Gillespie Field Community Relations Traffic Pattern Review

Final

September 2012

Prepared by

C&S COMPANIES®

Gillespie Field

Community Relations Traffic Pattern Review

September 2012

Section 1 – Introduction

C&S Engineers, Inc., has been contracted by the County of San Diego to prepare a community relations traffic pattern review of aviation activity at Gillespie Field Airport (SEE). Preparation of this report involved discussions with community members, review of Federal Aviation Administration (FAA) guidance, review of previously completed documentation specific to operations at SEE, and discussions with the FAA Airport Traffic Control Tower (ATCT) and the Flights Standards District Office (FSDO).

The objective of this study is to review existing airport traffic patterns for operations on Runways 27R and 27L while addressing community concerns relating to safety of the traffic patterns. The review will address the following questions:

- What are the existing traffic patterns to Runways 27R/27L at SEE?
- What steps are taken to develop departure and arrival procedures at airports?
- How were departure and arrival procedures developed at SEE?
- Are there alternatives to current traffic patterns for Runways 27R/27L at SEE that would improve safety of air traffic flow?

Section 2 –Existing Airport Conditions

Gillespie Field is located in the City of El Cajon within San Diego County. The Airport is owned by the County of San Diego and operated by its Department of Public Works (DPW). The airport elevation is 388 feet above mean sea level (MSL). Although the airport consists of three runways, (9L/27R, 9R/27L, and 17/35), this study focuses on operations on Runway 27L,[1] and Runway 27R. Whenever prevailing wind allows, both runways are used for arrival, departure and touch-and-go operations.

[1] Touch-and-go operations occur when an aircraft lands and departs on a runway without stopping or exiting the runway.

Aircraft operate under two different procedures defined by Federal Aviation Regulations (FAR). These include Visual Flight Rules (VFR) and Instrument Flight Rules (IFR). Pilots operate under VFR when weather conditions meet the established federal minimums and thus allow pilots sufficient time to see a runway for landing, as well as avoid other aircraft during flight and obstacles on the ground. When weather conditions do not permit VFR operations, pilots must fly under IFR and rely on cockpit instrumentation, navigational aids, and/or air traffic control. Gillespie Field is equipped with instrument approaches and therefore operates under both procedures. Due to excellent weather conditions (no clouds and high visibility) approximately 90 percent of the operations at SEE are VFR. This allows for more variability in flight tracks when pilots arrive and depart from the Airport.

The FAA operates Gillespie Field's ATCT between the hours of 7 a.m. and 9 p.m. During this time, the ATCT controls arrivals and departures at the airport, as well as any aircraft transitioning through its designated airspace. However, there is additional control provided by adjacent and interrelated entities. The Los Angeles Air Route Traffic Control Center (ARTCC) delegated the Southern California Terminal Radar Approach Control (SOCAL TRACON) facility with an approach control area within which it is responsible for all IFR arrivals, departures and overflights. As Gillespie Field lies within this area, all of its IFR operations are controlled by the TRACON. The TRACON assists aircraft that are transitioning from the en route phase of flight, (controlled by the ARTCC), to the Airport and vice versa. Control then transfers over to the Gillespie Field ATCT for the aircraft's final approach clearance and landing.

Navigational Aids

Instrument approach procedures are divided between precision, Approach with Vertical Guidance (APV), and non-precision procedures.[2] Both and precision and APV approaches provide both vertical and horizontal guidance to aircraft pilots. Non-precision approach procedures provide only horizontal guidance so that pilots rely on other means to determine when to descend to a lower altitude along the approach course.

Currently, most precision approach procedures are provided by navigational aids located on the ground. However, the FAA has begun to replace the older ground-based systems with satellite-based aids such as the Global Positioning System (GPS) as the technology becomes more readily available. Information relayed from the satellite technology to pilots is further strengthened by Ground Based Augmentation Systems (GBAS) that improve the accuracy of the spatial data. The impact that the switch will have on aircraft operations is currently being reviewed by the FAA at airports nationwide.

[2] Defined in section 5-4-5.7 of the Aeronautical Information Manual (AIM) as "an instrument approach based on a navigation system that is not required to meet the precision approach standards of ICAO [International Civil Aviation Organization] Annex 10 but provides course and glidepath deviation information."

Gillespie Field has two non-precision instrument approach procedures that assist with IFR operations. Gillespie Field's instrument approaches are listed below:

Gillespie Field Instrument Approach Aids

Approach Procedure	Location	Procedure	Lowest Landing Minimum Above Ground Level (AGL)
Gillespie Localizer	On-airport	Circling	1200'/1 ¼ mile
GPS	Satellite	LP R/W 17	1000'/1 ¼ mile

Runway 27R is equipped with the following visual aids to assist pilots in locating the runways at night or during reduced visibility:

Gillespie Field Visual and Navigational Aids

Navigational/Visual Aids	Location
Runway End Identifier Lights (REIL)	Runway 27R
Precision Approach Path Indicator (PAPI)	Runway 27R
Localizer	Runway 27R
Fan Marker (GRIGG)	3.1 nautical miles from approach end of Runway 27R

Note: Additional visual and navigational aids exist on the airport but do not relate to Runways 27R and 27L.

