Applications Program hopes to give travelers a Csmoother, safer ride. CBob and his colleagues are developing a prototype warning system that Cissues up-to-the-minute alerts about wind shear and turbulence to airCtraffic controllers, airline dispatchers, and pilots. The goal is to warn Cpilots in time to prevent injuries to passengers and crew. RAP designedCa similar system thats operating at Hong Kongs Chek Lap KokĊIts great that NCAR can use its scientific and technical Cexpertise to contribute to society on this day-to-day operational level, CRAPs Bob Barron and Deirdre Garvey. CThe RAP team used anemometers and wind profilers to set up the Juneau Cwarning system. The devices use vector mathematics to create a comprehensive Cpicture of surrounding winds and to determine the danger these winds poseCto airplanes and passengers. CA wind profiler is an upward-looking radar that can measure turbulence, Cwind speed, and wind direction. It gives researchers a profile of horizontal Cwinds and turbulence at 60-meter (200-foot) increments up to about

2.5 Ckilometers (1.5 miles). An anemometer also measures

for the FAA-sponsored Juneau Wind Project, BobCBarron of the Research