



AGENDA ITEM: _____

MEETING DATE: July 22, 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 2nd quarter of 2015. A monthly report supplements this report which offers insights on outreach efforts by staff to operators and community members based on annoyance comments. This document represents the most accurate operations numbers using the current suite of technology for data capture.

About the Data

TTAD continues to refine and upgrade operations data gathering equipment and methods. A group of cameras that will capture arrivals will be deployed in July 2015 to increase system accuracy and provide even better information to stakeholders. An analysis of jets weighing over 50,000lbs has been added into the report per Board direction. Continued analysis of operations during voluntary curfew periods is included here as well.

The primary data source for this report is the Vector VNOMS system which integrates departure camera imagery at 4 runway ends and MLAT flight tracking data. There was no system downtime reported for Q2 2015. The only aircraft operations which tend to fall outside of standard data gathering protocols are itinerant helicopters, and glider operations. Staff supplemented values from Soar Truckee for glider operations and REMSA for helicopter activity for the reporting period.

Operations and Fleet Mix

The warm, aviation-friendly weather continues. A modest 1.87 inches of precipitation fell for the quarter, and starting as early as mid-April, scattered thunderstorms, more typical of summertime, began to occur. As ski resorts closed and golf courses opened, Tahoe saw the seasonal shift much earlier than in years past. Excellent weather and perhaps a more robust economy are possible contributors to the increased operational numbers. Additionally, the suite of technology which captures activity has improved considerably since August of 2014, so there is a strong likelihood fewer operations are being missed in reporting. In April 2015, operations were well over double that of 2014. May saw just under 200 more operations and June rose by almost 1,900.

Those figures represent about a 40% increase as compared to Q1 2014. The largest gains by type were piston and turboprop. Overall piston operations rose by 1272, by far the largest category of growth. However touch and go operations are no longer estimated and are part of this figure. By September of 2015, a full annual cycle with the Vector system will allow for a better year on year comparison.

Turboprops saw a gain of 389 operations for the quarter, up by about 50%. Jets as a category dropped 40 operations.

The table to the right is a matrix of the top 20 aircraft models visiting the airfield during the quarter. The leader again among aircraft models is the Pilatus PC12 turboprop. In speaking to smaller operators who don't already own a PC12, many are making plans to add the aircraft to their fleet.

Model	Type	Engines	Total Ops
PC12	Turboprop	1	711
C172	Piston	1	446
C182	Piston	1	395
AS50	Helo	1	242
SR22	Piston	1	231
C210	Piston	1	167
TBM7	Turboprop	1	99
BE36	Piston	1	96
B350	Turboprop	2	75
E50P	Jet	2	74
C56X	Jet	2	65
C421	Piston	2	63
M20P	Piston	1	63
BE9L	Turboprop	2	60
C206	Piston	1	58
C525	Jet	2	55
P28A	Piston	1	54
BE20	Turboprop	2	53
P46T	Turboprop	1	51
BE35	Piston	1	46

Jets Analysis

Previous discussions of analysis on jets over 50,000lbs inspired this analysis. Historical breakouts of aircraft over 50,000lbs are not available, however charts and tables will reflect the 50,000lbs + category from January 2015 and on. The following table summarizes jet operations by weight for the quarter along with associated comment info. As a whole, Jets were 8.5% of the quarterly sum.

2015 Q2 Operation Type	Total Ops	Total Comments	Ops/Cmnt
Jet <12,499 lbs	161	0	NA
Jet 12,499-19,999 lbs	210	9	23
Jet 20,000-49,999 lbs	167	18	9
Jet >50,000lbs	20	1	20
TOTAL	558	29*	19

*one military overflight could not be attributed to a jet weight category

Jet operations totaled 558 and generated 29 complaints for Q2 2015, yielding an operations to comment ratio of 19. Of those 29, 8 were determined to be non-compliant and outreach to flight crews and operators ensued. One aircraft generated multiple comments from the same departure on 6/28.

Night Operations

A recent ACAT recommendation to change the advertised voluntary curfew times to 10 p.m. to 7 a.m. has been largely accomplished. The FAA's Airport & Facilities Directory has a 56-day publication cycle, and a request was sent to the NFDC, and a confirmation email has been received from the FAA that the change is in process. District controlled print and media have been updated.

For reporting purposes, the use of the Fly Quiet incentive times of 11 p.m. to 6 a.m. were used for this report. 43 operations occurred in that time frame during the quarter; all but 3 were medical helicopter movements. Of those 3, 2 Jet departures occurred before 6 am. One piston departure occurred just after 6 am and was compliant with lease incentives. All aircraft have been positively identified and the jet operators have been counseled. No Fly Quiet incentives were revoked.

One medevac helicopter movement near curfew hours generated annoyance at 10:12 p.m. from Prosser Lakeview. The local flight crew has been notified of the complaint.

The reporting metric for night operations is based on the Fly Quiet 1 lease incentive. When broadening the time frame, more operations fall into the category. For example, moving the query times from 10 p.m. to 7 a.m. increases the numbers to 97, of which 56 were medevac helicopter movements. The majority of the remaining flights occurred during the 6:30 - 7 a.m. time frame and in the month of June, likely supporting the effectiveness of the lease incentives.

Community Annoyance Comments Summary

82 comments were generated from 22 households representing 8 residential areas near the airport. 3 commenters were first time. The majority of households made multiple comments. 8 of 22 made only one comment. 2 households represented 28 of the total comments.

For Q2 like Q1, Olympic Heights was the most impacted neighborhood followed by Prosser Lakeview. Olympic Heights comments favor Piston aircraft 3 to 1, while Prosser comments are more often concerned over departing jets. A breakdown of comments by neighborhood by type follows:

					Olympic		Sierra	Tahoe	
Type	Alder	Glenshire	Martis	Northstar	Heights	Prosser	Meadows	Donner	Total
Helo	1	1			1	2			5
Jet	2	5	5	2	4	7	1	3	29
Piston		2	2	1	12	5	3	3	28
Turboprop		11	1	1	4		2		19
Unknown								1	1
Total	3	19	8	4	21	14	6	7	82

June 28th, 2015 generated abnormally high comments. 10 were received that Sunday morning. While 6 of the comments came from 1 household, 5 were on non-compliant operations and 2 were generated from the same aircraft. In reviewing operations trends, Sundays are the busiest days, with Fridays close behind. Sundays typically generate about twice as many calls as any other day of the week. 26 of 82 comments for Q2 came on a Sunday. Ramp outreach efforts continue with emphasis on Fridays and Sundays during peak season.

