

## **Dr. Peter P. Neilley**

## Overview

Dr. Neilley has about 30 years of experience in meteorology, mostly developing stateof-the-science technologies in weather forecasting for public use and weatherdependent markets. Dr. Neilley was a scientist at the National Center for Atmospheric Research between 1991 and 2001 conducting research on various aviation weather problems and the application of artificial intelligence methods for weather forecasting applications. He served as a principal scientist for a project to understand and predict terrain-induced and convective weather hazards in Hong Kong Airport and similar programs in Juneau and Colorado Springs. He was also the lead scientist developing an operational and automated weather forecasting system, derivatives of which are used today to drive forecasts consumed by billions of people daily. In 2001, Dr. Neilley became chief scientist at Weather Services International (WSI) Corp., leading a team of scientists developing methods for improved forecast technologies for a wide sector of markets. In 2007, Dr. Neilley became Vice President of Forecasting for WSI, responsible for both the research and operational forecasting including WSI's extensive aviation weather forecasting branch. In 2009, Dr. Neilley was promoted to Senior Vice President of Forecasting for The Weather Company, WSI's parent organization that includes The Weather Channel, weather.com, EEC Weather Radars (until 2012), Weather Underground and other holdings. In 2016, after The Weather Company's acquisition by IBM, Dr. Neilley was named an IBM Distinguished Engineer.

## **Education**

Dr. Neilley is active in the community and currently is co-chair of the UCAR Community Advisory Committee for NCEP that reviews and advises the National Weather Service on its core operational centers. He also served on the UCACN Model Advisory Committee for NOAA and more recently on the EPIC Summer Community Workshop planning committee. He recently completed a six-year tenure on NOAA's Science Advisory Board's Environmental Information Services Working Group where he was the principal author of the NOAA-adopted Open Environmental Information Services paradigm that contributed to the creation of the recent NOAA Big Data Initiative. He was a longtime member and chair of the American Meteorological Society's Committee on Weather and Forecasting and championed the first international weather forecasting conference and first joint conference between the AMS and the National Weather Association. He also served as an executive member of the AMS Forecast Improvement Group. He has also served as a member of the National Research Council's Surface Transportation Weather task force the FAA's Turbulence Product Development Team. In 2017, Dr. Neilley was named a Fellow of the American Meteorological Society.

- **Ph.D. Meteorology**, Massachusetts Institute of Technology 1990. Jules Charney Scholarship in Meteorology. Thesis titled "Interactions between synoptic-scale eddies and the large-scale flow during the life cycles of persistent anomalies." Randall M. Dole, advisor.
- **M.S. Meteorology**, Massachusetts Institute of Technology, 1984. *Thesis titled "The vertical structure of the New England coastal front."* Richard E. Passarelli, advisor.
- **B.S. Meteorology**, McGill University, 1982 University Scholar of Great Distinction, American Meteorological Society Undergraduate Scholarship Prize (2nd place).