

Oakland Oceanic FIR (ZAK FSS)

Who and what is Oakland Oceanic?

Oakland Oceanic FIR also referred to as “San Francisco Radio”, or position name ZAK FSS, is not an ARTCC. This facility is operated by visiting controllers only, which, at a minimum, have to have obtained a C1 rating. After a period of being offline, Oakland Oceanic Airspace has been officially reopened on November 15th 2009. Oakland Oceanic is a non-radar control facility, and, mainly is in charge of aircraft flying routes leading from the western United States over the Pacific Ocean to many possible destinations, and vice versa. The most commonly found flights on VATSIM which transit Oakland Oceanic airspace go to or arrive from Hawaii, New Zealand, Australia, Japan and China.

What makes Oakland Oceanic so special?

As mentioned above, Oakland Oceanic is a non-radar control facility, meaning that ATC cannot see any planes within their airspace on a radar scope. Therefore Oakland Oceanic can only plot where planes are by pilots reporting their position at specific intersections on a predefined route, also known as an oceanic track. Aircraft within Oakland Oceanic airspace are separated by non-radar methods.

How does Oakland Oceanic separate traffic?

Aircraft enter oceanic tracks at an intersection within an ARTCC before entering Oakland Oceanic airspace. The ARTCC has to receive an oceanic clearance (OC) from Oakland Oceanic well before having an aircraft enter Oakland Oceanic airspace. This clearance includes a specific time at which the aircraft is expected to cross the first intersection of the oceanic track. If this time will not be met, the responsible controller has to request another OC from ZAK FSS, even if the aircraft would be at that fix too early. Two airplanes wanting to enter the same track at the same flight level are required to have a minimum time separation of 15 minutes. The other non-radar separation method is using the aircrafts altitude. Normal altitude assignments apply based upon their direction of flight*.

How does Oakland Oceanic affect us at vZOA?

vZOA shares a 400nm long border with Oakland Oceanic and many flights we have departing or arriving our airspace transit the Oakland Oceanic airspace. As controllers handling these aircraft it is important to understand at a bare minimum how oceanic departures are handled. This requirement applies to all controllers regardless of your rank or qualifications.

Oceanic Tracks starting and ending in vZOA

Track	In-/Outbound	TCP	End/Start fix	FL to be used
R463	in/outbound	ALLBE	ALCOA	Even/Odd*
R464	outbound	BAART	BEBOP	Even*
R465	inbound	CREAN	CINNY	Odd*
A220	in/outbound	MAFIC	CINNY	Even/Odd*

TCP = transfer of control point

Time compressed flights over the pacific ocean

We all know we should use even flight levels for westbound IFR and odd flight levels for eastbound IFR flights. Assuming that ZAK will get more traffic this way, the ZAK staff has included the option for aircraft to use time compressed flight while overflying the pacific using factors 2x and 4x. Westbound flights with time compression factor 2x **must** be assigned FL390, westbound flights with time compression factor 4x **must** be assigned FL410. Eastbound flights with time compression factor 2x **must** be assigned FL380, eastbound flights with time compression factor 4x **must** be assigned FL400.

I got a plane going to PHNL, what do I do?

I will walk you through the procedure assuming all positions within vZOA, as well as ZAK_FSS is staffed. If OAK CTR is not staffed, coordination with ZAK FSS is done directly and is not relayed by anyone. Initially aircraft call up asking for IFR clearance. If you know the route is correct, issue the clearance as normal using the CRAFT format. After the pilot reads back the clearance, he should be told to **“hold for oceanic clearance”**. At this time clearance delivery has to contact OAK CTR and ask for OAK CTR to request the oceanic clearance for this aircraft from ZAK FSS. The format for this using AAL102 bound to PHNL is **“Reqst OC, AAL102, FL360, BEBOP at 16:15Z”**. OAK CTR will relay this message to ZAK FSS. ZAK FSS has the option to approve the clearance, change the time at when the track has to be entered, change the flight level, a combination thereof, or to deny the clearance. Replies from ZAK FSS to OAK CTR will be relayed as appropriate and you will issue an oceanic clearance to the aircraft, which will include - at times - a change of cruise altitude, but always a time when to cross the intersection that starts out the oceanic track. Replies from OAK CTR (or ZAK FSS, when no one else is online) will have the following format **“AAL102, XX”** (A/C callsign + Operating initials, meaning that the route is approved), **“AAL102, BEBOP 16:23Z, XX”** (A/C callsign + new track entering time + Operating initials), **“AAL102, FL320, XX”** (A/C callsign + new cruising altitude + Operating initials), **“AAL102, unable, XX”** (A/C callsign + stating ZAK FSS cannot accept the aircraft at all + Operating initials). An example of the oceanic clearance relayed issued to the aircraft is: **“AAL102, you are cleared Oceanic, FL340, BEBOP at 1618Z.”** Change the figures as necessary to comply with ZAK FSS instructions. If OAK CTR is not online, advise the pilot that (s)he has to inform ZAK FSS of any time deviation expected at the starting fix of the oceanic track.

Enjoy sending the pilots over the pond!

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