

Rivera, Carlos I.

Subject: FW: Discuss - General Atomics Test of LTE IOPS on Band 14 over the Anza Borrego desert.

From: PATEL, CHETAN <cp2626@att.com>

Sent: Friday, March 29, 2019 2:23 PM

To: Rivera, Carlos I. <Carlos.I.Rivera@ga-asi.com>

Cc: MUTHUSWAMY, ESWARAN <em574v@att.com>; FILLEY, MICHAEL J <mf3714@att.com>; LEWIS, MIKE <ml2487@att.com>; BANCHONGSIRICHAREON, SOONTORN <sb3291@att.com>; Hite, Jason <Jason.Hite@ga-asi.com>; Lin, Susan <Susan.Lin@ga-asi.com>; Lozada, Godfrey <Godfrey.Lozada@ga-asi.com>; Oyekan, Aziz <Aziz.Oyekan@ga-asi.com>

Subject: -EXT-Re: Discuss - General Atomics Test of LTE IOPS on Band 14 over the Anza Borrego desert.

Yes 100 mile off shore is not a problem.

Sent from my iPhone

On Mar 29, 2019, at 1:34 PM, Rivera, Carlos I. <Carlos.I.Rivera@ga-asi.com> wrote:

Hi Chet,

Would a hundred miles offshore be a workable solution for AT&T? The proposed lat/long for the aircraft loiter is 32.594338 and -118.857295.

Thank you for your consideration.

Carlos



From: PATEL, CHETAN <cp2626@att.com>
Sent: Wednesday, March 20, 2019 10:26 AM
To: Rivera, Carlos I. <Carlos.I.Rivera@ga-asi.com>; MUTHUSWAMY, ESWARAN <em574v@att.com>; FILLEY, MICHAEL J <mf3714@att.com>; LEWIS, MIKE <ml2487@att.com>; BANCHONGSIRICHAREON, SOONTORN <sb3291@att.com>; Hite, Jason <Jason.Hite@ga-asi.com>; Lin, Susan <Susan.Lin@ga-asi.com>; Lozada, Godfrey <Godfrey.Lozada@ga-asi.com>; Oyekan, Aziz <Aziz.Oyekan@ga-asi.com>
Subject: -EXT-RE: Discuss - General Atomics Test of LTE IOPS on Band 14 over the Anza Borrego desert.

Hi Team,

Thanks for the info. I can only speak for San Diego . The other proposed location is in Arizona Market. But that area does seem to be more isolated than Imperial County. As for the third location, doing it over the ocean West of San Diego. , that would depend how far as Propagation over water and LOS can hit the San Diego coastline of 70 miles with a lot of sites.

Hope that helps.

Chet ☺

From: Rivera, Carlos I. <Carlos.I.Rivera@ga-asi.com>
Sent: Tuesday, March 19, 2019 1:44 PM
To: MUTHUSWAMY, ESWARAN <em574v@att.com>; PATEL, CHETAN <cp2626@att.com>; FILLEY, MICHAEL J <mf3714@att.com>; LEWIS, MIKE <ml2487@att.com>; BANCHONGSIRICHAREON, SOONTORN <sb3291@att.com>; Hite, Jason <Jason.Hite@ga-asi.com>; Lin, Susan <Susan.Lin@ga-asi.com>; Lozada, Godfrey <Godfrey.Lozada@ga-asi.com>; Oyekan, Aziz <Aziz.Oyekan@ga-asi.com>
Subject: RE: Discuss - General Atomics Test of LTE IOPS on Band 14 over the Anza Borrego desert.

Dear Chet, Warren, Michael, Mike, and Soontorn:

Thank you for your participation in last week's conference call regarding our request for airborne cellular network testing near the Anza Borrego desert; it was very informative. It's a shame that we missed testing in that area prior to AT&T initiating Band 14 and AWS-3 service.

Following the conference call, the GA-ASI team met to come up with next steps and these three suggestions were raised for aerial testing:

- **Option 1: AT&T to recommend a location which hasn't been placed in FirstNet service yet**

Based on your knowledge of AT&T's LTE Band 14 deployment plans, is there another area that AT&T still has not placed these bands into service and could serve as a candidate area for our airborne testing for a day or two? It doesn't have to be in San Diego County; it can be over any county or state so long as can avoid interference.

- **Option 2: GA-ASI proposes a more remote location, further away from roads, population and AT&T towers (see Maps 2 below)**

We would like to propose an area east of Yuma, AZ and west of Phoenix, AZ (shown in Map 1 below) which is significantly farther from AT&T towers than the Anza Borrego desert test area we discussed on Thursday (left red rectangle below). Whilst transmissions from our airborne eNodeB would not reach your AT&T cell sites below at noise levels (-118 dBm at ??? bandwidth), they would be considerably attenuated based

on the distances involved (see Map 2). The airborne test would take place 50 miles from Arizona State Routes 95 and 85, and 30 miles from Interstates 8 and 10.

