



**AGENDA ITEM:** \_\_\_\_\_

MEETING DATE: November 05, 2015  
TO: Board of Directors  
FROM: Michael Cooke, Manager of Aviation and Community Services  
SUBJECT: Quarterly Operations and Comments Report

This report summarizes operations and community annoyance comments during the 3rd quarter of 2015. A monthly report supplements this report which offers insights on outreach by staff to operators and community based on annoyance comments. This document represents the most accurate operations numbers using the current suite of technology for data capture.

#### **About the Data**

The primary data source for this report is the Vector VNOMS system which integrates cameras at 4 runway ends, 7 taxiways, and MLAT flight-tracking system input. There was no known system downtime for Q3. Operations which tend to fall outside of standard data-capture protocols are itinerant helicopters and glider operations. Staff supplemented values from Soar Truckee for glider operations and Care Flight for helicopter activity.

#### **Operations and Fleet Mix**

Despite some periods of strong winds, Q3 consisted of excellent flying weather with just .35 inches of precipitation. The holidays of Independence Day and Labor Day, the Truckee Tahoe Airport Airshow, the Reno Air Races, a PGA tour, the Lake Tahoe Iron Man and many, many other special events combined with the scenic wonders and robust amenities to draw visitors to the area. In short, it was a busy summer and the weather cooperated. When looking at operations values for Q3 2015, note that Labor Day 2015 fell one week later than in 2014, so this year, there was an extra week in the peak operations window versus 2014.

Operations showed increases in all aircraft types except for helicopters which show a 20% decrease over 2014. Since helicopters are regularly missed by NOMS camera captures, staff relies on operations numbers supplied by Care Flight. These values are supplemented with known data captures within the NOMS system. Staff speculates that fire-fighting helicopters may have visited KTRK less than in previous seasons based on the needs of other western states with major fires this summer.

Jet operations beginning in January of 2015 have been broken into the additional category of aircraft over 50,000lbs. Values reported prior to 2015 are not categorized the same way, so figures used to

report jet aircraft by weight will not compare for year on year reporting. In total, jet operations were up 167 over Q3 2014 or about 11%. Jets comprised 14% of total operations for the quarter. 115 jet operations, or 7%, were made by aircraft over 50,000lbs.

The top 20 aircraft operations by model for Q3 are shown in the following table.

Piston aircraft saw a significant increase over 2014. The piston single engine Cessna C172 Skyhawk and C182 Skylane hold the 2<sup>nd</sup> and 3<sup>rd</sup> ranking in the model visits. These aircraft represent the most common training aircraft to frequent KTRK as well as 31 of the aircraft based on the field.

Turboprops saw the largest numerical growth in operations for the quarter, up by about 78%. The popularity of the Pilatus PC12 cannot be overstated. As of October 2015 the hangar waitlist consisted of 7 applicants interested in basing a Pilatus aircraft at KTRK.

The overall operations trends of the quarter are generally in line with masterplan forecasts and the aviation industry at large. Piston twins were an exception with a gain of 271 ops. Q3 2015 is the first full annual cycle with integrated cameras to MLAT data. An analysis was run to determine numerical reliability of the reported values and no errors were found. With the additional of 7 arrival cameras, staff anticipates even better data captures for 2016.

Model	Type	Engines	Total
PC12	Turboprop	1	1170
C172	Piston	1	809
C182	Piston	1	719
SR22	Piston	1	434
C210	Piston	1	297
AS50	Helo	1	274
BE36	Piston	1	242
C206	Piston	1	217
C56X	Jet	2	203
B350	Turboprop	2	191
BE20	Turboprop	2	167
M20P	Piston	1	166
E50P	Jet	2	164
BE35	Piston	1	152
BE30	Turboprop	2	145
P28A	Piston	1	142
TBM7	Turboprop	1	142
C525	Jet	2	126
BE58	Piston	2	120
BE9L	Turboprop	2	110

### Night Operations

Voluntary curfew times are currently advertised as 10 p.m. to 7 a.m., a recent change. Previous outreach results indicate that most part 135 and many part 91 operators chose not to operate in or out of the airfield at night due to lack of a precision approach, or ILS. EMS services are the most typical operators after hours at KTRK. There were no cancellations of Fly Quiet lease incentives during Q3 2015. The following table illustrates non-EMS operations during the hours of 10 pm to 7 am for the quarter.

Time	Jet	Piston	Turboprop	Total
4:54 - 05:59	1	3	2	6
6:00 - 06:29	2	4	6	12
6:30 - 07:00	3	22	10	35
22:00 - 22:59	0	10	4	14
23:00 - 23:59	3	4	0	7
<b>Total</b>	<b>9</b>	<b>43</b>	<b>22</b>	<b>74</b>

## Community Annoyance Comments Summary

272 comments were generated from 59 households representing 10 residential areas. 20 of 59 were new commenters. 29 commenters made only one comment. The top 10 commenters made 189 or 69% of the quarterly comments. One household made 74 or 27% of the total comments.

For Q3 the month of August saw unusually high comment volumes and staff was made aware of a social media campaign to rally community members to make noise complaints. Outside of one commenter who appears to be the genesis of the campaign, the remaining commenters with high (3 to 20) comments numbered 18 and were found to be regular commenters with 147 comments combined.

Olympic Heights continues to be the most impacted residential areas when looking at the number of unique commenters combined with the volume of comments. In general, complaints from Olympic Heights occur when aircraft drift too far to the east on the Bypass Departure or Truck Four and overfly the western end of the neighborhood. The table below summarizes the total comments by type from each residential area that commented during the quarter.

Q3 Total						Olympic			Sierra	Tahoe	
	Alder	Downtown	Glenshire	Martis	Northstar	Heights	Other	Prosser	Meadows	Donner	Total
Helo	0	0	1	0	0	1	0	1	0	1	4
Jet	10	0	12	6	18	12	0	63	2	22	145
Piston	1	0	4	4	1	35	1	13	1	4	64
Turboprop	3	0	11	0	5	15	0	12	0	1	47
Unknown	0	1	2	2	0	3	0	1	3	0	12
<b>Total</b>	<b>14</b>	<b>1</b>	<b>30</b>	<b>12</b>	<b>24</b>	<b>66</b>	<b>1</b>	<b>90</b>	<b>6</b>	<b>28</b>	<b>272</b>

20 Comments from multiple reporting areas referenced the frequency of operations as a contributing factor or the sole source of their annoyance. Most new commenters with 2 or fewer comments cited frequency of operations during outreach correspondence and several voiced support for a control tower during outreach discussions.

