ACRP in the Classroom: Reimagining the Textbook at the University of North Dakota Department of Aviation

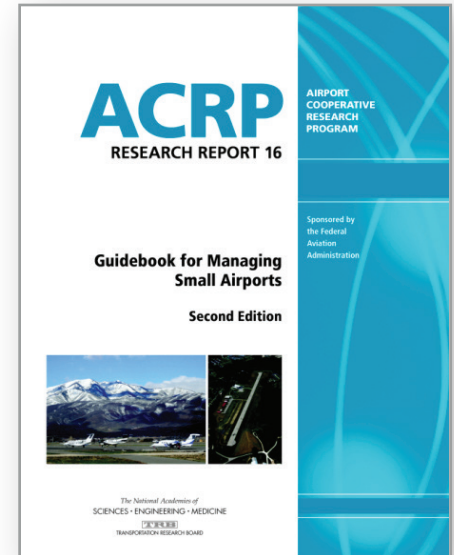## Evolving Aviation Industry Creates Educational Challenges

Within the academic aviation world, good textbooks can be hard to come by. Not only do few aviation textbook publishers exist, but the aviation industry is constantly changing. Textbooks can therefore quickly become outdated as technologies, Federal Aviation Administration (FAA) regulations, and other standards evolve. Dr. Kim Kenville, a professor in the Department of Aviation at the University of North Dakota (UND) is all too familiar with these issues.

Dr. Kenville teaches airport management classes at UND's John D. Odegard School of Aerospace Sciences. In addition to limited textbook options, she

Aerial view of the John D. Odegard School of Aerospace Sciences campus (Source: John D. Odegard School of Aerospace Sciences).

grapples with school and state legislature mandates to lower costs for students by providing open educational resources. So, when ACRP decided to update *ACRP Report 16: Guidebook for Managing Small Airports*, she saw an opportunity to use the updated report as a textbook for her students, ensuring that they had free access to the latest industry best practices.

ACRP Guidance Responds to Industry Changes

Originally released in 2009, *ACRP Report 16* is a popular handbook for small airport managers who typically support multiple management functions and daily operations to serve the needs of airport users, stakeholders, industry groups, and regulators. Nearly 10 years after releasing the initial publication, ACRP announced a project to update the report into a user-friendly guidebook that responds to today's industry challenges, policies, and guidance. Dr. Kenville—who had

experience serving on previous ACRP projects and panels—volunteered to chair the ACRP project panel overseeing the research effort.

ACRP released the revamped *ACRP Research Report 16, Second Edition*, in 2019, outlining best practices—with sample documents and easy-to-understand decision flowcharts—for small airport finance, contract and lease management, federal and state compliance, facility repairs, and community relations. The second edition also discusses new and emerging technologies, including unmanned aircraft systems,

geographic information systems, digital notices to airmen, and social media.

ACRP Writes the Book on Meeting Student Needs

In August 2019, Dr. Kenville began using the updated *ACRP Research Report 16* as the official textbook for her Airport Planning and Administration course. The report, along with all ACRP publications, is available online for free, which allowed Dr. Kenville to comply with school and state textbook guidance. "Students are excited because they can download it by chapters, or they can download the whole thing at once," Dr. Kenville explains. "They live in a very digital world, so it really fits the mold for them."

The second edition also includes accompanying electronic resources

Night view of Robin Hall, UND's newest aerospace building (Source: John D. Odegard School of Aerospace Sciences).

(*ACRP WebResource 6: Resources for Managing Small Airports*) with up-to-date examples of lease agreements, minimum standards, and other airport-specific documents. These resources help Dr. Kenville's students complete their homework assignments and provide them invaluable exposure to real-world airport management and operations.

Moving Beyond the Classroom

For Dr. Kenville, one of the greatest benefits of using the second edition report is that it gives students a template of what to expect as they transition out of the classroom and into careers where they will likely write their own airport planning documents. Moreover, she estimates that prior to using the report, less than 2 percent of the aviation students at UND had heard of ACRP. The updated report often serves as a gateway for the students to access the wealth of valuable information that ACRP provides, helping them "find free consulting for the rest of their careers."

Other faculty members at UND's John D. Odegard School of Aerospace Sciences have also

> "This publication is just so consumable, useable, and the information is in chunks that fit perfectly into hourly type lectures. [The] students . . . can learn more and find things easily."
>
> — *Dr. Kim Kenville*

benefited from ACRP research. As the school's graduate program increasingly moves toward safety and environmental education, Dr. Kenville shares ACRP guidebooks on these topics with her colleagues, who especially appreciate ACRP's variety of airport-specific case studies.

Dr. Kenville plans to continue using *ACRP Research Report 16, Second Edition*, as her classroom textbook for the foreseeable future. The report helps meet UND's goal to provide freely accessible resources and saves aviation students about $100 per semester in textbook costs. Most importantly, Dr. Kenville adds, it exposes UND students to ACRP, to the latest research, and to FAA documents that can be otherwise difficult to find. She emphasizes, "I look at this as a win–win–win scenario."