MEMO:

To: **Board of Directors, ACAT and Staff**
From: **Hardy Bullock, Environment & Technology Specialist**
Subject: **Community Comments & Operations Report- 1st Quarter 2012**
Date: **April 26, 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 Multi Lateration Flight Tracking System (FT), and our internal commenter data base along with reported operations from Care Flight. As you know our facility, information technology infrastructure, and associated backbone architecture were newly constructed in the first quarter of 2012. Significant data loss from the WASP system occurred in January of 2012 as the result of the facility move. All other systems remained whole in their ability to produce valid, accurate and complete data for use in this report. Staff does not anticipate additional data loss as a result of the facility move. The totals for Operations-Type are calculated two ways. TOTAL CAPTURED is the total number of departure events captured by WASP. UPTIME represents the percent of time the system was capturing and analyzing flight events. TOTAL ESTIMATED is a multiple of TOTAL CAPTURED adjusted for downtime. I feel comfortable with the ESTIMATED totals based on their correlation to data gained from the flight tracking system, their quarterly composition as well as their ability to track along the current annual trend. No effort was made to estimate individual types of operations; a manual audit was performed and operations by type are listed accurately from the captured data set.

All quarterly and annual operational comparisons use ESTIMATED numbers. All COMMENTS PER OPERATION use ESTIMATED numbers.

Flight Tracking

Q1 2012 is the first 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 house 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. That is to say that the track correlation for the given comment period is nearly 100%.

Trends

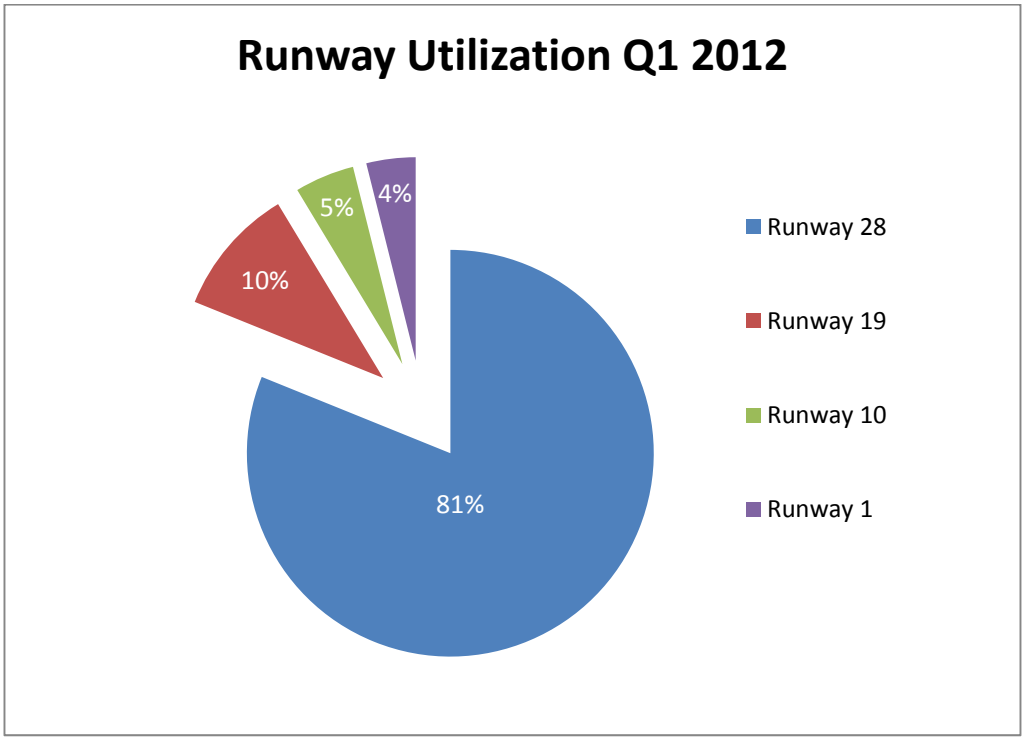
During Q1 2012 a 1% decrease in total operations from Q1 2011 was estimated. Q1 2012 saw a 42% decrease in comments per operation from the same period in 2011. The overall reported annoyance of aircraft in Q1 2012 was 9 compared to 13 in Q1 of 2011. There is debate regarding the correlation between comments and actual community annoyance. When examining annual trends a steady decrease in comments is obvious, more planes can operate generating fewer and fewer comments. If no correlation exists then one may assume previous annoyance may have been related to factors other than aircraft noise or specific flight characteristics. The alternative may be our improved ability to direct aircraft toward areas of lower annoyance and our ability to manage public perception regarding annoyance. The reduction of comments may be a confluence of both factors?

Curfew

Staff processed no cancellations of voluntary Fly Quiet Incentives due to out of hours operations. Three operations after 11 PM and before 6 AM were captured in Q1 of 2012.

Beyond the Comments

89% of all the comments in the Q1 were from one household located in the B1 zone. Medium and large jet operations increased in Q1 but only one comment referenced jet operations of the 9 received. This comment came from a household in Prosser. All comments referenced departures or touch and go operations. The weather for January of 2011 and January 2012 was generally fair. The weather for February 2011 was poor, February 2012 was fair. March for 2011 and 2012 were both stormy and poor. Below is a runway utilization graph for our four runways for Q1 2012.



Comments by Operation Q1 2012

- ✓ Departures generated 7 comments (78%)
- ✓ Touch and Go operations generated 2 comments (22%)

A Few Items of Note in Q1

- 9 comments were received from 2 households. One household in the B1 zone accounted for 88% of the comments.
- All comments referenced operations between the hours of 9:31 AM and 4:35 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.

