

PULSE BURST LASER SYSTEM FOR HIGH SPEED LASER AND COMBUSTION MEASUREMENTS

NAIBO JIANG, MATT WEBSTER, KATHRYN GABET, RANDY PATTON, JEFFEREY SUTTON AND WALTER LEMPert, *Department of Mechanical Engineering, The Ohio State University, Columbus, OH 43210*; JOSEPH MILLER AND TERRENCE MEYER, *Department of Mechanical Engineering, Iowa State University, Ames, IA 50011*; JENIFER INMAN, BRETT BATHEL, STEVE JONES AND PAUL DANEHY, *NASA Langley Research Center, Hampton VA, 23681*.

The critical features of a burst mode diagnostic imaging system is described, along with representative NO PLIF measurements at 1MHz, in a Mach 10 hypersonic flow, and Rayleigh imaging and CH PLIF at 10kHz in turbulent flames.