

Balloon-Based Oil Spill Surveillance System

FACT SHEET

Project completed 2011

Overview

The council, in conjunction with the Oil Spill Recovery Institute of Cordova and BP's Crisis Management Unit worked on the development of a **promising new method of providing aerial observations during an oil spill**. The surveillance technology uses a helium filled balloon carrying both infrared and conventional cameras tethered to a vessel. The spill balloon can be lofted up to 500 feet in the air and would supplement traditional aircraft over-flights during a response.

A demonstration of this system was conducted on April 25, 2011 in Valdez at the small boat harbor. An on water demonstration took place later that afternoon in Port Valdez.

The balloon-based oil spill surveillance system was purchased by the Prince William Sound Science Center in 2009 for the purpose of testing its applicability for oil spill surveillance. The original concept for the system came out of a workshop titled "Hydrocarbon sensors for oil spill prevention and response," jointly sponsored by the Oil Spill Recovery Institute (OSRI) and the Alliance for Coastal Technology.

Right: The balloon is tethered to a vessel in Port Valdez.



Final Report

A final report on this demonstration was approved by the council's board of directors in September 2011:

OSRI Balloon Based Spill Surveillance System
Operations and Testing Results.

On the web: <http://www.pwsrccac.org/docs/d0082069.OSRIBalloon.pdf>

This document focuses on the system owned by the Prince William Sound Science Center with discussion about other systems as applicable as there are other vendors of balloons and camera systems. Some additional information on alternative systems is provided in the section on selection criteria.

The final report also gives suggestions for further research and speaks to the sorts of refinements that will help make the system better for spill response work .

For more information:

Project web page: www.pwsrccac.org/projects/OSPRops/TetheredBalloon.html

Oil Spill Recovery Institute photo album of test: <http://on.fb.me/VAYuyQ>

Prince William Sound Regional Citizens' Advisory Council ~ Citizens promoting environmentally safe operation of the Alyeska terminal and associated tankers.



VALDEZ: PO Box 3089 / 130 S. Meals, Ste 202, Valdez AK 99686 ~ toll-free: 877.478.7221 ph: 907.834.5000 fax: 907.835.5926
ANCHORAGE: 3709 Spenard Rd., Ste. 100, Anchorage AK 99503 ~ toll-free: 800.478.7221 ph: 907.277.7222 fax: 907.277.4523

www.pwsrccac.org