Noise Ops Report Q1_2012

	Jan-11	Jan-12	% Change	Feb-11	Feb-12	% Change	Mar-11	Mar-12	% Change	1Q 2011	1Q 2012	% Change	LYTD	YTD	% Change
Comments- Location															
Alder	1	0	-100%	0	0	0%	0	0	0%	1	0	-100%	1	0	-100%
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%	0	0	0%
Gateway	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%
Glenshire	0	0	0%	0	0	0%	1	0	-100%	1	0	-100%	1	0	-100%
Martis Valley Estates	1	5	400%	2	2	0%	3	1	-67%	6	8	33%	6	8	33%
Northstar/ Martis	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%
Olympic Heights	2	0	-100%	0	0	0%	0	0	0%	2	0	-100%	2	0	100%
Ponderosa	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%
Prosser	2	1	-50%	1	0	-100%	0	0	0%	3	1	-67%	3	1	-67%
Tahoe Donner	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%
Unknown/Other	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%
TOTAL	**6**	**6**	0%	**3**	**2**	-33%	**4**	**1**	-75%	**13**	**9**	-31%	**13**	**9**	-31%
Operations- Type															
Piston Single	566	138	-76%	378	454	20%	432	240	-44%	1376	832	-40%	1376	832	-40%
Piston Twin	128	18	-86%	72	82	14%	82	33	-60%	282	133	-53%	282	133	-53%
Turbo Prop	272	48	-82%	146	240	64%	176	126	-28%	594	414	-30%	594	414	-30%
Jet <12,499 lbs	54	6	-89%	34	74	100%	40	20	-50%	128	100	-22%	128	100	-22%
Jet 12,499-19,999 lbs	60	6	-90%	40	44	10%	28	34	21%	128	84	-34%	128	84	-34%
Jet > 20,000 lbs	18	14	-22%	28	50	79%	16	36	125%	62	100	61%	62	100	61%
Helo	142	70	-51%	102	70	-31%	130	78	-40%	374	218	-42%	374	218	-42%
Unknown	110	0	-100%	10	0	-100%	4	0	-100%	124	0	-100%	124	0	-100%
TOTAL CAPTURED	**1350**	**300**	-78%	**810**	**1014**	25%	**908**	**567**	-38%	**3068**	**1881**	-39%	**3068**	**1881**	-39%
UPTIME	**100%**	**22.6%**		**100%**	**80.0%**		**100%**	**80.0%**							
TOTAL ESTIMATED	**1350**	**1088**	-19%	**810**	**1250**	54%	**908**	**693**	-24%	**3068**	**3031**	-1%	**3068**	**3031**	-1%
Comments- Type															
Piston	2	5	150%	2	2	0%	3	1	-67%	7	8	14%	7	8	14%
Turbine	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%
Jet	4	1	-75%	0	0	0%	0	0	0%	4	1	-75%	4	1	-75%
Helo	0	0	0%	1	0	-100%	0	0	0%	1	0	-100%	1	0	100%
Unknown	0	0	0%	0	0	0%	1	0	-100%	1	0	-100%	1	0	-100%
TOTAL	**6**	**6**	0%	**3**	**2**	-33%	**4**	**1**	-75%	**13**	**9**	-31%	**13**	**9**	-31%
Comments/Ops	**225**	**181**	-20%	**270**	**625**	131%	**227**	**693**	205%	**236**	**336**	42%	**236**	**336**	42%
Q1 2012 Operations by Home Base vs. Transient					HomeBased 44% Transient 56%										
NOTES	**TOTAL CAPTURED** operational number are unadjusted by operations-type and only summarized in totals. **TOTAL ESTIMATED** are used to calculate Comments/Ops.														
*Indicates Data Loss	Significant		Moderate		Minor										

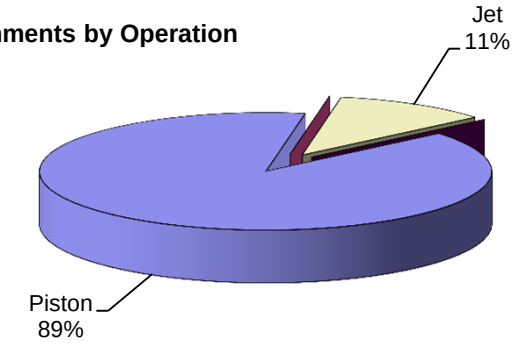
	Q1 2011	Q1 2012	% Change	2011	2012	% Change
Total Operations	3068	3031	-1%	3068	3031	-1%
Total Comments	13	9	-31%	13	9	-31%
Comments/Ops	236	336	42%	236	336	42%

