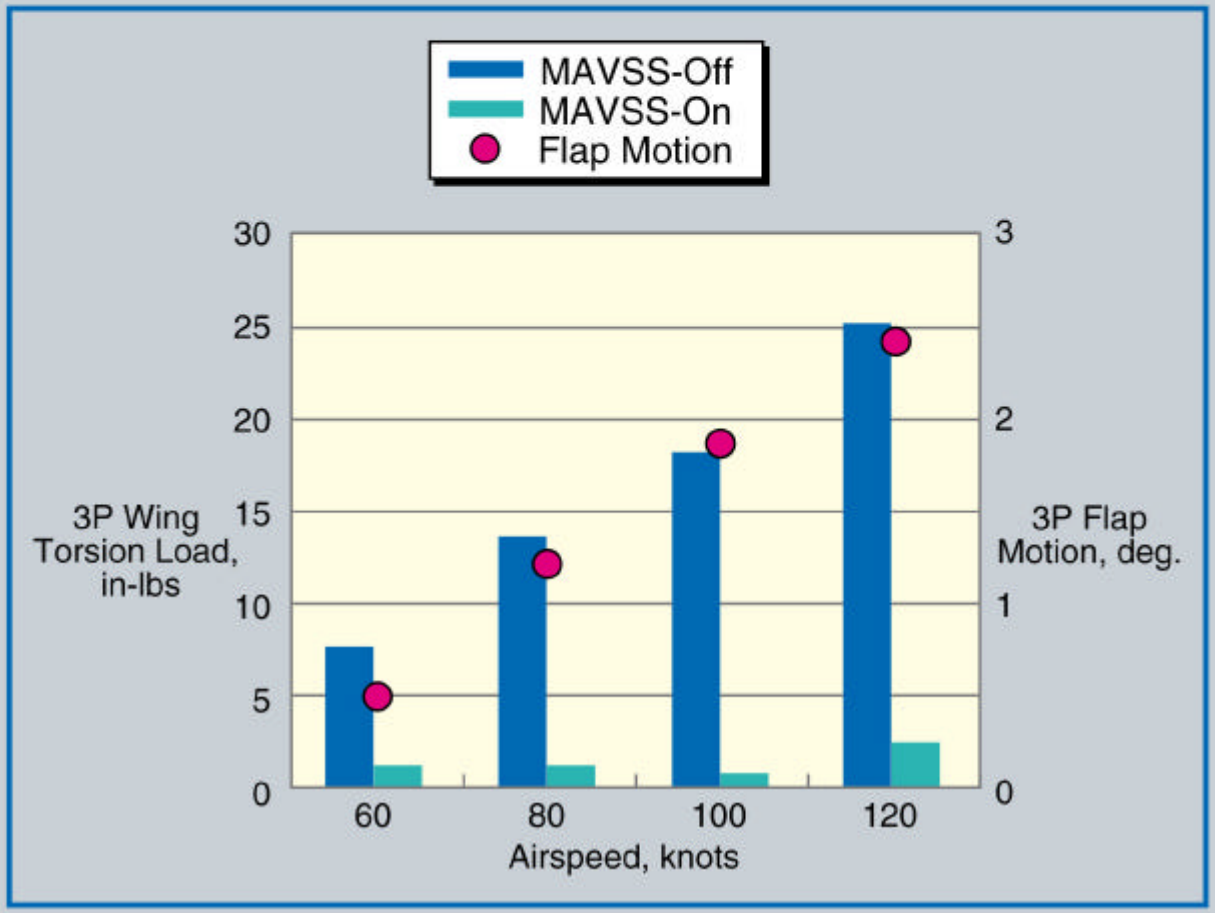
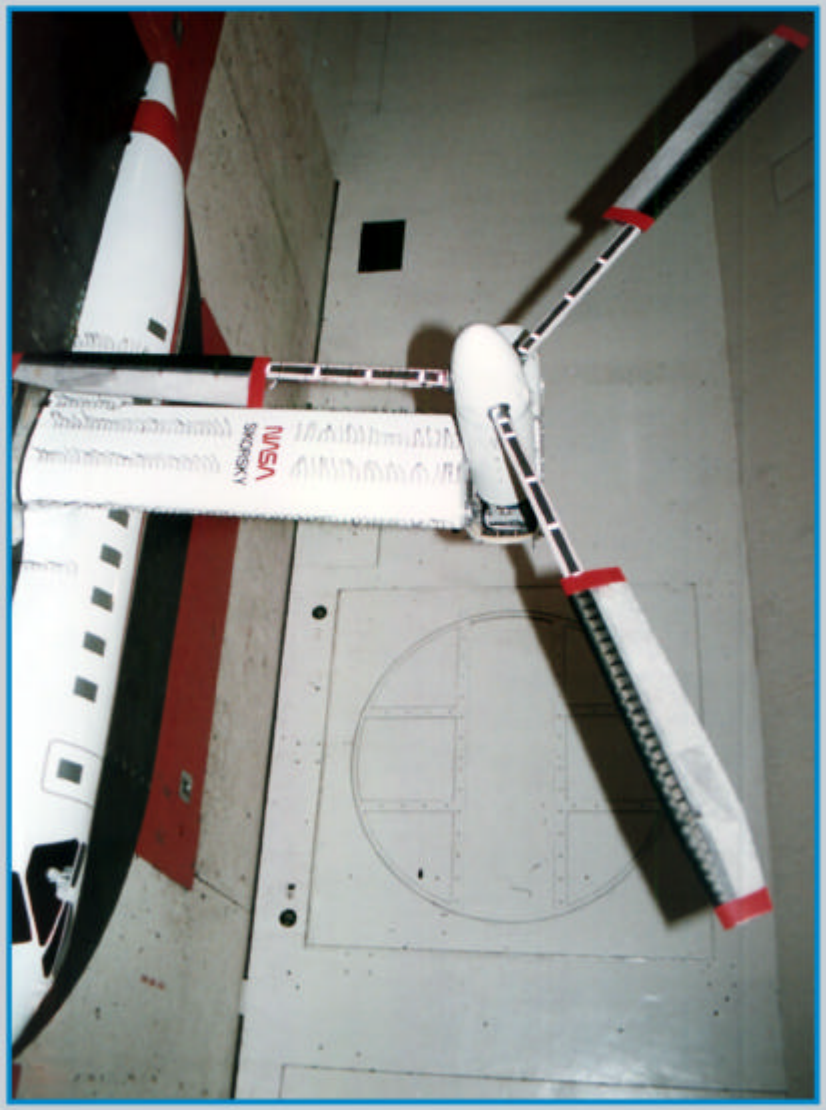
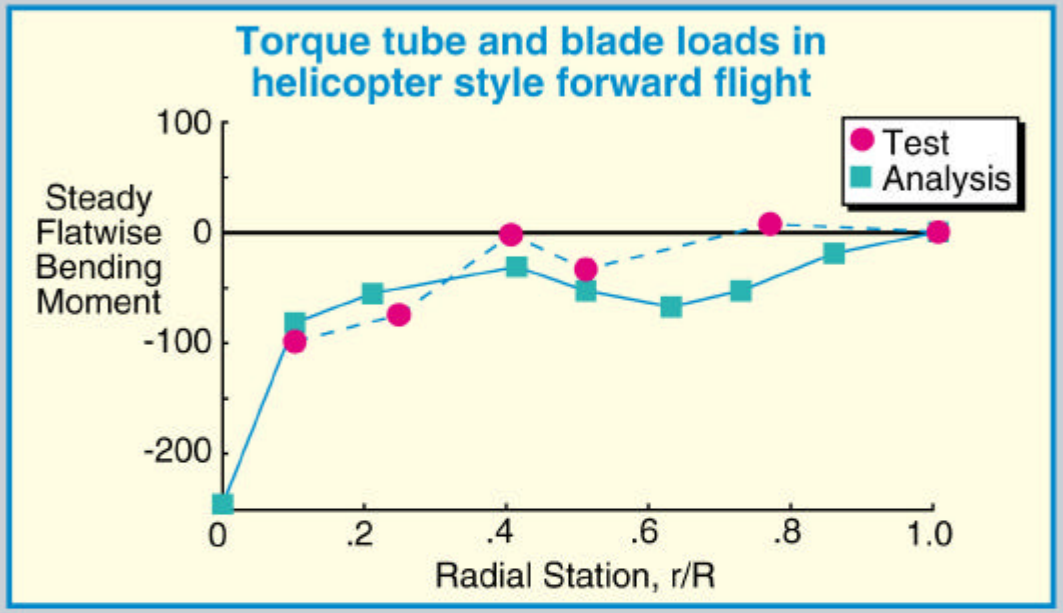
ACTIVE-FLAPERON TEST DEMONSTRATES SIGNIFICANT REDUCTIONS IN TILTROTOR WING VIBRATORY LOADS

