

SAN DIEGO COUNTY REGIONAL AIRPORT AUTHORITY

AIRPORT NOISE ADVISORY COMMITTEE (ANAC)

MEETING AGENDA

Wednesday, December 21, 2016, 4:00 p.m.

**San Diego International Airport
SDCRAA Administration Building, First Floor
3225 N. Harbor Drive, San Diego, CA 92101**

1. Welcome and Introductions
2. Presentation Items
 - a. Quieter Home Program Update
 - b. Curfew Violation Review Panel (CVRP) Statistics
 - c. Missed Approach Statistics
 - d. Early Turn Statistics
 - e. Metroplex Update
 - f. Noise Complaint Statistics
 - g. Fly Quiet Report
3. Public Comment
4. Approval of October 19, 2016, Meeting Minutes
5. Information Items:
 - Subcommittee Update
 - Airport Authority Update
6. New Business
7. Adjourn

In Attendance

<u>Name</u>	<u>Affiliation</u>	<u>In Attendance</u>
Captain (Ret.) Jack Bewley	Airline Pilot (Retired)	No
Lee Steuer	Representative for Congresswoman Susan Davis	Yes
Emmet Aquino	County of San Diego	No
Conrad Wear	Representative for San Diego City Council, District 2	Yes
Carl "Rick" Huenefeld	MCRD	Yes
Susan Ranft	Downtown Community Planning Council	Yes
Kirk Hansen	Community at Large	No
David Swarens	Greater Golden Hill Community Planning Committee	Yes
Deborah Watkins	Mission Beach Precise Planning Board	Yes
Paul Webb	Peninsula Community Planning Board	Yes
Tom Gawronski	Ocean Beach Planning Board	Yes
Victoria White	City of San Diego, Planning Department	Yes
Rick Savage	FAA	Yes
Barry Davis	FAA	Yes
Robert Cook	FAA	Yes
Andrea Ortega	FAA	Yes
Brian Elliott	Representative for Congressman Scott Peters	Yes
Chris Cole	Uptown Planners	Yes
Justin Cook	Acoustical Engineer	Yes
Grady Boyce	Commercial Airline Pilot Representative	No
Victor Avina	Representative for San Diego County Supervisor Greg Cox	Yes
Randall LaRocco	Midway/Pacific Highway Community Planning Board	Yes
Melissa Hernholm-Danzo	Steering Committee	Yes
Authority Staff	Keith Wilschetz, Sjohnna Knack, Craig Mayer	
Heidi Gantwerk	Facilitator	

*Members contacted staff ahead of time and are considered excused.

1. Welcome and Introductions

Heidi Gantwerk, facilitator for the Airport Noise Advisory Committee (ANAC), opened the meeting at 4:04 pm. The meeting began with a brief overview of the agenda and the process. Ms. Gantwerk explained the minutes are provided in a summary format rather than verbatim style. ANAC members introduced themselves.

2. Presentation Items

Note: A copy of the information in the presentation can be found via our website using the following link:

<http://www.san.org/Airport-Authority/Meetings-Agendas/ANAC?EntryId=8952>

Quieter Home Program Update - Craig Mayer, Deputy Program Manager, Quieter Home Program (Program), provided an update on the program status.

Mr. Mayer stated there are currently 662 applicants, or 1,418 individual units on the waitlist. During the months of August and September, nine (9) homes were completed. The Program has achieved its estimated goal of completing 136 units by the end of calendar year 2016. Total number of homes completed through September 30, 2016, is 3,453.

The Program continues to work with local FAA representation to resolve the delay of future projects. The dialogue between the FAA ADO and QHP is now focused on the current working contract. Future construction groups will be separated into historic and non-historic homes.

Curfew Violation Review Panel (CVRP) Statistics – Sjohnna Knack, Program Manager, Airport Planning and Noise Mitigation, gave a review of the curfew violations. There were 15 violations in August and September, thirteen (13) were reviewed at the October CVRP meeting where they penalized ten (10), and three (3) were waived, due to mechanical issues. There were two more Air Canada violations after the September deadline, and these will be reviewed in December's CVRP meeting.

Question from ANAC: Mr. La Rocco inquired if the fines and penalties are high enough for the community?

Ms. Knack explained SDIA is the lead in providing fines to the operators, and if they request higher fines from the FAA there is a risk of losing the curfew.

Missed Approach Statistics - Ms. Knack explained the definition of missed approaches. She clarified that a missed approach is done for safety reasons and cannot be influenced by the Airport Authority. Airplanes that have to turn around will either fly over Point Loma or Mission Beach in order to land properly.

Ms. Knack reported missed approach numbers are lower; of the 155 missed approaches in August and September, 112 were compliant with the FAA Noise Dots. This is a small percentage of the average 277 daily departures.

Question from ANAC: Ms. Danzo requested who gives the pilot instruction to turn left.

Mr. Rick Savage, FAA Tower, stated it is a coordination call between the Tower and TRACON. If there is a traffic conflict, they might decide the 250 is the best heading, although the 275 heading is typical and routine. He stated it is hard to determine exactly why the pilot may be instructed to turn left, unless a specific case is identified.

Question from ANAC: Ms. Danzo noted that planes that fly over Dana Middle School, Fleetridge, La Playa, are increasing, and she has not been able to get a return email from the carriers answering why this is now occurring so frequently. She said that the missed approach numbers have increased since 2011, and inquired for the reason to this significant rise to missed approach numbers, considering that flight operations have declined about 1%.

Mr. Rob Cook, FAA TRACON, also indicated that weather, fog particularly, might be a reason for a go around, although with not knowing the specifics of the particular flight, it would be hard to determine.

Question from ANAC: Ms. Danzo also stated that there seems to be an increase in a flurry of flights, especially with Southwest, instead of spacing out the flights.

Mr. Cook stated that they do have a departure rush in the morning and a departure rush at night.

Question from ANAC: Ms. Danzo stated that the missed approaches are increasing, but the flight operations are not, and she believes this merits more attention as to the reasons why this is occurring.

Early Turns - Ms. Knack explained the definition of an early turn. She reported that there has been a decrease in early turns to the left from the previous months, less than one early turn per day. Early turns to the right over

Mission Beach, were decreased as well, with less than one early turn per day. From August 1 – September 20, 2016, there were 16,905 departures to the west with 0.4% early turns.