Operations & Community Comment Report

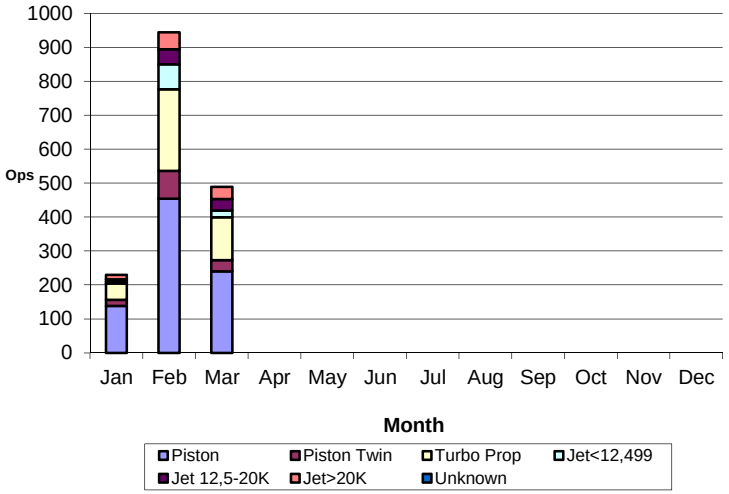
First Quarter 2012

Truckee Tahoe Airport District

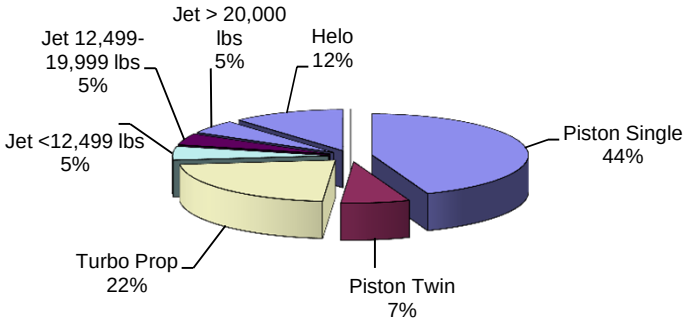
Comments by Operation



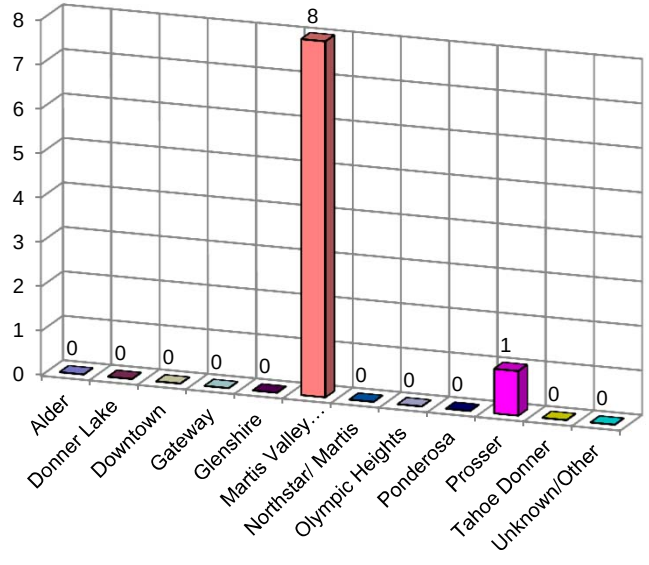
Operations by Type of Aircraft



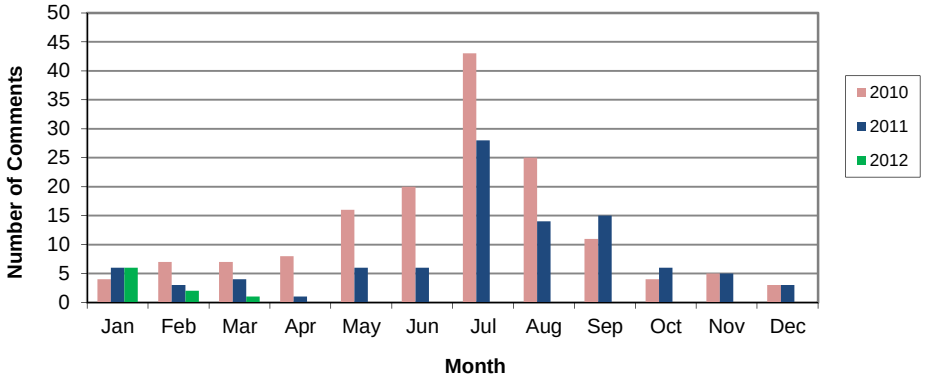
YTD Operations by Aircraft Type



YTD Comments by Location



Comments by Year



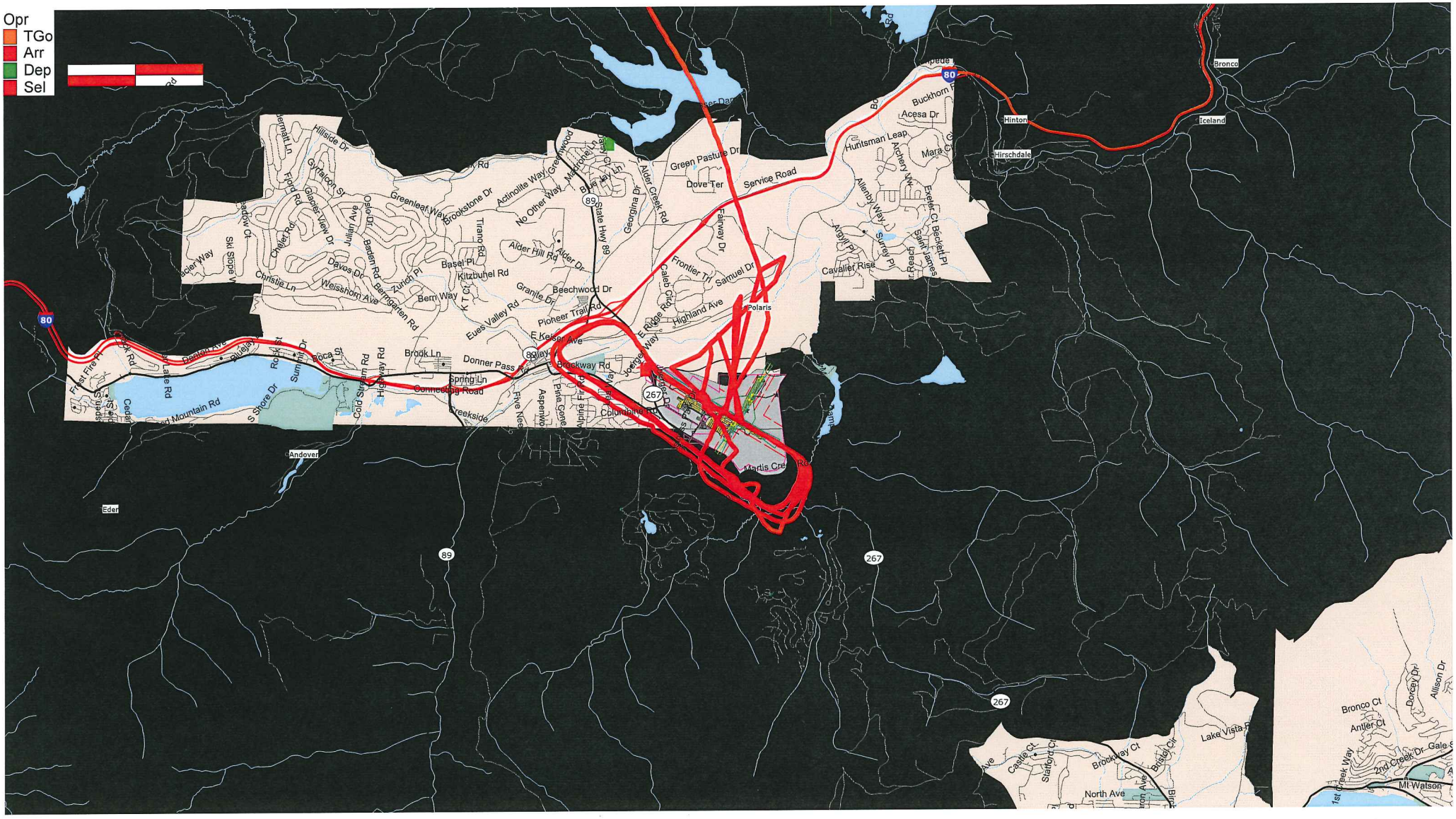


Exhibit 1: Touch and Go operation. Errant lines may be multi-path from refracted signals at low altitude and not actual track segments.

