Engineered Materials Arresting System (EMAS)

Runway Excursion Risk Reduction Toolkit
What is EMAS

• A bed of cellular cement blocks placed at the end of a runway to decelerate an overrunning aircraft in an emergency

• Passive system that will reliably & predictably crush under the weight of an aircraft
Theory of Operation

- Material designed to crush during overrun (like driving into quicksand)
- Designed to stop aircraft at entry speed of 70kts or less
- Engineered to avoid damage to aircraft and passengers
To date four overruns successfully arrested with EMAS

May '99: Saab 340 at JFK
May '03: MD-11 at JFK
Jan '05: B747 at JFK
Jul '06: Falcon 900 at Greenville
EMAS Installations – United States

Boston Logan

Baton Rouge, LA

Burbank, CA

JFK Int’l, NY