Because Runway 27L is not equipped with lighting it is closed from dusk to dawn.

Airspace

There are 16 public use and military airports in the County of San Diego. The Airport is located within Class D airspace, which resembles a cylinder of 4.3NM radius, extending from the surface to 2,400 feet MSL. Two-way radio communication must be established between the pilot and ATCT prior to entering this airspace and maintained until they have exited it.

The below image shows the complexity of the airspace surrounding Gillespie Field, which greatly restricts the arrival and departure procedures at the Airport.

Airspace Surrounding Gillespie Field

Source: AirNav, Accessed May 14, 2012

Aviation Activity

Gillespie Field is a general aviation airport that serves primarily single- and multi-engine aircraft. Operations include air taxi, general aviation (both local and itinerant), and some military activity. According to the FAA's Terminal Area Forecast Report, operations have declined in recent years from nearly 300,000 in 2007 to 217,846 in 2010.

There are several flight schools operating at the Airport, including those that offer training to non-U.S. citizens. Prior to beginning training, these foreign students must follow certain procedures that include the following:

1. As explained in the letter dated May 9, 2012, from the U.S. Department of Homeland Security (see **Appendix E – Flight Training Procedures**), a potential student must complete the following process:

a. The vetting student must apply to a flight school that has been certified by the U.S. Immigration and Customs Enforcement's (ICE) Student Exchange Visitor Program (SEVP).
b. A designated official at that school will then review the foreign student's application and issue a Form 1-20M-N, Certificate of Eligibility for Nonimmigrant (M-1) Student Status for Vocational Students.
c. Applicant must then apply for an M-1 student visa with the U.S. Department of State (DOS), which will determine whether or not to issue the visa.
d. The vetting student will need to apply for entry into the U.S. at a designated port of entry, where he or she will be examined by a U.S. Customs and Border Protection (CBP) officer who will determine whether the student is admissible into the U.S.

2. In addition to the required approval by DOS and CBP, potential students must be vetted by the DHS's Transportation Security Administration (TSA). As shown in the TSA training checklist within **Appendix E – Flight Training Procedures**, the following procedures must be adhered to in compliance with TSA guidelines in order to provide flight training for sport, recreational, private certificates, or instrument, multi-engine rating to non-U.S. citizens:

    a. Flight training provider registers with TSA.
    b. Student submits a flight training request with TSA.
    c. Flight training provider confirms student's request.
    d. Student pays TSA $130 processing fee.
    e. Flight training provider and candidate receive preliminary TSA decision.
    f. Student submits fingerprints to TSA.
    g. TSA confirms receipt of fingerprints and fee and allows flight training to begin.
    h. Student photo taken on first day of flight training and sent to TSA.
    i. TSA notifies flight training provider if training needs to stop.

TSA also provides guidelines for validation of flight instructors[3]:

1. Flight schools and instructors must complete initial and recurrent security awareness training for each active instructor and any employee in direct contact with flight students. They must also receive and maintain documentation of this training and have such documentation available for TSA inspections as directed by 49 Code of Federal Regulations (CFR) 1552 Flight Schools.

[3] Note: these validation rules apply only to training of aircraft weighing less than 12,500 pounds and for sport, recreational, private pilot certificate, or the instrument or multi-engine rating.

2. If training U.S. citizens for sport, recreational, private certificates, or instrument, multi-engine ratings, they must check student's proof of U.S. citizenship and maintain a copy of the student's ID for five years or endorse the instructor and student logbook (see **Appendix E – Flight Training Procedures**).

Existing Safety and Noise Abatement Measures

To address public concern the County of San Diego has implemented the following safety and noise abatement measures at SEE:

- Recommended noise abatement traffic pattern for Runway 27L as stated below in *Section 4*.
- Recommended noise abatement departure pattern for Runway 27R as stated below in *Section 4.*
- Touch-and-go operations and jet take-offs are discouraged during nighttime hours from 10 p.m. to 7 a.m. for noise abatement purposes. (There can be no mandatory time restrictions on operations as a result of the Congressional Airport Noise and Capacity Act [ANCA] of 1990.)
- Gillespie Air Traffic Control's *Pilot Resource Guide* lists several best practices developed by the FAA to enhance aircraft operating safety. These address pre-flight planning, taxiing, take-off, landing, and vehicle driving on the airfield (see **Appendix B – Airport Information**).
- Airport Noise Reporting Form available on the County of San Diego's website.

Pilot compliance with Noise Abatement Procedures is voluntary. Pilots are not directed to comply, but are urged to abide by recommended procedures. County of San Diego Airports strongly advocates noise abatement procedures through various outreach methods, such as, publications (Pilot Resource Guide and Airport Facility Directory), letters to users, airport's webpage and airfield signage.

Future Plans

The County of San Diego DPW has proposed to redevelop 70 acres of vacant land in the southeastern corner of Gillespie Field for aviation support purposes. Redevelopment would include facility improvements such as new taxiways, apron area, and drainage facilities on 15 acres of land and private aviation-use development on the remaining 55 acres. The County has prepared a Program Environmental Impact Report (PEIR) to satisfy California Environmental Quality Act (CEQA) requirements. The PEIR approached environmental compliance on a program level, as opposed to a project level, because the scope, scale and funding for individual

projects have not been identified. When specific project components are defined and funded additional measures will be taken to determine if further CEQA documentation is necessary.