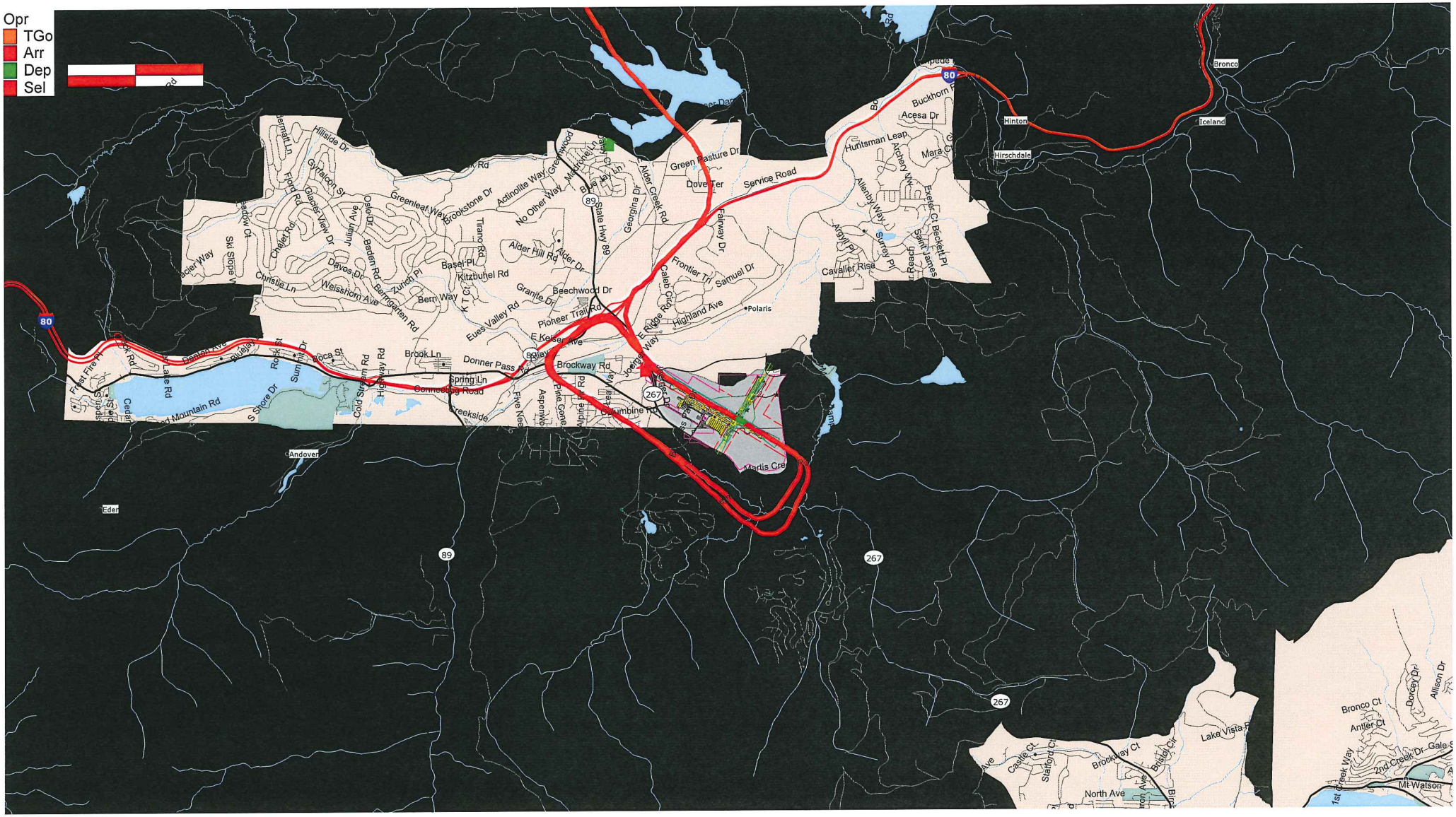


Exhibit 2: Typical left traffic runway 28 Touch and Go operation.