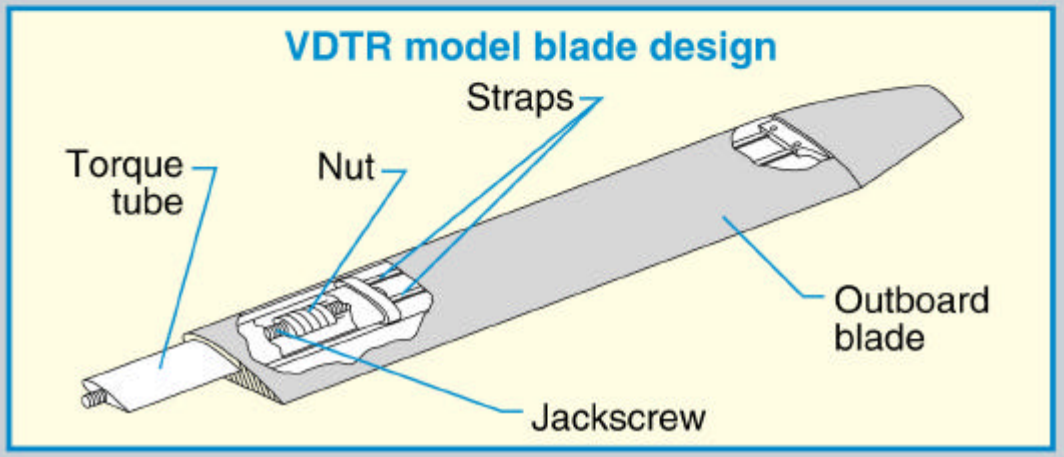
Effect of the Bell Multipoint Active Vibration Suppression System (MAVSS) on 3P Loads as a Function of Airspeed at 950 Rpm