Section 3 –What are the existing traffic patterns to Runways 27R/27L at Gillespie Field Airport?

According to the Gillespie Air Traffic Control's *Pilot Resource Guide*, pilots operating under Visual Flight Rules (VFR) should utilize Runway 27R when departing to the north or east; Runway 27L should be used for south and west departures, aircraft performance permitting (see **Appendix B – Airport Information)**. This provides for an organized operating environment and assists the ATCT in supporting operations. The existing arrival, departure, and touch-and-go flight paths for Runways 27R and 27L are presented below.

Runway 27R

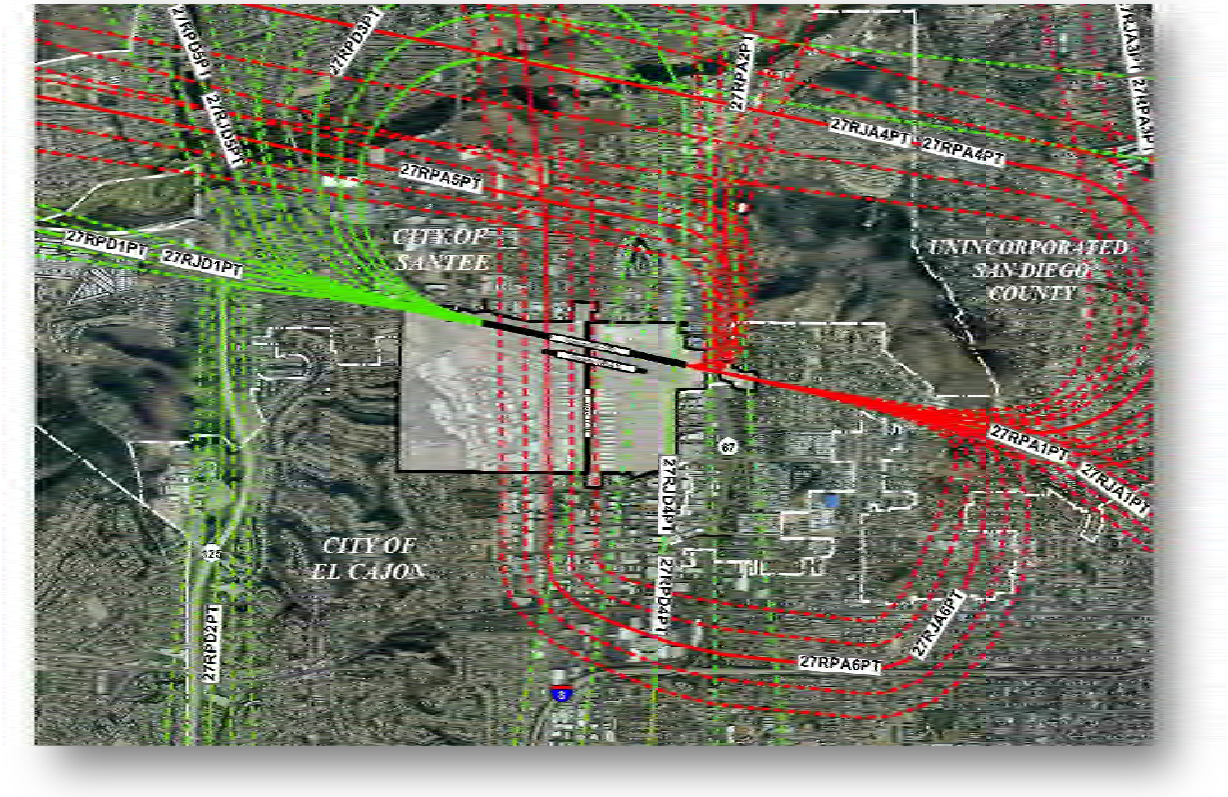
The recommended noise abatement departure pattern for Runway 27R ask pilots to fly runway heading (straight-out) until they reach 800 feet MSL before turning crosswind.

In 2008, field observations were completed to observe and log aircraft operations, verify the use of flight tracks by aircraft category, and note any new flight paths being utilized (see **Appendix C – Noise Analysis**). At the County's request, efforts were focused on arrival paths to Runway 27R and initial departure headings from Runway 27R.

There are three standard arrival routings to an airport – a downwind entry, a base entry, and a straight-in approach. A pilot may request a short approach, which reduces flight time by compressing the standard pattern. During the 2008 observations no jet aircraft utilized the short approach to Runway 27R, which involves aircraft coming from the north or west and approaching the runway west of Rattlesnake Mountain. Only 26 percent of all arriving propeller aircraft utilized this approach. The remaining 74 percent of arriving propeller aircraft and all arriving jets that landed on Runway 27R used the straight-in approach that originates east of Rattlesnake Mountain.

