

# FAA Update

Dustin Byerly

SM Oceanic Airspace and Procedures

March 2, 2015



**Federal Aviation  
Administration**

# Oakland ARTCC Webpage



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## Air Traffic Organization

ATD Organization

### Air Route Traffic Control Centers (ARTCC)

Airport Traffic Control Towers (ATCT)

Terminal Radar Approach Control Facilities (TRACON)

## Oakland Air Route Traffic Control Center (ZOA)



At the heart of Oakland ARTCC is a team of Air Traffic and Technical Operations Professionals. Oakland Center is unique in that two distinctly different air traffic control functions are handled here. There is the normal en route air traffic control as well as an oceanic air traffic operation that manages the largest volume of international airspace in the world at one facility.

- [KZOA Domestic ATC Operations](#)
- [KZAK Oceanic ATC Operations](#)
- [NOTAMS, TFRs, SUAs](#)



Oakland ARTCC

Oakland ARTCC  
5125 Central Ave.  
Fremont, CA. 94536  
Phone: (510) 745-3000

Rohitkumar Desai,  
Web POC  
[ZOA Web Site](#)  
[Feedback](#)

• [http://www.faa.gov/about/office\\_org/headquarters\\_offices/ato/artcc/oakland/](http://www.faa.gov/about/office_org/headquarters_offices/ato/artcc/oakland/)



# Oakland ARTCC Webpage

## KZAK Oceanic ATC Operations

- [Print](#)

### KZAK Watch Desk (24/7):

- Oceanic Operations Supervisor  
510-745-3342 (24 hours/day—7 days/week)
- Oceanic Non-RVSM Aircraft  
510-745-3342
- Oceanic Operations  
fax: 510-745-3414
- Oakland Oceanic AFTN  
address: KZAKZQZX

### KZAK Track Advisory

- Traffic Management Unit (TMU)  
510-745-3771  
fax: 510-745-3339

### Oakland ARTCC International Airspace & Procedures Support Manager

- [Dennis Addison](#)
- 510-745-3258 (Monday through Friday business hours)

# Oakland ARTCC Webpage

KZAK Oceanic ATC Operations - Windows Internet Explorer  
http://www.faa.gov/about/office\_org/headquarters\_offices/ato/artcc/oakland/kzak/

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KZAK Oceanic ATC Operations

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**Air Traffic Organization**

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## KZAK Oceanic ATC Operations

Print Share

- Oakland Oceanic Controlled Airspace/Flight Information Region (OCA/FIR) (PDF)
- Oakland ARTCC Oceanic Points of Contact (PDF)
- User Preferred Route (UPR) Flight planning Guidelines (PDF)
- Pacific Organized Track System (PACOTS) Guidelines (PDF)
- Track Advisory User's Guide for Dispatchers (PDF)
- Central East Pacific (CEP) Routes Guidelines (PDF)
- Oakland Oceanic CPDLC (PDF)
- Guam Area Preferential Routings (PDF)

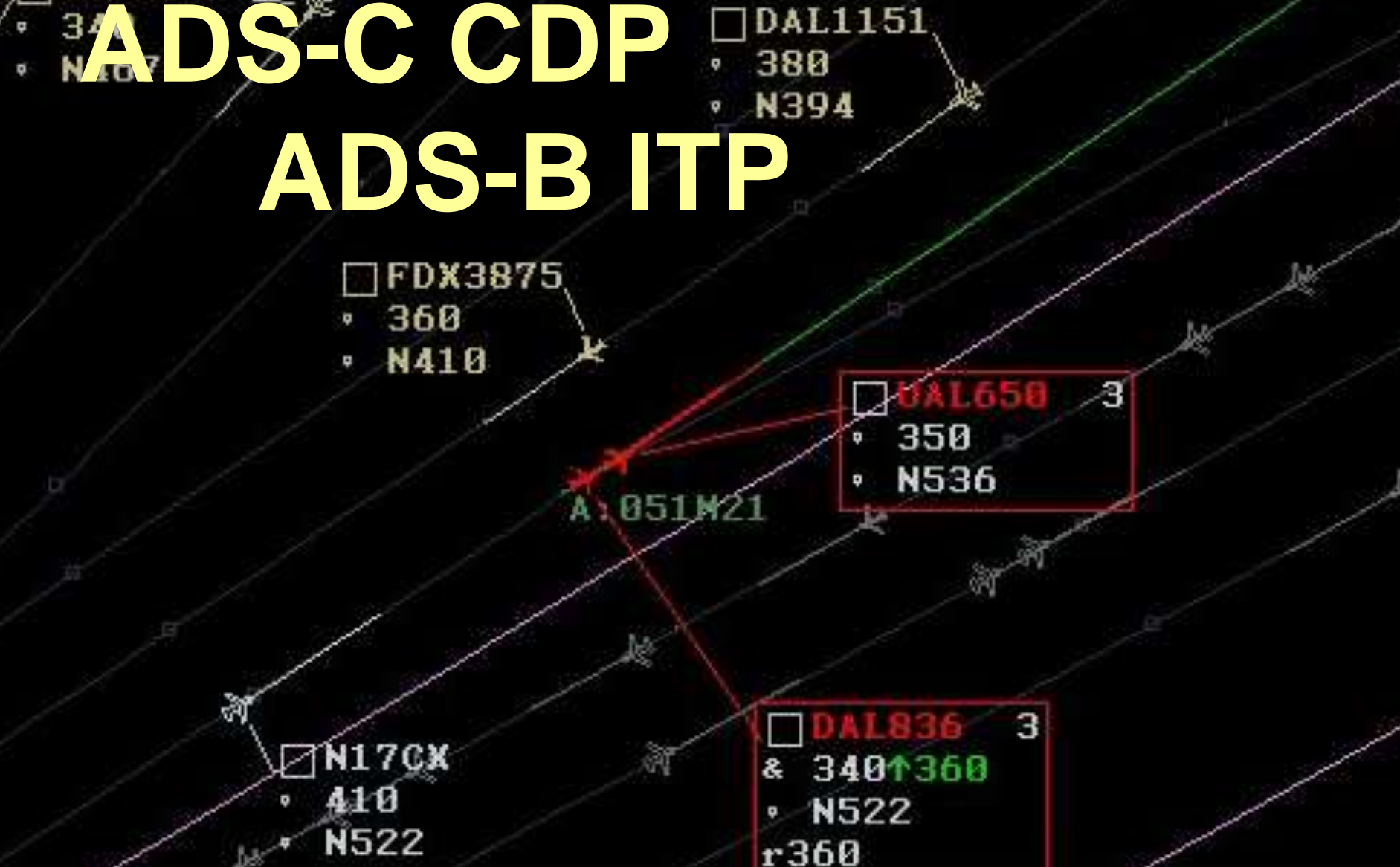
### Pacific Meetings

- Informal Pacific Coordinating Group (IPACG)
- Informal South Pacific Coordinating Group (ISPACG) ↗
- Oceanic Workgroup Meeting (OWG)