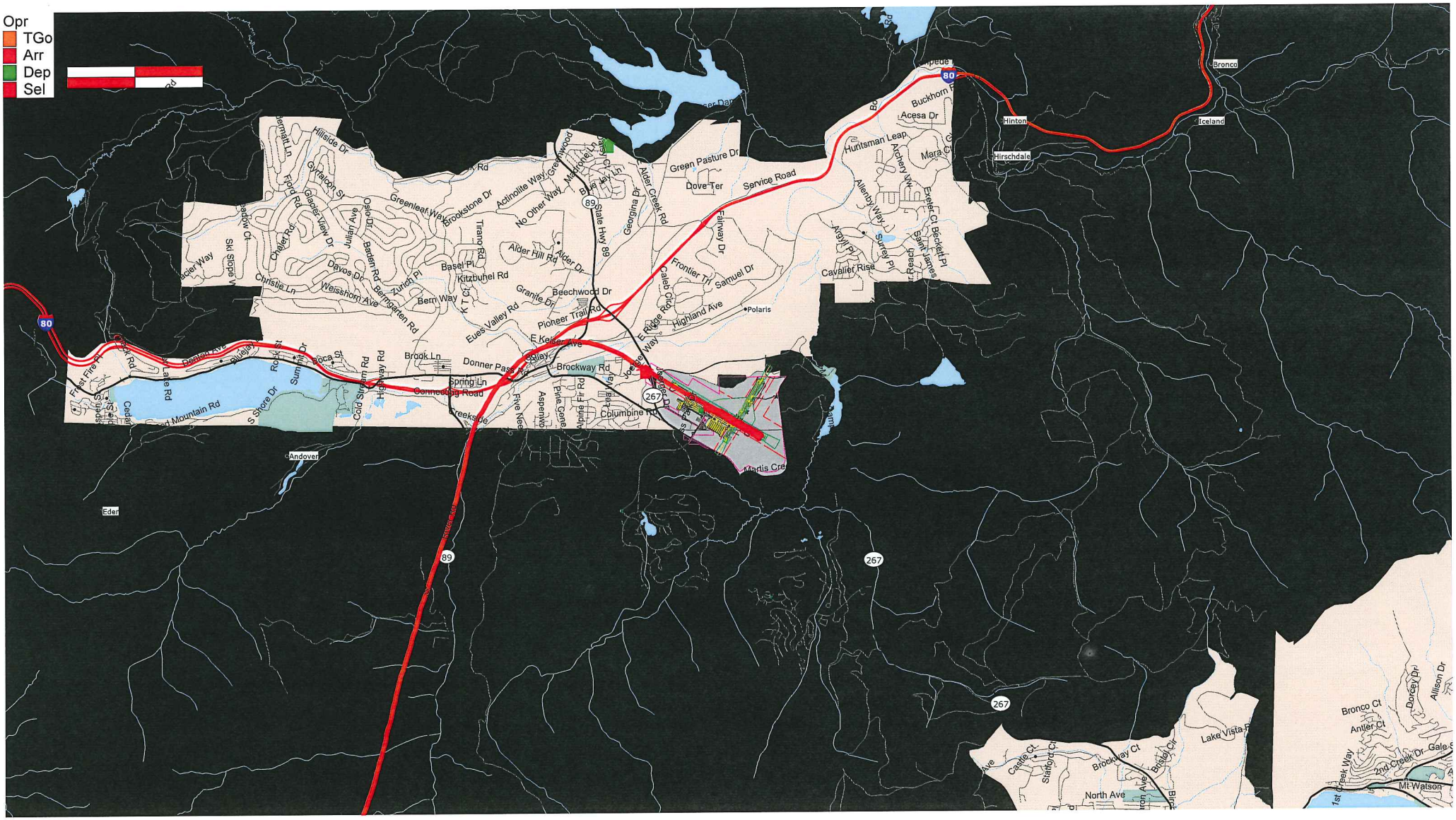


Exhibit 3: FAR/AIM left crosswind departure, probably direct to Squaw Valley VOR.

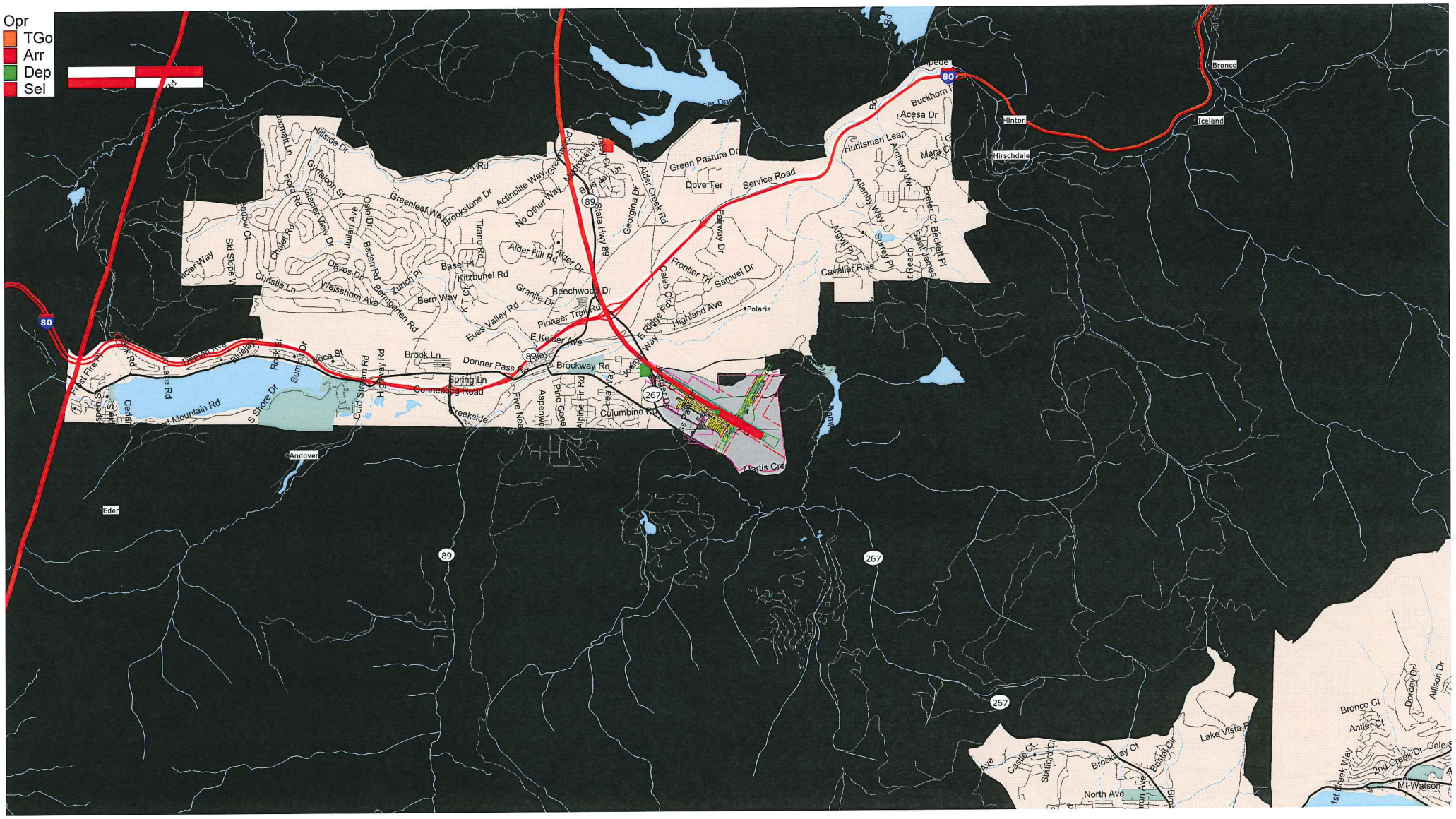


Exhibit 4: Bypass departure or Truck Three departure. Lear 40.

