NPTEL Video Course - Aerospace Engineering - Flight Dynamics II (Stability)

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Co-ordinating Institute - IIT - Madras

Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable

Lecture 30 - Linear Model and Aircraft Dynamics Modes
Lecture 31 - Short Period, Phugoid (Lanchester's formulation)
Lecture 32 - Short period mode approximation
Lecture 33 - Flying and Handling Qualities, Cooper Harper Scale
Lecture 34 - Pure rolling motion, Pure yawing motion,Spiral approximation
Lecture 35 - Spiral, Roll, Dutch roll Mode approximations
Lecture 36 - Lateral directional Flying Qualities, Routh's Stability criterion
Lecture 37 - Stability in Steady Roll Maneuver
Lecture 38 - Wind Effect on Aircraft Pure Plunging Motion
Lecture 39 - Wind Profiles, Longitudinal Mode Response to Wind Shear
Lecture 40 - Stability control/Augmentation
Lecture 41 - Autopilots, Automatic Landing System