

# WEST COAST GENERAL AVIATION RESPONSE PLAN

GENERAL AVIATION:  
BECOMING THE FUTURE'S  
CRITICAL LIFELINE



# WEST COAST GENERAL AVIATION RESPONSE PLAN (WCGARP)

With the awareness of the Cascadia Subduction Zone earthquake potential to devastate much of the west coast, there is also the growing awareness of General Aviation's (GA) critical role. GA has the potential to be an important role in response and recovery efforts from the northern end of California through Oregon and Washington, and all the way to Vancouver Island and British Columbia. As a result, a multi-level plan has been developed and regularly drilled.

## THE SOLUTION

The Cascadia subduction zone earthquake would result in 80 percent of roads and land based infrastructure in Washington to be unusable during this event. The loss of access to affected areas and the high probability of death promoted Sky Terry to find the solution to this problem. DART and WCGARP became the solution, as there was a need for a transportation network that could transfer supplies and people without the reliance on roadways. While most emergency services take at least a week to mobilize, DART is functional by Day 2 after the major incident. This is a multi-layer collaborative effort that has 3 levels to it.

### **3rd Level (International/national and multistate):**

This is the West Coast General Aviation Response Plan (WCGARP) that helps coordinate all the different groups working with GA in the support of the West Coast involving all three states of WA, OR, CA and BC is a part of this effort along with Alaska and Canada.



### **2nd level (national):**

This is the Air Care Alliance/Emergency Volunteer Air Corps (ACA/EVAC). They are made up of 80+ pilot groups throughout the nation. Their role in this plan is to help as back up/support to the local DARTs.



### **1st level (local):**

The Disaster Airlift Response Teams (DARTs) are the local level response within a county. They are an organized group of pilots and ground support team. They meet at the DART hub or at the ground support team pick up/drop off points.



# WHO IS SKY TERRY?



Sky Terry is the Northwest Regional Emergency Services Director for Emergency Volunteer Air Corps, a sister organization to Air Care Alliance. Sky Terry's original plan was to ensure a better response and lessen the loss of life shortly after Hurricane Katrina and the Nisqually earthquake. His idea began more than 12 years ago and it has grown into what the DART program is today. Since 2014, Sky Terry has been involved with the ACA/EVAC national group, an organization whose main goal in the event of a large scale disaster is to provide a public benefit relief flying to assist people in time of need or to provide disaster response assistance. Some of his greatest accomplishments include working with Aerobridge, an ACA member group, to facilitate an Albatross flying boat bringing about 14,000 lbs of supplies into St. Thomas. This one organization was able to fly almost 50,000 pounds of supplies into the Summerland keys, of which Sky Terry facilitated looping in one of the key logistic hubs to Aerobridge.

In 2018, Sky Terry got involved with Operation Airdrop, who were able to achieve their unmet needs of integration into the community of Maxton, as part of the No Town Left Behind program. Maxton successfully received 60,000 lbs of the 284,000 lbs that Operation Airdrop dropped into multiple airports over a 7 day stretch. The success of this type of program in Florida was proven during the next hurricane; where the first DART deployment occurred, supported and coordinated through Operation Airdrop. The Florida DART was assisted by Sky Terry and Paul Marshall in its formation a year prior to the hurricane. Sky Terry believes that having a lifeline to fall back onto is important during any disaster because, it protects vulnerable communities that otherwise would have had no support.

Sky Terry's main goal is to prove that general aviation is a key aspect in any disaster emergency because, of the capability of these sea/land planes to respond quickly. During 9/11, an ACA (Air Care Alliance) pilot delivered blood test kits to New York and was the first general aviation aircraft airborne after 9-11 grounded nationwide. General aviation is one of the best ways to reach a lot of people in a short time frame. The ideal future scenario, Sky Terry states would be for "DART's and the WCGARP to be accepted and adapted as a resource, for use in the County level and State level disaster response"





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## HOW IT DEVELOPED:

### *WCGARP & DART*



In realizing the need for a solution to efficiently move injured citizens and transport medical and food supplies in the case of a disaster, **WCGARP and DART were created.**

Paul Marshall and Rodney Pharis put together a group of **general aviation pilots and ground support personnel** organized in a highly structured format with standardized procedures. Their group was able to quickly move critical supplies, equipment, rescuers, and key personal.

Congruently during this development in California, **Sky Terry** was leading the transport of patients using seaplanes. This led to having Sky lead in live drills with seaplanes. **These drills began in 2009 and are still running today.**

Today, these drills have grown to include **both land and sea safety aspects.**

After a joint drill was conducted in 2015 with California DARTs, the DART system was brought to Washington. Over the years, both **DART and WCGARP** have had tremendous growth.

WCGARP is currently being led by the **ACA/EVAC** – a national network of **more than 80+ pilot groups** throughout the nation.

During the Loma Prieta earthquake, a spontaneous group of pilots responded to requests for assistance from the city of Watsonville. This volunteer pilot group of around 80 aircraft flew about a 1/2 million pounds of supplies in 3 days.



