MEMO:

To: Board of Directors, ACAT and Staff

From: Hardy Bullock, Environment & Technology Specialist

Subject: Community Comments & Operations Report- 3rd Quarter 2012

Date: October 25, 2012

Overview

This report summarizes data from several airport systems designed to monitor operational activity. These systems include the wireless airport surveillance platform (WASP), the Multilateration Flight Tracking System (FT), and our internal commenter data base along with reported operations from Care Flight and Soar Truckee. All systems produced reliable data with nearly 97% uptime. Gliders have an operational impact on the airport in this 3rd quarter of 2012. Glider operational numbers are added to the 3rd quarter glider category using the following formula:

Previous Annual Reported Operations: 5496 May 2% (110) June 24% (1319) July 24% (1319) August 24% (1319) September 24% (1319) October 2% (110)

I have removed "Unknown" from the operations type. A manual audit of this segment of unidentified aircraft allows us to correctly categorize those operations.

The 4th Quarter 2012 report acts as the annual master and annual totals are updated to reflect actual glider operations as received from Soar Truckee. The only operations that are not reflected here are helicopters other than Care Flight.

Flight Tracking

Q3 2012 is the third quarter to ingrate our new Flight Tracking System data for use in this report. The exhibits furnished in this report are basic depictions of the flight events that generated a comment. Both the aircraft and household are anonymous for reporting purposes. The reporting location is marked by a red polygon icon. No effort was made on my part to place judgment on the validity of either the comment or the quality of the track flown with respect to noise abatement procedure compliance. I do however, feel that the depiction of flight events offered here accurately depict the aircraft that created annoyance for the given comment. An associated altitude at the point of closest approach is given for each track. This is the distance the aircraft was above the surface when it passed closest to the comment location. Certain comments in this quarter where vague in nature and did not reference a particular operation. These comments are present but have no associated flight track in the absent of a conclusive time.

Trends

Q3 2012 posted a 13% increase in operations year over year.Q3 was also the first quarter we see a swing in the long standing trend of declining operations. Since 2007 operations have steadily been declining. If the trend continues 2012 overall could prove to be the first annual increase in operations since 2007. Q3 2012 set a new record low for total comments in a period. This continues a downward trend of decreasing comments and increasing operations per comment figures. I was surprised to see the low number of comments this quarter but routine comment households in the B1 virtually stopped when the runway closure occurred. These households usually amount to 30%-45% of our total comment volume. Q3 saw a continuing increase in operations in the medium and large jets category which brings rise to questions surrounding runway utilization for this class of aircraft. Turbo prop operations continue to climb as these aircraft take center stage in the replacement of an aging piston fleet.

Curfew

Staff processed no cancellations of voluntary Fly Quiet Incentives due to out of hours operations. Five operations after 11 PM and before 6 AM were captured in Q3 of 2012. None of these aircraft are based here in Truckee.

Beyond the Comments

The closure of runway 10/28 made this quarters comments a bit unique. The runway closed on July 9th and opened on September 27, 2012. It was closed most of the quarter. We received fewer comments regarding specific operations and more comments regarding the airport in general. Many comments came from new households. Many of the commenters I spoke to knew there was a change at the airport but didn't know what it was. When I explained the runway closure and its effect on the traffic pattern they, in general, understood. Many of the household calls were from inside the airport influence area. Many of the households were unaware of their actual proximity to the airport; this may indicate those neighborhoods have a frequency threshold for annoyance only recently triggered by the runway closure - these areas have consistent operations within them. An area of low statistical value but high annoyance as measured by the emotion of the residents is the area to the east of Olympic heights between Highway 80 and Glenshire Drive. Our NAP depicts an approved route of flight in this vicinity. Because of the runway closure we saw a greater degree of flight track concentration to the west of the runway 020 extended centerline. Dispersion versus concentration of flight paths are commonly discussed when analyzing data regarding annoyance. Because of the runway closure there was a higher degree of concentration over the Glenshire and Olympic Heights neighborhoods. Because the increase in traffic only lasted for about ninety days it is tough to determine if concentration would result in less overall annoyance community wide. While comments are down year over year for this period the relatively low number of previous comments from these neighborhoods drives huge statistical increases, 650% for Glenshire specifically.

Comments by Operation Q3 2012

- ✓ Arrivals generated twice as many comments than departures in Q3 2012. This is split evenly between jet arrivals and turboprop arrival.
- ✓ Jet departures only accounted for 6% of all Q3 comments, far lower than average.
- √ 27% of comments referenced operations of unknown types. This correlates to the quarterly
 uptick in general airport comments that lack specific operational detail.