Runway utilization plays a significant role in annoyance. Runway 29 was the source for the majority of comments for Q2 with departures continuing to generate the highest numbers of comments. The matrix below shows a breakdown of operations by runway and neighborhood.

Runway					Olympic		Sierra	Tahoe	
Operation	Alder	Glenshire	Martis	Northstar	Heights	Prosser	Meadows	Donner	Total
Runway 02					1				1
Departure					1				1
Runway 11	2	1							3
Arrival	2	1							3
Runway20		16	1		4	1			22
Arrival		16			3	1			20
Departure			1		1				2
Runway29		2	7	4	16	12	6	6	53
Arrival		1		4		1	3	1	10
Departure		1	7		15	11	2	5	41
Touch n Go					1		1		2
Total	3	19	8	4	21	14	6	7	82
3 operations were either overflights or could not be attributed to a KTRK Runway									

Two touch and go operations generated complaints for the quarter. Neither emanated from locally based rental aircraft at KTRK. Both operators were contacted.

Compliance and Outreach Efforts

Community members received either return email confirmations or call backs regarding their complaints for 82 of 82 comments. Staff made itself available for follow up and discussion to all community members during the quarter and staff periodically checks with regular commenters on their preferred method of follow up.

For Q2, 55 of 82 annoyance instances were compliant. 3 could not be identified since a track could not be found to match the comment. The following track images capture non-compliant tracks with synopsis and follow up data for the month of June. April and May images were included in previous reports. All are available on request. One broken track, a piston single departure with overflight of Olympic Heights on 6/28 is not depicted because of track quality, however the operator was mailed a letter.

NOISE COMPLAINT REPORT

COMPLAINT ID: 4855
COMPLAINT TYPE: Off Course
OPERATION TYPE: Departure
RUNWAY: 29
A/C TYPE: C172

DATE AND TIME: Jun 03 2015, 10:54 AM
POINT OF CLOSEST APPROACH(PCA): 0.12 nm
ALTITUDE AT PCA: 6300 ft

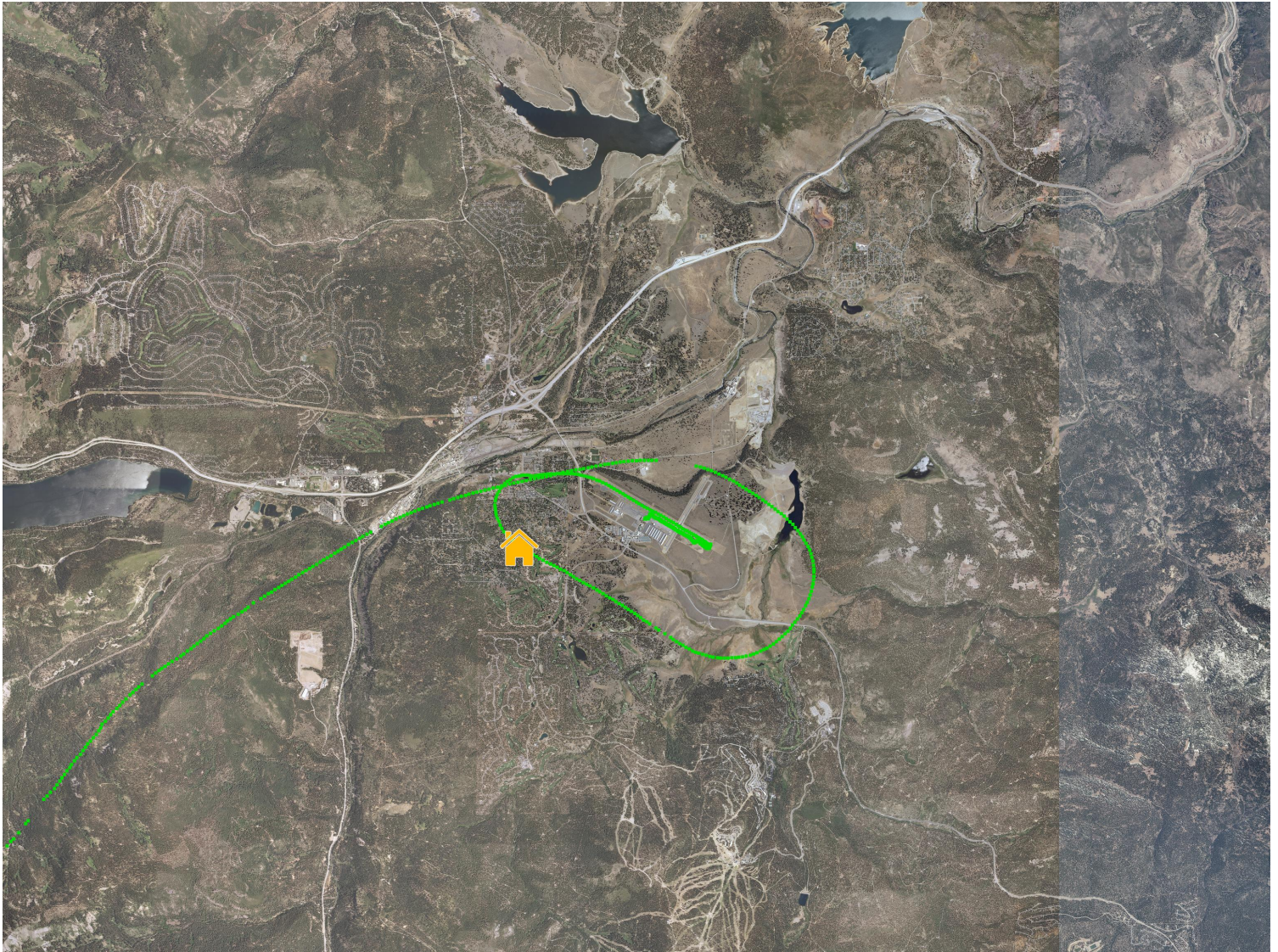


Piston 29 VFR Bypass Departure. Slightly off. Emailed operator who reached out to student.

NOISE COMPLAINT REPORT

COMPLAINT ID: 4857
COMPLAINT TYPE: Low
OPERATION TYPE: Departure
RUNWAY: 29
A/C TYPE: C340

DATE AND TIME: Jun 12 2015, 03:40 PM
POINT OF CLOSEST APPROACH(PCA): 0.02 nm
ALTITUDE AT PCA: 6500 ft



Piston twin departure 29. Climbing left turn instead of Bypass turn. Sent NAP info to pilot.