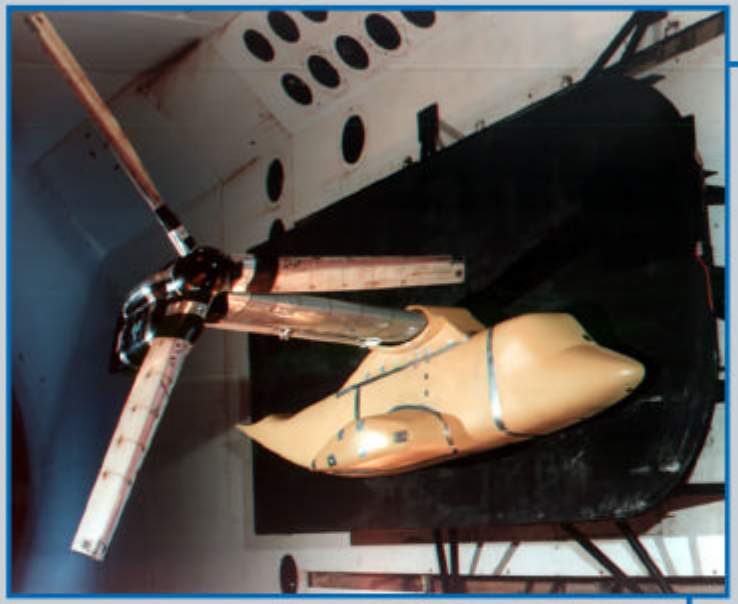
UMARC FINITE ELEMENT ANALYSIS ACCURATELY REPRESENTS VDTR MULTIPLE LOAD PATHS

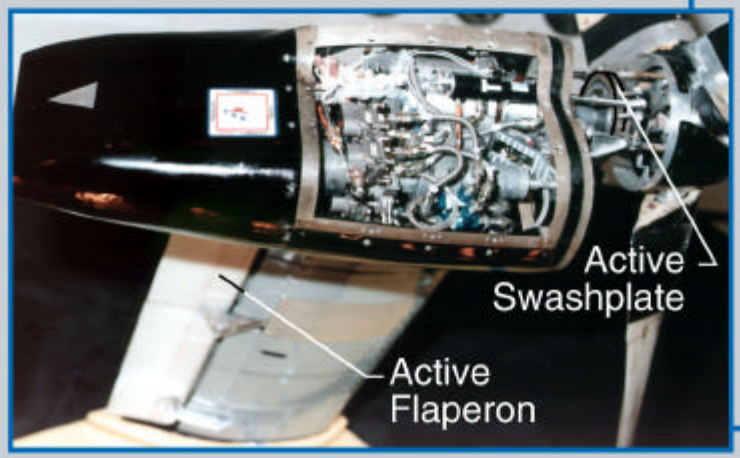




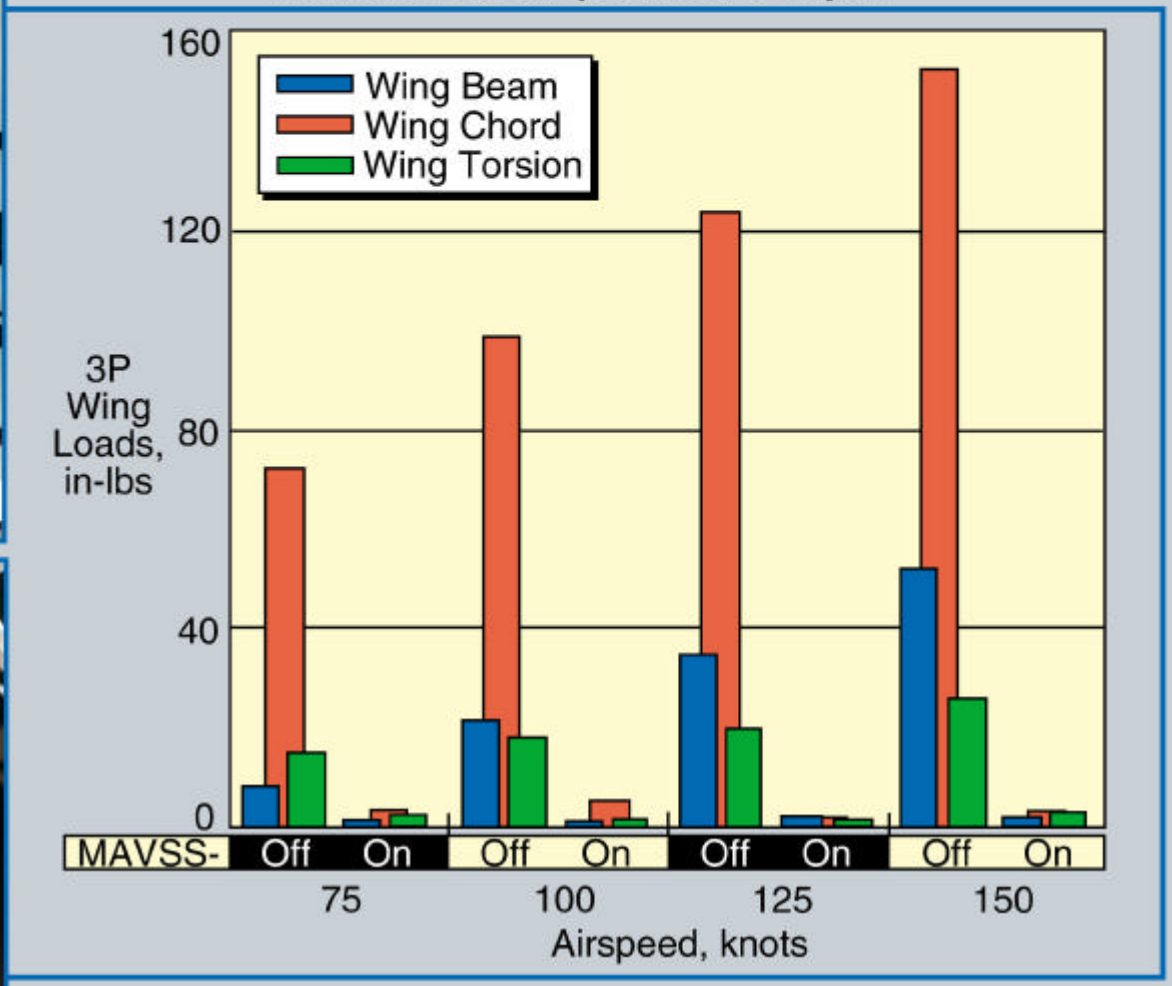


ACTIVE-SWASHPLATE/FLAPERON TEST DEMONSTRATES