Twelve touch and go operations generated complaints for the quarter and all operators were contacted. Four T&G operations were associated with Airshow practice. Six comments resulted from aircraft overflights not associated with KTRK, and ten comments were either solely attributed to frequency of operations or to unknown operations which could not be found. A matrix of comments by runway and operation type follows:

	Runway					Total
	2	11	20	29	Unk	
Arrival		30	32	41		103
Departure	1		1	139		141
Overflight					6	6
Touch n Go			3	9		12
Unknown					10	10
<b>Total</b>	<b>1</b>	<b>30</b>	<b>36</b>	<b>189</b>	<b>16</b>	<b>272</b>

## **Compliance and Outreach Efforts**

Community members received email follow-ups or return calls regarding their comments depending on their preference. Staff makes itself available for discussion to all community members and periodically checked with regular commenters on preferred method of follow-up. Outreach to community members also occurred during special events like Truckee Thursdays and the Airshow.

Based on staff reviews, 66 annoyance instances were determined to be non-compliant with NAPs in Q3. All non-compliant operators received outreach as did non-incentivized night operations and any staff-generated safety concerns. Compliant operations generating multiple comments also received outreach. Regular ramp outreach during peak days was performed by several staff members. A separate report during the September Board meeting outlined that undertaking.

Extensive efforts were invested in response to a low flying business jet aircraft over one Board member's home at Northstar at Tahoe. A report to the FAA's Reno FSDO office was returned with their findings of no violation of CFR 91.119, known as minimum safe altitudes. Repeated requests to the fractional operator for GPS data were never obliged. A comprehensive audit of TTAD's transponder-based flight-tracking system occurred culminating in a report to the Board by the MLAT engineer which indicated the system is performing as designed. Staff intends to continue to engage the operator to ensure they have the information and tools to reduce their operational impact to all residential areas near the airfield.

Finally, during the course of interactions with community members either at community events or in response to annoyance, staff noted significant amounts of missing or erroneous information in the community about the Airport. For example, most new commenters don't realize the Airport does not have authority over aircraft in flight or a control tower or that there are legal limits as to how an airport can influence traffic.

At a Truckee Thursday event one community member complained he couldn't afford to feed his children because of his tax contribution to the Airport. For the record, it averages about \$89 per household. One recurring theme was that the Airport only serves the wealthiest 1%. Staff made efforts to promote its record of open-space acquisitions, free community events and sponsorships, partnerships with local non-profit and business entities and the organization's transparency as a CA Special District. Much exertion went to educating community members about their local airport, its role in the community, revenue streams, operational info, the governance and role of elected Board members, the changing fleet mix, and any other relevant components. New commenters were engaged well beyond previous levels in attempt to both invite them into the mission of the District as well as inform them of the issues, benefits, constraints, and impacts of their local Airport. Staff and Airport officials are engaged and connected to the community at unprecedented levels and strive to balance operational impacts with the needs and desires of all District stakeholders.

## September 2015 Comments & Outreach Memo

Since it coincides with the Quarterly Operations and Comments Report, this abbreviated memo constitutes an analysis of comments and corresponding outreach efforts for September 2015.

### Operations and Weather:

September was warm and dry with just .06" of precipitation. Winds primarily favored runway 29 with occasional afternoon shifts to the south, favoring 20. Weather was not a significant encumbrance to air travel. Operations show an increase in all aircraft types except helicopters. Total operations were 381 or about 15% higher than in 2014. The biggest increases were in Turboprop and Piston operations.

### Community Annoyance Comments Summary:

Comments as compared to 2014 were static, gaining just one. 45 comments for the month versus 44 in 2014. 2 new households commented for the month. The neighborhoods and aircraft types associated with the annoyance for September are below:

					Olympic		Sierra	Tahoe		
	Alder	Glenshire	Martis	Northstar	Heights	Prosser	Meadows	Donner	Downtown	Total
<b>Jet</b>		1	2	1	1	11		5		<b>21</b>
<b>Piston</b>		1	1		5	4	1	1		<b>13</b>
<b>Turboprop</b>	1	1		1	4	1				<b>8</b>
<b>Unknown</b>		1			1				1	<b>3</b>
<b>Total</b>	<b>1</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>11</b>	<b>16</b>	<b>1</b>	<b>6</b>	<b>1</b>	<b>45</b>

As compared to 2014, comments about jets remained constant at 21; piston comments lost 4, and turboprop comments gained 5. No dramatic shifts of the type of aircraft associated to comments were noted.

### Comments by Type, Operation, Runway and Day:

The Labor Day holiday weekend acts as a bookend to the peak operations season at KTRK. Although operations continued through the month steadily with many summer amenities still available, weekday and weekend visits from beyond the holiday on the 9<sup>th</sup> began to contract. The holiday itself fell a week later in 2015 than in 2014, which could point to some rationale for the uptick in September ops numbers, especially in the piston fleet. Unlike previous months, Friday surpassed Sunday for the most comments per day of the week. 15 comments referenced Friday vs 9 on Sunday.

29 of 45 comments were associated to departures from Runway 29. The next nearest operation/runway assignment to generate comments was arrivals to 11 with 7. Touch and go operations generated 4 comments in September.

Operation	11	20	29	Total
Arrival	7	4	3	14
Departure			23	23
Touch & Go		1	3	4
<b>Total</b>	<b>7</b>	<b>5</b>	<b>29</b>	<b>41</b>
<i>Does not include comments with unknown/blank values</i>				

**Night Operations:**

Just one community comment was received regarding an operation during curfew hours at 12:05 am on 09/13. Staff replied to the commenter at 12:14 am that the operation was a King Air 200 operating on an air ambulance mission. In total 54 operations inclusive of EMS flights occurred during the 10 pm to 7 am hours. Of those 23 were non-EMS missions, included in table below. Further, 4 operations were captured by cameras taxiing out near 7 am but departed after the curfew. 19 flight operations occurred during the voluntary night curfew and the operators of each aircraft were contacted except for 4 aircraft associated with a Fly Quiet lease incentive.

<b>Time</b>	<b>Jet</b>	<b>Piston</b>	<b>Turboprop</b>	<b>Total</b>
05:26 - 05:59			1	1
6:00 - 06:29	1	2	2	5
6:30 - 07:00	1	10	1	12
22:00 - 22:59	1	3	1	5
<b>Total</b>	<b>3</b>	<b>15</b>	<b>5</b>	<b>23</b>

*"Night" operations 10a - 7p for September 2015, Non-EMS*

There were no Fly Quiet incentives revoked during September, and the clustering of operations to curfew end times suggests the incentive program is effective.