There are two types of departure paths from Runway 27R, those by pilots operating under VFR and those by pilots operating under IFR (refer to *Section 2* regarding the differences between these two Rules). There are two IFR departure paths from Runway 27R; one path leads to the northwest and the other makes a right 270 degree turn over the top of the airport towards the south. There are four VFR departures; the first turns right downwind, the second leads straight out from the runway, the third turns right at a 270 degrees, and the last turns left downwind. According to field observations, the majority of aircraft utilize the path that involves turning right in a northwest direction. Arrival and departure tracks for Runway 27R are shown below.

Arrival and Departure Tracks for Runway 27R



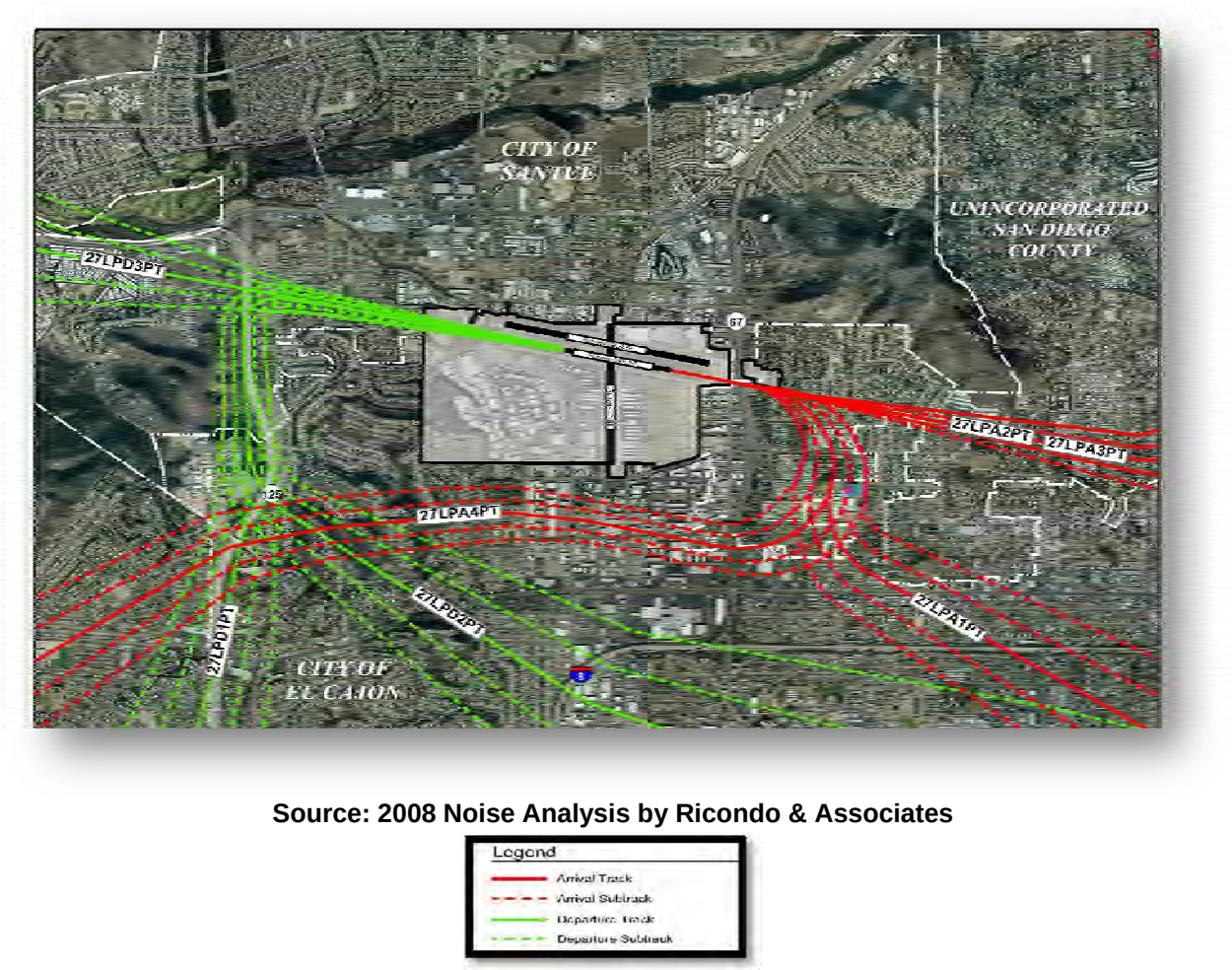
Source: 2008 Noise Analysis by Ricondo & Associates

As mentioned in *Section 3*, Runway 27L is closed from dusk to dawn because it is not equipped with lighting. This allows for left-hand traffic from Runway 27R during nighttime hours.