# ADS-C CDP

# ADS-B ITP



# Software June 2016



BOEING 777



ATC	FLIGHT INFORMATION	COMPANY
REVIEW	MANAGER	NEW MESSAGES

2319z ATC UPLINK

AT N1400.0E17000.0 CLEARED  
 ROUTE CLEARANCE  
 ORIGIN:PGUM DEST:PHNL  
 DEPARTURE:06  
 VIA TO  
 DIRECT N1330.0W18000.0  
 DIRECT N1400.0W17400.0  
 DIRECT N1800.0W16500.0  
 DIRECT MCFLY  
 DIRECT CHOKO  
 DIRECT GECKO  
 DIRECT HNL

ACCEPT	LOAD FMC	PRINT	DISPLAY REQUEST	REJECT REASONS	REJECT
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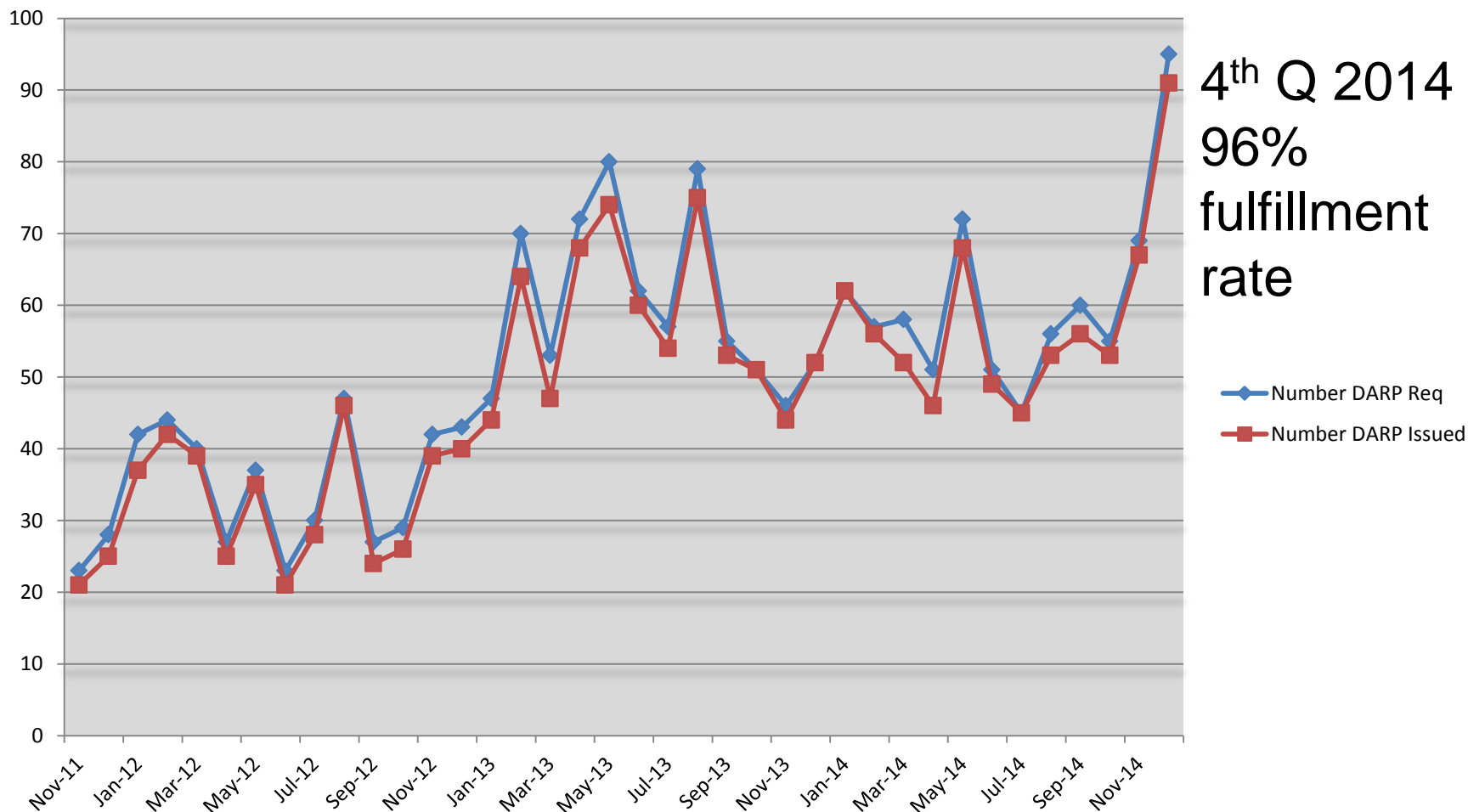
RTE 2 2/3  
 VIA TO  
 DIRECT N14E170  
 DIRECT N13W180  
 DIRECT N14W174  
 DIRECT N18W165  
 DIRECT MCFLY  
 -----  
 <RTE 1 ACTIVATE>

ACT RTE 1 LEGS  
 084° 237NM  
 N14E170 .834  
 081° 583NM  
 N14W180 .833  
 071° 355NM  
 N15W174 .831  
 055° 570NM  
 N19W165 .83  
 046° 117NM  
 AJINK .83  
 -----  
 <RTE 2 LEGS R

# DARPS



# Oakland FIR DARP Usage



# Dynamic Airborne Reroutes

- **DARP Procedure requires AIDC.**
- **AIDC is required between all facilities to destination.**
- **Do not request a DARP Reroute into FIRs that do not support the procedure.**



# UPRs

????  
Kg An.

1.09M.  
Kg An.

2.88M.  
Kg An.

10M.  
Kg An.

1.09 Kg  
An.

Over 32.8 Mil  
Kg Fuel  
Savings  
Annually

1017Kg  
Flight

.266M.  
Kg An.

