

Building on Existing Strengths to meet DHS Needs

CIMES

The Center for Island, Maritime and Extreme Environment Security (CIMES)

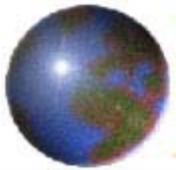
Overview

Dr. Roy H. Wilkens

Center Director

University of Hawaii

DHS University Summit 03/20/08



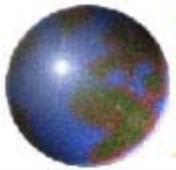
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Core Partners

- University of Hawaii
- Applied Physics Laboratory, University of Washington
- University of Alaska Fairbanks
- University Puerto Rico at Mayagüez

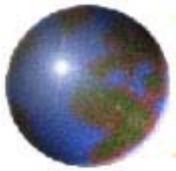
Collaborators

- University of Alaska Anchorage
- Pacific Disaster Center
- Maui High Performance Computer Center
- Intelesence Technologies

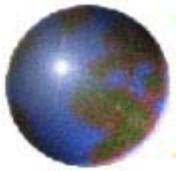


STEERING COMMITTEE

- Dr. Roy Wilkens (UH) – CIMES Center Director
- Dr. James Gaines (UH) – Administrative PI
- Dr. Peter Crouch (UH) – Chair Steering Committee
- Dr. David Martin (UW/APL) – UW Co-Director
- Dr. Buck Sharpton (UA) – UA Co-Director
- Dr. Jose Colucci (UPRM) – UPRM Co-Director

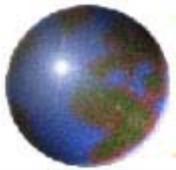


- Mission: To Provide New and Improved Technology for Observation of the Earth Where It Is Difficult and When It Is Imperative.
- Customers: US Coast Guard, Civil Defense, NOAA, Border Patrol, Port Authorities.....



Research Areas and PIs

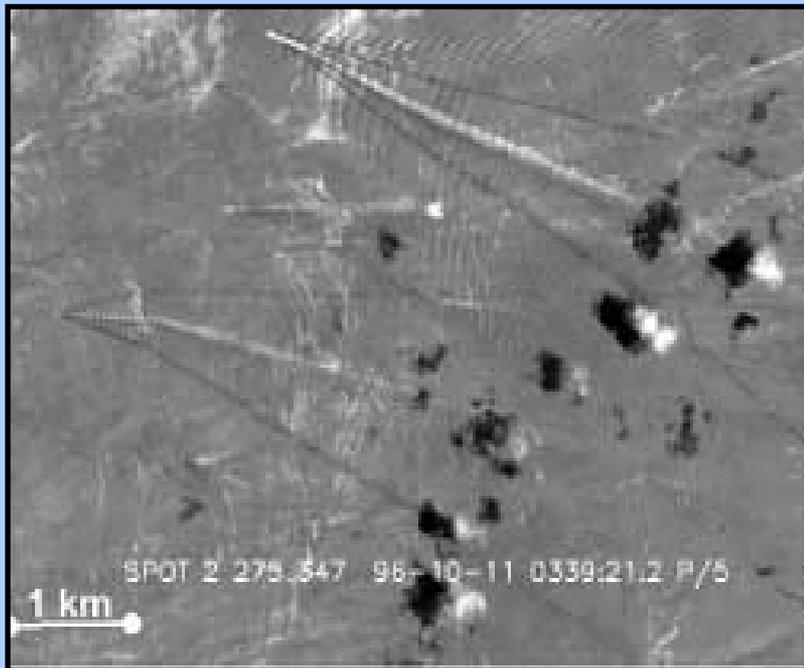
- **Satellite Detection and Tracking of Ships in the Tropical and Polar Oceans** - Robert Wright (UH), Tom Heinrichs (UAF), Miguel Velez-Reyes (UPRM), Kevin Engle (UAF), Buck Sharpton (UAF)
- **Coastal Radars, Tropical and Arctic** - Pierre Flament (UH), Hajo Eicken (UAF), Magdy Iskander (UH), Sungkyun Lim (UH), Mark Johnson (UAF)
- **Harbor Acoustic Monitoring Systems** - John Allen III (UH), Eva Nosal (UH)
- **Decision Support Systems** - David Jones (UW/APL), Kevin Montgomery (Intelesence/UH)



