

Dynamic Airborne Reroute Procedure (DARP)



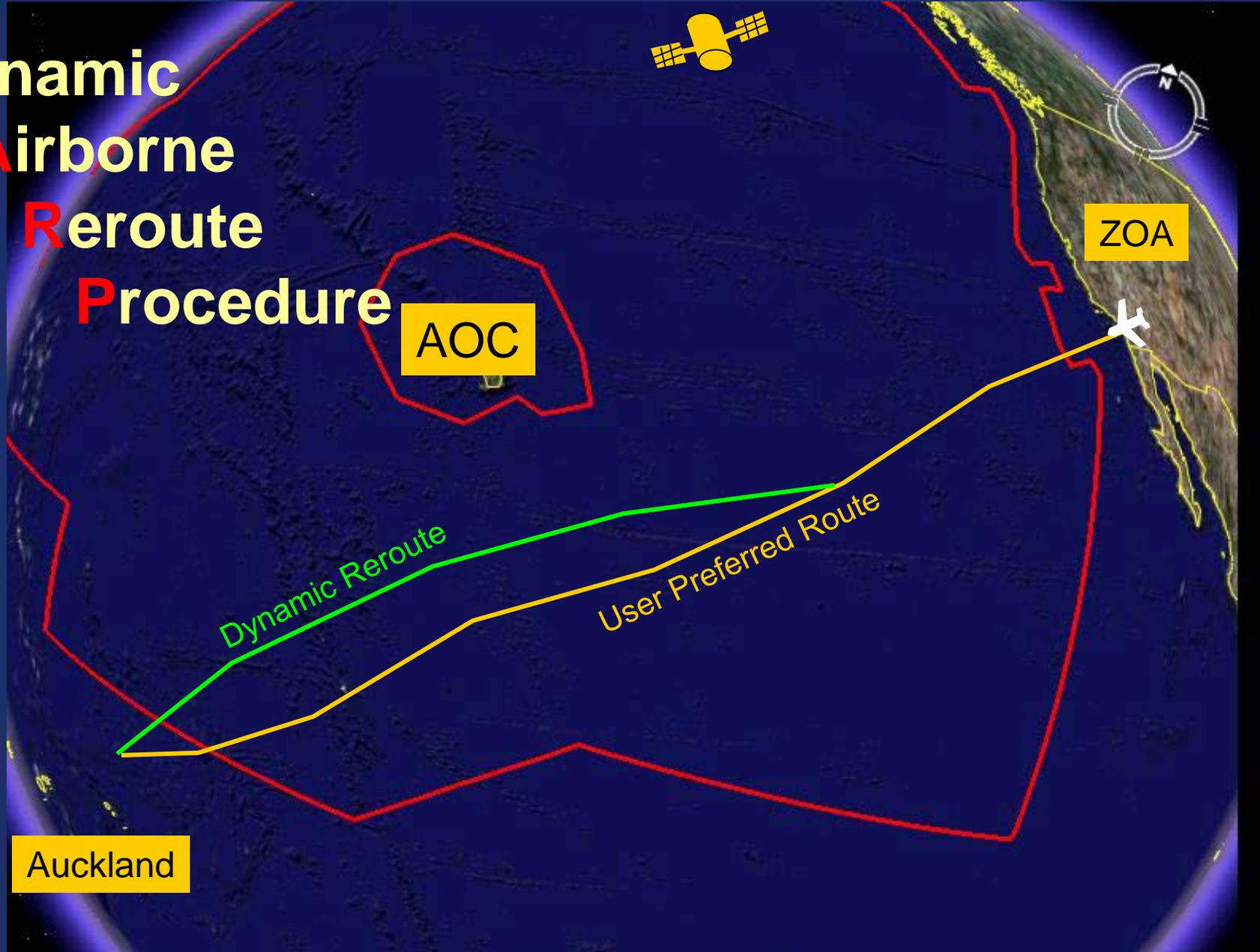
Federal Aviation
Administration

Dynamic Airborne Reroutes

- **Allows Airborne Rerouting of Aircraft When Winds Indicate a More Fuel Efficient Route is Available**
- **Reduce Operating Costs by Taking Advantage of Updated Winds**
- **FANS and Air Traffic Services Inter-facility Data Communications (AIDC) Required**
- **Trials started in the South Pacific**