Runway 27L

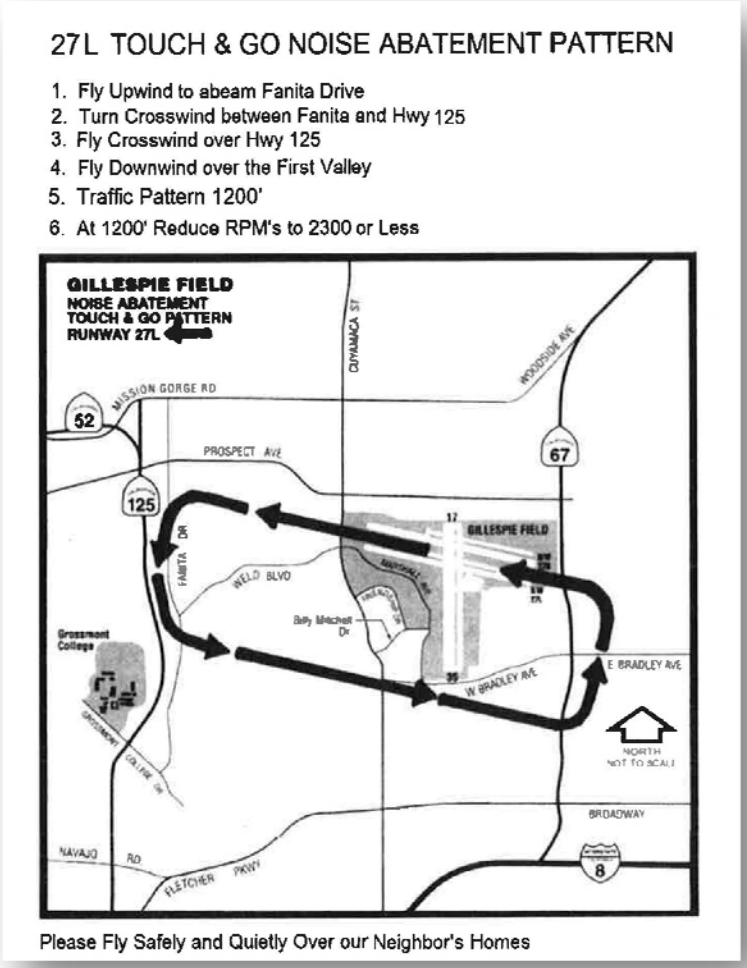
There are three standard arrival tracks to Runway 27L; a downwind entry, a base entry, and a straight-in approach. Typical Runway 27L departure tracks are a straight-west path, a left downwind path, and a path that involves turning left over State Highway Route 125 toward the south. The runway's arrival and departure paths are shown in the figure below:

Arrival and Departure Tracks for Runway 27L



Source: 2008 Noise Analysis by Ricondo & Associates

The current touch-and-go noise abatement pattern for Runway 27L was implemented in 2001 in response to noise and safety concerns raised by surrounding communities and the Fletcher Hills Highlands Association (see figure below and Current Runway 27L Pattern in **Appendix D – Noise Abatement**). This pattern directs pilots to fly upwind from Runway 27L to abeam Fanita Drive, turn crosswind between Fanita Drive and State Highway Route 125, fly crosswind over the highway, and fly downwind over the First Valley. Traffic pattern altitude is 1,200 feet MSL; once pilots reach pattern altitude, they should reduce their revolutions per minute (RPM) to 2,300 or less.



Source: Gillespie Air Traffic Control's *Pilot Resource Guide*

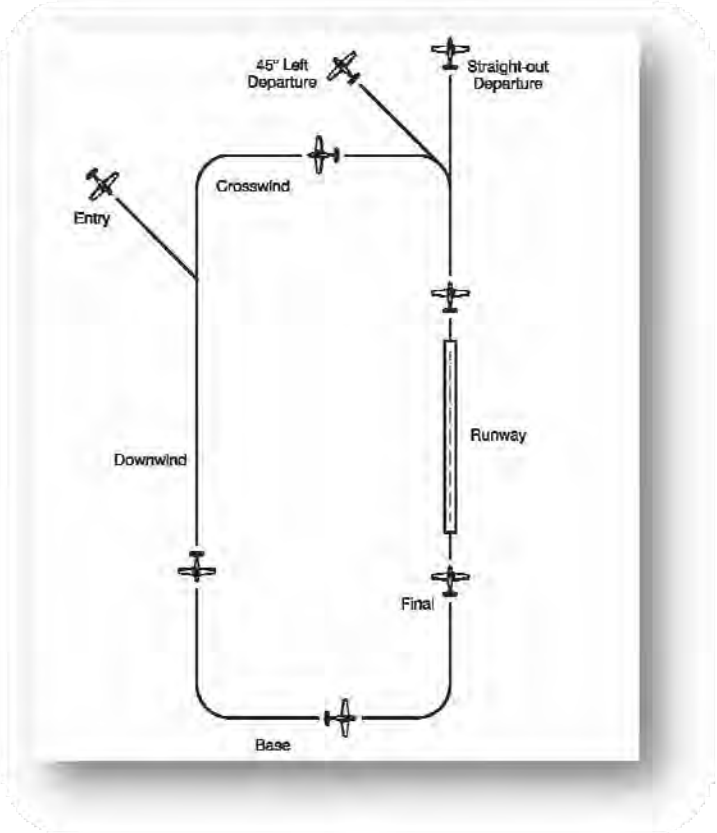
Section 4 –What steps are taken to develop departure and arrival procedures at airports?

Traffic patterns are developed differently for VFR and IFR operations (refer to *Section 3* for more information).