NOISE COMPLAINT REPORT

COMPLAINT ID: 4927

COMPLAINT TYPE: Loud Disturbance

OPERATION TYPE:

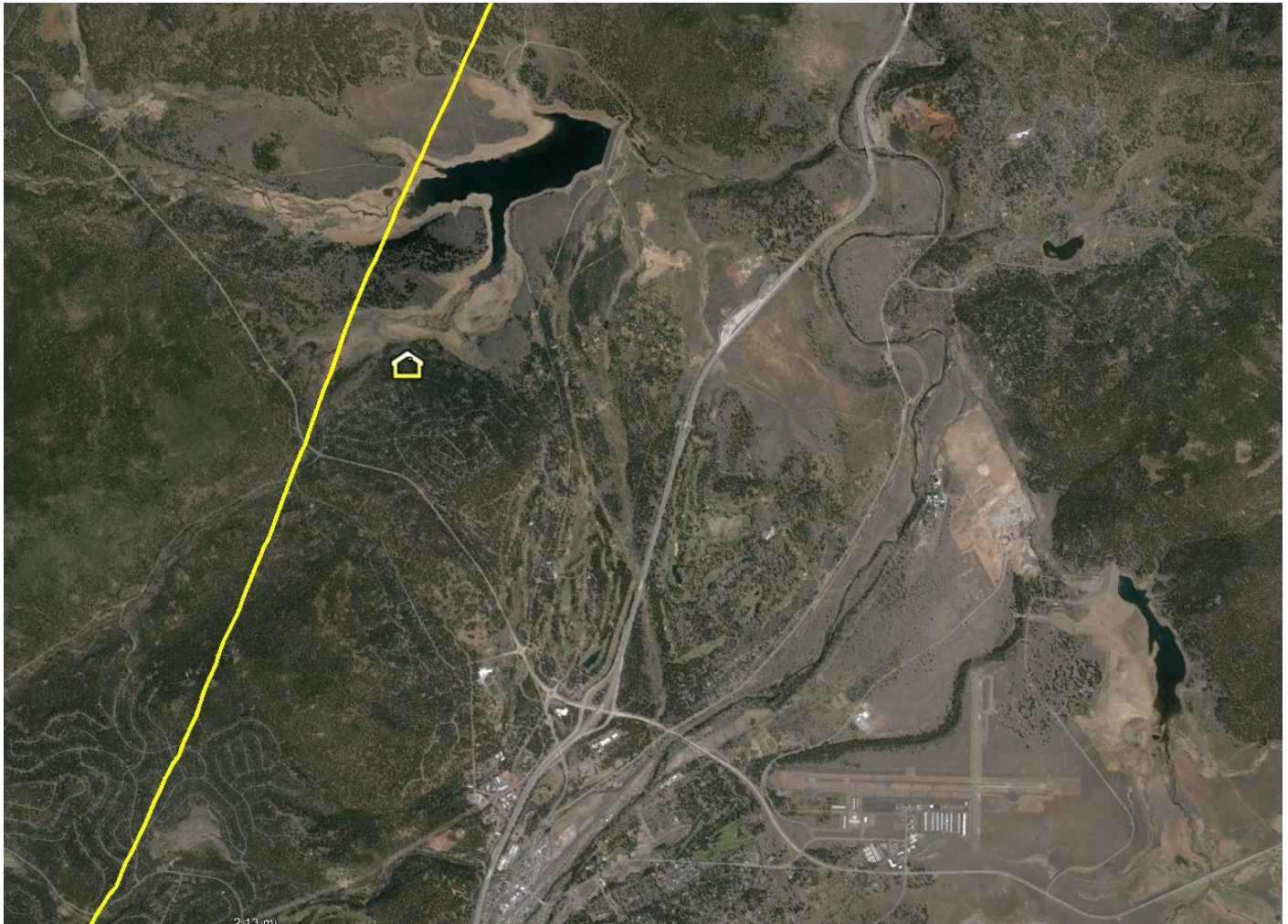
RUNWAY: NA: Overflight

A/C TYPE: MIL

DATE AND TIME: Jun 12 2015, 07:35 PM

POINT OF CLOSEST APPROACH(PCA): nm

ALTITUDE AT PCA: 934ft



Military helicopter likely training in nearby airspace. 6,800' at PCA. Track ends west side of Stampede Reservoir at 6,500'. No registry info for associated track. Unable to make contact with crew at this time.