Question from ANAC: Mr. Cole asked how many flights are on autopilot?

Ms. Knack said she would research the answer.

Question from ANAC: Mr. Swarens stated the stats are higher overall in 2016 from 2015 and from 2014. Is there any correlation with traffic? He inquired if the numbers have increased significantly.

Ms. Knack explained there is no correlation, and staff is working with the FAA to look at ways to reduce early turns. She said it is not a quick process to resolve these issues. She said that Airport staff met with the chief pilots group for every airline and they are optimistic early turns may continue to decrease. They also informed the chief pilots group that the first report of Fly Quiet will be released to the community in December. The report will review and grade airlines on type of aircraft (loud or quiet aircraft), the number of early turns and curfew violations. If the carrier elects to cancel a flight in order to avoid a curfew violation, they will receive a bonus point. Ms. Knack stated that she has seen this Program work positively for other airports.

Question from ANAC: Mr. Swarens said he is looking forward to a follow-up next meeting for his previous question, as this is a fair increase of statistics. Could staff research data and see what the issues are? He believes that weather could not be identified as a reason.

Ms. Knack said she will reach out to the ATCs, but wanted to align expectations that she will not get an answer from all the carriers for all those reasons by next meeting.

Mr. Barry Davis, FAA TRACON, stated that SDIA is only one of many airports in their jurisdiction; their other constituents ask for information as well, so these questions take time to research regarding these trends. Mr. Davis asked if the statistics indicate flights are just clipping the Noise Dots?

Ms. Knack believes this is correct, but would need to research.

Mr. Davis stated that they spend their time focused on the more egregious flights, which is less than one per day.

Question from ANAC: Mr. Wear asked for confirmation that there is no altitude threshold for early turns. He noted that in 2012 and prior there was a threshold for early turns, and the statistics would change after that date.

Ms. Knack confirmed both statements.

Question from ANAC: Ms. Danzo asked if the removal of LOWMA and the addition of ZZOOO will assist with flow control off the point, not over the point?

Mr. Cook confirmed that this would be an accurate assessment.

Question from ANAC: Ms. Danzo asked if there is an easy way to get the statistics on how many fly a POGGI vs a BORDER? Are the flights on the BORDER the majority of early turn violators?

Mr. Cook stated the statistics could be looked at. The BORDER is not necessarily the early turn violators.

Ms. Knack asked what the public could expect on November 10, when the ZZOOO procedure is implemented and if the public will see every aircraft fly over ZZOOO?

Mr. Cook said not every aircraft, but that the public could expect to see better climb rate on the departures.

Noise Complaints Statistics – Ms. Knack first mentioned that on October 7, the FAA turned off the data feed for the online flight tracking website (WebTrak). As there was no data for 11 days, there was a dramatic decrease in noise complaints. Ms. Knack indicated the system should be repopulated by next Friday, and acknowledged the public's frustration.

She reported that September's noise complaint numbers decreased from August. There were less individual complaints but still many complaints coming from a few homes. 216 households registered noise complaints, although the total number of complaints for those two months was 3,680. The total number of complaints for the year through September 30, was 28,676.

Question from ANAC: Mr. Webb stated he has received complaints from members of his community; they believe that the current chart is an attempt to minimize the impact of those who enter complaints, and they believe it is a shaming device to point out specific households. Mr. Webb did state that this data could be valuable, especially for new residents.

Ms. Knack said there is a difference between some residents who use an app, who might opt to push the app's button continuously to enter complaints, even though the complaints might not correlate to specific flights, and residents who report a concerning flight.

Question from ANAC: Ms. Watkins commented that it was important to see the actual complaint specifics - the actual reasons, broken down into the different communities and indicated that these details could be more closely investigated. What are their actual complaints?

Ms. Knack stated that typically they are too loud, too low, off course or curfew.

Question from ANAC: Ms. Danzo stated that she has stopped complaining unless it is an egregious flight, as it is tedious to enter and report the information. However, she feels it is important to complain, and asked for the top five (5) instances of complaints. She inquired if they come in clusters, is it fanning and missed approaches?

Ms. Knack stated that curfew violations and early turns are the top two complaint items. One particularly egregious flight had 36 complaints.

Question from ANAC: Ms. Danzo asked if this was 36 different households?

Ms. Knack stated that they received 36 complaints, and that one household could have five (5) individual residents submitting complaints.

Mr. Wilschetz offered that staff are attempting to understand this data, as there is a concern that five (5) complaints in one household might be interpreted as five times more valid than one complaint coming from one household. He asked the community to try to be clearer with the complaints, as this will be more beneficial for the Airport Authority to help the community.

Question from ANAC: Mr. Cole identified that residents feel comfort in the numbers of complaints. He suggested two lists or reports with greater details and statistics. These reports could potentially influence the FAA.

Question from ANAC: Mr. Swarens indicated that the charts were useful and the information was effective.

Question from ANAC: Mr. Huenefeld stated that he respects the frustration of the household who gave the largest amount of complaints, calculated about 30 per day; but blurs the statistics for the community, as there is a complaint for every flight. As staff also needs to address the hundreds of other households, he proposed that to meet criteria, the data be delineated into two sets of numbers (total complaints and complaints by households).

Question from ANAC: Mr. Wear offered a potential solution in which staff correlates an event, missed approach or early turn, and compare the data with the complaints, then determine if every complaint is valid. He suggested that if a community member reports an event, but does not know the specific time, it may not correlate with that specific event. He requested staff focus on those events that disturb quality of life and concern the community.

Ms. Knack stated she identified two items from Mr. Wear. The first, to record events that are disturbing quality of life, and the second, to record those events that are not in compliance with the FAA.

Question from ANAC: Mr. Wear stated that an example is to use an early turn event and correlate how many complaints at that time. He recommended this task to the Subcommittee.

Question from ANAC: Mr. Cole stated he agreed with Mr. Wear's request.

Ms. Knack said her staff could work on this.

Question from ANAC: Ms. Steuer stated that as she represents the Golden Hill and Bankers Hill area, she inquired if there have been egregious offenders those areas?