**Outreach Summary:**

Efforts were made via email or phone calls to reach out to all 23 commenters who made 45 comments. 13 comments were associated with non-compliant operations. Outreach was made for 14 operations, as well as all non-incentivized operations between 10 pm & 7 am, any single aircraft generating multiple comments, and any concerns over safety of flight or unusual activity that occurred during the month.

Track imagery for September 2015 follows with relevant comment synopsis. One outreach correspondence follows in the track image and complaint synopsis for 09/13/15 at 12:35 pm. The pilot requested his response be noted for consideration. Additional details of interest are captured within these summaries as well; of note is the email correspondence associated with comment from 09/28 at 09:40.

Imagery and synopsis for July and August are not included as they were reported during those monthly reports.



# NOISE COMPLAINT REPORT

**COMPLAINT ID:** 18348

**COMPLAINT TYPE:** Frequent

**OPERATION TYPE:** Overflight

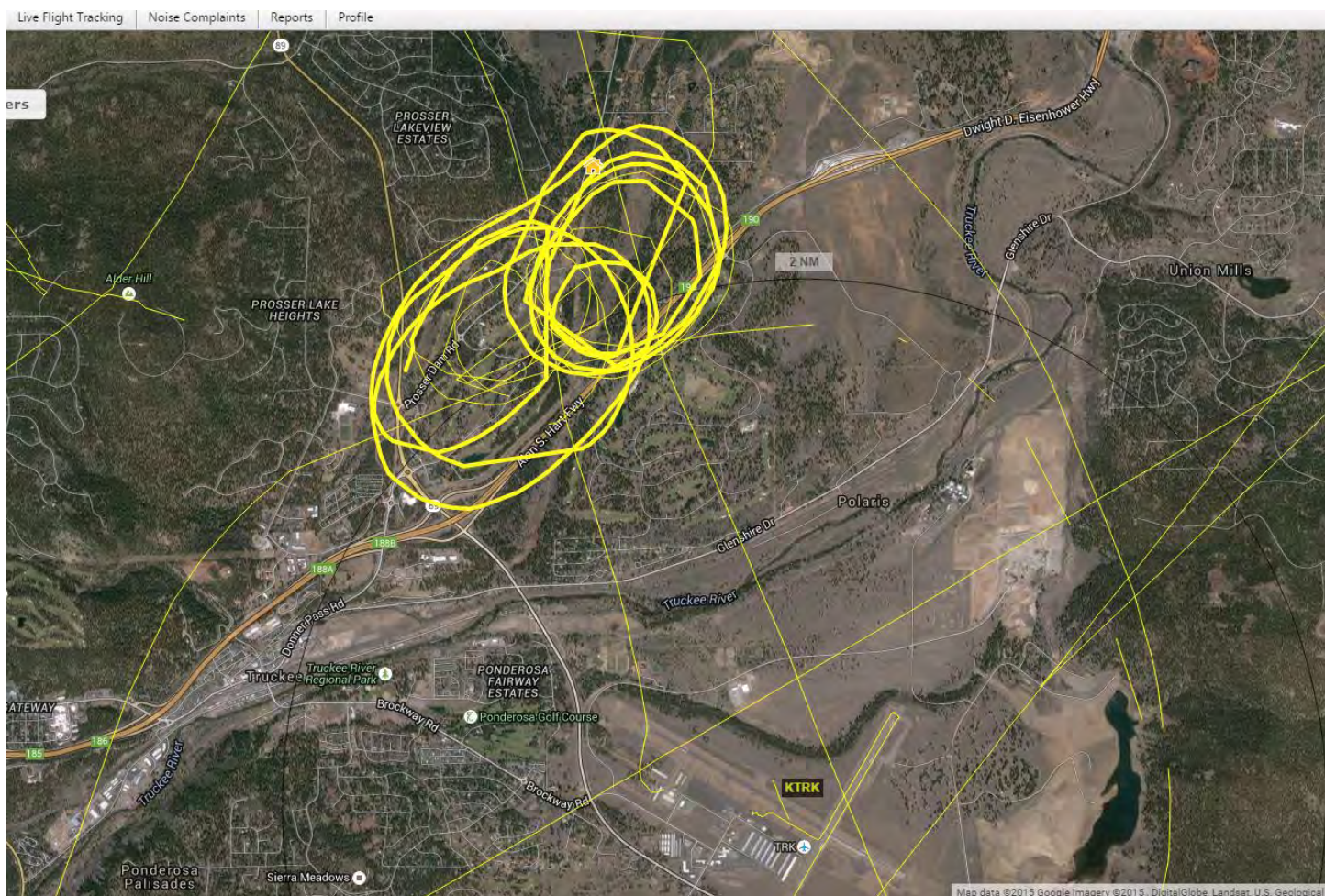
**RUNWAY:** NA

**A/C TYPE:** C206

**DATE AND TIME:** Sep 02 2015, 04:25 PM

**POINT OF CLOSEST APPROACH(PCA):** nm

**ALTITUDE AT PCA:** 7,000 ft



New caller from Prosser. Aircraft did not land or depart from KTRK. Commenter was annoyed by the frequency of overflights. The Cessna 206, a CHP aircraft, was called for assistance by Truckee PD to track a fleeing suspect.

Staff spoke to CHP Air Ops and asked them to consider pursuing suspects in the future as quietly as possible.



