

NAS NORTH ISLAND - NAVY REGION SOUTHWEST NAVY ENVIRONMENTAL LEADERSHIP PROGRAM

POLLUTION PREVENTION

AQUEOUS PARTS WASHER

LEAD ACTIVITY

Naval Air Station (NAS) North Island

STATUS

Completed

MISSION

To reduce the use of air emitting solvents and ozone depleting substances (ODS)

DESCRIPTION

Traditionally, Naval Aviation Depot (NADEP) and NAS North Island Aircraft Intermediate Maintenance Department (AIMD) have used PD-680 (stoddard solvent) and to clean various engine and aircraft components. In an attempt to minimize air emissions and generation of hazardous waste, NADEP and AIMD reduced and replaced the cleaning process that used the hazardous solvent with aqueous parts washers. The parts washers use heated aqueous solutions with alkaline detergent and a high pressure spray. The washers feature a filter that continuously removes solid contaminants suspended in solution and a disc-type oil skimmer that removes floating oil. At NADEP, parts washers have eliminated 17 vapor degreasers, each containing 10 to 15 gallons of ODS. Additionally, NFESC and NADEP are exploring a more efficient recycling system to separate detergent and water, and the viability of operating the power parts washer at lower temperature to reduce energy consumption. NADEP material laboratory will explore wider application of the power parts washer.

Through the Chief of Naval Operations (CNO) Pollution Prevention Equipment Program, eight additional aqueous parts washers have been installed at the Commander Naval Air Force, U.S. Pacific Fleet (COMNAVAIRPAC) Support Equipment Maintenance shops and AIMD airframe division.



**Better Engineering
Aqueous Parts Washer
Installed in Intermediate
Maintenance Department**



**Senior Chief English demonstrates
operation of the aqueous
parts washer in COMNAVAIRPAC Support
Equipment Maintenance Shop**

BENEFITS

- Reduced the amount of PD-680 used to clean engine and aircraft components
- Eliminated air emissions and health risks associated with PD-680 use
- Reduced cleaning material costs by approximately \$1,000 per year
- Reduced off-site transportation of used PD-680 solvent

UPDATED: 01/23/02