Ms. Knack stated that the east side is for arrivals and these flights are consistent and will come in only one way. It is unusual for Golden Hill to have an event, although as there are no arrival curfews, if there is a 4:00 am arrival, it could be disruptive.

Question from ANAC: Mr. Cole agreed with Mr. Wear's comment that there should be one chart in which the numbers reflect data from the different communities, and another report that correlates with the number of calls for early turns and other events.

Ms. Knack stated that she and her staff will work on these reports, but noted concern that staff will be stretched given now there are ANAC or Subcommittee meetings every month. She confirmed that they will work on the reports.

Question from ANAC: Mr. Swarens asked if the meetings should return to a quarterly calendar with the advent of the Subcommittee.

Mr. Wilschetz stated that it is important to meet bi-monthly for public to hear the progress, as there is still a high number of complaints.

Metroplex Update – Ms. Knack stated that the FAA's Environmental Assessment (EA) report was released on August 31, 2016, and there was finding of no significant impact (FONSI). The FAA is offering community engagement meetings and releasing tools on their website. The first meeting in San Diego is on October 27, from 6:00 to 9:00 pm at the McMillian Conference Center in Liberty Station. Ms. Knack encouraged members to visit the FAA website, to view the revisions to the Pt. Loma procedure. The community requested to retain LOWMA, the FAA listened and added a new waypoint further southwest (further away from the point). The ZZOOO waypoint will be active in November. The four (4) implementation dates of procedures will be in November, January, March, and April.

3. Public Comment

Ms. Gantwerk opened the public comment period. She reminded the public that each speaker would have three (3) minutes to speak and would not be able to go over the allotted time, to ensure all speakers get an opportunity. She reminded speakers to obtain a request card and write out their comments on the card.

Neal Esterly inquired if he calls in a complaint, as does his wife, is that considered one or two complaints? He stated a multiplier effect should be recognized, that if he calls, there are ten other people who want to call or email, but do not. Mr. Esterly was also frustrated at how much time it took to research offending planes, and he now reports only the more egregious low-flying violators. He'll often see planes take off and fly to 1,000 feet, then level off, with very little climbing. He indicated the graphic which lists noise complaints by home is an effective depiction of the issues, and also agreed with Mr. Wear's suggestions to expand on the data.

4. Approval of August 17 Minutes

A motion was made by Mr. Huenefeld to approve the August 17 meeting minutes and was seconded by Ms. Ranft. Mr. Swarens abstained as he was not represented during the last meeting.

5. Information Items

Airport Authority Update – Mr. Keith Wilschetz, Director Airport Planning, gave an update on the three-story Parking Plaza in front of Terminal 2 which started construction. Terminal 2's parking lot is currently closed, but the Airport is working to mitigate Harbor Drive traffic. The Parking Plaza is scheduled to open by summer of 2018. Mr. Wilschetz stated there are no other major CIPs, although some are in planning stages.

Total passenger numbers increased by 5% in September 2016, versus September of last year. The year-to-date passenger numbers are higher, currently at 3.4 % over last year. Takeoff and landing operations are lower from this time last year; currently the operations are at 5.1%, higher in September of 2016 versus September of 2015. As was forecasted, the year-to-date growth rates for operations are at 1.2%.

Question from ANAC: Mr. Cole inquired about an update on the Pacific Highway Park.

Mr. Wilschetz said that heavy construction will start this January or February. He explained that the park will have a sloped berm with landscaping for visitors to observe the airfield. As parking will be unavailable in the park, visitors will be encouraged to take public transportation off Palm Street or with Airport shuttles.

6. New Business

Ms. Gantwerk introduced Ms. Watkins as the Chair of the Subcommittee, who would give the report.

Ms. Watkin stated the first Subcommittee meeting last month was very productive. The members were first educated by presentations given by two FAA representatives and a commercial pilot. The committee voted to hold the meetings bi-monthly, and determined the topics for research and discussion over the following months' meetings through May 2017. These specific topics have been previously raised by the public and ANAC members. Ms. Watkins requested approval for the Subcommittee work plan.

Question from ANAC: Mr. Webb asked Ms. Watkins to identify the type of products the Subcommittee will generate from this research.

Ms. Watkins specified the Subcommittee will gather and present data, which ANAC had previously requested, on concerns such as early turns and curfew violations, with recommendations for possible solutions.

Mr. Swarens motioned to approve the Subcommittee work plan. Mr. Cole seconded the motion. ANAC members then voted and approved the Subcommittee work plan.

7. Next Meeting/Adjourn

The next meeting is scheduled for December 21, 2016, at 4:00 p.m. at the Administrative Building, 3225 N. Harbor Dr., San Diego, CA. The meeting was adjourned at 5:33 p.m.

PROGRAM STATISTICS

Applicants / Homes on the Wait List	672/1,441
Homes Completed in October & November 2016	0
Estimated Homes to Complete in CY 2016	136
Total Homes Completed (through November 30, 2016)	3,453

Updates

- Revised construction contract documents to FAA specifications.
- Submitted two packages (137 units) for FAA design review and approval.
- Meeting with FAA ADO representatives earlier today to discuss designs, contract documents and plan to move forward.

CURFEW VIOLATION REVIEW PANEL

Airport Noise Advisory Committee

December 21, 2016

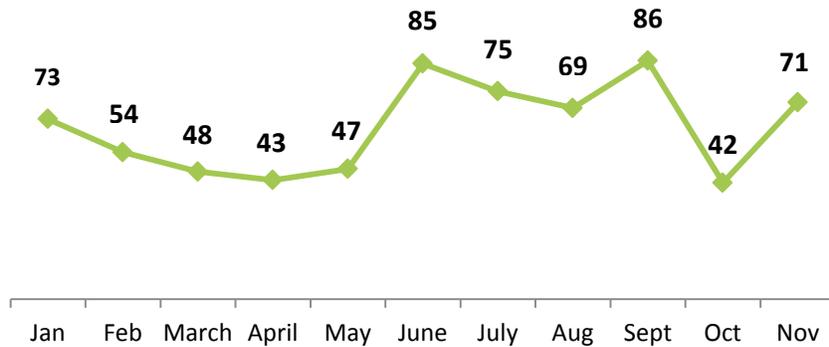
Curfew Violations for October - November, 2016