# NOISE COMPLAINT REPORT

**COMPLAINT ID:** 19322

**COMPLAINT TYPE:** Low

**OPERATION TYPE:** Departure

**RUNWAY:** 29

**A/C TYPE:** PA32

**DATE AND TIME:** Sep 05 2015, 11:00 AM

**POINT OF CLOSEST APPROACH(PCA):** Est .2 nm

**ALTITUDE AT PCA:** Est 6,200 ft



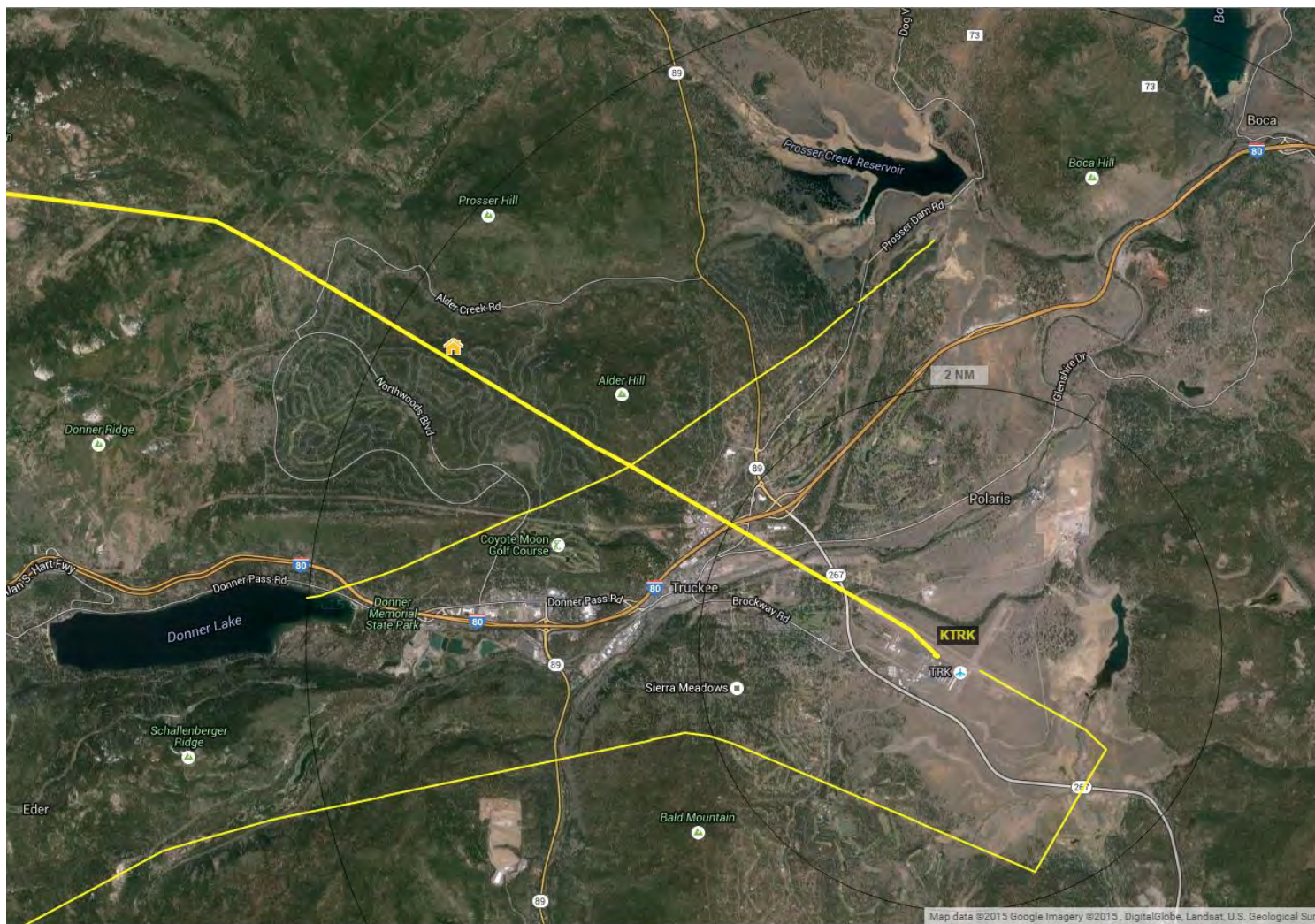
Piper Cherokee Six departed 29 with an immediate left. Track was dropped so image is not accurate. Aircraft is depicted with the climbing left 360 in image above. Information on aircraft was limited to FAA registry. Staff mailed letter.



# NOISE COMPLAINT REPORT

**COMPLAINT ID:** 19327  
**COMPLAINT TYPE:** Low  
**OPERATION TYPE:** Arrival  
**RUNWAY:** 11  
**A/C TYPE:** C25B

**DATE AND TIME:** Sep 07 2015, 01:30 PM  
**POINT OF CLOSEST APPROACH(PCA):** .02 nm EST  
**ALTITUDE AT PCA:** 7000 ft EST



Citation 525B 11 arrival. Poor track quality. Staff made outreach to operator based on runway conflict during the arrival.