- **Satellite Detection and Tracking of Ships in the Tropical and Polar Oceans**

Ship Wakes in COTS Data

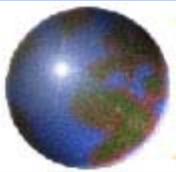
- **Color Reflectance**



Hawaii Space Flight Lab

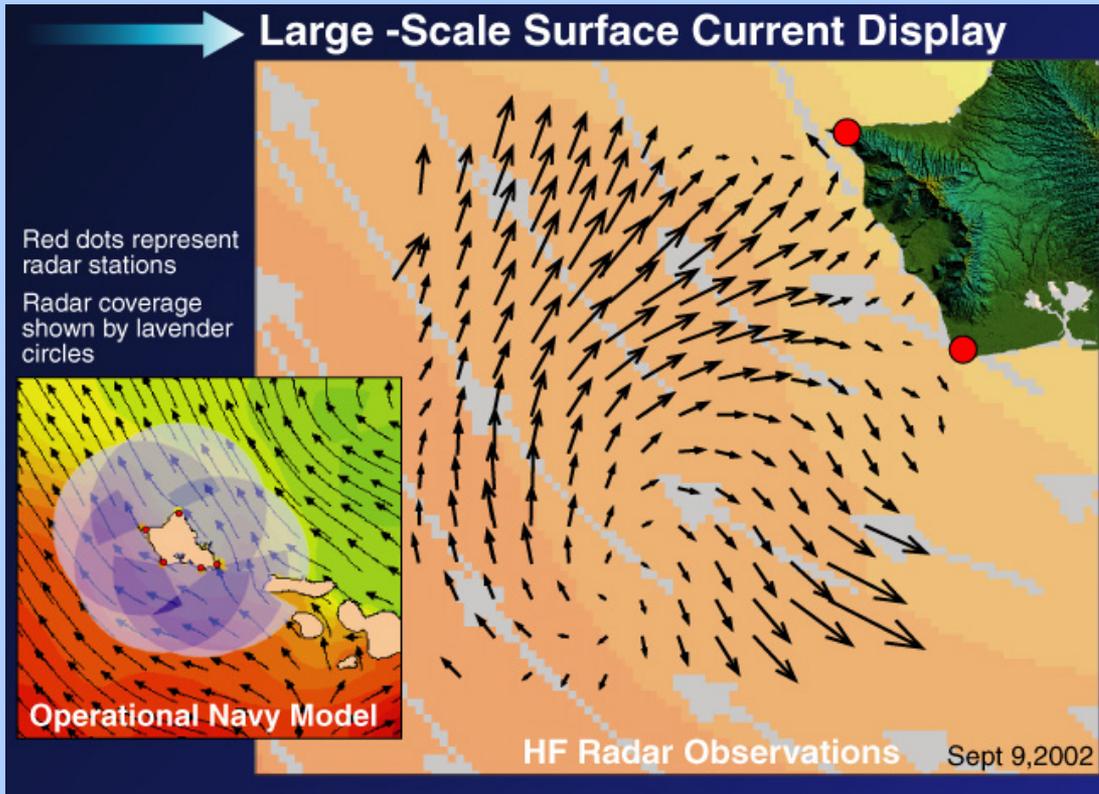
- **300 kg to low-Earth orbit**

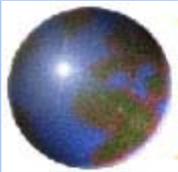




- Coastal Radars, Tropical and Arctic

Develop new deployment techniques and new data processing algorithms for coastal HF Doppler Radio (HFDR) systems

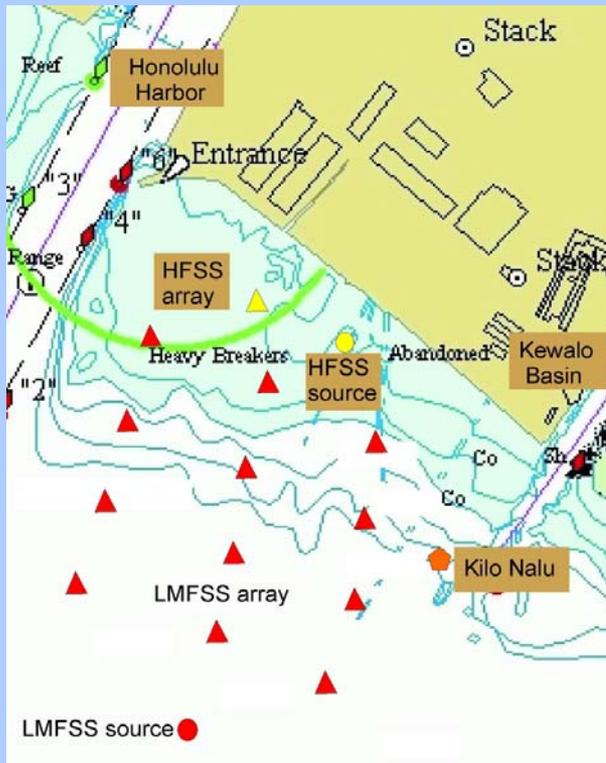


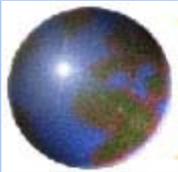


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- Harbor Acoustic Monitoring Systems





- All CIMES Leads Are Land, Sea, and Space Grant Institutions