Image depicts: Aftermath of Loma Prieta Earthquake

General aviation response was effective during the 2010 Earthquake in Haiti, through the use of multiple ACA/EVAC chapters. The albatross (flying boat) flew in 2 tons of supplies directly to a community in need; bringing along with them a full medical team. During this event, Aerobridge facilitated evacuations of 1400 individuals off the island by using roads that had been turned into airstrips.

### **WCGARP/DART ACTIVATION AND DEPLOYMENT**

When DART leaders learn of an incident, a pre-scripted text message is sent to the rest of the DART and WCGARP groups. The objective of sending this initial text message is to “lean forward,” to be communicating with one another, standing by and ready to deploy upon request from any jurisdiction emergency management office.

There are currently 140 pilots throughout 22 counties in Washington State. Beginning in 2019, DART intends to integrate HAM radio operators into the communication structure.



# ACCOMPLISHMENTS OF DART

## ***Clallum County***

DART in Clallam County started when Clallum County Aviation Coordinator, Alan Barnard, attempted to design his own volunteer pilot disaster response plan for the county. Barnard had difficulty writing this because there were not many other plans he could find to use information from as a base guide to his writing. After a year and a half of working on creating the volunteer pilot disaster response plan, Barnard almost decided to give up. Barnard was then introduced to the Cal-Pilots DART/DARP program which gave him further understanding of how to design Clallum County's DARP. Being able to adapt the Cal-Pilots DART/DARP program to Barnard's writing helped immensely in creating Clallum County DART/DARP. Clallum County began enlisting DART volunteers in 2017. On January 30, 2018 Clallum County Commissioners approved the DART/DARP to put into the Comprehensive Emergency Management Plan. This is a major accomplishment, as Clallum County was the very first DART/DARP to be referenced as a response resource in a Comprehensive Emergency Management Plan in the nation. Clallum County is the first county in Washington State to adopt DART. On September 15, 2018 Clallum County had their first full scale practice for emergency operations. The goal of this practice was to test the Clallum County DARP and safely transport "cargo" (680 pounds of non-perishable food donated by the Bellingham Fred Meyer and Saar's in Port Angeles) to the Peninsula Food Coalition in Sequim. Bellingham Aviation Service helped facilitate the load out aircraft at Bellingham International Airport.

## ***Kitsap County***

One full scale exercise was completed in 2018.



## ***Jefferson County***

Jefferson County DART has also had many accomplishments over the years. Jefferson County DART has participated in several exercises including a full scale exercise. Jefferson County's full exercise, on August 9, 2017, was a partnership with Jefferson County Department of Emergency Management (JCDEM), the United States Navy, Neighborhood Preparedness Groups (NPRED), and Port Townsend Fire Department. The goal of this exercise was to transfer wounded personnel to and from Indian Island. Jefferson County has accomplished having multiple ground support teams trained and prepared to assist DART pilots in the event of a disaster. In March 2018 Jefferson County joined Clallum County in Coyle, Washington for ground support training. Jefferson County has participated in the Kenmore Air 2018 exercise and the joint exercise with Clallum County at Forks Airport in July 2018.

## ***King County - Kenmore Air Site***

The City of Kenmore and Kenmore Air Seaplane Base collaboratively support the DART Program in multiple jurisdictions. Kenmore Air Seaplane Base on Lake Washington has been identified as a main base of operations during incidents where seaplanes may be a requested resource. The City of Kenmore supports these efforts by facilitating HAM radio communications between Kenmore Air and Clallam, Jefferson, Kitsap, Mason and Island Counties (Counties with established DART Programs).



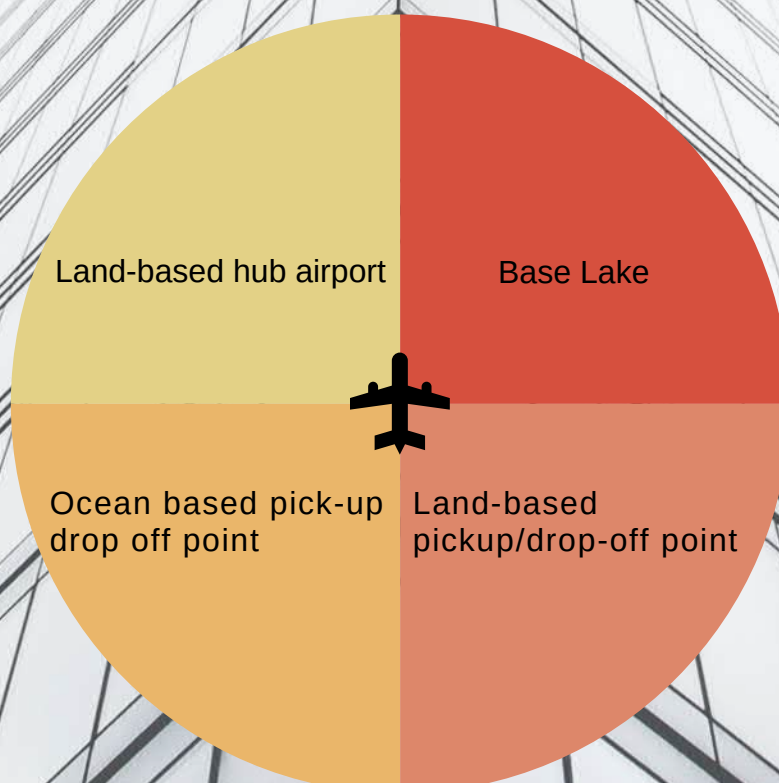
# HOW CAN DART INTEGRATE WITH CITY/COUNTY EMERGENCY MANAGEMENT?