# NOISE COMPLAINT REPORT

**COMPLAINT ID:** 20058

**COMPLAINT TYPE:** Loud Disturbance

**OPERATION TYPE:** Arrival

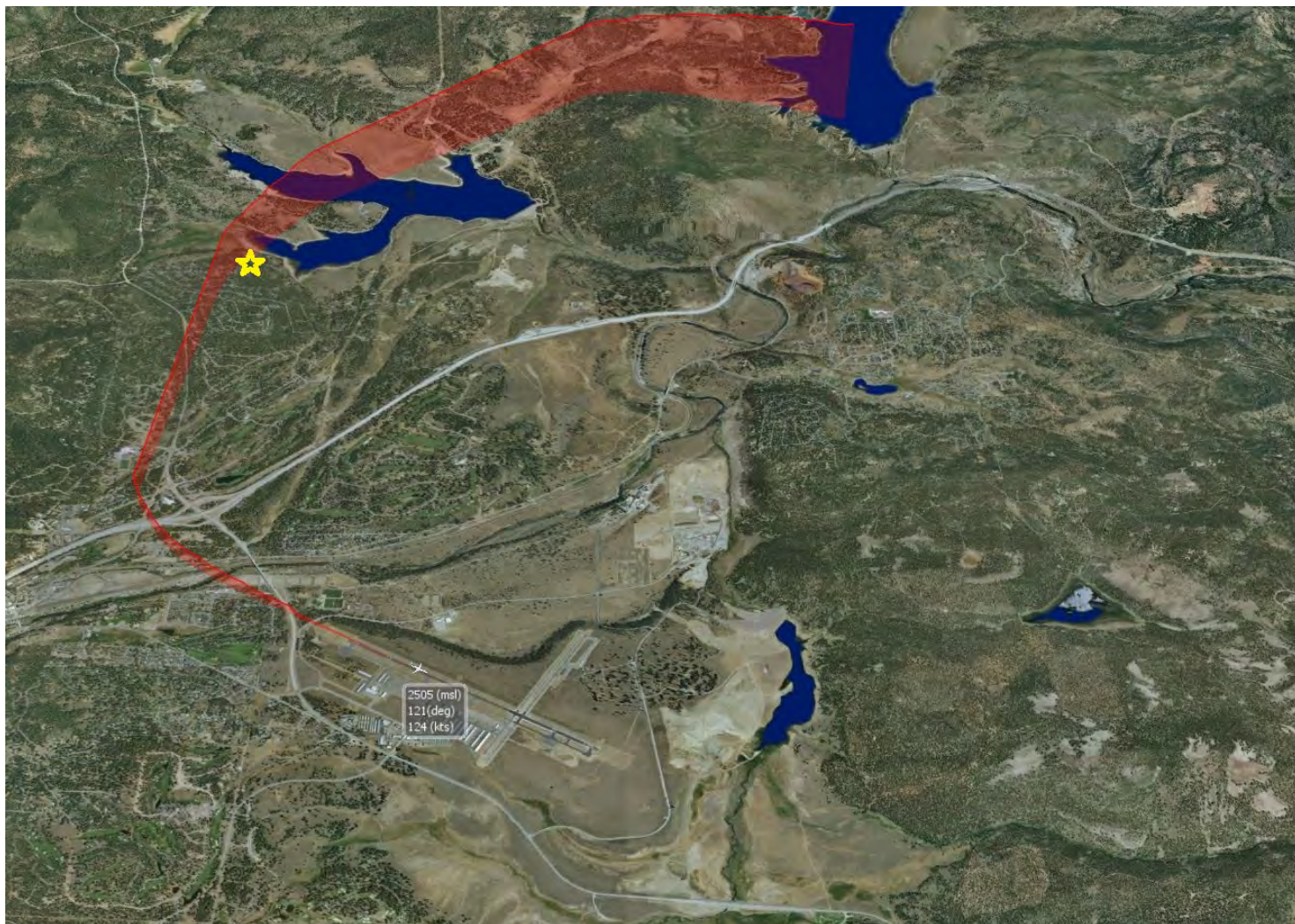
**RUNWAY:** 11

**A/C TYPE:** F2TH

**DATE AND TIME:** Sep 11 2015, 03:23 PM

**POINT OF CLOSEST APPROACH(PCA):** .01 nm EST

**ALTITUDE AT PCA:** 7,516 ft EST



Broken track, poor image quality. Staff subbed high res above for standard picture. Commenter called in "Big huge jet just flew over looked way too low right over our house....scary...ask them to fly a different route or higher up."

This is a visual left traffic arrival to 11 by a Falcon 2000. PCA was 7,516'msl or about 1,654'agl. Although technically compliant, staff made outreach via email to operator. There was a mixed use of all runways during the day and 2 other operations during the hour associated to 11.



# NOISE COMPLAINT REPORT

COMPLAINT ID: 19590

COMPLAINT TYPE: Loud Disturbance

OPERATION TYPE: Departure

RUNWAY: 29

A/C TYPE: BE36

DATE AND TIME: Sep 13 2015, 12:35 PM

POINT OF CLOSEST APPROACH(PCOA): 0.29 nm

ALTITUDE AT PCA: 7300 ft



29 Departure Truck Four @ 7k' u @ u, 1500' AGL at PCA

Comment: Two very loud planes flying in quick succession over a residential Truckee neighborhood. Bonanza " - - just one aircraft. Went north to circle for altitude. MAC emailed

Email received in response to Community Annoyance received on 09/13/15 at 12:35 pm. Comment was received from Prosser Lakeview with the comment, "Two very loud planes flying in quick succession over a residential Truckee neighborhood."

"Hi Mike,

In response to your email about the noise complaint, I have to say that I filed an IFR flight plan and flew the exact published departure procedure, taking into account your recommended noise mitigation departure. In reviewing my track, I know of no other way to depart safely. My climb rate was constant and steady. As you know, on high density altitude days, aircraft do not perform as well and in order to maintain safety, gaining the necessary altitude over Prosser is the logical area to do this so as not to conflict with the incoming traffic for RWY 20 for both planes and gliders. I followed the published procedure guidelines to the letter. It would appear to me that it is necessary for Truckee to perhaps educate the homeowners that elected to buy homes next to an active airport as unfortunately this will continue. I have no problems with flying over Hwy. 80 and circling over Boca, however at the time, this conflicted with other incoming traffic.

Suggestions:

1. Homeowners that submit noise complaints should be educated as to why it is necessary for planes to circle and gain altitude.
2. They should be educated as to what the published departures are and what the policy is to mitigate noise complaints with the understanding that all aircraft develop different noise levels.
3. Work with local real estate agents in developing a Notice that must be signed by future homeowners of property located within those areas affected by airplane traffic. The Notice would inform them about the activity that takes place around an airport and how they might be affected.
4. Host a Town Hall Meeting to educate the community on the various activities that take place at the airport and how the community is benefited from them.

In summary, I am willing to fly any safe arrival or departure that will help mitigate any potential complaints that does not conflict with other traffic or the geographic constraints of the airport and surrounding areas.

Sincerely,

Concerned Community Member and Pilot"



# NOISE COMPLAINT REPORT

**COMPLAINT ID:** 19775

**COMPLAINT TYPE:** Off Course

**OPERATION TYPE:** Departure

**RUNWAY:** 29

**A/C TYPE:** PC12

**DATE AND TIME:** Sep 23 2015, 12:02 PM

**POINT OF CLOSEST APPROACH(PCA):** 0.16 nm

**ALTITUDE AT PCA:** 6700 ft



PC12 Departing 29. Right turn out too early and aircraft over Olympic Heights. Staff spoke to crew and emailed company headquarters.



## NOISE COMPLAINT REPORT(2)

**COMPLAINT ID:** 19851

**COMPLAINT TYPE:** Low And Loud

**OPERATION TYPE:** Departure

**RUNWAY:** 29

**A/C TYPE:** HA4T

**DATE AND TIME:** Sep 25 2015, 01:23 PM

**POINT OF CLOSEST APPROACH(PCA):** 0.16 nm

**ALTITUDE AT PCA:** 9300 ft



Comment 1: "Not quite as low as two previous jets that flew over our house earlier today but still quite loud."

Comment 2: "2 jets took off straight over the Martis estates neighborhood right around this time. Very low, very loud. I'd like to know if the airport is keeping track of jets who do not comply with noise abatement, and what is being done about it. This is an increasing problem." See synopsis of 09/25/15 @ 13:30.

Staff reached out to both commenters on 09/25 & 09/28. Staff also reached out to the operator on record who said they sold the aircraft a year ago. No detailed contact information was left when the crew paid fees during their visit. The FAA registry appears to have old contact information for this aircraft and an exhaustive search has turned up no solid leads. Staff will mail a letter to the suspect address in hopes that the USPS will carry it to the correct operator.