Date	Time	Runway	Flight ID	ID	Aircraft Type	Penalty
10/22/2016	1:05	27	Allegiant Air 4102	AAL	MD-83	\$2,000
11/7/2016	23:35	27	WestJet Airlines 4265	WJA	Boeing 738	No Penalty, local maintenance issue
11/19/2016	23:35	27	Frontier Airlines 1746	FFT	Airbus 319	Potentially \$2,000
11/27/2016	1:58	27	N620PJ	N620PJ	CL-600	Potentially \$2,000
11/27/2016	23:48	27	Southwest Airlines 4887	SWA	Boeing 737	Potentially \$6,000

Year	Total Curfew Violations
2012	36
2013	60
2014	47
2015	55
2016	55*

*Through November 30, 2016

2016 Missed Approaches by Month



Missed Approach Compliance with FAA Noise Dots

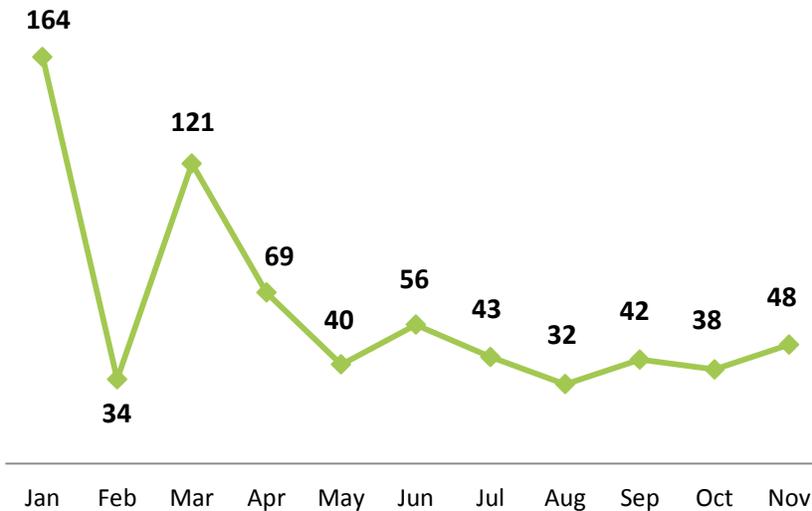
	Compliant	Non-Compliant
October	30	12
November	59	12

YEAR	Total Missed Approaches	Total Arrivals	% of Total Arrivals that are Missed Approaches
2012	692	93,126	0.7
2013	659	93,985	0.7
2014	637	95,881	0.7
2015	748	96,856	0.8
2016	693*	90,367*	0.8

*Through November 30, 2016

Note: Flight track data from 2012 through current was reviewed and missed approach numbers reflect an increased accuracy.

2016 Early Turns by Month



Note: Previous months in 2016 were modified to reflect early turns at all altitudes.

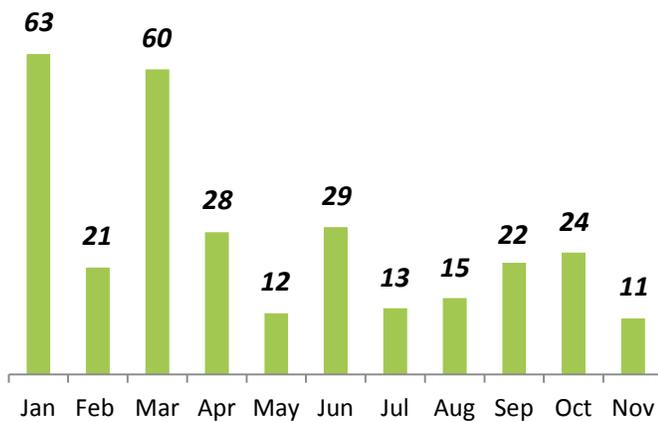
Historical vs. Current Data

YEAR	Below 6,000'	All altitudes
2012	316	538
2013	200	829
2014	338	1,105
2015	467	1,293
2016	488*	687*

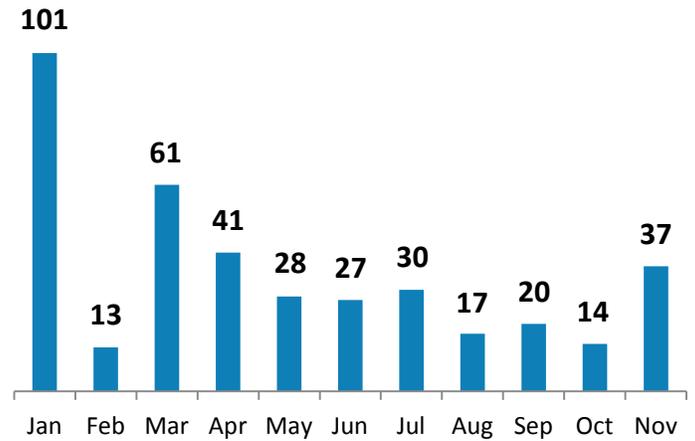
*Through November 30, 2016

Note: Flight track data from 2012 through current was reviewed and early turn numbers reflect an increased accuracy.