NOISE COMPLAINT REPORT

COMPLAINT ID: 4928
COMPLAINT TYPE:
OPERATION TYPE: Arrival
RUNWAY: 20
A/C TYPE: AS50

DATE AND TIME: Jun 12 2015, 10:12 PM
POINT OF CLOSEST APPROACH(PCA): 0.88 nm
ALTITUDE AT PCA: 6600 ft

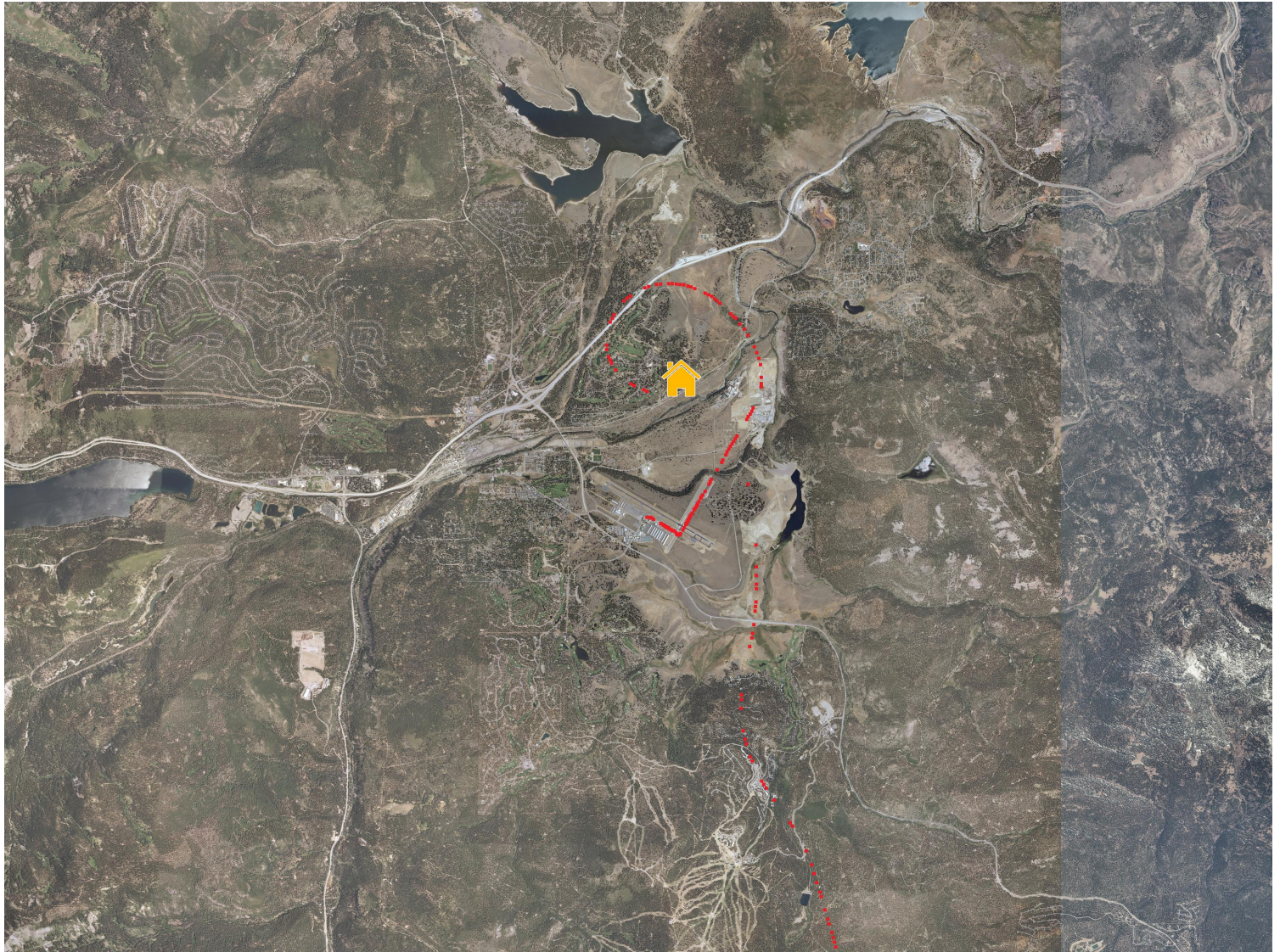


Medevac Helo departure at 10:12 p.m. Commenter requested we speak to operator. Emailed Chief pilot.

NOISE COMPLAINT REPORT

COMPLAINT ID: 4860
COMPLAINT TYPE: Low
OPERATION TYPE: Arrival
RUNWAY: 20
A/C TYPE: BE58

DATE AND TIME: Jun 14 2015, 11:50 AM
POINT OF CLOSEST APPROACH(PCA): 0.37 nm
ALTITUDE AT PCA: 6900 ft



Strange entry to right traffic for 20. Poor track quality in image. Aircraft entered right crosswind near gliderport and proceeded to land 20. No contact phone or email. Mailed letter to registry address.