This departure generated 2 instances of community annoyance, the one depicted here and another in Martis Valley Estates .4 miles from the end of 29. The aircraft is estimated to have been at 6,600' msl or 700' agl at SR 267 and at 9,300' or 2,851' agl when nearest the commenter location in Tahoe Donner, about 4 miles out from 29. Staff will be looking for future operations from this aircraft and is committed to ensure the operator gets notice about this specific operation and KTRK NAPs.



# NOISE COMPLAINT REPORT

**COMPLAINT ID:** 19852

**COMPLAINT TYPE:** Low And Loud

**OPERATION TYPE:** Departure

**RUNWAY:** 29

**A/C TYPE:** CL60 & HA4T

**DATE AND TIME:** Sep 25 2015, 01:30 PM

**POINT OF CLOSEST APPROACH(PCA):** 0.15 nm

**ALTITUDE AT PCA:** 6200 ft



Commenter states: "2 jets took off straight over the Martis estates neighborhood right around this time. Very low, very loud. I'd like to know if the airport is keeping track of jets who do not comply with noise abatement, and what is being done about it. This is an increasing problem."

Staff emailed commenter and attempted outreach to Hawker operator.

2 Business jets, a Hawker 4000 and a Challenger 600 departed 29.

The Challenger flew the Truck Four SID while the Hawker departed straight out.

Positionally the aircraft are not far apart up to I-80, however the Challenger flew to the Truck intersection.

Outreach was made to the Hawker. See also synopsis of 09/25/2015 @ 01:23 pm.



# NOISE COMPLAINT REPORT

**COMPLAINT ID:** 19854

**COMPLAINT TYPE:** Off Course

**OPERATION TYPE:** Departure

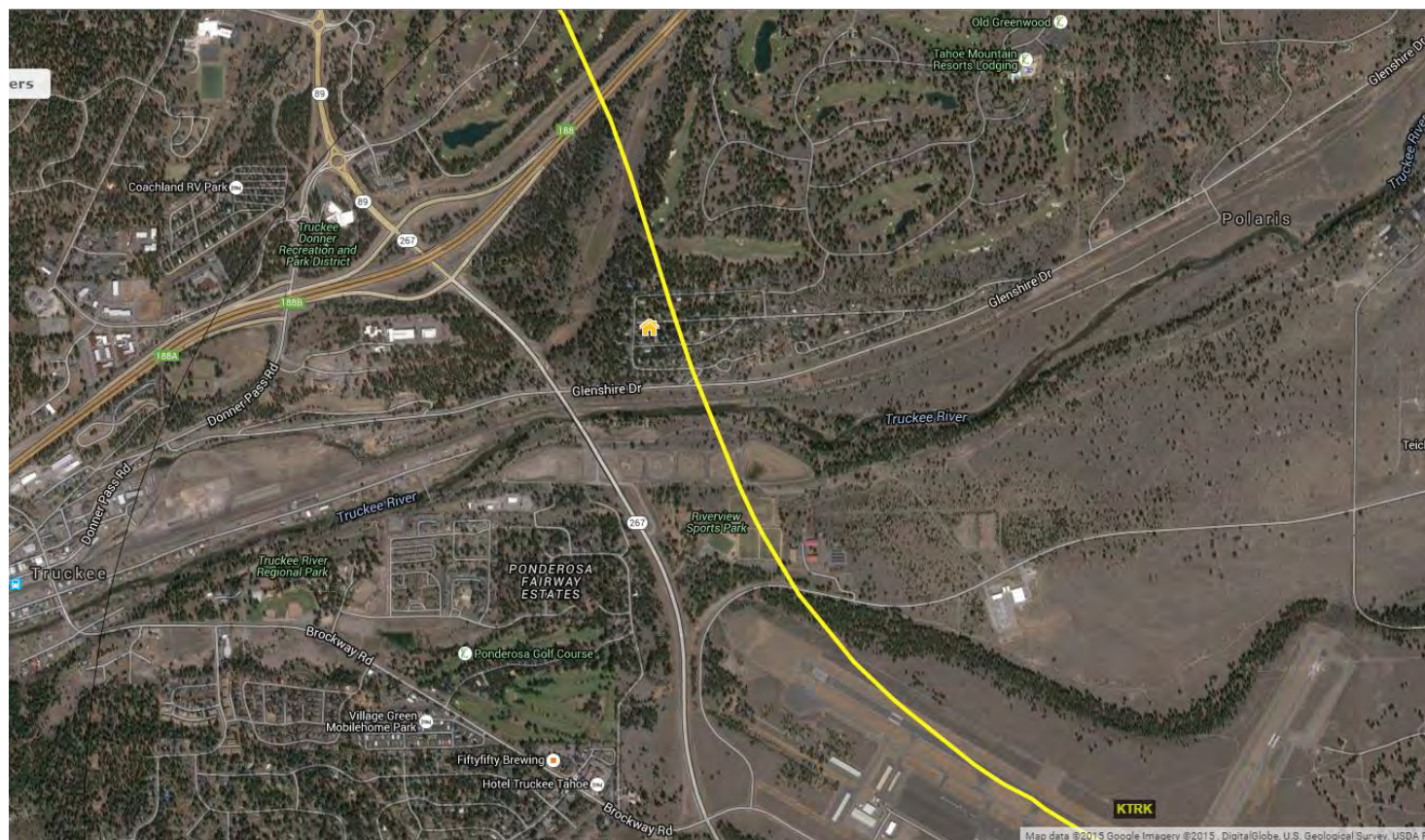
**RUNWAY:** 29

**A/C TYPE:** SR22

**DATE AND TIME:** Sep 27 2015, 09:45 AM

**POINT OF CLOSEST APPROACH(PCA):** .03 nm

**ALTITUDE AT PCA:** 6,500 ft



Cirrus SR22 with a 29 Bypass departure - too far east and flew over West Olympic Heights. Staff called and emailed the locally-based pilot.