Dynamic Airborne Reroute Procedure

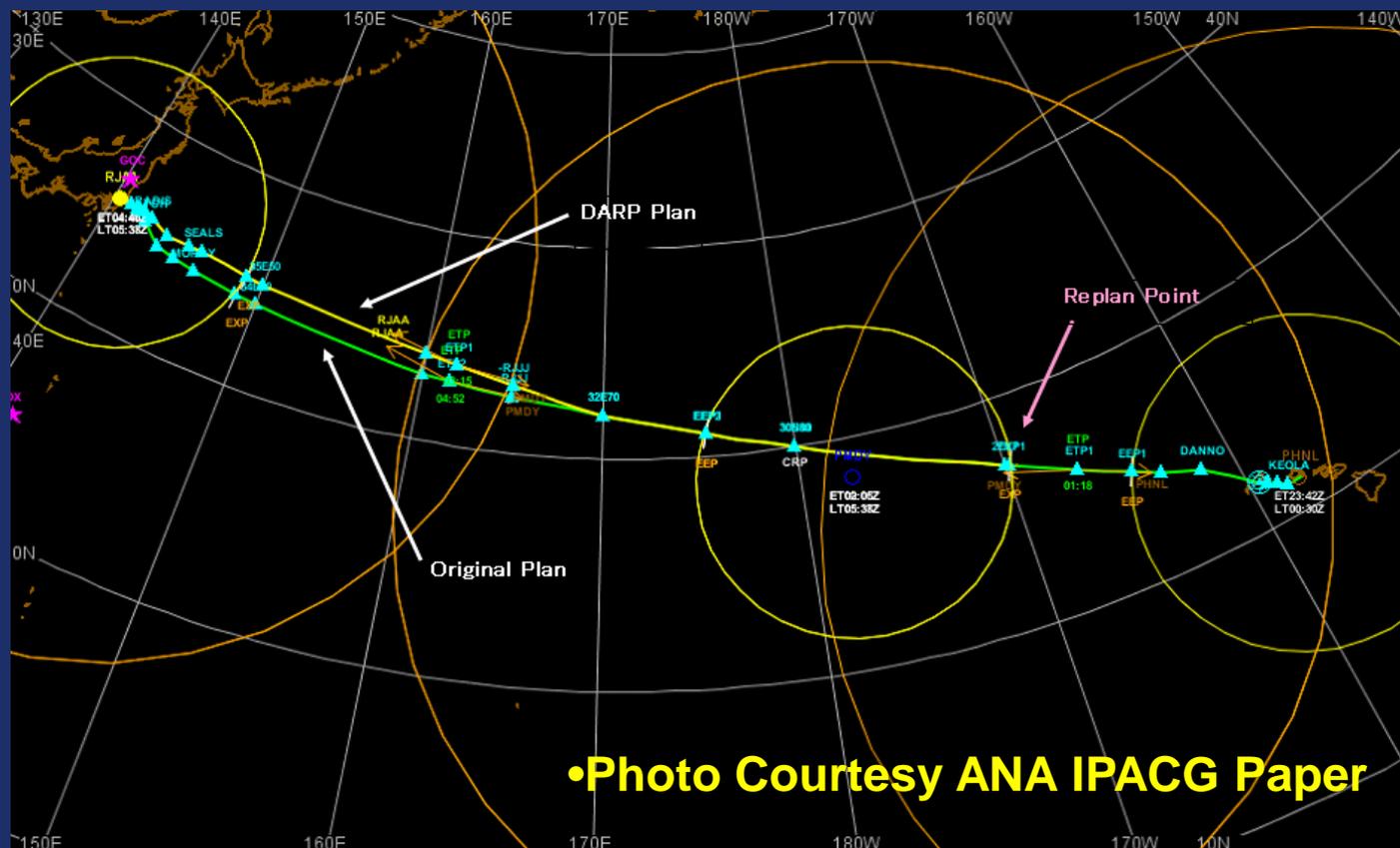


JAL ASPIRE Demonstration Flight

- Overall fuel savings of 10,046 Pounds
- DARP = 2600 pounds Fuel

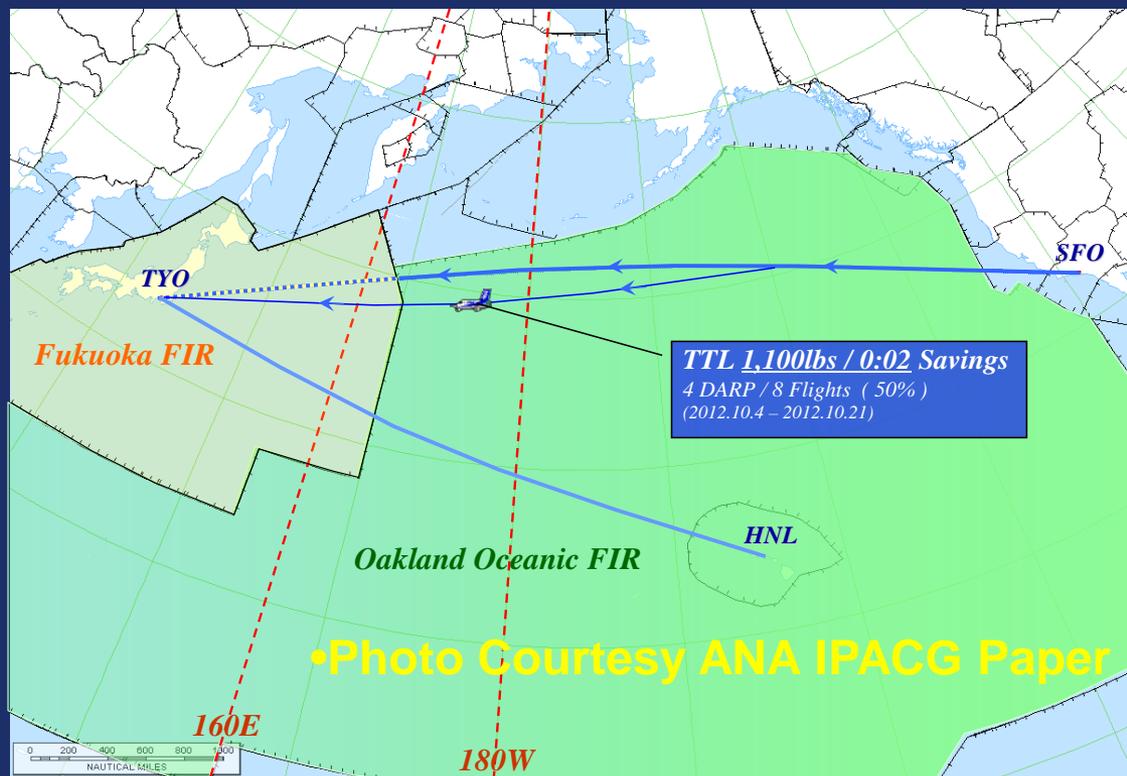
Dynamic Airborne Reroute Procedure

- On 30 April 2011, FAA and JCAB began an operational trial for use of DARP for flights from Hawaii to Japan.



Dynamic Airborne Reroute Procedure

- October 2012, FAA and JCAB conducted a limited DARP trial with one operator for flights from KSFO to RJAA.
- The DARPs trials in the Northern Pacific PACOTS airspace (CENPAC) was limited to the Oakland and Fukuoka FIRs.



Dynamic Airborne Reroute Procedure

- JCAB has implemented an ODP system enhancement to allow initiation of DARP clearances in Fukuoka FIR.
- JCAB had moved into limited operational testing of the DARP process in the Fukuoka FIR and is in the final stages of operational software evaluation.
- The first DARP test was successfully completed on 19 March 2013 with ANA1052.
- AIC Japan has been published which allows the use of DARP in the Fukuoka FIR

DARP Guidelines

- Operators wishing to employ DARP procedures initiated in the Fukuoka FIR or initiated in the Oakland FIR from North America or Hawaii to destinations in Japan must pre-coordinate with ATMC office by email (atmc_ocean@cab.mlit.go.jp).

DARP Guidelines