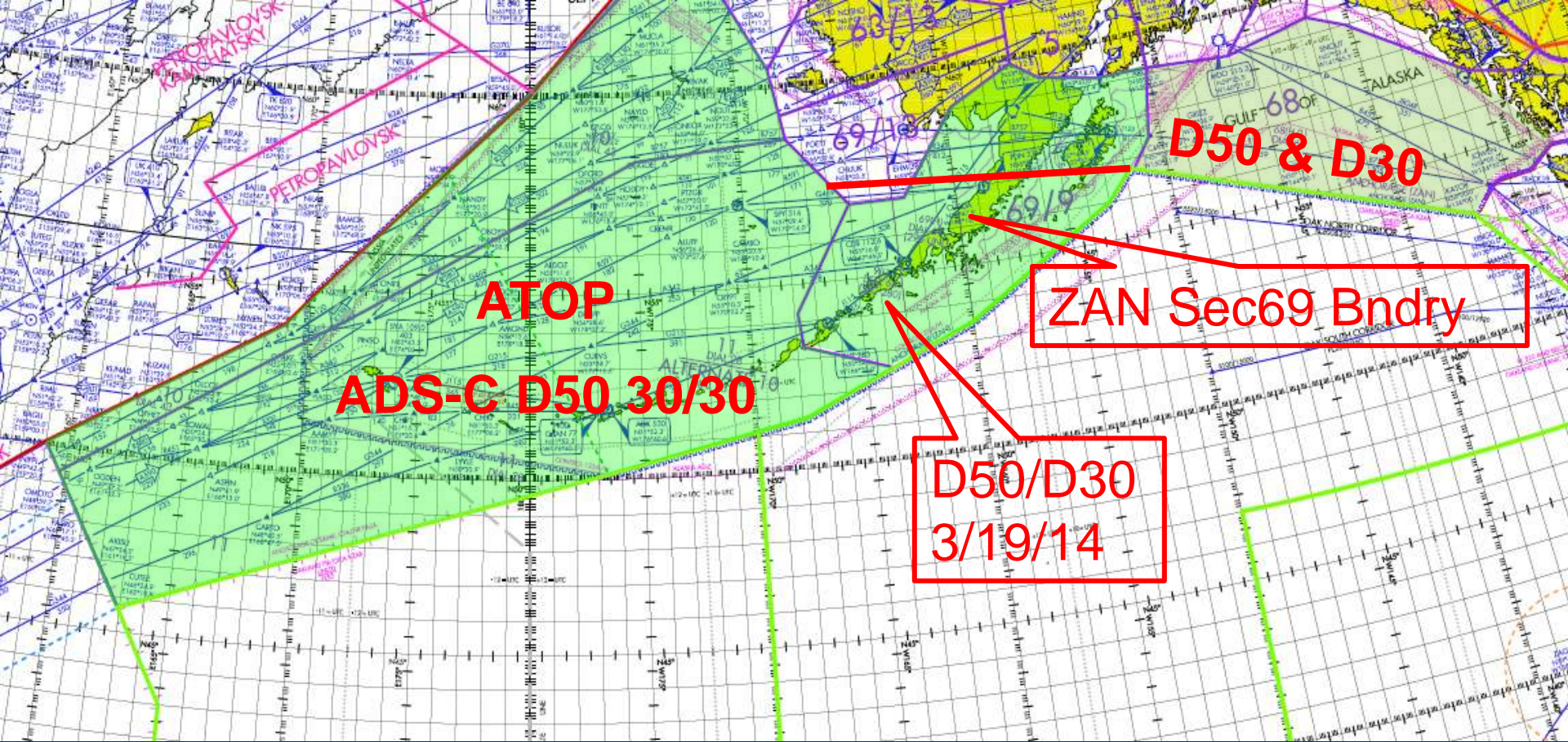
9.61M  
Kg An

2.88M.  
Kg An.

2.09M.  
Kg An.

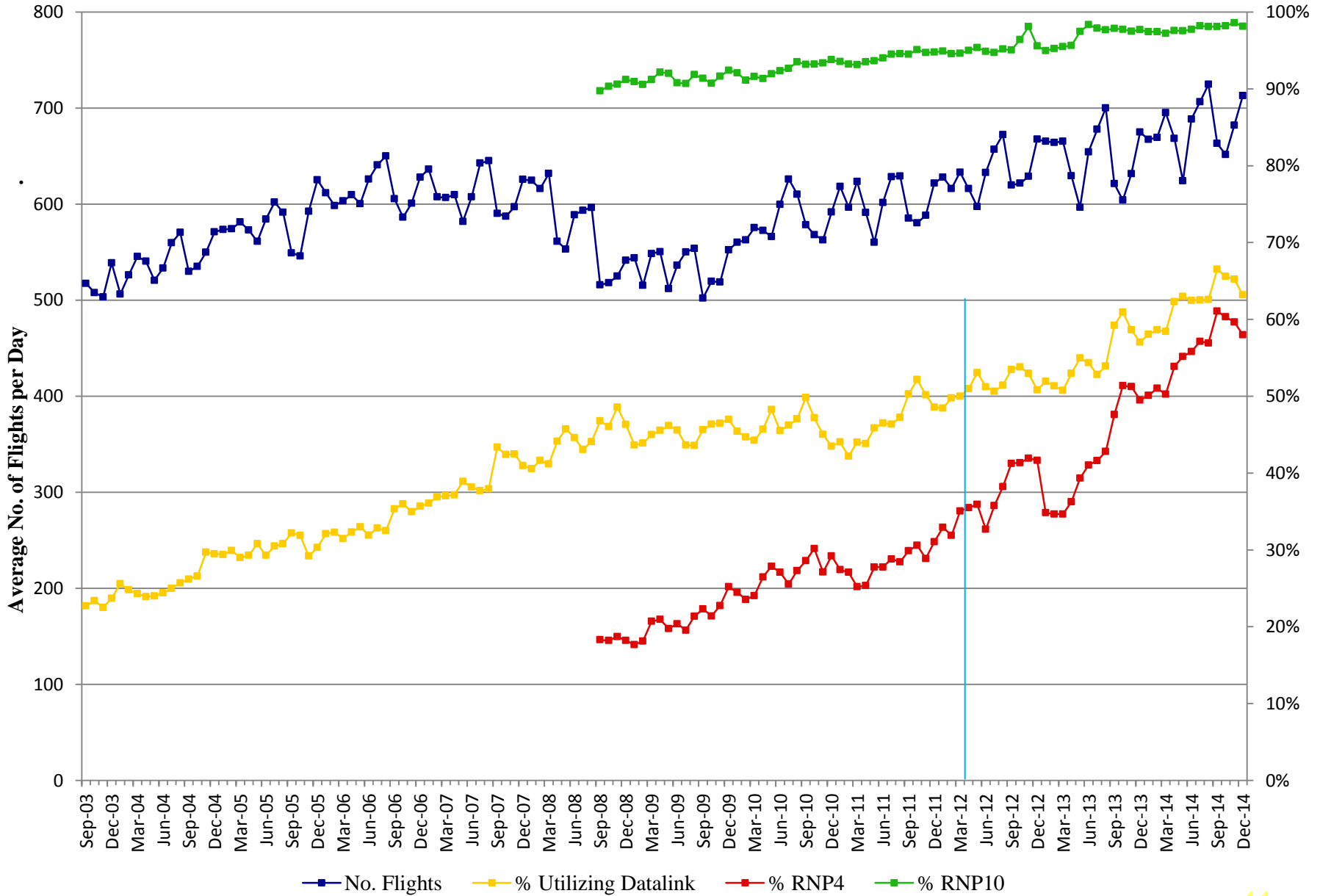
????  
Kg An.