Over Point Loma



Over Mission Beach



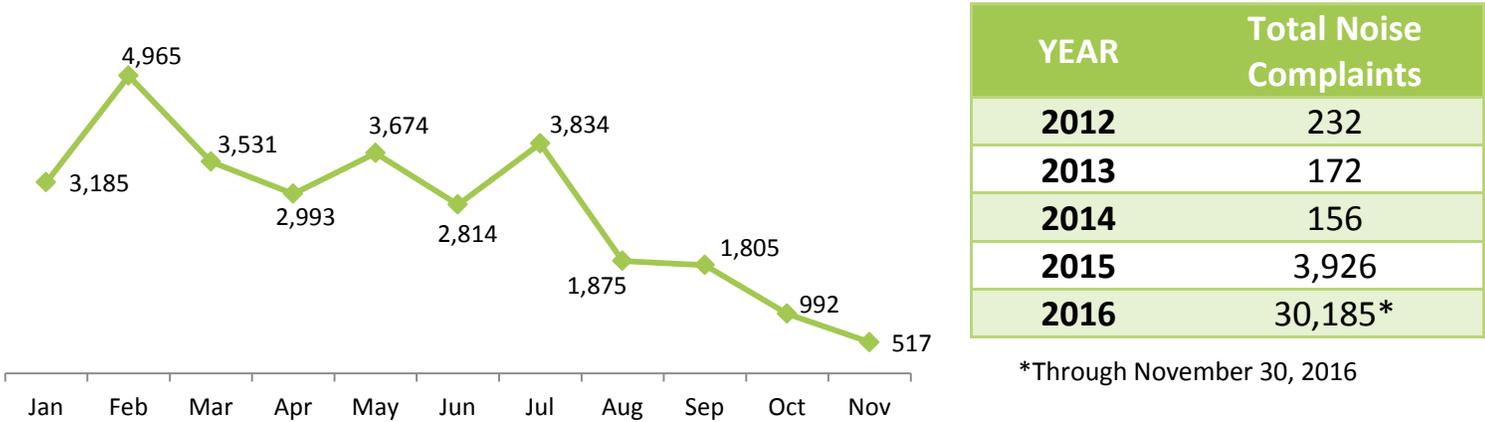
Note: Previous months in 2016 were modified to reflect early turns at all altitudes.

Early Turns by Operator (Oct. – Nov. 2016)

Count	Airline	Aircraft
10	General Aviation	-
7	Southwest Airlines	B737
6	United Airlines	A320, B737, B738, B739
3	Delta Air Lines	B739, B752
2	Alaska Airlines	B739
2	jetBlue Airways	A320
2	Air Canada Rouge	A319
1	Aeromexico	E190
1	American Airlines	B738
1	Frontier Airlines	A319

Count	Airline	Aircraft
22	General Aviation	-
13	United Airlines	A319, A320
9	Southwest Airlines	B737
3	SkyWest Airlines	CRJ7, E75L
2	Delta Air Lines	A319
1	Compass Airlines	E75L
1	Virgin America Inc.	A320

2016 Noise Complaints by Month



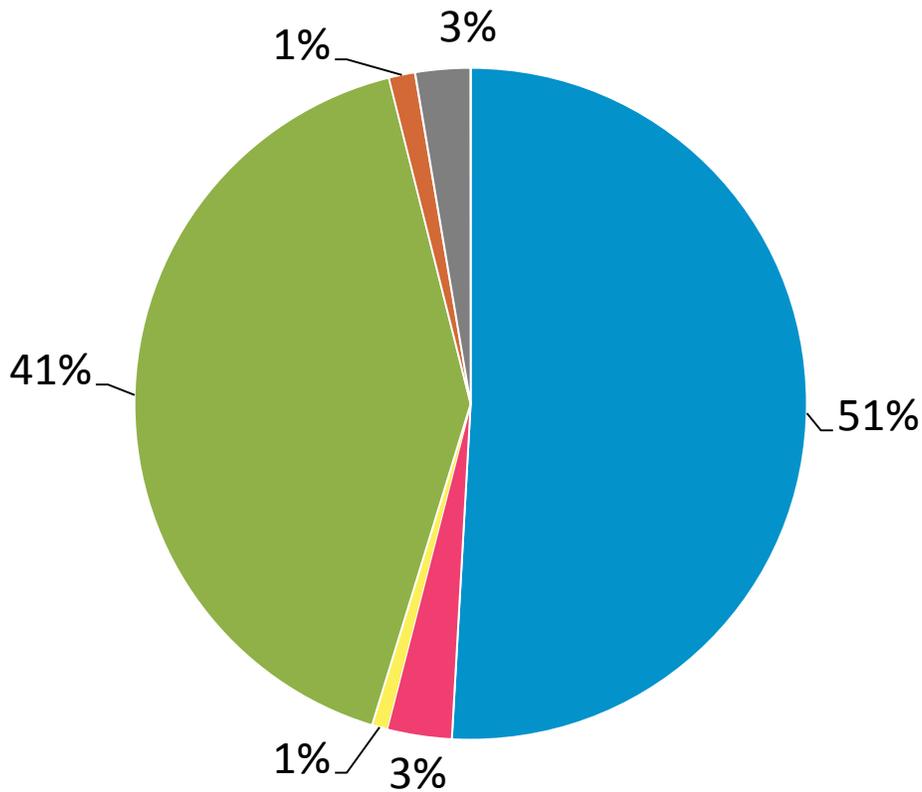
YEAR	Total Noise Complaints
2012	232
2013	172
2014	156
2015	3,926
2016	30,185*