SIGNIFICANT REDUCTIONS IN TILTROTOR WING VIBRATORY LOADS



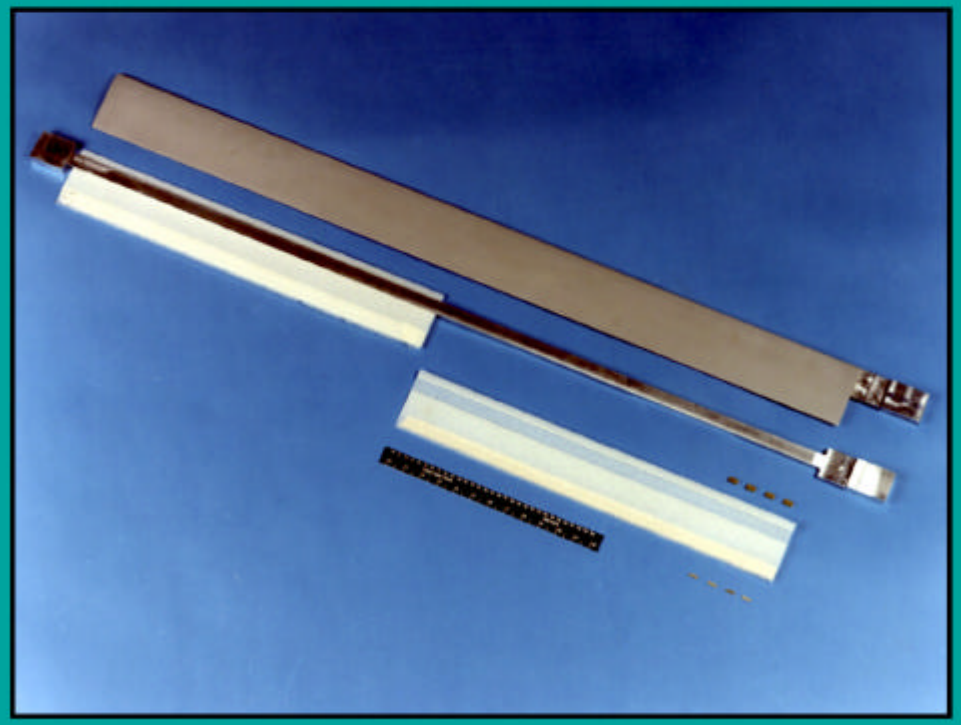


Simultaneous Effect of the Bell Multipoint Active Vibration Suppression System (MAVSS) on 3P Loads as a Function of Airspeed at 742 Rpm