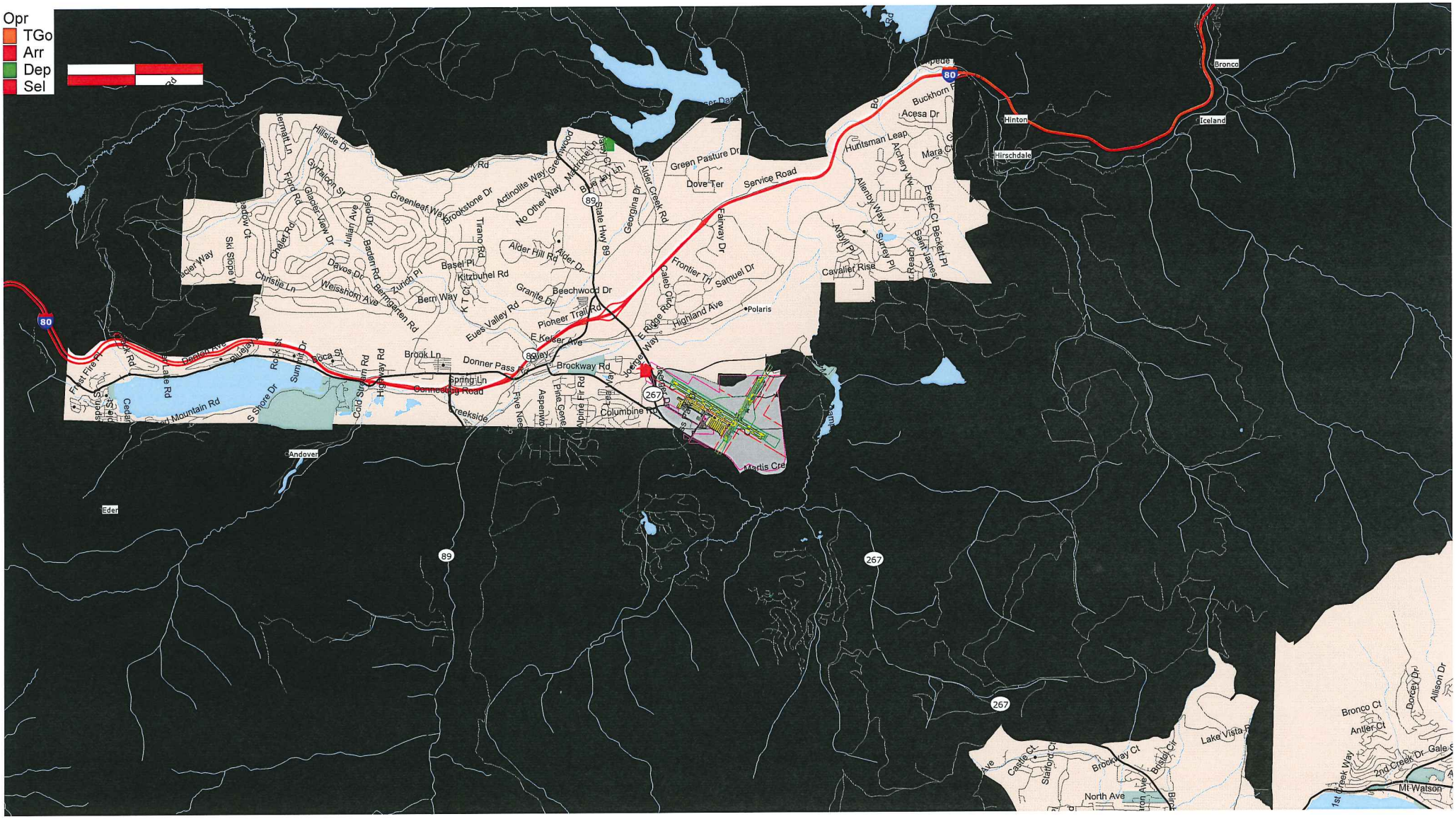


Exhibit 5: No track information available.

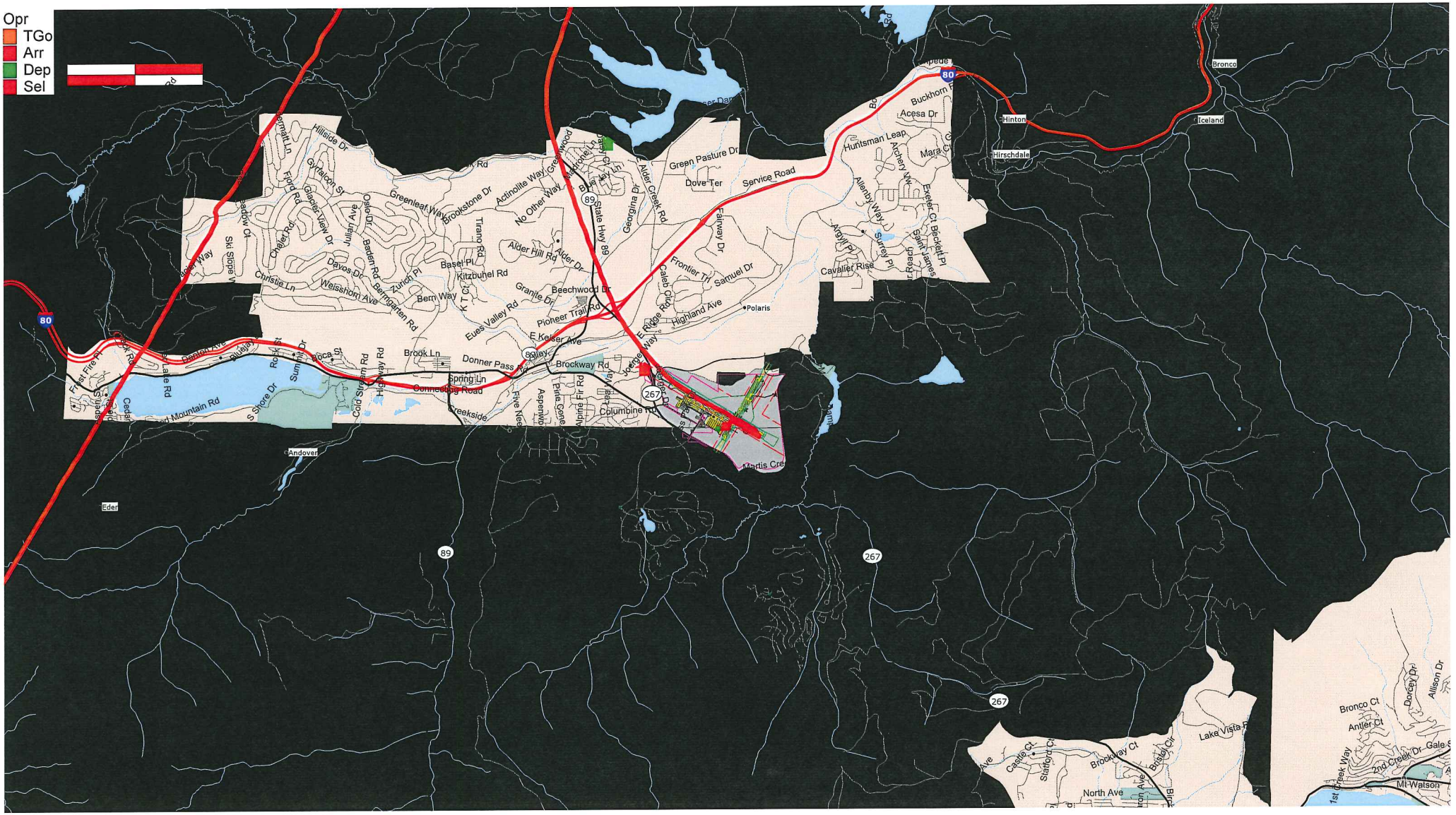


Exhibit 6: Bypass or Truck Three Departure.