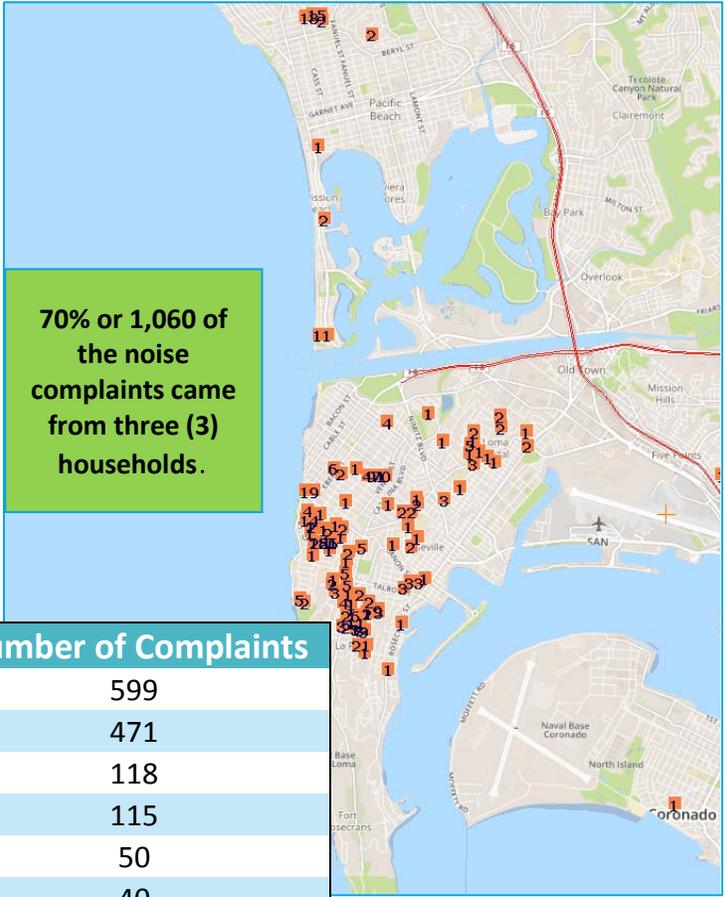
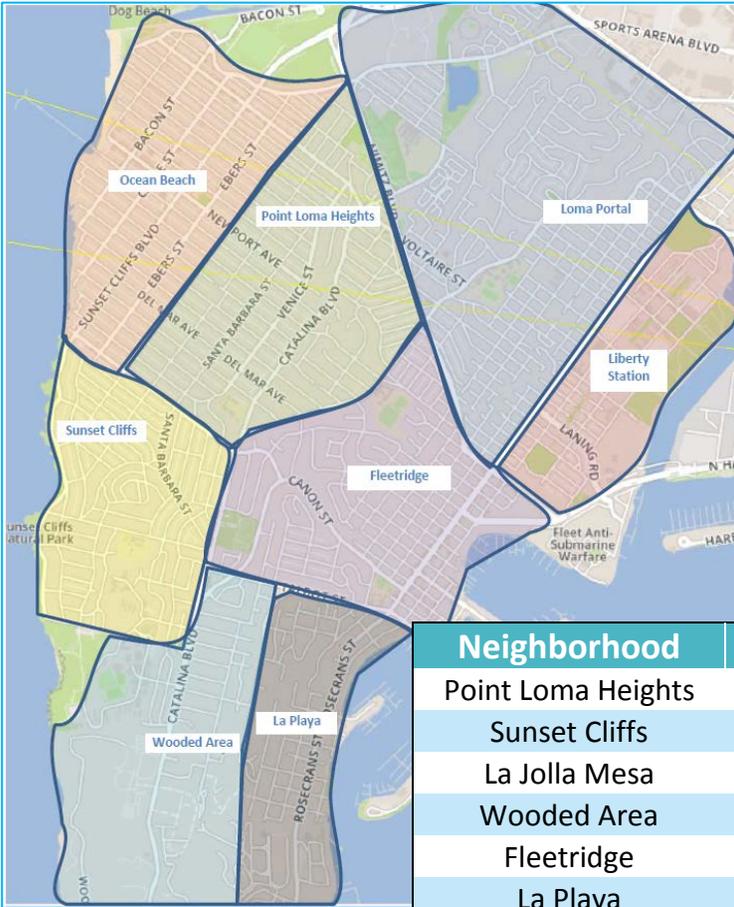
*Through November 30, 2016

Top Five Noise Concerns

Date of Noise Complaint	Noise Complaint Event Time	Noise Event	Number of Complaints
10/18/2016	5:01 a.m.	Medical Emergency Flight	5
10/27/16	9:47 a.m.	Missed Approach, traffic separation from departing aircraft	5
11/27/2016	11:31 p.m.	Southwest Airlines Departure, actual departure time 11:29 p.m.	5
10/10/16	7:25 p.m.	FedEx DC10 departure, compliant with Noise Dots and overflow LOWMA	4
10/22/16	1:06 a.m.	Allegiant Air Football Charter, curfew violation	4
11/27/16	11:48 p.m.	Southwest Airlines, curfew violation	4

Breakdown of Complaint Reasons October – November 2016





Neighborhood	Number of Complaints
Point Loma Heights	599
Sunset Cliffs	471
La Jolla Mesa	118
Wooded Area	115
Fleetridge	50
La Playa	40
Loma Portal	35
Ocean Beach	30
Mission Beach	13
North Park	7
Bonita	6
Midtown	5
Encanto	3
Bird Rock	3
La Mesa	3
Pacific Beach	3
El Cerrito	2
Liberty Station	2
South Park	2
Alpine	1
Coronado	1
Serra Mesa	1
Total	1,509



SAN DIEGO INTERNATIONAL AIRPORT

AIRPORT NOISE MITIGATION

December 13, 2016

Fly Quiet Report

3rd Quarter 2016

Prepared by:

Sjohnna Knack
Program Manager, Airport Noise Mitigation
San Diego County Regional Airport Authority



1.0 Summary of 3rd Quarter 2016 Report

This is the inaugural report for the San Diego International Airport's (SAN) Fly Quiet Program. Each quarter, the Airport Noise Mitigation Office will publish this report that will outline the trends on how quietly each operator is flying in and out of SAN. In Section 3.0 you will find a detailed description of the elements within the Fly Quiet Program.

Specific trends that were observed in this report include:

- United Airlines and Southwest Airlines had several early turns which brought their overall ranking down. Airport Noise Mitigation staff has already been working with both carriers to educate them on the early turns to see if they can fly further west before initiating their turns. There are also meetings scheduled with the FAA's Air Traffic Control (ATC) management. We anticipate with these outreach efforts, both carrier's overall ranking and scores will increase.
- Curfew violations brought a couple operators' scores down. Carriers such as Air Canada Rouge, Delta Air Lines and British Airways will have increased scores with fewer curfew violations. It should be pointed out that United Airlines cancelled six flights and American Airlines cancelled one flight during this period instead of violating the curfew; these cancellations increased their score.
- Fleet quality for individual airlines will improve as older, louder aircraft are replaced.
- Overall, operators at SAN are performing very well in the categories that the community has currently identified as areas of concern. Continued efforts with the FAA on early turns, education to Chief Pilots and continued outreach on the curfew will likely increase the scores and overall ranking of individual operators.
- This report will serve as a baseline for the Airport Noise Mitigation office to use to view any significant trends for individual operators. It will allow staff to focus efforts where necessary to help decrease noise impacts in the surrounding communities.

2.0 Fly Quiet Program Description

The purpose of the San Diego International Airport's (SAN) Fly Quiet Program is to encourage individual commercial operators to operate as quietly as possible in the San Diego area by acknowledging those operators that attempt to follow the noise abatement goals of the airport. The program creates a participatory atmosphere of the operators working with the airport and community to actively reduce noise by grading an operator's performance and by making the scores available to the public.

