

RUDDER CONTROL SYSTEM ISSUES FOR COMMERCIAL AIRPLANES

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ABSTRACT

A series of in-flight incidents and a severe airplane accident, involving the use of the rudder, has led to questions regarding the contribution that the characteristics of the control system and flight crew interface may have had in these events. Some events factors leading to misuses of the rudder are linked to system malfunction, and turbulent upsets. Other events and factors are unknown. It also appears upon examining flight recorder data that some transport airplane pilots may have difficulty predicting use of rudder controls for recovery from unusual attitude upsets. This paper will provide some input that will answer these questions. In essence, this paper is concentrating to determine and identify types of rudder control problems, design and training issues associated with use of rudder control.