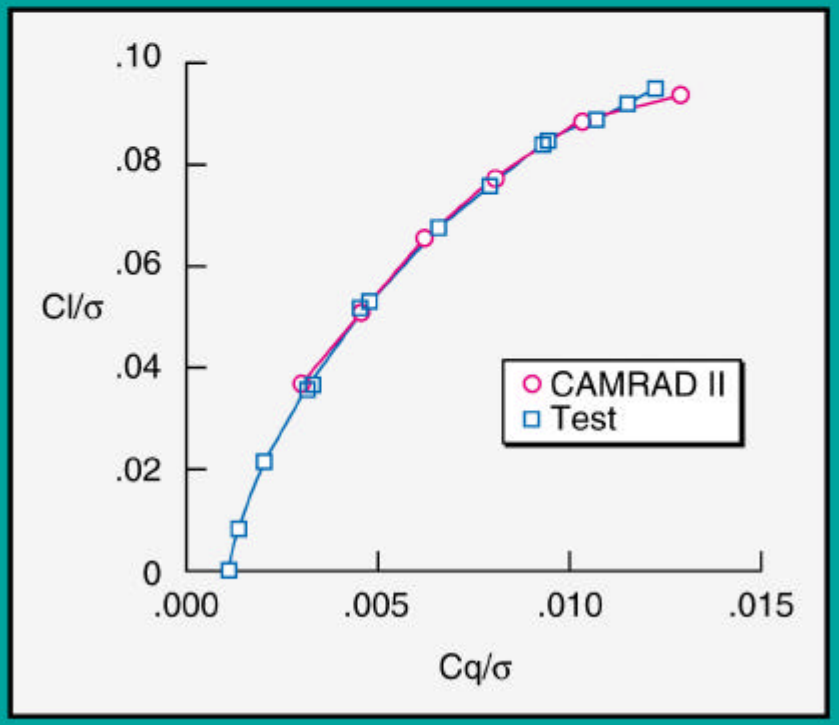


BASIC RESEARCH ROTOR SUCCESSFULLY TESTED IN THE TDT

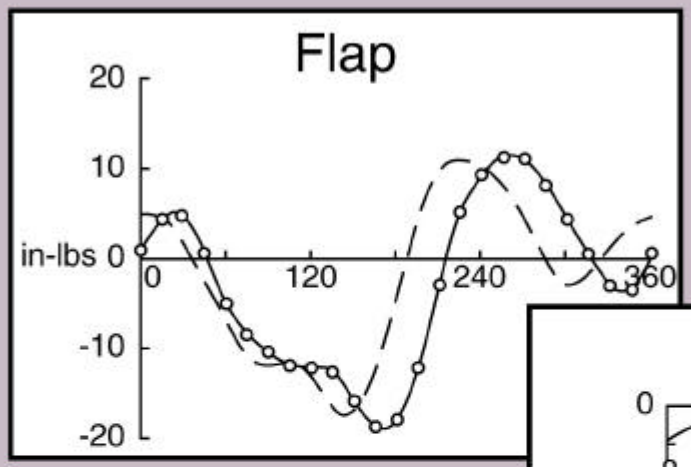
Components of the Basic Research Rotor



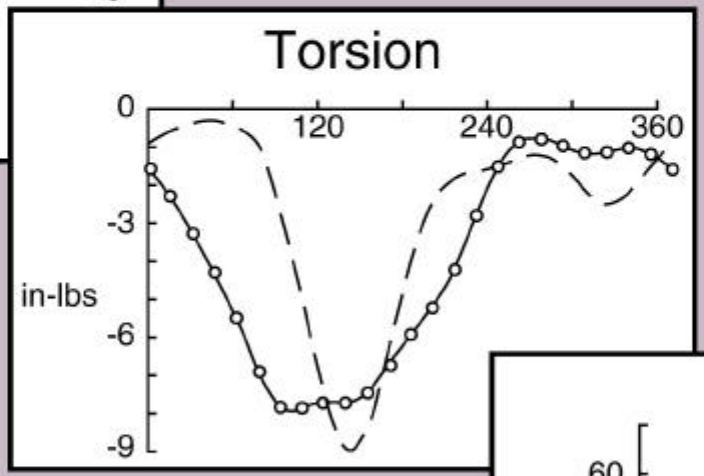
CAMRAD II Predictions vs Test Data



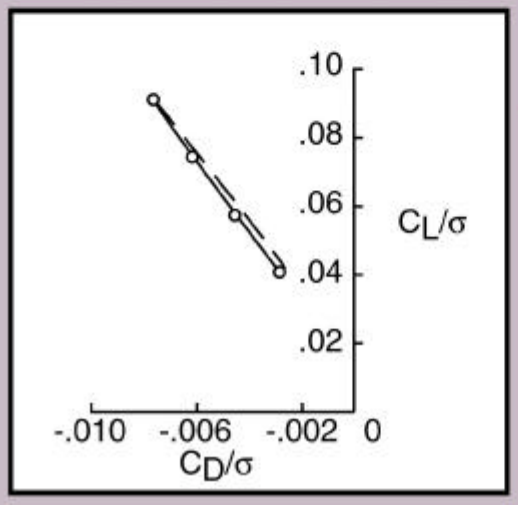
PRELIMINARY VERIFICATION OF ANALYSIS CAPABILITY FOR USE IN THE DESIGN OF LOW VIBRATION HELICOPTER ROTORS

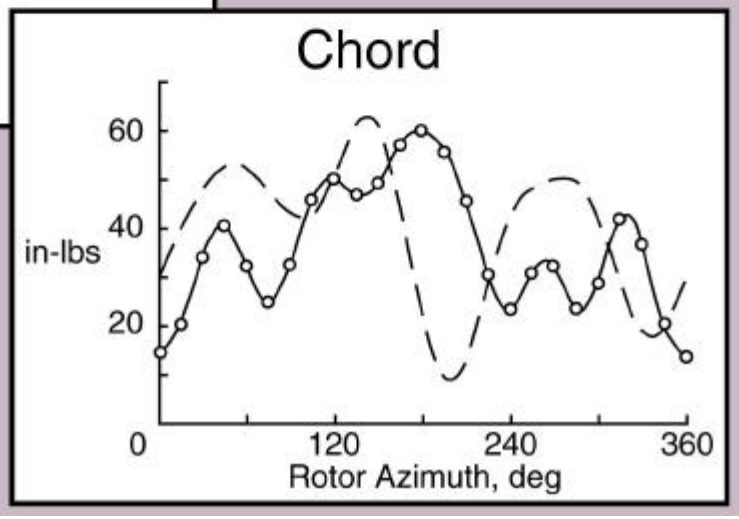


Blade Bending Moments
(r/R = 0.37)

