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A comparison of reactive burn models to gap/rate-stick experiments CHRISTINA SCOVEL, RALPH MENIKOFF, ELIZABETH FRANCOIS, DANA DATTELBAUM, JAY KUCKO, Los Alamos National Lab — We present a numerical study of shock initiation for the case when a detonation wave in a donor PBX 9502 passes through an inert polymer material (epoxy) and then into an acceptor of PBX 9502. The pressure gradient behind the detonation wave causes the lead shock in the epoxy to decay and strongly influences whether the acceptor detonates. We compare four reactive burn models and discuss difference in their predictions.

Christina Scovel
Los Alamos National Lab

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