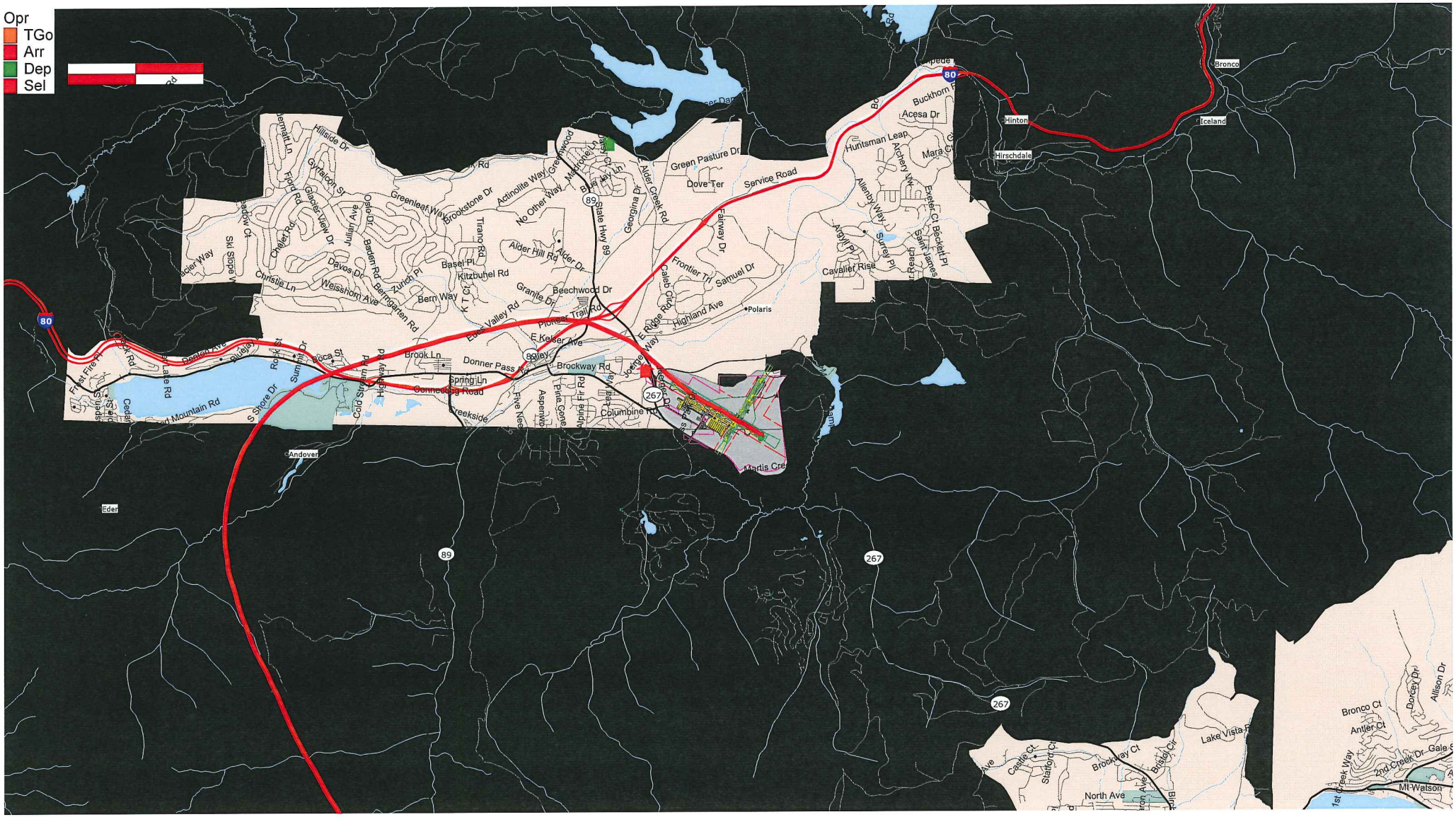


Exhibit 7: FAR/AIM left cross wind departure runway 28.