# Boundary Change with Anchorage ARTCC



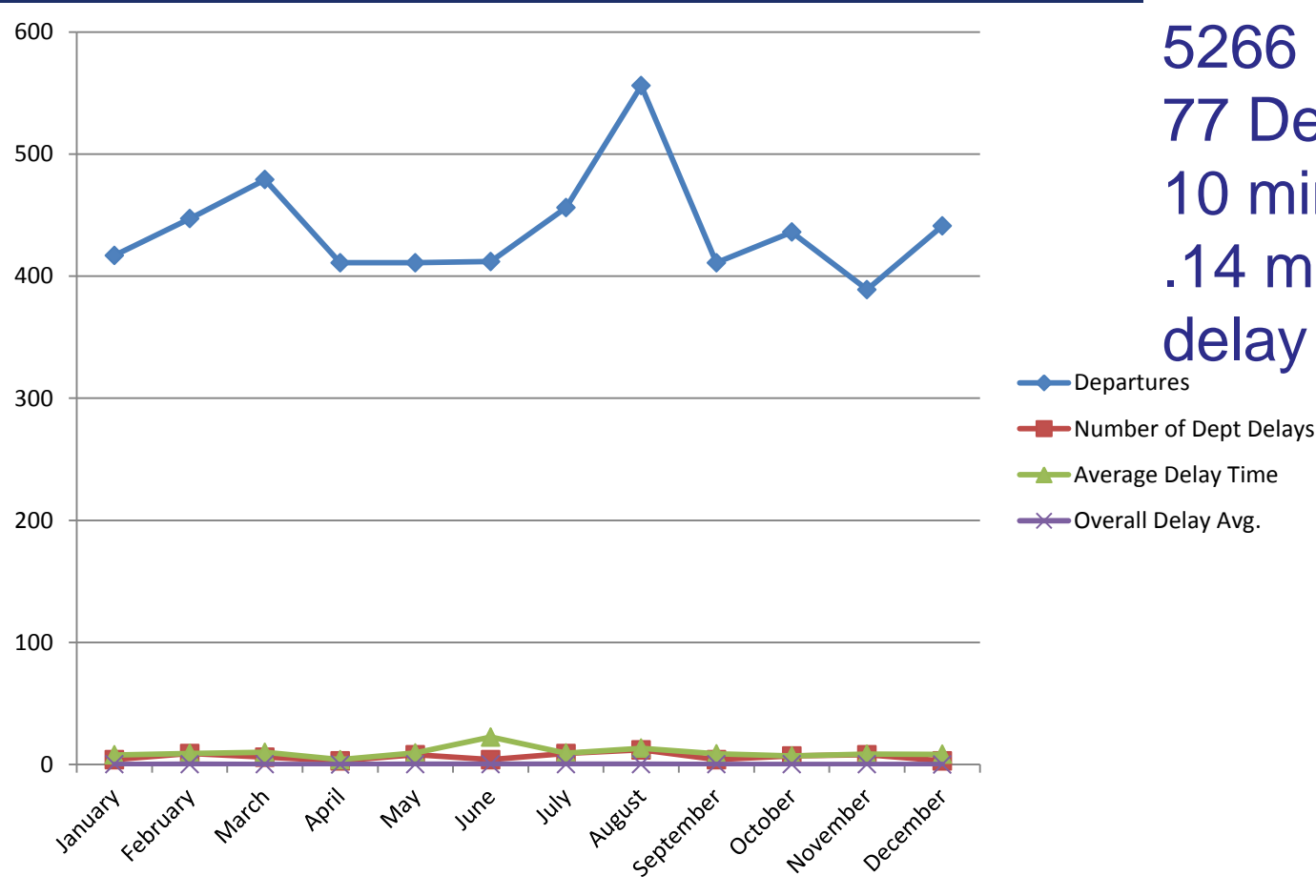
# April 2015

# ZOA Flights & Equipment Utilization



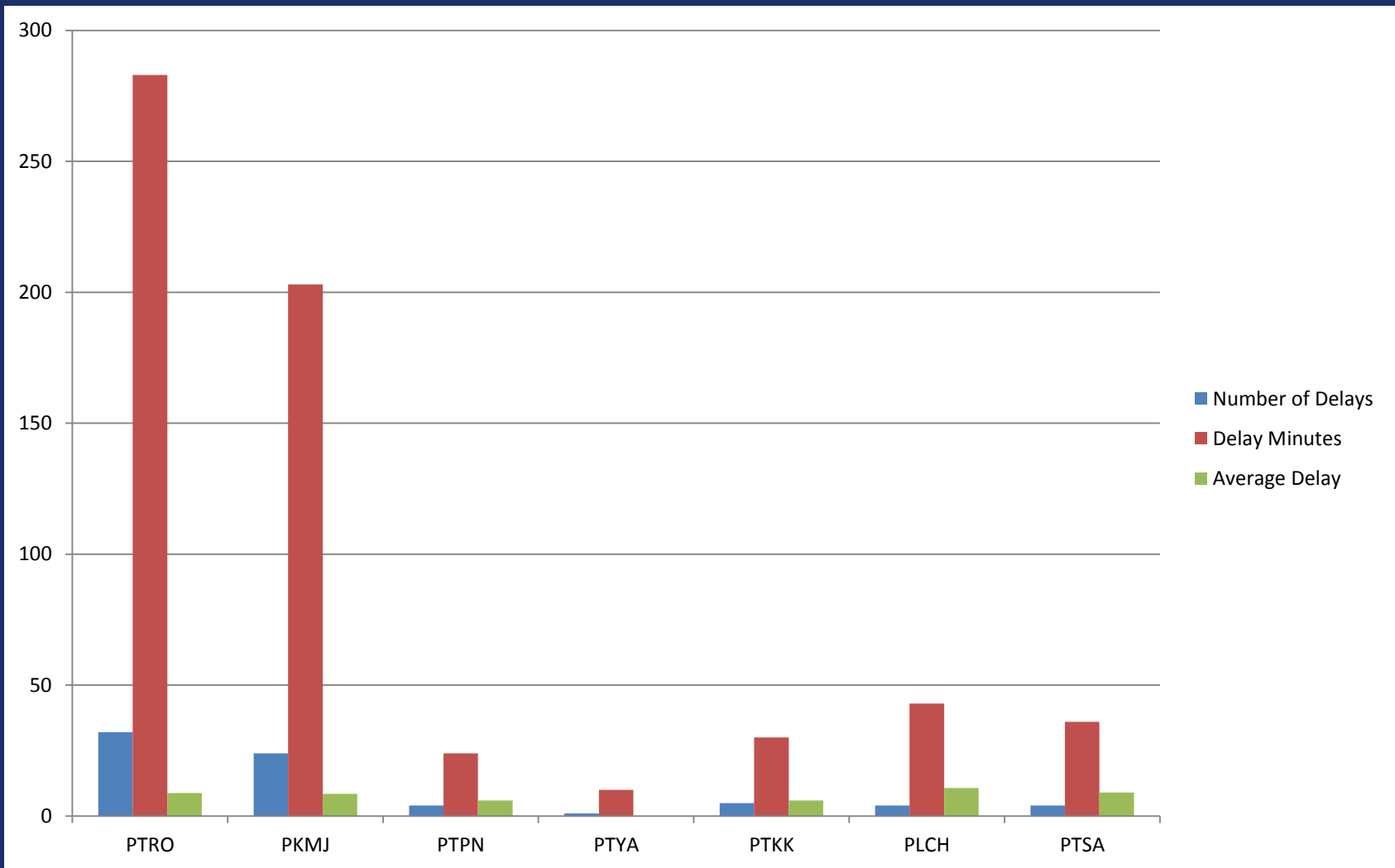
# 2014 Island Departure Delays

•2014 Totals  
5266 Departures  
77 Departure Delays  
10 mins avg delay  
.14 mins Overall  
delay avg



Overall average flight delay was less than a minute

# 2014 Island Departure Delays



# Space Based ADS-B Surveillance

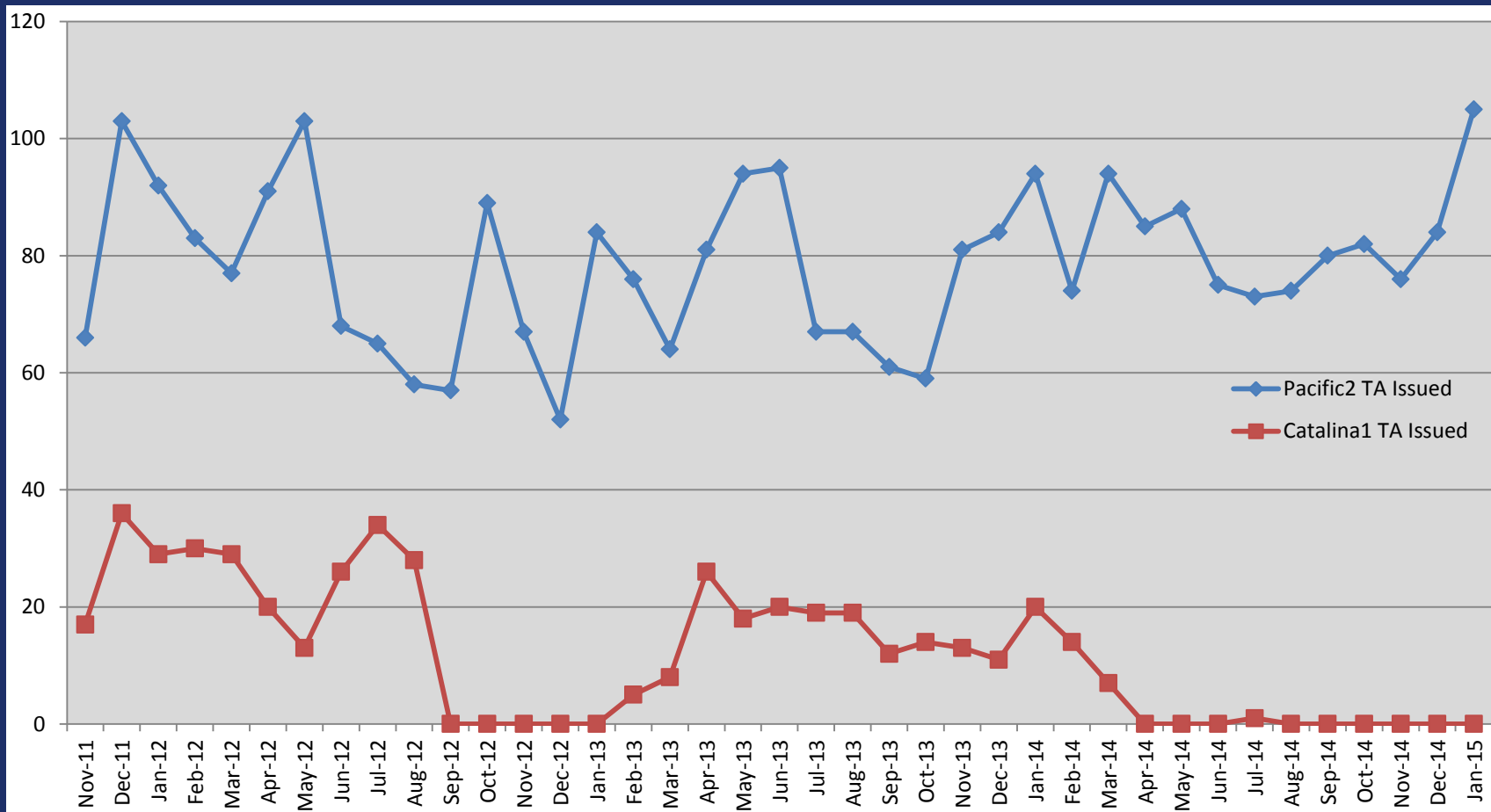


ZOA



•The FAA is also investigating the feasibility of Space Based ADS-B Surveillance. In conjunction with CPDLC the possibility exists to greatly reduce separation standards

# Tailored Arrival Clearances



# KSFO Tailored Arrivals

- A new RNAV PIRAT1 STAR is being developed to mirror the KSFO Pacific 2 TA.
- The PIRAT1 STAR would provide an OPD for non FANS aircraft.
- The Target Date for implementation December 2015.

