502 to very high pressures without subsequent chemical reaction. Relevant modeling and computations will be presented for the PBX 9502 reactants equation of state.

Work done in collaboration with Richard Gustavsen, Nathaniel Sanchez, Brian Bartram, and Ralph Menikoff.