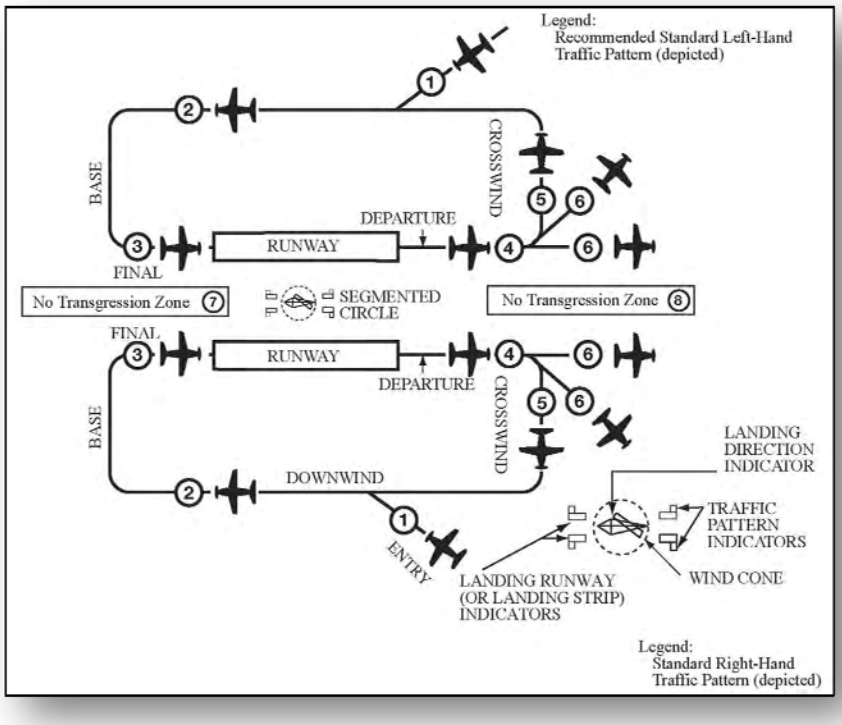
VFR Traffic Patterns

The FAA has established "standard traffic pattern for aircraft operating under VFR, which is rectangular in shape and consists of five" legs"; departure/upwind leg, crosswind leg, downwind leg, base leg and final approach leg. Typically, aircraft entering the standard pattern, enter the downwind leg at a 45 degree angle (see the below figures).

Standard Traffic Pattern



Traffic Pattern Operations for Parallel Runways



These standards are used to ensure orderly traffic and assist visiting pilots who have not previously used the airport. These patterns are not mandatory but are generally followed at non-towered airports. Traffic patterns at towered airports are more regulated but likewise more variable because pilots can request the type of entry or departure that is convenient to their location. If the tower determines that a pilot can safely land or depart using a nonstandard route they may grant approval to do so.

The traffic pattern altitude is generally 800 to 1,000 feet AGL. Federal Aviation Regulation Part 91.126 states that all turns should be made to a pilot's left unless otherwise authorized. However, towered-airports qualify as "controlled" airports and are therefore able to operate in both left- and right-hand patterns.

IFR Traffic Patterns

Instrument Approach Procedures

As discussed in *Section 3*, precision approach and APV procedures provide both vertical and horizontal guidance to aircraft while non-precision approach procedures provide only horizontal guidance so that pilots rely on other means to determine when to descend to a lower altitude along the approach course. Consequently, precision approach procedures allow for lower approach minimums. Most allow aircraft to land when weather conditions are as low as a 200-foot cloud ceiling and half-mile visibility. Minimums for non-precision approach procedures are higher than precision approach procedures.

As defined by the AIM, an instrument approach procedure is "a series of predetermined maneuvers for the orderly transfer of an aircraft under instrument flight conditions from the beginning of the initial approach to a landing or to a point from which a landing may be made visually." Civil standard instrument approach procedures for an airport such as SEE are approved by the FAA as prescribed under 14 CFR Part 97 and are available for public use.[4]

Instrument approach procedures involve numerous segments that include initial, intermediate, final and missed. The initial and intermediate segments assist the pilot in "finding" the airport vicinity. The pilot then flies the final approach course until the missed approach point. The pilot then proceeds to land or executes the missed approach procedure.

Instrument Departure Procedures

Gillespie Field Airport also has published instrument departure procedures, which are less complex and generally do not rely upon on-airport navigational aids. As defined in Section 5-2-8 of the AIM, "instrument departure procedures [DP] are preplanned [IFR] procedures which provide obstruction clearance from the terminal area to the appropriate en route structure."

[4] Aeronautical Information Manual (AIM), Section 5-2-8, February 9, 2012.

Airport-Specific Adjustments

Many adjustments to the standard traffic patterns are made at airports to accommodate its specific conditions. Factors that may require limiting traffic pattern locations include the following:

- Multiple runways
- Multiple airports in a small area
- High terrain that may necessitate adjustments to the direction of a flight pattern
- Residential or noise-sensitive land uses surrounding an airport

Voluntary Noise Abatement Procedures

An airport sponsor's ability to enforce noise abatement flight procedures is restricted and regulated by ANCA. However, voluntary procedures may be recommended to pilots if there will be no impacts to safety, air traffic control, or surrounding airspaces. There are several steps to implementing voluntary noise abatement flight procedures at airports. These include the following:

1. Proposed procedures need to be tested and evaluated for benefits and potential impacts to air traffic control.
2. Proposed procedures need to be evaluated for potential conflicts with other runways or airports/airspaces.
3. Proposed procedures need to be evaluated for environmental impacts, including the potential to increase aircraft emissions or redirect noise over other noise-sensitive land uses.
4. Proposed procedures need to be approved and accepted by the airport operator and the FAA.
5. Pilots need to be educated on the approved procedures.
6. Pilots are encouraged to adopt approved procedures.

