# Fifteen years of the Pacific International Training Desk: training impacts in the islands

Jennifer L.S. Strahl and H. Gingerlei Porter

Pacific International Training Desk, Honolulu, HI

### Our Purpose

The purpose of the Pacific International Training Desk is to train and collaborate with 20 participants annually from across the South Pacific Islands region and 15 participants annually from the US affiliates in the Northwest Pacific to promote the international interests of the U.S. meteorological and physical-science community and improve the levels of science, technology operations, and services worldwide.

### Our Training Program

#### Prerequisite E-learning Program

20-25 hours, self-paced COMET/MetEd modules In home country, prior to arrival Fundamental atmospheric/oceanic science

#### On-Site Training Program

4 weeks, 4-5 trainees per cohort

NWS Honolulu Forecast Office or Guam Forecast Office
More advanced atmospheric/oceanic science
Classroom instruction: hands-on lab exercises and activities
Real-time weather analysis and forecast practice
Communication/dissemination systems training
NWS shift-shadowing and map discussions
Visits to and guest presentations by nearby agencies
(Honolulu: ITIC, PTWC, JTWC, NWS Observation Sites, Media)
(Guam: USCG, DHS and Emergency Mgmt, UAL, Media)

Collaborations: NWS, UH Atmospheric Science, PEAC

Training Topics Atmosphere/Ocean Structure Map Interpretation Introductory Climatology Introductory Hydrology Thermodynamics and Stability Remote Sensing Surface and Upper Air Analysis General Circulation Patterns Tropical Weather Phenomena Forecast Philosophy and Practice Numerical Weather Prediction Forecast Verification **Tropical Cyclones** Marine Forecasting Messaging and Communication Tsunami Science and Warnings

Level 1: Experienced observers with little to no forecasting experience.

Level 2: Experienced observers who have successfully completed Pacific Desk training since 2014 or junior/assistant forecasters with limited training and experience.

South-Pacific NMHS staff train in Honolulu; North-Pacific WSO staff train in Guam.

## Our History

Pacific Island nations face many challenges to their NMHS, including isolation, large data voids, small bandwidth, lack of resources, and a lack of qualified meteorological staff.

The Pacific Desk, as one of NOAA's contributions to the World Meteorological Organization (WMO) Voluntary Cooperation Program (VCP), is intended to provide training opportunities for participants from the WMO Regional Association V. Training is funded through NOAA-NWS Office of International Activities The program was originally managed by the Joint Institute for Marine and Atmospheric Research (JIMAR) at the University of Hawai'i (UH), and is now under adminstration by the UH Telecommunications and Social Informatics (TASI) group.

Pacific Desk training began in 2001 as 8-week one-on-one internships at the Honolulu NWS Forecast Office. Training was reduced to 6 weeks, and increased to two participants at a time.

The program was evaluated in 2011 and redesigned into the program described above.

Learning objectives were standardized and informed by the WMO Basic Instruction Package for Meteorologists and Meteorology Technicians, but still includes customized practical forecasting practice. Participants are evaluated through a variety of assessments and provide a program evaluation upon completion of the training.

Training was expanded in 2016 to include Palau, Republic of the Marshall Islands, and the Federated States of Micronesia, at the Guam NWS Forecast Office.





128 individuals from 20 countries

### Our Impact

Since 2001, 128 participants from 20 countries have been trained at the Pacific Desk. Following training, offices and individuals have experienced the following:

New NMHS offices have been created, staffed with and led by Pacific Desk participants

More NMHS offices now issue forecasts - no longer dependent on other countries' products

More useful and detailed public and marine forecasts

Increased forecast length and accuracy

Offices resumed or began map discussions and forecast verification

Collaboration between WFO-Honolulu, WFO-Guam, and University of Hawaii

Individual promotion from non-scientific to forecasting positions

Progression into NMHS or governmental leadership

Qualification for more advanced training or degree programs

Demonstrated confidence in weather analysis and forecasting

Connection and communication of NMHS staff among isolated island groups

Increased distribution and use of RANET Chatty Beetle across the Pacific

### Our Future

Training cohorts for early 2017 have been selected.

A new curriculum for more advanced forecasting training is under development, with pilot cohorts to begin in late 2017.

In-island training opportunities are being explored for shorter workshops on more specific topics of interest to individual NMHS offices.

Increasing collaboration with COMET/MetEd and Pacific partners such as the National Institute for Water and Atmospheric Research (NIWA), NZ and the Pacific Meteorological Council (PMC).

### Our Partners

The Pacific Desk gratefully acknowledges the support of the National Oceanic and Atmospheric Administration (NOAA), the National Weather Service Pacific Region Headquarters (NWS-PRH), and the University of Hawai'i (UH).