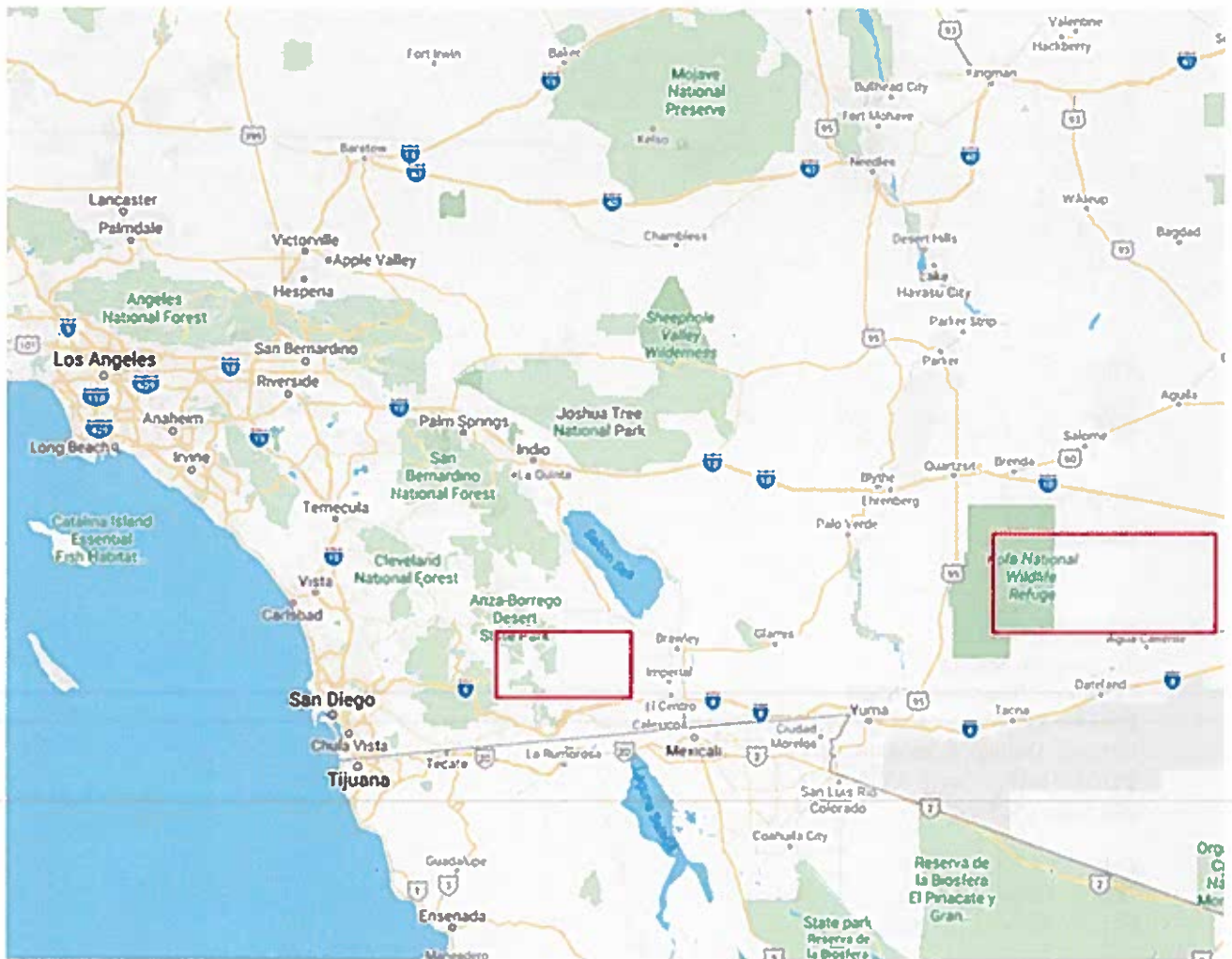
- **Option 3: Propose testing offshore, west of San Diego**

Testing offshore could be a last option.

Attached is the information that you requested during our conference call. Please let me know if you have any questions or concerns with this information.

We look forward to receiving your feedback.

MAP 1. Visual size comparison of proposed test area vs. Anza Borrego



MAP 2. Proposed test area

-----Original Appointment-----

From: MUTHUSWAMY, ESWARAN <em574v@att.com>

Sent: Monday, March 11, 2019 5:16 PM

To: MUTHUSWAMY, ESWARAN; PATEL, CHETAN; FILLEY, MICHAEL J; LEWIS, MIKE;
BANCHONGSIRICHAREON, SOONTORN; Hite, Jason; Lin, Susan; Lozada, Godfrey; Oyekan, Aziz; Rivera, Carlos I.

Subject: -EXT-Discuss - General Atomics Test of LTE IOPS on Band 14 over the Anza Borrego desert.

When: Thursday, March 14, 2019 12:00 PM-1:00 PM (UTC-08:00) Pacific Time (US & Canada).

Where:

HI Carlos,

I am sending this invite out since it is easier for me to look up calendars internally. Hope this slot works for everyone. We may or may not need the full hour.