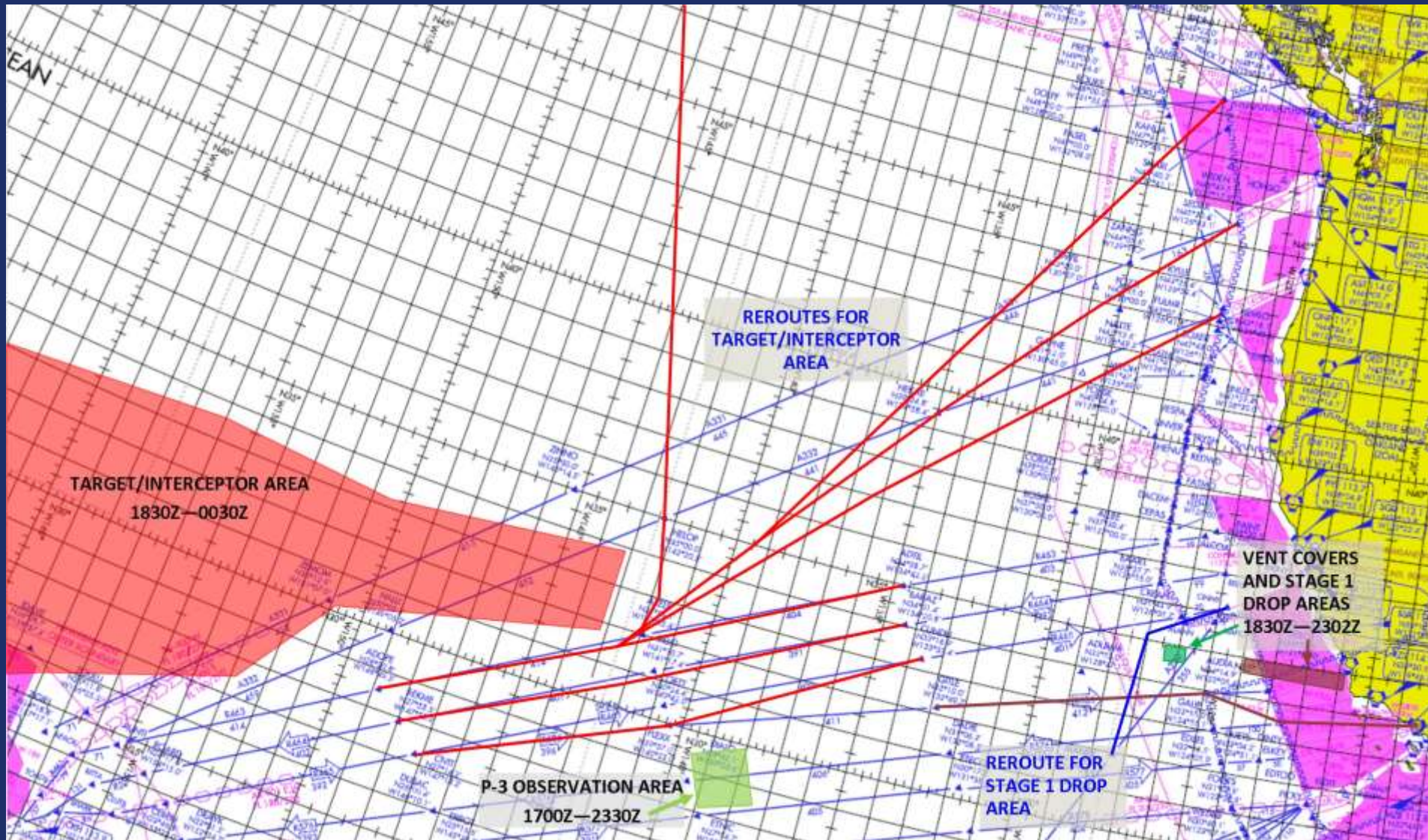


# Mazatlan ACC

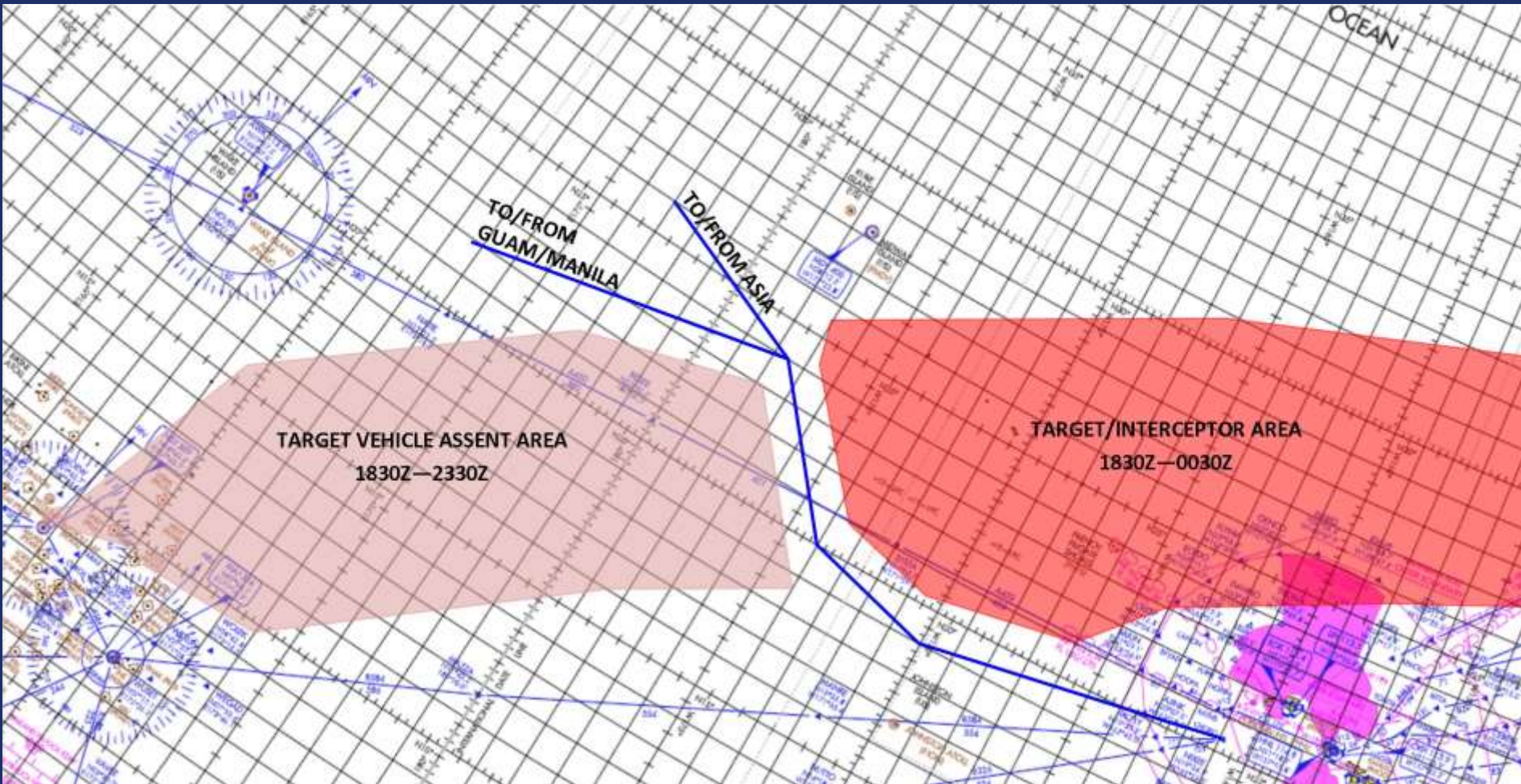
- FAA working to establish an AIDC connection between Oakland and Mazatlan. March of 2015
- Mazatlan announced they are working to convert their Class G Airspace to Controlled Airspace.



