

## **Abstract**

Although student pilots spend many hours practicing maneuvers to improve airmanship and prevent accidents, almost one half of all general aviation aircraft accidents occur during flight training. Among these, loss of control is the most commonly cited causal factor, and the most common first occurrence in a chain of causal events. This project answers the following question: Can an analysis of National Transportation Safety Board (NTSB) accident reports identify the role of secondary causal factors or reasons involved in general aviation loss of control accidents that involve instructional flights? The analysis focuses on five factors as they each relate to loss of control events: causal factors, phase and location of flight, student and instructor experience, procedural errors, and meteorological conditions. In addition, common occurrences were analyzed to determine trends involved with accident chains of events, and a chi-square test was completed for student and instructor experience as well as accident locations in order to gather insight and support recommendations regarding instructional loss of control accidents in general aviation. The study revealed at least two significant findings: (1) the number of student flight hours accumulated correlates to accident location; and (2) the chain of events in an accident can be an important piece of information in determining causes of an aircraft accident.