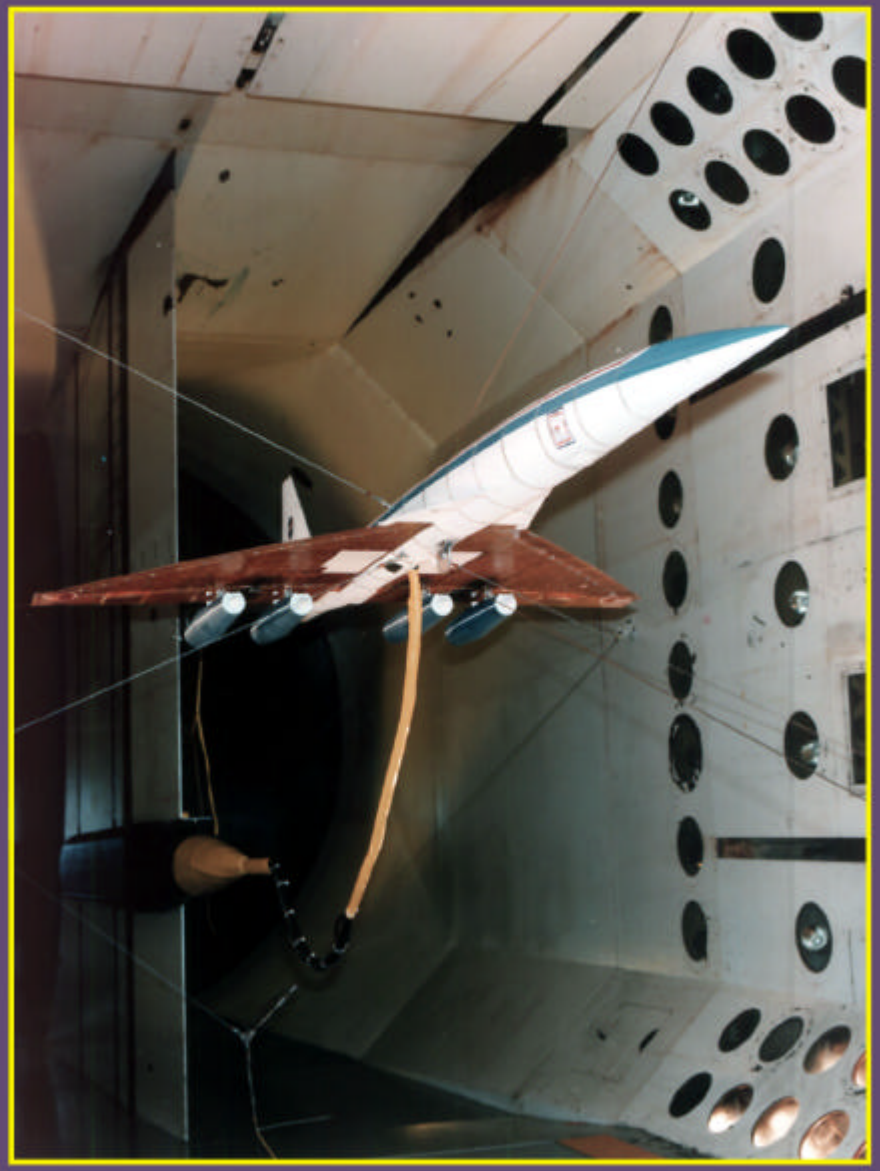


Rotor Performance





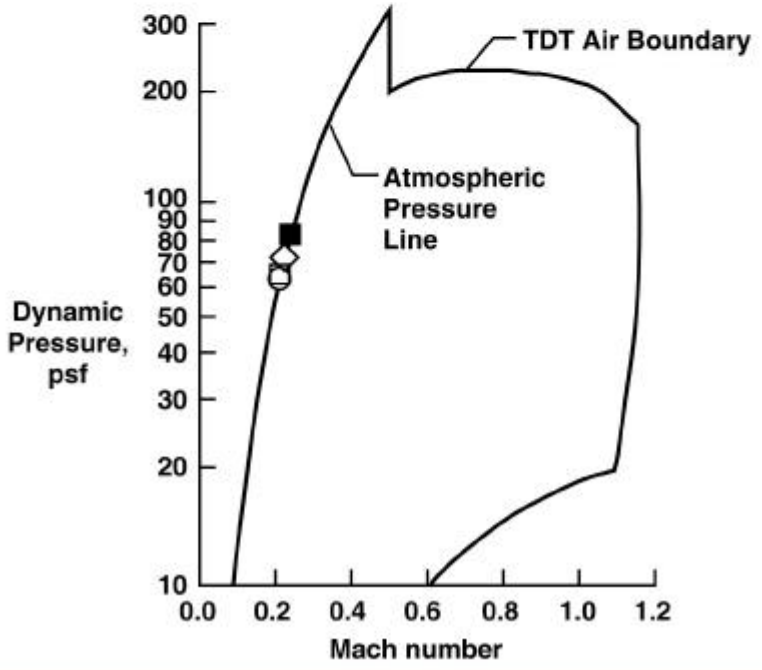
HSR ACTIVE CONTROLS TESTBED SUCCESSFULLY TESTED ON CABLE-MOUNT SYSTEM IN TDT



Configurations

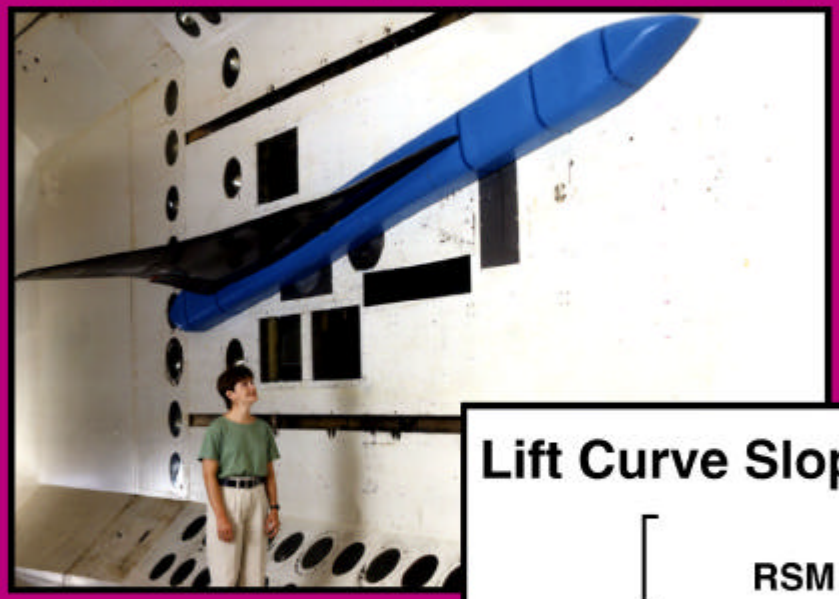
- ○ Forward cg, stiff nacelle springs
- □ Mid cg, stiff nacelle springs
- ■ Mid cg, soft nacelle springs
- ◇ Aft cg, stiff nacelle springs

Flutter Results