NOISE COMPLAINT REPORT

COMPLAINT ID: 4859

COMPLAINT TYPE: Low And Loud

OPERATION TYPE: Departure

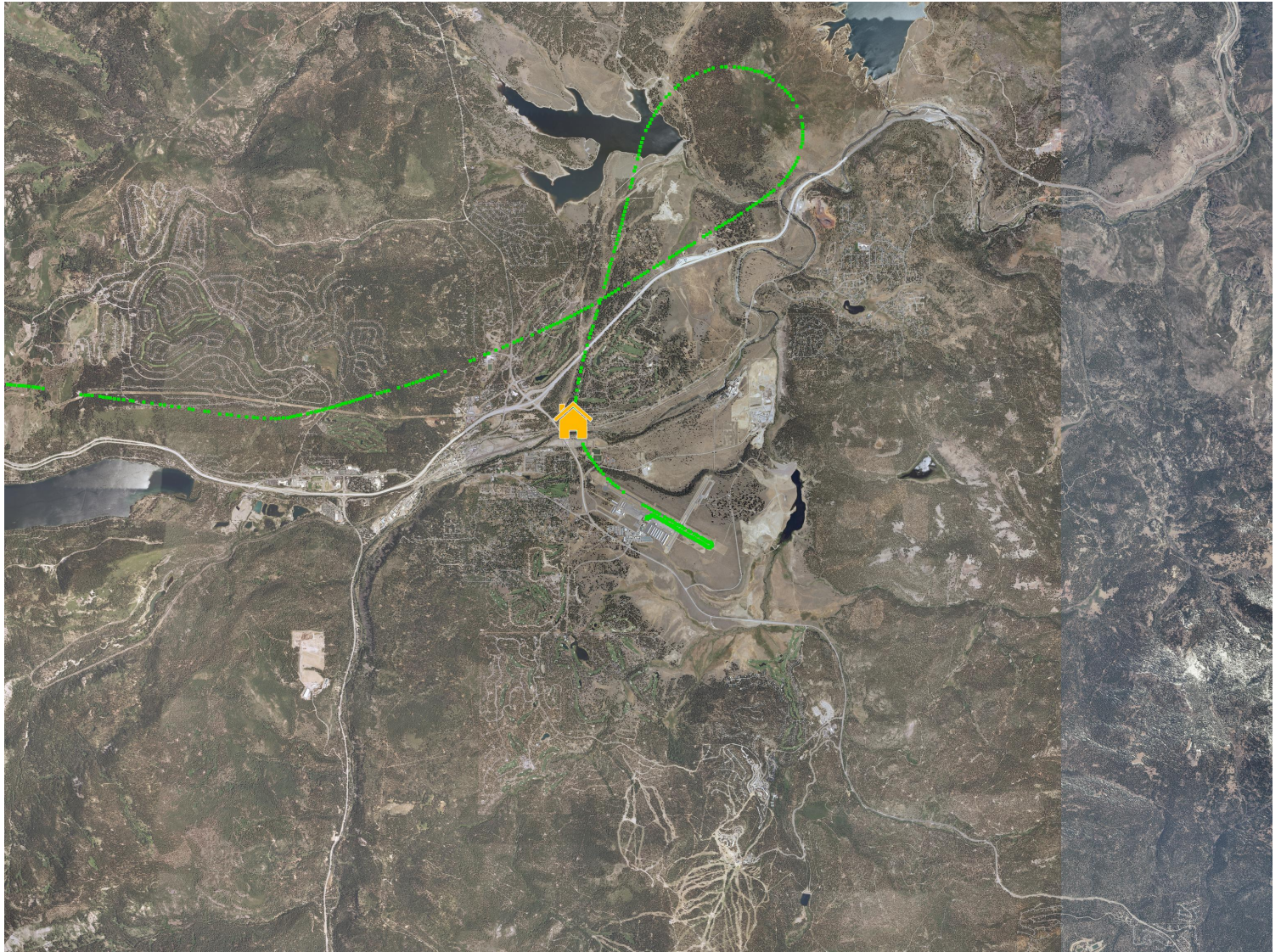
RUNWAY: 29

A/C TYPE: C414

DATE AND TIME: Jun 14 2015, 07:39 PM

POINT OF CLOSEST APPROACH(PCA): 0.02 nm

ALTITUDE AT PCA: 6400 ft



Piston twin 29 departure. Too much right turn out at Bypass. Mailed operator letter.

NOISE COMPLAINT REPORT

COMPLAINT ID: 4870

COMPLAINT TYPE: Off Course

OPERATION TYPE: Departure

RUNWAY: 29

A/C TYPE: C56X

DATE AND TIME: Jun 20 2015, 03:05 PM

POINT OF CLOSEST APPROACH(PCA): 0.24 nm

ALTITUDE AT PCA: 6400 ft



29 jet departure straight out. Emailed track and NAP info with request to operator.

NOISE COMPLAINT REPORT

COMPLAINT ID: 4871

COMPLAINT TYPE: Off Course

OPERATION TYPE: Departure

RUNWAY: 29

A/C TYPE: C750

DATE AND TIME: Jun 20 2015, 03:15 PM

POINT OF CLOSEST APPROACH(PCA): 0.2 nm

ALTITUDE AT PCA: 6500 ft



29 jet departure straight out. Spoke to operator.

NOISE COMPLAINT REPORT

COMPLAINT ID: 4873

COMPLAINT TYPE:

OPERATION TYPE: Departure

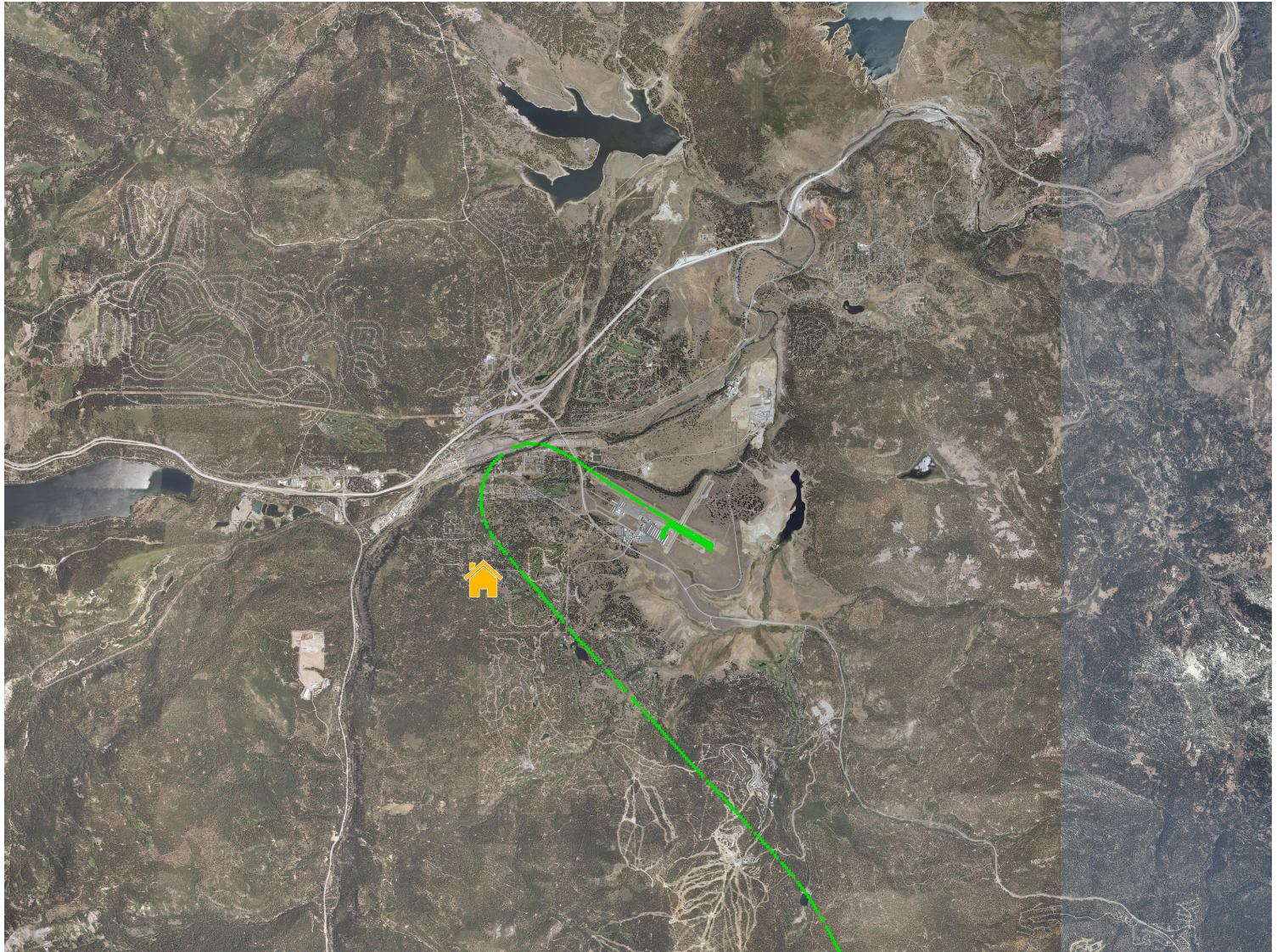
RUNWAY: 29

A/C TYPE: BE36

DATE AND TIME: Jun 23 2015, 09:30 AM

POINT OF CLOSEST APPROACH(PCA): 0.32 nm

ALTITUDE AT PCA: 7300 ft



Piston aircraft departing 29 w left turn out. Non compliant, called and spoke to pilot.