The DART Program is a resource available upon request. However, it is recommended that logistical and operational aspects be planned and exercised in advance.

- Ask for a presentation from DART leaders and learn about their efforts in other jurisdictions.
- Work with DART leaders to develop a Memorandum of Understanding or Mutual Aid Agreement, and create a plan for coordinating these efforts (a template Disaster Airlift Response Plan is available upon request).
- Recruit volunteers to be trained as ground support crews. Include your local HAM radio operators in the communication structure.
- Train and exercise with all partnering agencies in your jurisdiction.
- Map your county potential land and water landing opportunities.

## Trainings, Drills and Exercises

SKY TERRY AND THE DART PROGRAM HAVE STRATEGICALLY IMPLEMENTED ANNUAL TRAININGS THAT OPERATE IN THESE FOUR AREAS:





# SUPPORTER & PARTNER QUOTES

*"General Aviation will come to help, and Sky Terry is the lead organizer among the groups for Washington State. OAD will team up with Sky so that all resources will be used to their fullest extent under one common NGO leader". "I would heavily recommend Sky be invited to any and all meetings concerning General Aviation at the county and state level".*

**- VP Western Operations, Operation Airdrop;  
Brian Kelly**

*"In southeast Alaska, we do a lot of medevac just by virtue of the fact that all the communities are scattered and there are no roads. There's no quick way to get somebody to medical care. We think that Sky has a good idea...if we didn't support it, who would?"*

**- Kenmore Air, Chief Pilot; Chuck Perry**



*"On a very small scale, we were modeling what we might be doing on a large scale in a real disaster."*

**- South County Airport Pilot Association  
(SCARPA) DARP; Paul Marshall**



# LIABILITY



**DART REQUIRES ALL VOLUNTEER PILOTS BE INSURED FOR MINIMUM \$1 MILLION. VOLUNTEER PILOTS WHO FLY FOR PUBLIC BENEFIT ARE COVERED BY LIABILITY PROTECTION AS DESCRIBED IN VOLUNTEER PROTECTION ACT OF 1997. IT IS RECOMMENDED THAT GROUND SUPPORT AND OTHER VOLUNTEERS BECOME REGISTERED EMERGENCY WORKERS WITH THEIR RESPECTIVE COUNTY.**

# ***Links to Videos and Trainings***

## **Land and Amphibian Disaster Exercise in Forks, WA (2018)**

[http://youtu.be/Q\\_56AY5NMqs](http://youtu.be/Q_56AY5NMqs)

## **General Aviation Pilots Delivering Half a Million Pounds Of Supplies**

[https://www.youtube.com/watch?v=ISpT0p4XY\\_A&t=212s](https://www.youtube.com/watch?v=ISpT0p4XY_A&t=212s)

## **Mass Casualty Exercise at Kenmore Air (2018)**

<https://m.youtube.com/watch?v=QKSDvrX7ATg>

## **Presentation at Museum of Flight on West Coast General Aviation Response Plan**

<https://www.youtube.com/watch?v=OGLwa4lXZKg&t=14s>

## **Jefferson County Seaplane Exercise (2017)**

<https://youtu.be/oYQhK-bFqV8>

## **KOMO 4 News Story (2016)**

<http://komonews.com/news/videos/seaplane-pilots-could-be-saviors-in-a-disaster>

## **Two Springs MCI's**

<https://www.youtube.com/watch?v=81EmPY0uV8k>

## **KOMO 4 News Story (2017)**

<http://komonews.com/news/local/bellingham-pilot-helping-to-coordinate-hurricane-irma-relief-efforts>

## **Article In An International Online Magazine**

<http://seaplanemagazine.com/author/lifefighter/>

## **MCI Drill**

<https://www.youtube.com/watch?v=ZZDYWBxSpKo>

## **Pictures of Trainings Since 2009**

<https://www.flickr.com/photos/125273998@N03/>

## **General Aviation Involvement in Nebraska Flooding (2019)**

<https://www.ketv.com/article/pilots-fly-people-and-supplies-to-and-from-fremont-amid-flooding/26850008>

***This Executive Summary of the WCGARP and DART Program was created as a collaborative effort between DART, the Bellingham Office of Emergency Management, the Resilience Institute, and student interns from Western Washington University, Huxley College of the Environment.***

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