The Fly Quiet Program offers a dynamic venue for reviewing noise abatement initiatives by praising and publicizing active participation rather than a system that admonishes violations from essentially voluntary procedures.

2.1 Goals

The overall goal of the Fly Quiet Program is to influence commercial operators to operate as quietly as possible in the San Diego area by acknowledging those operators that make the greatest effort.

Monitoring, collecting, and analyzing comprehensive amounts of operational and noise data highlights both airport trends and individual operator performance on specific noise abatement programs. Fly Quiet Program data is quantified and translated into quarterly reports for each operator rated in the Fly Quiet Program at SAN.

2.2 Reports

Fly Quiet reports communicate results in a clear, understandable format on a scale of 0-10, zero being poor and ten being the best. *(Note: an operator can have a score higher than 10 in the Curfew Violations element only, if they had no violations and also cancelled flights to avoid a Curfew Violation).* This allows for an easy comparison between operators over time. Individual operator scores are computed and reports are generated each quarter. These quantitative scores allow operator management and flight personnel to measure exactly how they stand compared to other operators and how their proactive involvement can positively reduce noise in the San Diego area. The overall airport score is tracked to measure the overall improvement over time.

2.3 Elements

Currently the Fly Quiet Program scores commercial operators on the following three elements that will be described in detail in the next section.

- Curfew Violations
- Early Turns
- Fleet Noise Quality

2.3.1 Curfew Violations

SAN has an existing curfew violations system in place as part of the Airport Use Regulations that may result in a monetary fine if an operator violates the curfew. All departures are restricted from 11:30 p.m. to 6:30 a.m. Stage 2 aircraft departures are restricted from 10:00 p.m. to 7:00 a.m. Any aircraft may arrive at SAN 24 hours a day.

While the authority to control aircraft in flight at airports lies solely with the FAA, prior to 1990 airports could adopt regulations to restrict hours of operations for certain aircraft types or for the airport as a whole. SAN's curfew violations system was developed in 1989. The program is mandatory, however there are exemptions for lifeguard and emergency flights; compliance is at the discretion of the pilot or operator. Penalties may be waived if there are local issues impacting safety (such as weather or maintenance of the aircraft).

The curfew violations system includes administrative fines: \$2,000 for the first violation by a particular operator in a compliance period; \$6,000 for the second violation in a compliance period; and, \$10,000 for the third violation in a compliance period. Additionally, a multiplier is added to reflect the number of violations from the previous compliance period. Each compliance period is 6 calendar months, starting in January and July. The Fly Quiet Program will formalize working with the operators to reduce the number of curfew violations of departing aircraft.

2.3.2 Early Turns (FAA Noise Dots)

Aircraft departing SAN using Runway 27 are asked to fly runway heading until reaching a defined distance, in an attempt to keep aircraft from making extraneous noise, over residential areas, while

turning. These areas are defined as the FAA Noise Dots. A corridor/gate was established based on the FAA Noise Dots and departing aircraft that do not pass through that corridor/gate, regardless of the time of day, are defined as turning early. The Fly Quiet Program will formalize working with the operators to reduce the number of early turns of departing aircraft.

2.3.3 Fleet Noise Quality

The Fleet Noise Quality score evaluates the noise contribution of each operator's fleet as it actually operates at SAN. Operators generally own a variety of aircraft types and schedule them according to both operational and marketing considerations. The Fly Quiet Program assigns a higher rating or grade to operators operating quieter, new generation aircraft, while operators operating older, louder technology aircraft would rate lower. The goal of this measurement is to fairly compare operators – not just by the fleet they own, but by the frequency that they schedule and fly particular aircraft into SAN.

Historically airports have rated fleet noise quality by the relative percentage of Stage 2 vs. Stage 3 operations. Since the completion of the phase out of Stage 2 aircraft mandated by the Airport Noise and Capacity Act (ANCA) of 1990, all aircraft in the U.S. over 75,000 pounds meet the more stringent Stage 3 standards. However, within the allowable Stage 3 criteria, there is a wide range of noise levels, and the Federal Aviation Administration (FAA) does not distinguish between these aircraft types. There is a Stage 4 aircraft type, applicable to aircraft with a type certification issued after January 1, 2006; all aircraft manufactured today that are over 12,500 pounds meet these Stage 4 standards. The majority of the commercial aircraft fleet remains Stage 3.

The method used here bases an operator's Fleet Noise Quality Rating on established 14 CFR Part 36 noise certification data. For each aircraft type, Part 36 specifies allowable noise levels at three measurement locations: approach, departure, and sideline. Part 36 allowable noise limits increase with weight, so that larger aircraft, serving more passengers, are not penalized as compared to smaller types. The rating method for the Fleet Noise Quality rating totals the difference between each aircraft's certified noise levels at all three measuring points and the Stage 3 standard for that weight and number of engines. Aircraft with the greatest number of decibels below Stage 3 threshold are rated the best.

Similar to and consistent with Part 36, the Fleet Noise Quality Rating allows for higher noise levels for larger aircraft. It is important to credit larger aircraft serving more passengers, because they offer more air service in fewer flights and less total noise than multiple operations in smaller aircraft types.

3.0 Reports

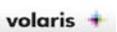
The following pages contain the Fly Quiet Summary Report and the individual element reports for the 3rd Quarter of 2016. The Fly Quiet Summary Report contains the total Fly Quiet score and ranking of the commercial operators.