NOISE COMPLAINT REPORT

COMPLAINT ID: 4874

COMPLAINT TYPE: Low And Loud

OPERATION TYPE: Arrival

RUNWAY: 29

A/C TYPE: LJ45

DATE AND TIME: Jun 24 2015, 10:30 AM

POINT OF CLOSEST APPROACH(PCA): 0.17 nm

ALTITUDE AT PCA: 7700 ft



Lear 45 arrival RIGHT traffic to 29. Spoke to pilots. Vague language in Jeppesen chart.

NOISE COMPLAINT REPORT

COMPLAINT ID: 4875

COMPLAINT TYPE: Low

OPERATION TYPE: Departure

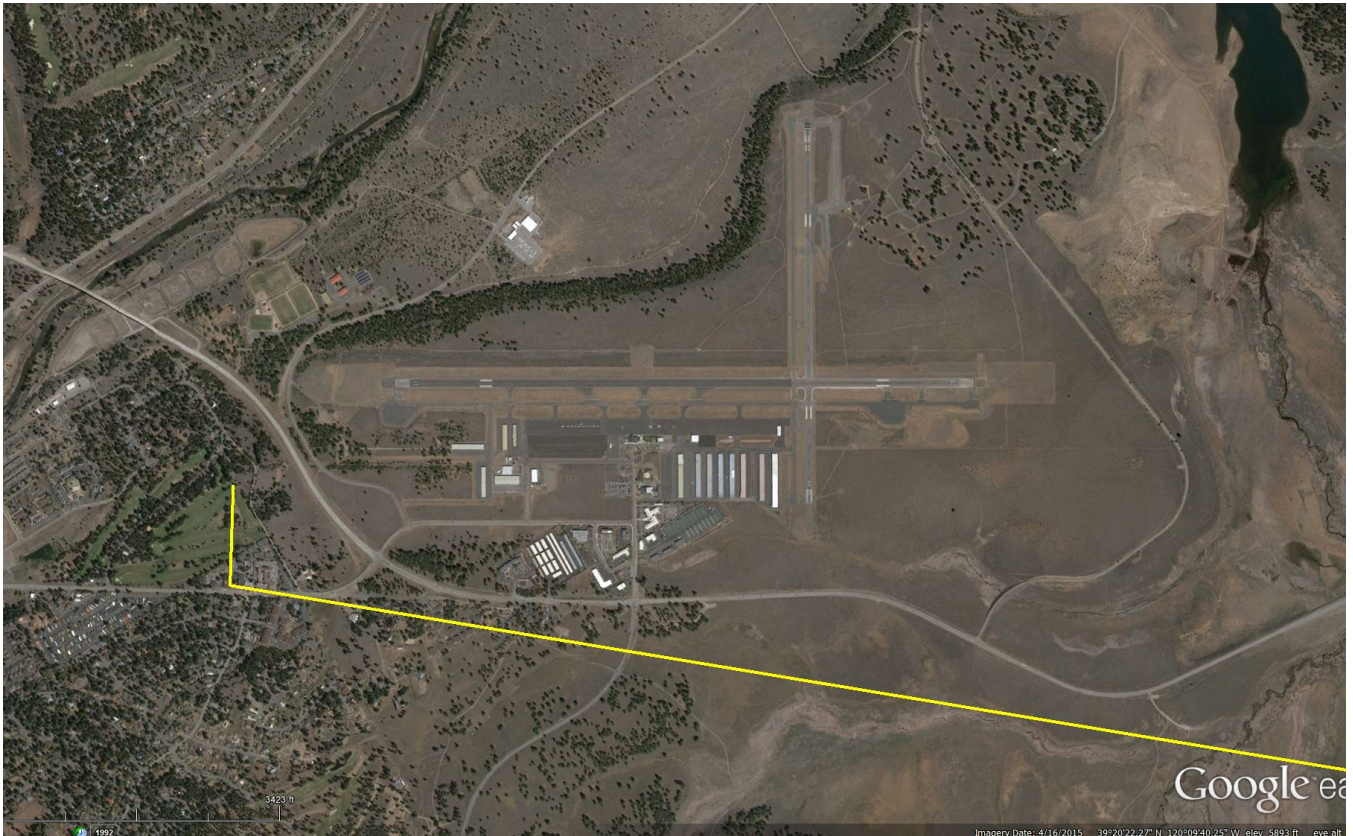
RUNWAY: 29

A/C TYPE: C421

DATE AND TIME: Jun 25 2015, 11:17 AM

POINT OF CLOSEST APPROACH(PCA): nm

ALTITUDE AT PCA: Unk ft



Poor track image quality. C421 Piston twin departure 29 with a hard left. Mailed operator letter.