A Few Items of Note in Q3

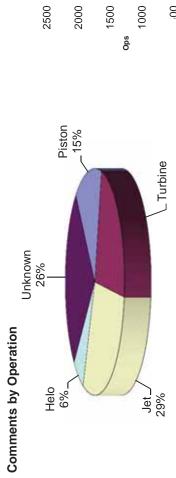
- 52 comments were received from 22 households. The top two households each commented 5 times in Q3. One household is in Glenshire, the other is located east of Olympic Heights off Glenshire Drive.
- We had 5 new households in Q3. 4 were in Glenshire or the surrounding area:
 - 1. CLUP ZONE D, one comment on Jet arrival, one comment on unknown operation.
 - 2. CLUP ZONE E, one comment on Jet arrival, one comment on piston arrival.
 - 3. OUT OF CLUP ZONE, one comment on helicopter operations in and around the North shore of Lake Tahoe and Brockway Road.
- All comments referenced operations between the hours of 7:45 AM and 9:12 PM.
- Staff used flight tracking data to respond to comments made by our neighbors. Most commenters responded favorably to discussion that utilized specific operational data such as altitude, speed, direction of flight and relative position.
- On September 6, 2012 around 10:40 AM two military fighter jets made several low approaches near Truckee. Sporadic operations were reported on September 7th and 8th. On the 10th of September the military operations occurred again around 11:40 AM. Staff received approximately 15 calls related to these operations from community members primarily located in Prosser, Alder Hill, and Tahoe Donner. Upon the first occurrence staff contacted the controlling authorities for operations and airspace and was given no substantive information on the aircraft or controlling party. Subsequently it came to our attention that these were military jets transiting the area from Utah enroute to the Capital Airshow in Sacramento. Many complaints regarding the conduct of these aircraft have been filed throughout the area. All the callers who made comments to our airport were called back immediately if they left a phone number. These comments are not summarized in our comments for the quarter as the operations are attributable to the Truckee Tahoe Airport District.

Q3 2012 Operations and Comment Report

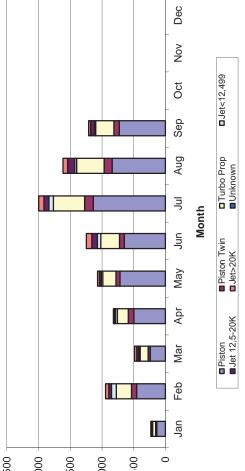
	Jul-11	Jul-12	Jul-11 Jul-12 % Change	Aug-11	Aug-12 %	% Change	Sep-11	Sep-12	Sep-12 % Change 3	3Q 2011 3	3Q 2012	% Change	LYTD	YTD	% Change
Comments- Location															
Alder	0	7	100%	0	0	%0	0	0	%0	0	2	100%	2	2	%0
Donner Lake	0	0	%0	0	0	%0	0	0	%0	0	0	%0	0	0	%0
Downtown	0	0	%0	0	0	%0	0	0	%0	0	0	%0	9	0	%0
Gateway	0	2	100%	0	0	%0	0	0	%0	0	2	100%	0	2	100%
Glenshire	0	7	100%	2	7	250%	0	1	100%	2	15	%059	5 4	17	325%
Martis Valley Estates	9	0	-100%	4	0	-100%	က	0	-100%	13	0	-100%	5 23	12	-48%
Northstar/ Martis	2	0	-100%	0	0	%0	0	0	%0	2	0	-100%	3	_	%29-
Olympic Heights	4	~	-15%	2	_	%09-	9	4	-33%	12	9	%09-	14	80	-43%
Ponderosa	6	_	%68-	4	_	-75%	2	0	-100%	15	2	%28-	91 16	2	%88-
Prosser	က	0	-100%	2	0	-100%	2	0	-100%	7	0	-100%	11	_	-91%
Tahoe Donner	က	0	-100%	0	_	100%	2	2	%0	2	3	-40%	6	3	%29-
Unknown/Other	1	1	%0	0	2	100%	0	1	100%	1	4	300%	. 1	4	300%
TOTAL	28	14	%09-	14	12	-14%	15	8	-47%	25	34	-40%	83	52	-37%
Operations- Type															
Piston Single	574	1138	%86	572	840	47%	489	728	49%	1635	2706	%99	5083	6833	34%
Piston Twin	112	136	21%	91	128	41%	66	98	-13%	302	350	16%	928 9	200	-19%
Turbo Prop	257	492	91%	243	434	%62	196	286	46%	969	1212	74%	, 1865	2300	23%
Jet <12,499 lbs	78	72	%8-	34	30	-12%	49	12	%9/-	161	114	-29%	5 412	320	-22%
Jet 12,499-19,999 lbs	20	28	11%	19	110	%08	25	20	23%	188	258	31%	9 420	474	. 2%
Jet > 20,000 lbs	51	82	61%	51	74	45%	46	30	-35%	148	186	26%		418	28%
Helo	119	162	36%	122	142	16%	94	112	19%	335	416	24%	9201 9	994	
TOTAL POWERED AC	1261	2160	71%	1174	1758	%09	1030	1324	73%	3465	5242	51%	10068	12048	20%
TOTAL WITH GLIDERS	2580	3479	32%	2493	3077	23%	2349	2643	13%	5295	7778	47%	5 15053	17322	15%
Comments- Type															
Piston	10	_	%06-	8	2	-75%	4	2	-20%	22	2	%22-	33	20	-39%
Turbine	2	2	150%	0	_	100%	0	2	100%	2	∞	300%	4	6	125%
Jet	13	က	%22-	3	7	133%	7	0	-100%	23	10	%29-	32	12	%69-
Helo	0	0	%0	0	_	100%	_	_	%0	_	2	100%	2	2	%0
Unknown	3	2	%29	3	1	%29-	3	3	%0	6	6	%0	5 12	6	-25%
TOTAL	28	4	-20%	14	12	-14%	15	∞	-47%	22	34	-40%	83	52	-37%
Ops/Comment	95	249	171%	178	256	44%	157	330	110%	93	229	146%	181	333	84%
Losed omot 20% Transaction 70% Transaction Double	Jumo	i i i	2001 Type	200;	1 0 0 0 1	7000									
Average Allinai Operation			10/0 1915	100 1100	ומוומ	asca									