- **DARP Clearances are limited to aircraft transiting between Japan and North America or Hawaii.**
- **Operational CPDLC is required for aircraft requesting DARP.**
- **The requested routing shall remain within the Japan and United States FIRs.**

DARP Guidelines

- **The DARP Request must be made:**
 - within Fukuoka or Oakland oceanic airspace, and:
 - the aircraft must be at or east of 145E, and:
 - the aircraft must transmit the request at least 20 minutes before the divergence waypoint to allow for processing time by ATC and the pilot, and:

DARP Request Boundary Proximity



UNABLE
DARP MUST BE
REQUESTED
AT LEAST 60
MINUTES
PRIOR TO FIR

REQ
DARP

DARP Guidelines

- **Questions regarding DARP may be addressed to one of the following:**
 - Fukuoka ATMC
 - Office: atmc_ocean@cab.mlit.go.jp or TEL +81-92-608-8869
 - Oceanic Supervisor: TEL +81-92-608-8890
 - Oakland ARTCC
 - Oceanic Airspace Office: dustin.m.byerly@faa.gov or TEL 1-510-745-3543
 - Oceanic Supervisor: TEL 1-510-745-3342
 - *Note: Operational questions should be addressed to the Oceanic Supervisor.*

DARP Guidelines

- Oakland ARTCC has recently implemented a flight plan interface with Vancouver ACC.
- The interface will potentially allow for DARP into the Vancouver FIR in the future.
- More testing and coordination must be completed before this expansion will be possible.