# NOISE COMPLAINT REPORT

**COMPLAINT ID:** 19855

**COMPLAINT TYPE:** Off Course

**OPERATION TYPE:** Departure

**RUNWAY:** 29

**A/C TYPE:** BE30

**DATE AND TIME:** Sep 27 2015, 12:23 PM

**POINT OF CLOSEST APPROACH(PCA):** 0.05 nm

**ALTITUDE AT PCA:** 6700 ft



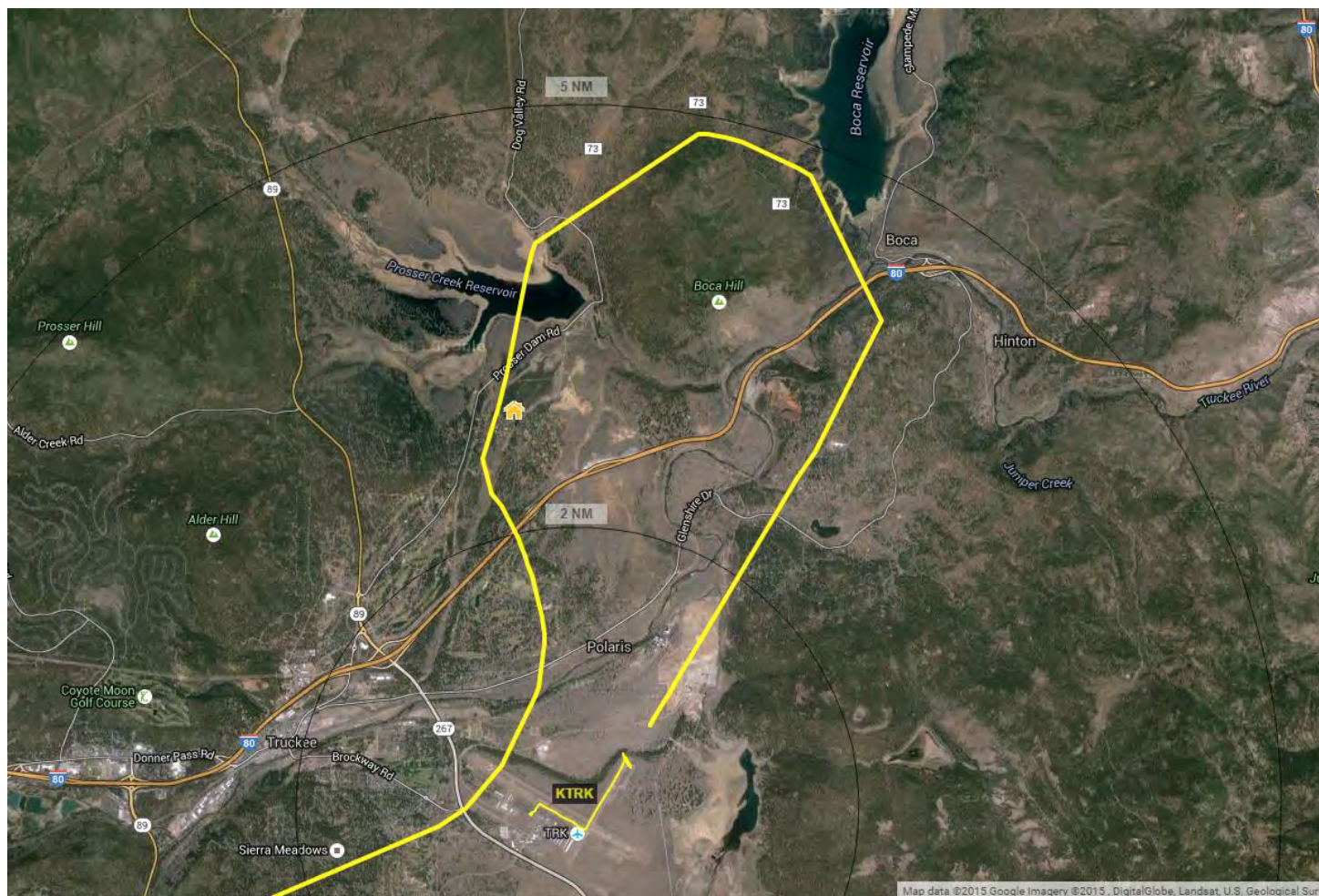
King Air 300 29 Bypass Departure but flew it too far east. Staff spoke to very cordial pilot and emailed flight track and NAP information.



# NOISE COMPLAINT REPORT

**COMPLAINT ID:** 19856  
**COMPLAINT TYPE:** Low  
**OPERATION TYPE:** Arrival  
**RUNWAY:** 20  
**A/C TYPE:** SR22

**DATE AND TIME:** Sep 27 2015, 12:45 PM  
**POINT OF CLOSEST APPROACH(PCA):** .08 nm  
**ALTITUDE AT PCA:** 6,700 ft



Comment: "record for lowest aircraft ever seen, white, low wings, looks like nose gear down, due north"  
Staff investigation uncovered that a Cirrus SR22 made right traffic for 20. The aircraft went a little wide and long on downwind for sequencing behind another inbound aircraft from the north. Staff spoke to an amenable pilot who explained that he was trying to sequence behind another aircraft on final with SSW winds gusting into the mid 20s. The aircraft was estimated to be at 982'agl when nearest the commenter's location. A copy of the flight track and NAP information was sent to the pilot.



# NOISE COMPLAINT REPORT

**COMPLAINT ID:** 19864  
**COMPLAINT TYPE:** Low  
**OPERATION TYPE:** Arrival  
**RUNWAY:** 11  
**A/C TYPE:** C560

**DATE AND TIME:** Sep 28 2015, 09:40 AM  
**POINT OF CLOSEST APPROACH(PCA):** 0.19 nm  
**ALTITUDE AT PCA:** 7900 ft



C560 made left visual arrival to runway 11. This operation spurred email dialogue and discussion that ultimately led to a meeting with the commenter. A detail of the correspondence follows for review as there are significant themes inherent in the correspondence that are relevant to a Airport District stakeholders. Staff commends this resident for taking the time to come in and discuss his concerns.

Original Comment: Commenter info hidden per TTAD Policy & email signatures left off to condense script

•Sent: Monday, September 28, 2015 11:39 AM

To: Hardy Bullock

Subject: Low flying aircraft

Dear Mr. Bullock,

We meet at Truckee Thursdays this summer. I expressed my concern of a problem of low flying air traffic over the Prosser Lakeview area.

Today at 9:40am a jet passed over my home at XXXXXXXXXX at a distance of less than 500 feet heading westbound. This has become a common occurrence this summer.

As you know this is counter to FAA regulation which I will quote:

Title 14, Code of Federal Regulations, Section 91.119 of the General Operating and Flight Rules which specifically prohibits low-flying aircraft.

91.119 Minimum safe altitudes; general

Except when necessary for takeoff or landing, no person may operate an aircraft below the following altitudes; (a)

Anywhere. An altitude allowing, if a power unit fails, an emergency landing without undue hazard to persons or property on the surface.

(b) Over congested areas. Over any congested area of a city, town, or settlement, or over any open air assembly of persons, an altitude of 1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet of the aircraft. (c)

Over other than congested areas.

An altitude of 500 feet above the surface except over open water or sparsely populated areas. In that case, the aircraft may not be operated closer than

500 feet to any person, vessel, vehicle, or structure.