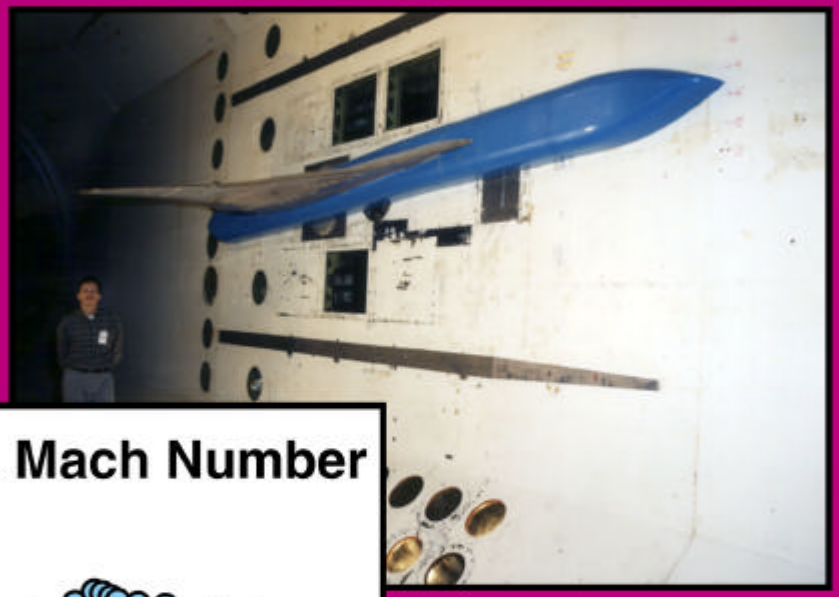


HSR AEROELASTICITY PROGRAM
BASELINE SEMI-SPAN MODEL TESTING COMPLETED IN THE TRANSONIC DYNAMICS TUNNEL

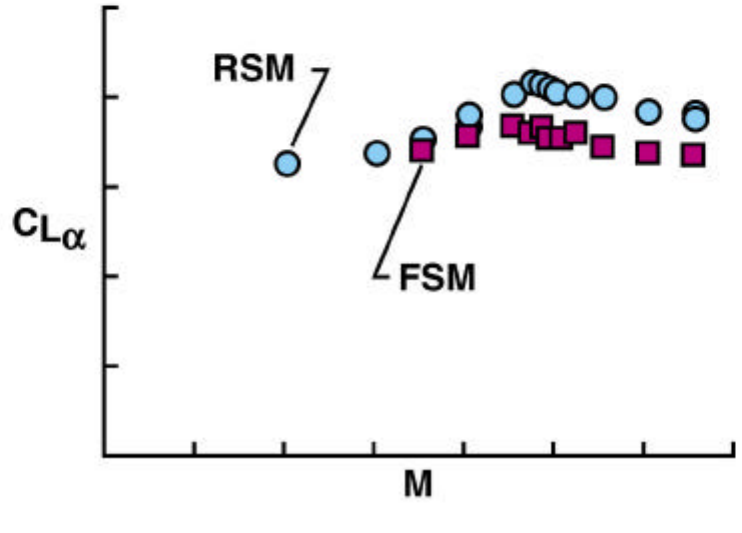
Rigid Semi-Span Model (RSM)



Flexible Semi-Span Model (FSM)



Lift Curve Slope vs. Mach Number



EFFECTS OF ANGLE-OF-ATTACK ON THE STABILITY BOUNDARY FOR AN HSR RIGID SEMISPAN MODEL MEASURED IN THE TDT