NOISE COMPLAINT REPORT

COMPLAINT ID: 4884

COMPLAINT TYPE: Low And Loud

OPERATION TYPE: Departure

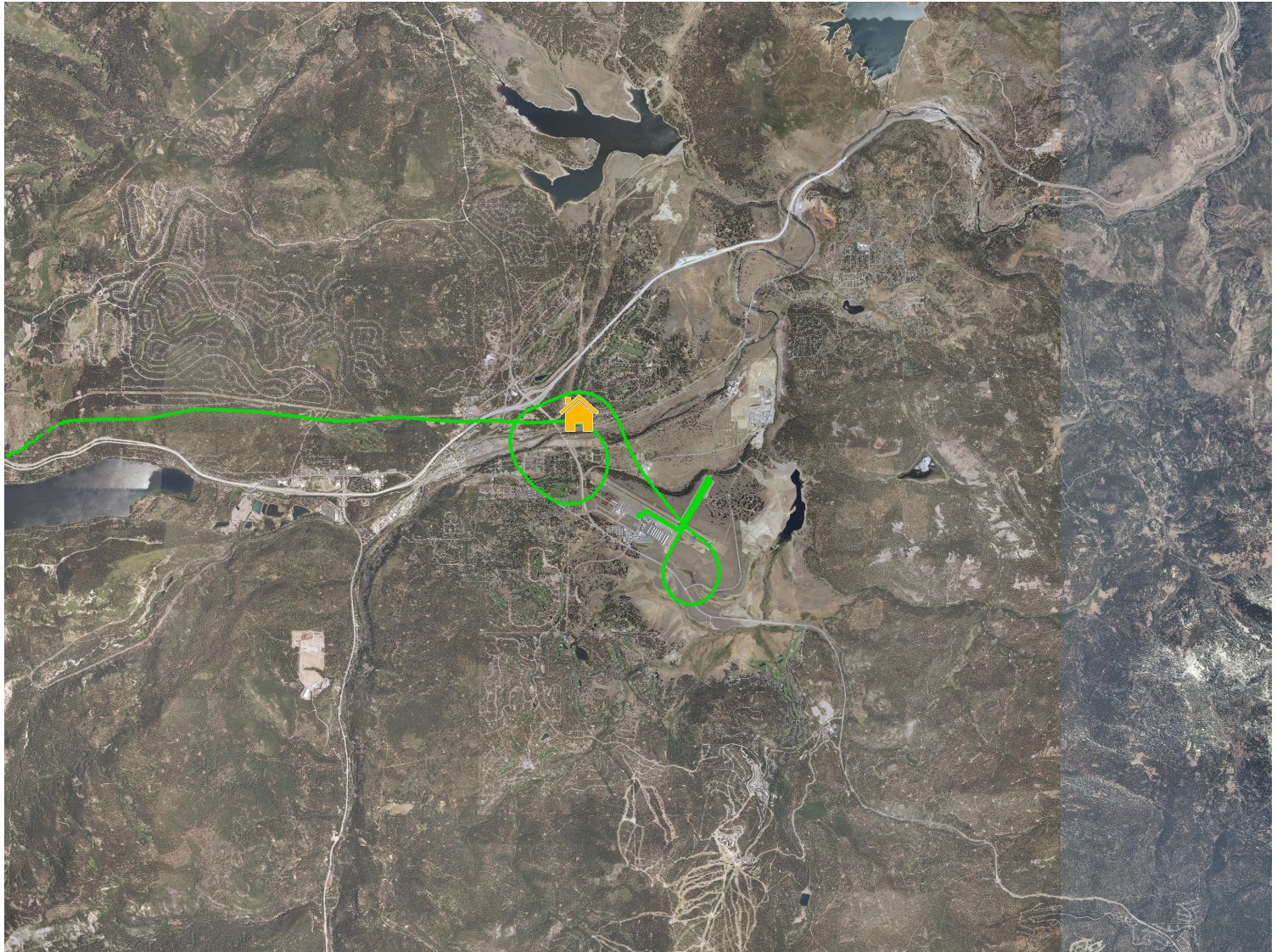
RUNWAY: 20

A/C TYPE: BE35

DATE AND TIME: Jun 26 2015, 10:40 PM

POINT OF CLOSEST APPROACH(PCA): 0.08 nm

ALTITUDE AT PCA: 8200 ft



10:40 p.m. departure. Pilot said he looked at the AOPA website for curfew info. Staff has reached out to AOPA and FAA to update Airport Remarks data. Pilot is now aware of curfew and NAPs.

NOISE COMPLAINT REPORT

COMPLAINT ID: 4891

COMPLAINT TYPE: Loud Disturbance

OPERATION TYPE: Arrival

RUNWAY: 20

A/C TYPE: C182

DATE AND TIME: Jun 27 2015, 02:37 PM

POINT OF CLOSEST APPROACH(PCA): 0.24 nm

ALTITUDE AT PCA: 7100 ft



C182 arrival. Staff spoke to PIC who said the winds made him rethink landing 20, so he went around and out to the northwest, climbed and waited for other traffic to clear and came back in for 29. Staff discussed best places to hold away from residential areas and other safety precautions specific to KTRK.

NOISE COMPLAINT REPORT

COMPLAINT ID: 4887

COMPLAINT TYPE: Off Course

OPERATION TYPE: Departure

RUNWAY: 29

A/C TYPE: BE36

DATE AND TIME: Jun 28 2015, 08:50 AM

POINT OF CLOSEST APPROACH(PCA): 0.65 nm

ALTITUDE AT PCA: 7400 ft



Spoke to PIC, can expect Bypass departures from this aircraft going forward.

