

shocked state may be. Many of these solids are further complicated by phase transformations.

Plastics appear to comprise another distinct class of materials for which a model for the constitutive relation under shock needs formulation. Much more experimentation is required before theory can fairly begin on this problem, although the success of Kolsky's model at low stresses is encouraging.

Porous solids form still another class in which much work is currently underway. The nature of the compaction process is only beginning to be understood and is crucial to predictions of shock propagation.

TABLE I

Stresses Produced by Impact at 1.5 mm/ $\mu$ s. (kbar)

Projectile	Target				
	Al	Fe	Pb	W	Lucite
Al	130	175	175	235	30
Fe	175	280	275	390	70
Pb	175	275	270	385	70
W	235	390	385	640	75
Lucite	30	70	70	75	30