2011 YTD 2012 YDT % Change Operations & Community Comment Report	15% Third Quarter 2012	-37% Truckee Tahoe Airport District	%
% Change	,	628-	84%
2012 YDT	17322	25	888
2011 YTD	15053	83	181
Q3 2011 Q3 2012 % Change	47%	-40%	146%
Q3 2012	7778	34	229
Q3 2011	5295	25	66
	Total Operations	Total Comments	Ops/Comment

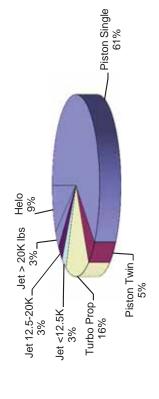




Operations by Type of Aircraft 2012



YTD Operations by Aircraft Type



YTD Comments by Location

Glenshire 33%

Gateway _4%

Unknown/Other Alder

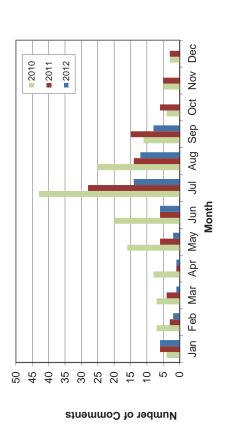
Tahoe Donner

Comments 2010 to 2012

ر %9

Prosser_2%

Ponderosa__ 4%



Martis Valley Estates 23%

Northstar/ Martis 2%

Olympic Heights J 15%

MEMO: Regarding Use of Flight Tracking Imagery

To: Board of Directors, ACAT and Staff

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2012

Date: October 25, 2012

The images contained in this quarterly report depict aircraft that likely caused the related annoyance. While the system determines the likely track that correlated to the comment event, this is not always accurate. Staff uses a wide variety of factors to determine track correlation, some of which include commenter history, time of day, weather, relative position to household, altitude, and airspace trends. Likewise some of the comments we receive have nothing to do with our airport and are simply over flights. Efforts are made to correlate over flights only if staff believes there is sufficient evidence that the flight either originated from or is destined to our airport. The name of each image will display the comment attributes as depicted below:

Undisclosed	Runway	Operation	Aircraft Type	Comment	POCA in AGL
XXX	28	(AR) Arrival	(J) Jet	Low	1775 feet
XXX	10	(DP) Departure	(P) Piston	LOUD	Above ground
	01	(TG) Touch and	(PT) Piston Twin	OFF PATH	level altitude at
	19	Go	(TP) Turbo Prop	BOTH	(POCA), point of
		(O) Over flight	(H) Helicopter		closest approach