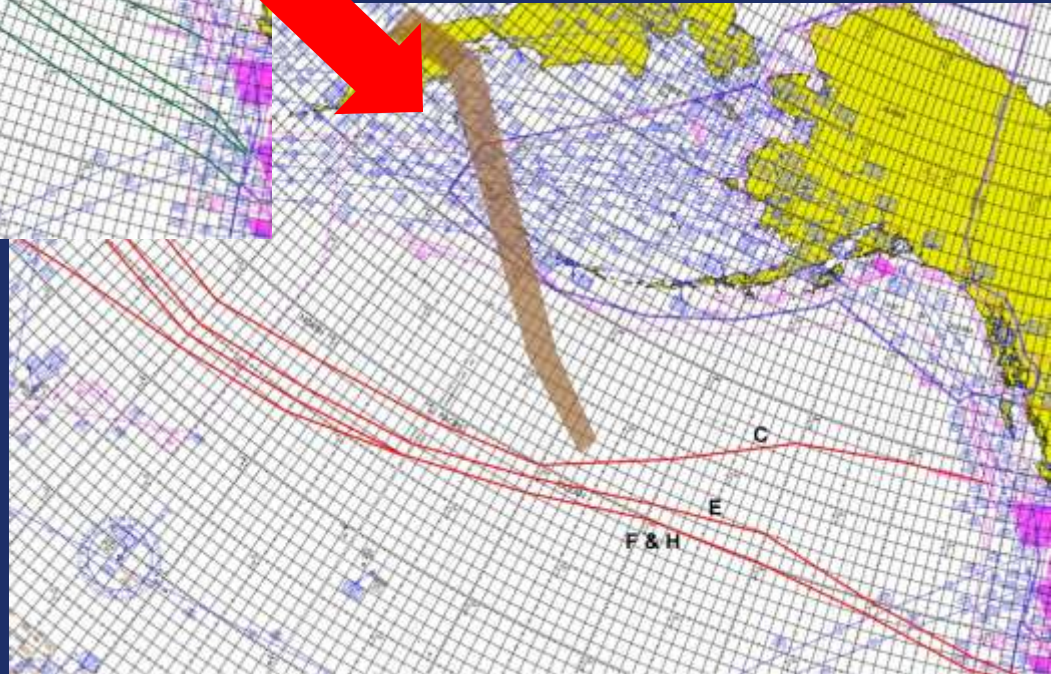
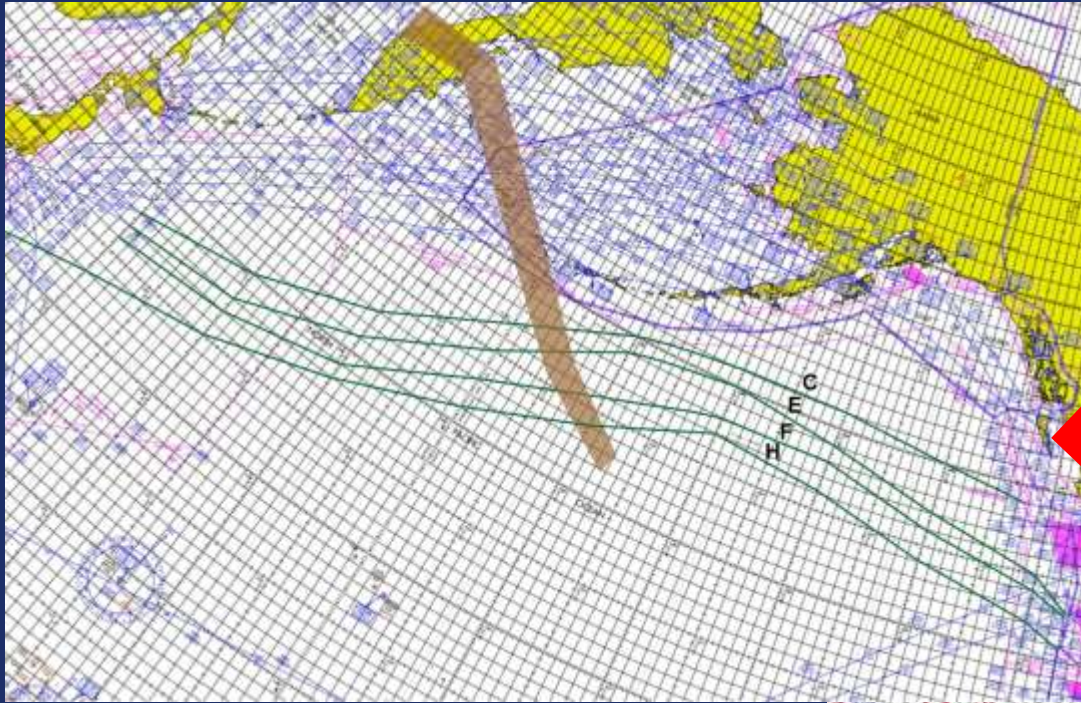
# Impacts From Missile Defense Testing



# Impacts From Missile Defense Testing



# Volcanic Ash & PACOTS Generation



# Volcanic Ash & PACOTS Generation (IPACG)

- In the event of an Ash Plume:
- Teleconference with International dispatchers
- Reach Agreement on the affected airspace
- When there is no agreement on affected airspace but credible evidence exists that the PACOTS will be affected by the Ash Plume, the PACOTS will be moved so that they are clear of the Ash Plume.
- This is a more conservative approach that keeps aircraft clear of volcanic ash.
- Operators that have completed their SMS analysis and determined that there is no risk could flight plan a route through the affected area.
- ATC would give advisories as required.