NOISE COMPLAINT REPORT

COMPLAINT ID: 4885

COMPLAINT TYPE: Loud Disturbance

OPERATION TYPE: Departure

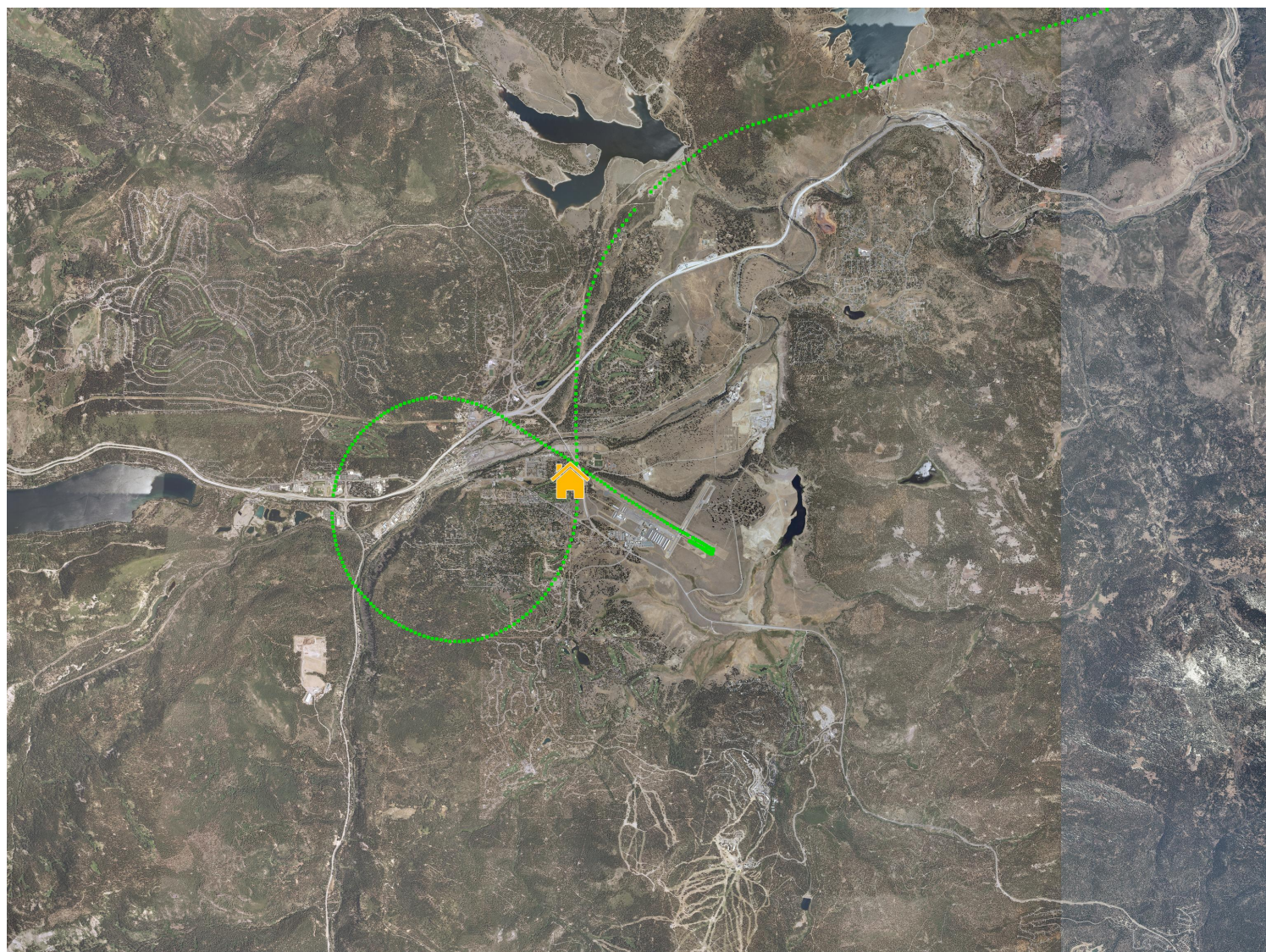
RUNWAY: 29

A/C TYPE: C560

DATE AND TIME: Jun 28 2015, 09:00 AM

POINT OF CLOSEST APPROACH(PCA): 0.05 nm

ALTITUDE AT PCA: 13100 ft



2 comments on this 29 Jet departure on Sunday morning. One came from Tahoe Donner (location not indicated on map) and one from Martis Valley Estates.

Operator claimed performance was an issue with temps that day and they needed to circle for terrain clearance. Staff asked them to follow the SID next time out.

NOISE COMPLAINT REPORT

COMPLAINT ID: 4889

COMPLAINT TYPE:

OPERATION TYPE: Overflight

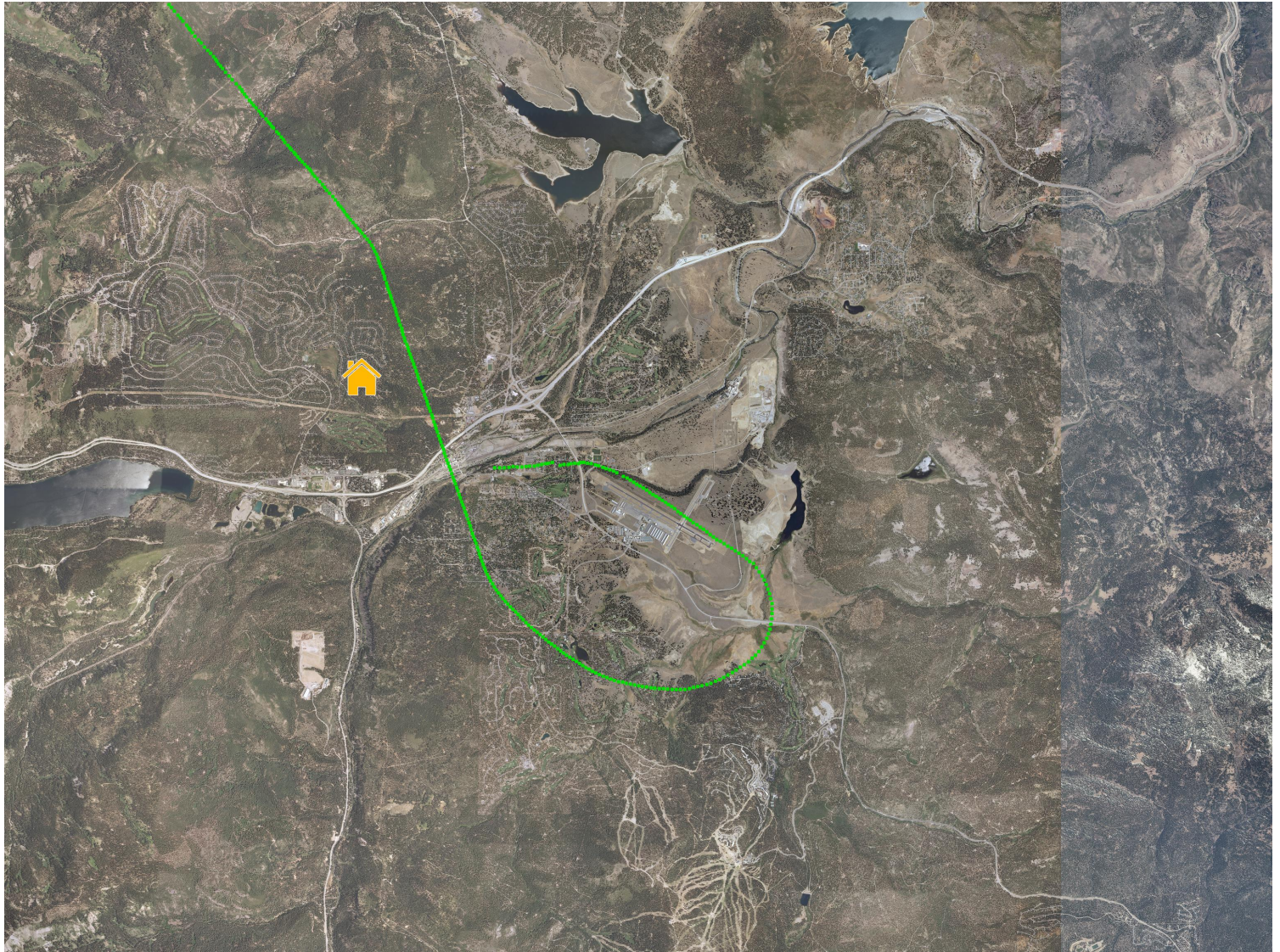
RUNWAY: 29

A/C TYPE: UNK: Military

DATE AND TIME: Jun 28 2015, 03:31 PM

POINT OF CLOSEST APPROACH(PCA): 0.5 nm

ALTITUDE AT PCA: 8100 ft



Military encoded tail number, staff has reached out to MLAT engineer for possible decoding of masked tail numbers. Staff hopes to make contact regarding the departure portion of the track with the left turnout.