Section 5 –How were departure and arrival procedures developed at SEE?

Arrival and departure procedures must follow certain FAA standards to ensure a safe aircraft operating environment. For VFR procedures, it is atypical to deviate from the standard, rectangular traffic pattern as mentioned above. Arrival and departure procedures at Gillespie

Field follow the basic FAA standards with some adjustments based on the surrounding topography, the number of runways and their configuration, and the Airport's status as a controlled airport, which allows for both left- and right-hand patterns. For example, departure and arrival paths to and from Runway 27L do not involve any immediate turns to the north so as to avoid conflicts with Runway 9L/27R.

Traffic pattern development considers both vertical and horizontal parameters in order to ensure that an aircraft can land if it encounters difficulties. An extended pattern and/or higher pattern altitude may compromise a pilot's ability to land safely at the Airport.

The County of San Diego implemented its noise abatement flight procedures by following the steps listed above in *Section 5*. Prior to this action, pilots were directed to turn crosswind at 1,000 feet MSL and then reduce their power after achieving a 1,200-foot altitude.

At the request of surrounding community members, the County of San Diego proposed in 2008 to raise the air traffic pattern altitude (TPA) from 1,188 feet mean sea level (MSL) to 1,388 feet MSL for touch-and-go operations on Runway 9R/27L. Using the modified flight pattern, pilots would fly out from Runway 27L toward State Highway Route 125, fly crosswind over Highway 125, and turn downwind once they have reached approximately 1,400 feet MSL while reducing their RPM. Following a practice test to determine its feasibility, the requested modification was rejected by the FAA in a letter dated April 15, 2008, because it would "adversely affect the safe and efficient use of the navigable airspace and the safety of persons and property on the ground" (see **Appendix D – Noise Abatement**). The FAA provided the following reasons for objection:

1. The new TPA would cause the flight pattern to grow laterally. Once they reach pattern altitude, pilots turn downwind which would position an aircraft further south and further from the air traffic control tower (ATCT), making visual observation difficult.
2. When aircraft depart Runway 27R at Gillespie Field using the current departure procedure, they cross above the downwind leg of the Runway 27L traffic pattern. Increasing the 27L traffic pattern altitude by 200 feet would reduce the margin of error and build potential conflict.
3. The modification would necessitate additional work to issue crossing restrictions.

Current noise abatement procedures are published both on the County's website and in the Airport's Pilot Resource Guide (see **Appendix B – Airport Information**) to encourage pilots' participation in this program. The Guide can also be downloaded from the County's website.

Section 6 –Are there alternatives to current traffic patterns for Runways 27R/27L at SEE that would improve safety of air traffic flow?

No alternative traffic patterns have been identified in this report. Arrival and departure procedures must follow FAA standards, allow ATCT to operate efficiently, and ensure a safe aircraft operating environment. Alternative flight procedures have been examined in the past and were rejected due to safety concerns.

The complexity of the airspace surrounding Gillespie Field limits any potential for modifying flight procedures. Any changes to flight paths could cause encroachment into other airports' airspace and increase the risk of collisions. Furthermore, with three runways it would be difficult to alter one runway's departure or arrival paths without impacting those of another runway and increasing the potential for collisions.

Section 7 –Community Concerns

C&S Engineers, Inc., representatives met with homeowners from surrounding communities to understand their concerns regarding operations at SEE. Concerns that were expressed during these meetings, (held in Fletcher Hills on April 20, 2012, and in Lakeside/Winter Gardens on May 4th, 2012), are summarized below and fall into six categories:

1. Noise – Community members expressed concern that their quality of life is being affected by aircraft noise. Members noted that state and federally established noise thresholds are based on averages over a given period of time (Community Noise Equivalency Level), and do not reflect extreme or single events. This prevents noise analyses from grasping the severity of the situation. There are also concerns that the 70-acre redevelopment project will result in increased aircraft operations and noise.

2. Safety – Community members raised issues regarding the large number of student pilots operating at the Airport who may lack experience to navigate adverse flight conditions. During touch-and-go procedures student pilots appear to turn early, prior to reaching State Route 125, in order to increase their number of touch-and-go procedures. Community members also believe that student pilots also neglect to reduce their RPMs after making the downwind turn as referenced in the recommended touch-and-go noise abatement procedures.

   A common concern is the language barrier among foreign student pilots who may revert to their first language during crises situations.

3. Health – The use of leaded aviation gasoline (AvGas) in older planes raises health concerns.

4. Security – Some community members expressed discomfort over the large number of foreign student pilots and would like to have a better understanding of how oversight is provided to flight schools.

5. Economic Impacts – Nearby residents question the economic benefit of the Airport for the surrounding community and raised concerns that airport operations may have an adverse effect on the value of their homes.