I suggest you and the management at Truckee Tahoe Airport start taking this problem very seriously and fix it. Otherwise I will start documenting the problem in detail and you and the Airport will not be pleased with the outcome.

Sincerely,

XXXXXX

•On 9/28/15 1:47 PM, "Hardy Bullock" wrote:

Mr. XXXXX,

I appreciate your concern surrounding low flying aircraft. I know it is disconcerting and we are working hard to prevent such occurrences. Before we respond to anyone who contacts the District regarding annoyance or other concerns with aircraft we initiate an investigation. We poll a number of data gathering systems to determine the flight identification, altitude, point of approach, speed, direction and behavior etc. We also pull up your household data - we have two different addresses for you? Did you move?

Mike and I found a bit of preliminary data on the flight you reference, I will allow Mike Cooke to complete his investigation before I comment on the actual details of the operation although I will say the aircraft was maneuvering to land and our initial data shows the aircraft height at 1600-1900 feet above the ground as referenced from your house at approximately 6050 mean sea level.

We will complete our investigation and contact you shortly. If the aircraft broke a federal regulation during the operation we will contact the Reno Flight Standards District Office and open a case with them. Please call me with any questions.

Best Regards,



Hardy S. Bullock C.M.

•On 9/29/15 1:09 PM, "Mike Cooke" wrote:

Good Day, Mr. XXXXX,

I tried to call you but the number on file is disconnected: 582.XXXX. These longer emails are sometimes better as conversations. If you prefer to chat, please call me at 587.4119 x 108. I've mined multiple sources for the track associated with your comment from Monday 9/28 at 9:40 am. The aircraft associated is a Cessna Citation 560 making left traffic to Runway 11 at KTRK in visual meteorological conditions. The aircraft appears closest to XXXXXXXXXX at 09:39:42. The time is a match. There was no other traffic captured in the immediate area at that time. Winds were reported as calm.

According to our data, the uncorrected altitude of the aircraft was 7,900 mean sea level. When corrected for pressure altitude that lowers it to 7,700' mean sea level. We use a transponder-based flight tracking system for this data. The aircraft in question has a Mode S transponder which reports altitude when interrogated by our system. The most recent system tests were performed in August 2015 and the system was operating within tolerances. A special report to the Board is available from that meeting via the TTAD website at: [https://trucketahoeairport.com/board\\_meetings/122/attachments](https://trucketahoeairport.com/board_meetings/122/attachments).

I understand this does not jive with your perception of the aircraft's altitude and accept that you feel it was lower. We use a very sophisticated technology to track planes, but it is a measuring device, and annoyance is not a measurable component of tracking aircraft. In the end and unless there is a safety case, altitude is a moot point in the sense that if you are annoyed, would several hundred feet of altitude change that significantly? I have attached screenshots of the operation from 2 different players as it was near your property for your review. I am happy to meet with you to discuss any of the data or the various programs the airport is working on to mitigate impacts on the surrounding community.

To your comment of this as a chronic problem, I can only offer this: As the economy strengthens and more visitors travel here and more people make this a primary or secondary residence, operations will continue to rise in every transportation sector. The airport does not solicit operations or in any way attempt to increase the number of flights to and from the area; our jobs would be vastly easier if we had fewer operations. Staff and publicly elected Board members do not benefit financially or otherwise in any way from increases in operations. Legally we can't limit the numbers of operations or mandate routes of arrivals and departures. We have implemented lease incentive curfews, met with aviation attorneys to study legal methods we can manage traffic here and hired various consultants to study demand drivers, airspace design. We've reached out to the FAA and our most regular users, and we use reserve funds to buy open spaces to prevent further development encroachments. We are working on operator outreach every day along with myriad mitigation strategies, but none of these solutions are quick or necessarily easy.

If you take a look at CFR 14 part 91.119, you'll see the first line regarding altitudes is: "Except when necessary for takeoff or landing." This aircraft you commented about could legally, according to the regulations, be at any altitude. It was in the traffic pattern for Runway 11 and turning left base. I hope you understand, that is a Federal Regulation, not something Truckee Tahoe Airport created or has jurisdiction over. We welcome your comments and are certainly open to your ideas and suggestions. Should you wish to document the problem on your own and pursue your own course of action via an attorney or through the FAA, please let me know if I can help. I'm glad to do what I can to help your cause.

Best Regards, Mike

Michael Cooke  
Aviation & Community Services Manager

Date: 10/03/2015 1:43 PM (GMT-07:00)

To: Mike Cooke

Subject: Re: Low flying aircraft

Dear Mr. Cooke,

This flight path in no way represents the direction or location of the plane I witnessed.

XXXXXXXXXX

•On 10/3/15 3:05 PM, "Mike Cooke" wrote:

I am sorry. That looked very close to me and fit the time and type profiles. I will take a look again when I'm back on the field. So I can find the correct operation, can you give me some insight as to why this is not correct in your assessment?

Thanks, Mike Cooke

Sent: Sunday, October 04, 2015 11:07 AM

To: Mike Cooke

Subject: Re: Low flying aircraft

I believe the direction of this aircraft was northwest while traveling over my home. Moreover the flight path you show over Prosser Lakeview Estates would have made that aircraft difficult to impossible for me to see. It would have been blocked by roofline, tall trees and terrain.

Thanks.

XXXXXXXXXXXX

•On 10/6/2015 5:31 PM, "Mike Cooke" wrote:

I understand, thanks. I don't have a matching track. The 3 aircraft that fit the profile were a Dash 8 at 09:38:53 flying at 22,200'msl, the Citation XL arrival track to KTRK at 09:39:54 and 7,900'msl which I sent to you, and there was an unidentified aircraft coming out of RNO crossing overhead near Prosser at 9:29:21 at 11,500'msl. I'm sorry I don't have anything else to fit the profile. I looked in the logs for outages and there weren't any system errors at that time and the raw data doesn't show anything else. I'll keep the complaint in the system though and include it in the September comments report to the Board.

Best regards, Mike

**Follow Up:**

After an additional comment on October 3<sup>rd</sup> stating that "an aircraft flew so close to my home at XXXXX that it was a potential threat" and multiple efforts, staff was able to get the commenter to come in for a review of both operations, the ALUC compatibility map and how the resident's property fit into it, a review of the policies and authority of TTAD, and a general discussion. While staff in no way solved this commenters concerns, there was open dialogue and beneficial interaction. Staff commended the commenter for being one of very few people to actually come down and discuss their concerns.