AOPA Flight Training

America sees some of the most varied and dynamic weather in the world - hurricanes, tornados, blizzards. Although extreme weather simplifies a pilot's go/no-go decision, it's equally important to understand what's behind pleasant weather when you're planning a flight. Most pilot manuals and training courses discuss weather, but few provide a real understanding of the science behind it.


One of Williams' goals with the book is to allow readers to look at the sky with an informed appreciation of what they're seeing. His use of photographs and illustrations help to accomplish this. One series of illustrations shows why wind behaves the way it does when flowing around an area of low pressure, around high pressure, and between areas of high and low pressure. Other full-color graphics explain how clouds create wind and snow, how Doppler weather radar works, and many other topics. Readers can learn a lot just from studying the book's illustrations.

Pilots and students of aviation will find relevant information throughout the book - especially in the chapters on winds and currents, global patterns (which also addresses fronts), weather observation, forecasting, and thunderstorms and tornados. He also tells the stories of researchers who have devoted their lives to understanding the atmosphere, including pioneers in hurricane research flights.

Williams, an instrument-rated private pilot, was weather editor of USA Today for 23 years, and then worked as public outreach coordinator for the American Meteorological Society. The AMS Weather Book is his sixth. Published by the University of Chicago Press, the 368-page, hardcover book can be ordered through the book's Web site, which also offers a wealth of supplemental information that didn't fit in the book. -Mike Collins