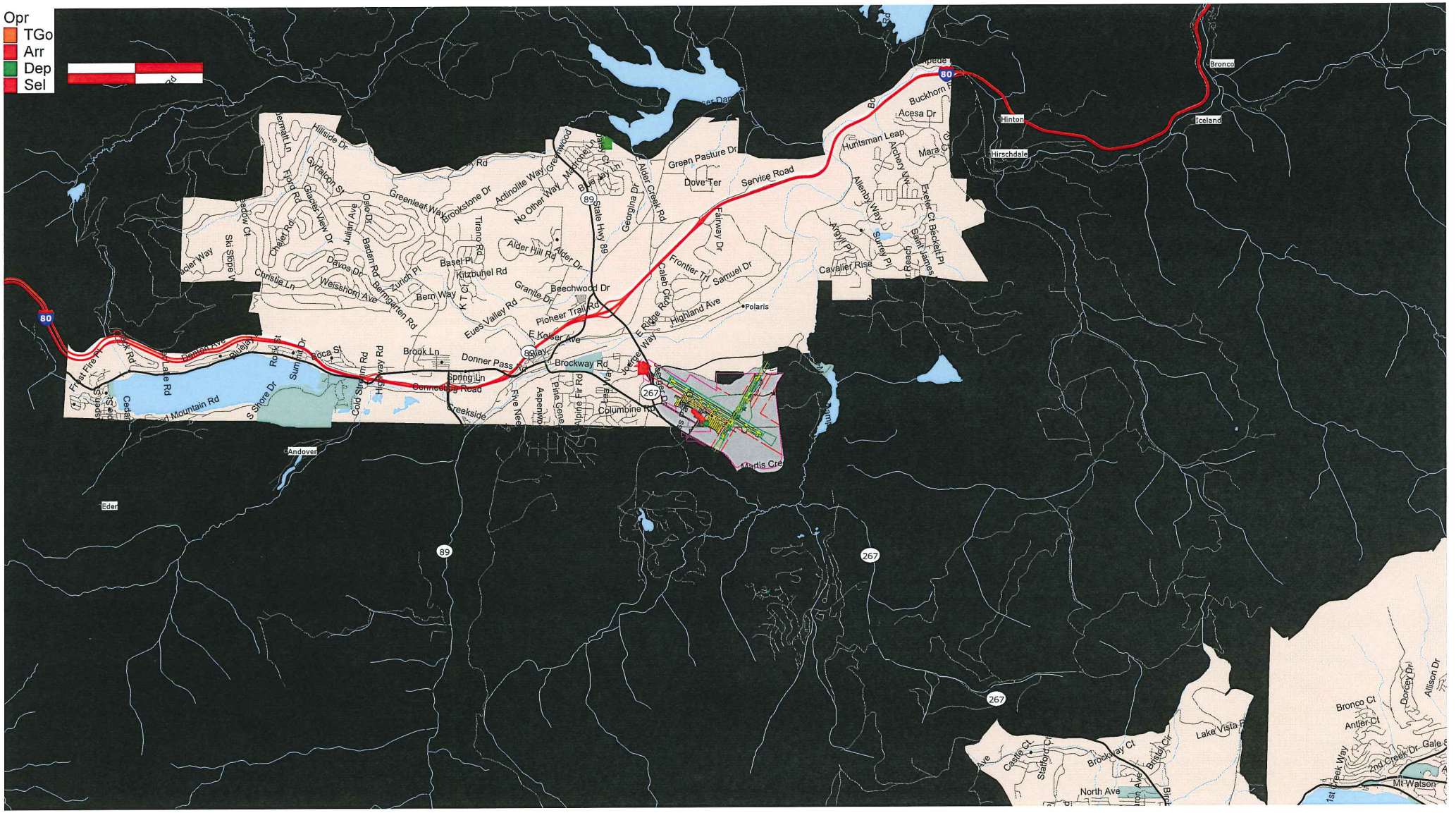


Exhibit 8: Partial track association with take off event.

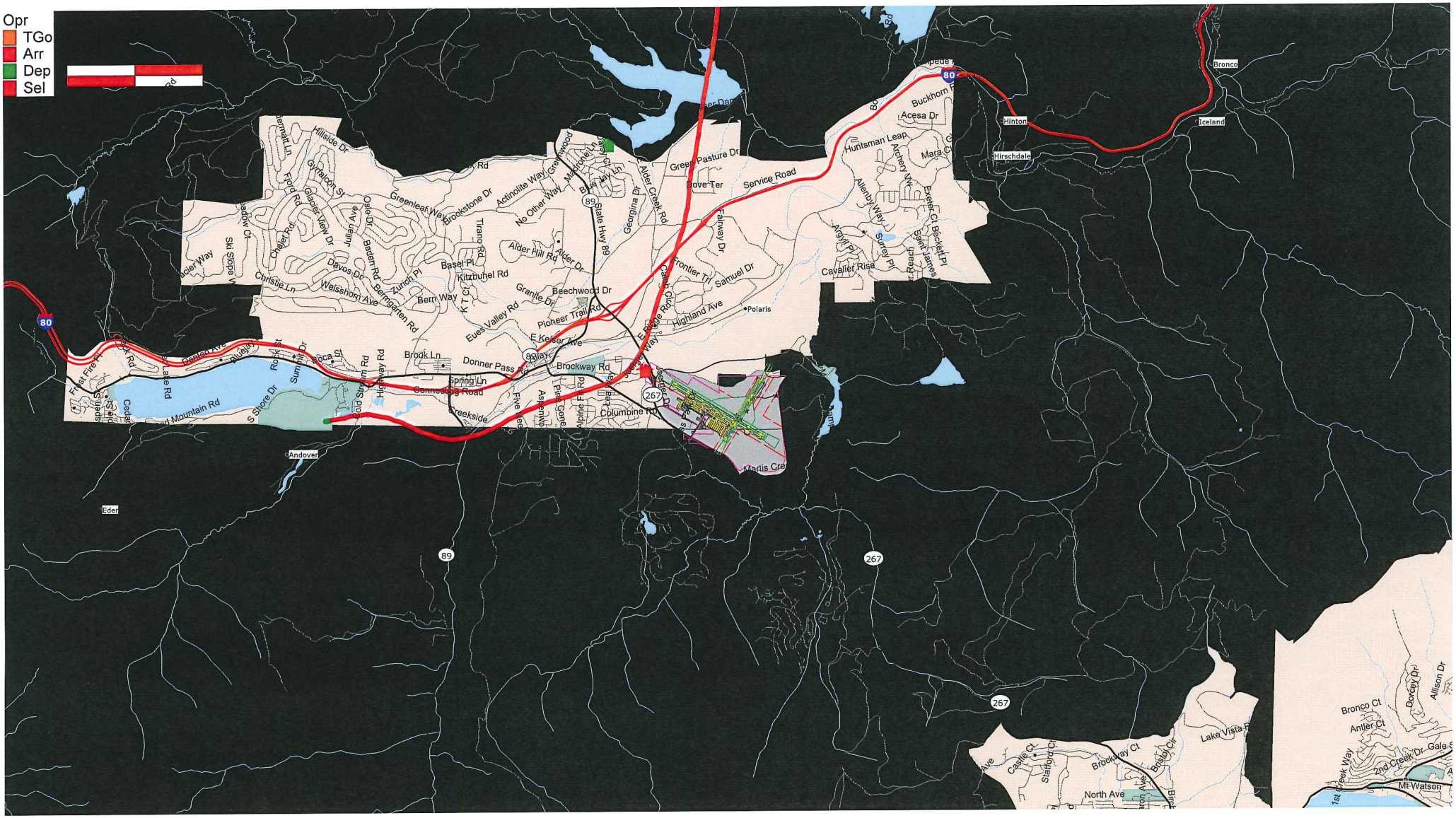


Exhibit 9: Possible overflight from CHP or Pipe Line Patrol. Aircraft loiters west of airfield then overflies household in B1 Zone.