# ICAO Annex 2 3.6.2.2 change

- *3.6.2.2 Inadvertent changes. In the event that a controlled flight inadvertently deviates from its current flight plan, the following action shall be taken:*
- *a) Deviation from track: if the aircraft is off track, action shall be taken forthwith to adjust the heading of the aircraft to regain track as soon as practicable.*
- *b) Variation in true airspeed: if the average true airspeed at cruising level between reporting points varies or is expected to vary by plus or minus 5 per cent of the true airspeed, from that given in the flight plan, the appropriate air traffic services unit shall be so informed.*
- *c) Change in time estimate: if the time estimate for the next applicable reporting point, flight information region boundary or destination aerodrome, whichever comes first, is found to be in error in excess of 2 minutes from that notified to air traffic services, or such other period of time as is prescribed by the appropriate ATS authority or on the basis of air navigation regional agreements, a revised estimated time shall be notified as soon as possible to the appropriate air traffic services unit.*
- 
- *3.6.2.2.1 Additionally, when an ADS agreement is in place, the air traffic services unit shall be informed automatically via data link whenever changes occur beyond the threshold values stipulated by the ADS event contract.*



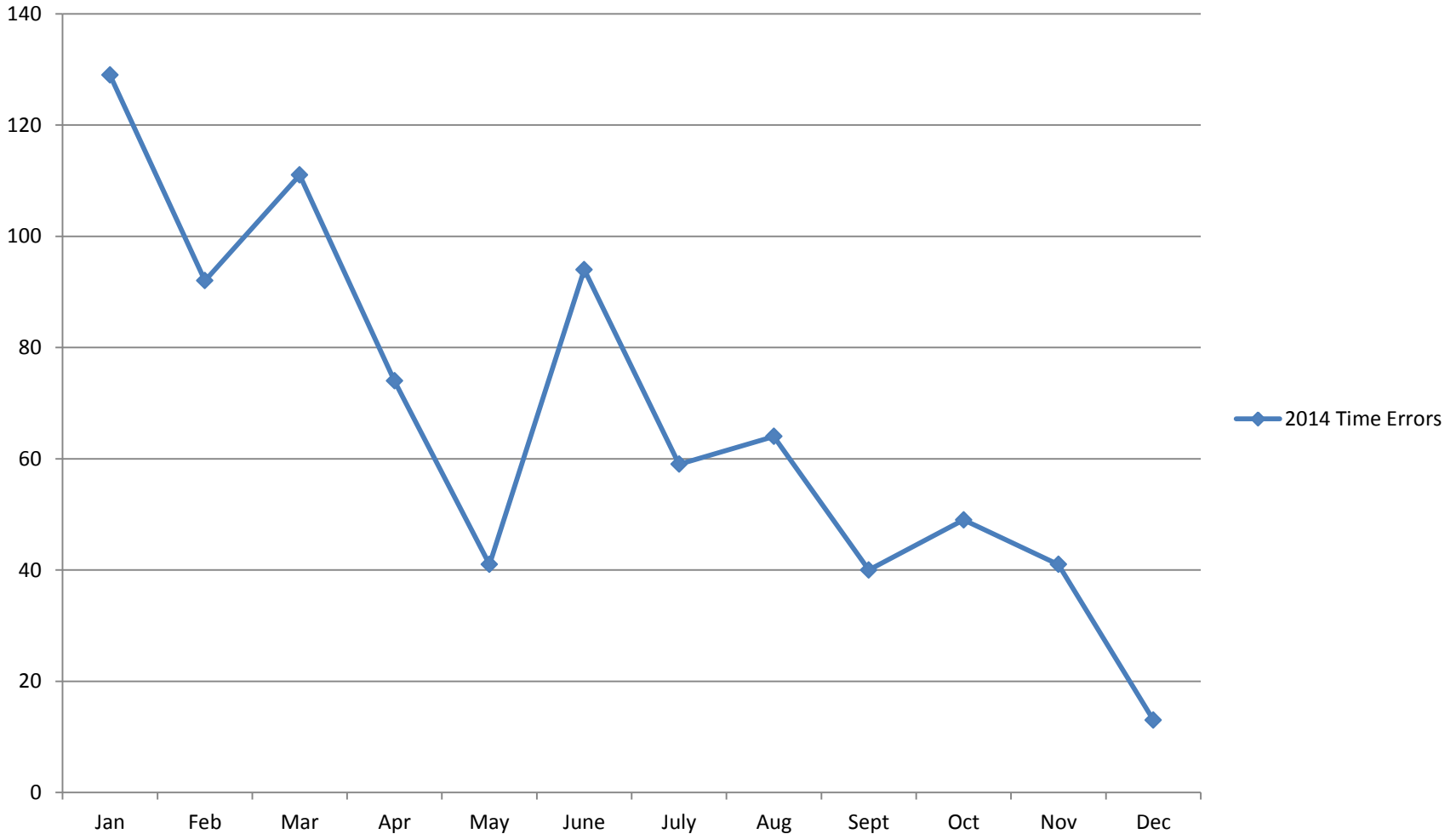
# Oceanic Navigation Error Reporting

- **FAA requires reporting of Oceanic Navigation Errors:**
  - GNE (Gross Navigation Error) 25nm or more.
  - Intervention: Aircraft on different route than ATC.
  - Height Error: 300 feet or more.
  - Time Errors: Pacific = More than 3 minutes
- **ONER Reports are forwarded to:**
  - Flight Standards
  - Technical Center, Airspace Safety Calculations.
- **Oakland has automated Time Error tracking and reporting.**



# ONER Time Errors

## 2014 Time Errors





# Port Moresby 50nm RNP10 Lateral Separation

- Investigating New Routes
- D50 Longitudinal Separation