Higher Number = Higher Score
Summary Report ranks by
“Quietest” to “Loudest” operator

Summary Report								
San Diego International Airport Fly Quiet Program								
3rd Quarter 2016 (July 1, 2016 - September 30, 2016)								
Airline Code	Number of Operations	Percent of Total Operations	Curfew Violations Score	Early Turns Score	Fleet Noise Quality Score	Total Fly Quiet Score	Ranking	
JAL 	182	0.4%	10.0	10.0	10.0	30.0	1	
NKS 	1,194	2.7%	10.0	9.0	9.0	28.0	2	
FFT 	534	1.2%	10.0	10.0	8.0	28.0	2	
VRD 	1,012	2.3%	10.0	10.0	7.0	27.0	4	
VOI 	62	0.1%	10.0	10.0	7.0	27.0	4	
ASA 	3,904	9.0%	10.0	10.0	6.0	26.0	6	
HAL 	178	0.4%	10.0	10.0	6.0	26.0	6	
AAY 	168	0.4%	10.0	10.0	6.0	26.0	6	
GTI 	130	0.3%	10.0	10.0	6.0	26.0	6	
WJA 	204	0.5%	10.0	10.0	5.0	25.0	10	
UPS 	200	0.5%	10.0	10.0	5.0	25.0	10	
SCX 	178	0.4%	10.0	10.0	5.0	25.0	10	
SKW 	2,164	5.0%	10.0	9.0	5.0	24.0	13	
FDX 	602	1.4%	10.0	8.5	5.0	23.5	14	
UAL 	4,710	10.8%	16.0	2.0	5.0	23.0	15	
JBU 	882	2.0%	5.0	8.0	10.0	23.0	15	
AAL 	4,738	10.9%	11.0	5.0	4.0	20.0	17	
CPZ 	780	1.8%	8.0	10.0	2.0	20.0	17	
ROU 	514	1.2%	0.0	9.0	9.0	18.0	19	
DAL 	3,848	8.8%	2.0	6.5	6.0	14.5	20	
SWA 	17,168	39.4%	8.0	2.0	4.0	14.0	21	
BAW 	180	0.4%	0.0	10.0	1.0	11.0	22	

Higher Number = Higher Score
Curfew Report ranks by number of operations.

Curfew Violations Report
San Diego International Airport Fly Quiet Program
3rd Quarter 2016 (July 1, 2016 - September 30, 2016)

Airline Code		Number of Operations	Percent of Total Operations	Number of Curfew Violations Penalized	Number of Curfew Violations Not Penalized	Curfew Violations Score
SWA		17,168	39.4%	1	0	8.0
FFT		534	1.2%	0	0	10.0
JAL		182	0.4%	0	0	10.0
HAL		178	0.4%	0	0	10.0
ROU		514	1.2%	6	2	0.0
WJA		204	0.5%	0	0	10.0
VOI		62	0.1%	0	0	10.0
AAV		168	0.4%	0	0	10.0
AAL		4,738	10.9%	1	0	11.0
NKS		1,194	2.7%	0	0	10.0
UAL		4,710	10.8%	0	0	16.0
DAL		3,848	8.8%	4	0	2.0
ASA		3,904	9.0%	0	0	10.0
VRD		1,012	2.3%	0	0	10.0
BAW		180	0.4%	6	0	0.0
SCX		178	0.4%	0	0	10.0
JBU		882	2.0%	2	1	5.0
FDX		602	1.4%	0	0	10.0
UPS		200	0.5%	0	0	10.0
CPZ		780	1.8%	1	0	8.0
SKW		2,164	5.0%	0	0	10.0
GTI		130	0.3%	0	0	10.0
Non Scheduled Operators				5	0	-
Total		43,532	100%	26	3	-
Average		-	-	-	-	8.6

Operators Who Cancelled a Flight to Avoid a Curfew Violation
United Airlines - 6, American Airlines - 3

Higher Number = Higher Score
Early Turns Report ranks by
number of operations.

Early Turns Report						
San Diego International Airport Fly Quiet Program						
3rd Quarter 2016 (July 1, 2016 - September 30, 2016)						
Airline Code		Number of Operations	Percent of Total Operations	Number of Early Turns	Percent of Early Turns from Number of Departures	Early Turns Score
SWA		17,168	39.4%	11	0.1%	2.0
FFT		534	1.2%	0	0.0%	10.0
JAL		182	0.4%	0	0.0%	10.0
HAL		178	0.4%	0	0.0%	10.0
ROU		514	1.2%	2	0.8%	9.0
WJA		204	0.5%	0	0.0%	10.0
VOI		62	0.1%	0	0.0%	10.0
AAY		168	0.4%	0	0.0%	10.0
AAL		4,738	10.9%	8	0.3%	5.0
NKS		1,194	2.7%	1	0.2%	9.0
UAL		4,710	10.8%	17	0.7%	2.0
DAL		3,848	8.8%	6	0.3%	6.5
ASA		3,904	9.0%	0	0.0%	10.0
VRD		1,012	2.3%	0	0.0%	10.0
BAW		180	0.4%	0	0.0%	10.0
SCX		178	0.4%	0	0.0%	10.0
JBU		882	2.0%	3	0.7%	8.0
FDX		602	1.4%	2	0.7%	8.5
UPS		200	0.5%	0	0.0%	10.0
CPZ		780	1.8%	0	0.0%	10.0
SKW		2,164	5.0%	1	0.1%	9.0
GTI		130	0.3%	0	0.0%	10.0
Non Scheduled Operators				66	-	-
Total		43,532	100%	117	-	-
Average		-	-	-	-	8.6

Higher Number = Higher Score
Fleet Noise Quality Report ranks
by number of operations.

Fleet Noise Quality Report
San Diego International Airport Fly Quiet Program
3rd Quarter 2016 (July 1, 2016 - September 30, 2016)

Airline Code		Number of Operations	Percent of Total Operations	Sub Score	Fleet Noise Quality Score
SWA		17,168	39.4%	12.3	4.0
FFT		534	1.2%	16.4	8.0
JAL		182	0.4%	25.2	10.0
HAL		178	0.4%	14.1	6.0
ROU		514	1.2%	17.5	9.0
WJA		204	0.5%	13.2	5.0
VOI		62	0.1%	15.5	7.0
AAY		168	0.4%	14.7	6.0
AAL		4,738	10.9%	12.3	4.0
NKS		1,194	2.7%	17.6	9.0
UAL		4,710	10.8%	13.7	5.0
DAL		3,848	8.8%	14.3	6.0
ASA		3,904	9.0%	14.1	6.0
VRD		1,012	2.3%	15.7	7.0
BAW		180	0.4%	9.3	1.0
SCX		178	0.4%	13.6	5.0
JBU		882	2.0%	19.6	10.0
FDX		602	1.4%	13.4	5.0
UPS		200	0.5%	13.1	5.0
CPZ		780	1.8%	10.3	2.0
SKW		2,164	5.0%	13.5	5.0
GTI		130	0.3%	14.6	6.0
Total		43,532	100%	-	-
Average		-	-	14.7	6.0