6. Future Plans – There are concerns that the future redevelopment of the former Cajon Speedway will increase aviation activity.

Gillespie Field
Community Relations Traffic Pattern Review

Appendix A

Community Concerns

Gillespie Field
Community Outreach Meeting
Friday, April 20, 2012

C&S Representatives: Michael Hotaling, Ralph Redman, Carly Shannon

ATTENDEE'S NAME	ATTENDEE'S CITY
Name: Bob Torrance	City: El Cajon
Name: Don Chafetz	City: El Cajon
Name: Ed Blitz	City: El Cajon
Name: Betty Chafetz	City: El Cajon
Name: Liza Butler	City: El Cajon
Name: Robert Germann	City: Lakeside
Name: Sue Strom	City: El Cajon
Name: Ronn Kilby	City: El Cajon

Gillespie Field
Community Outreach Meeting
Friday, May 04, 2012

C&S Representatives: Michael Hotaling, Ralph Redman, Carly Shannon

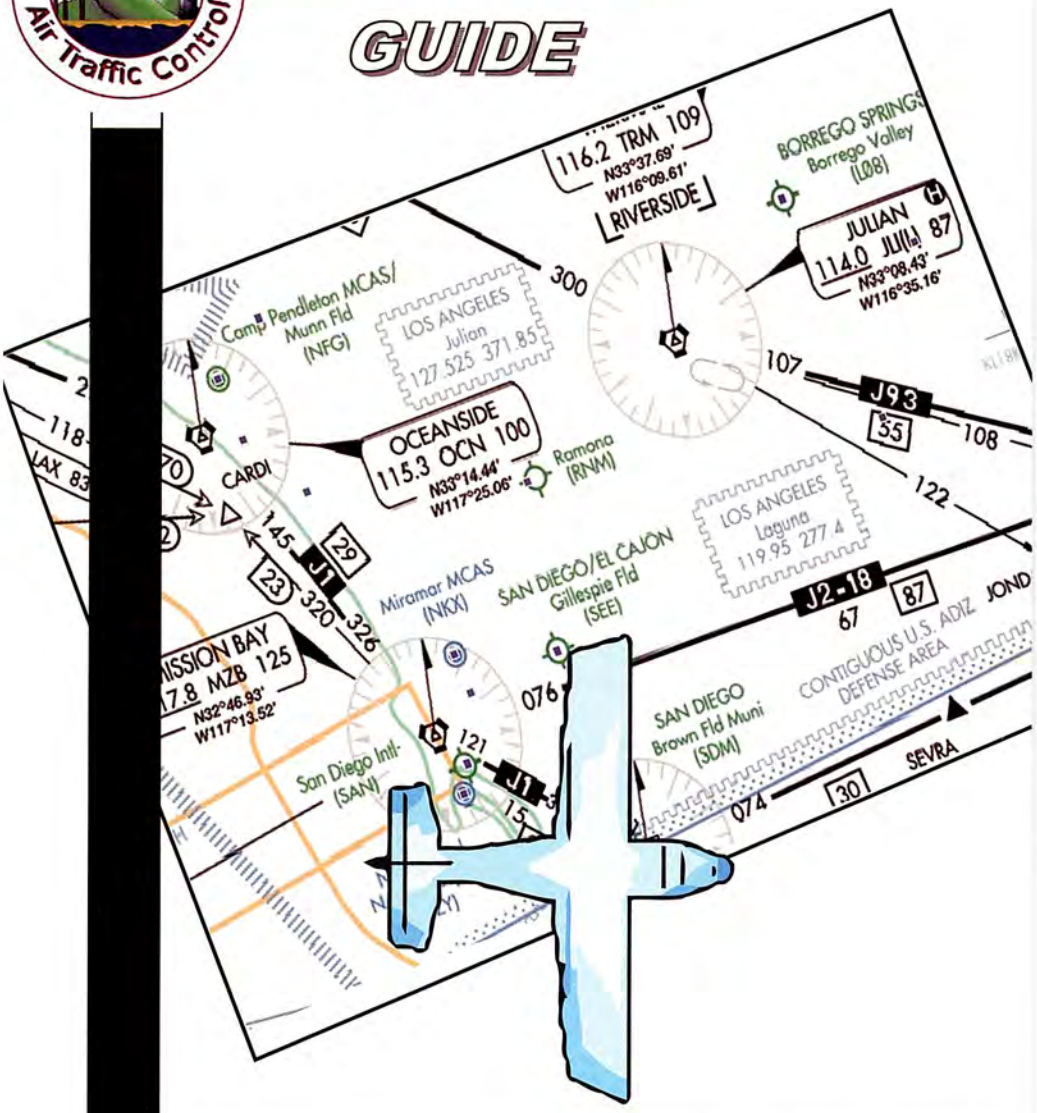
ATTENDEE'S NAME	ATTENDEE'S CITY
Name: Frank Janda	City: Santee
Name: Catherine Gorka	City: Lakeside
Name: Ed Blitz	City: El Cajon
Name: Betty Chafetz	City: El Cajon
Name: Liza Butler	City: El Cajon
Name: Robert Germann	City: Lakeside
Name: Sue Strom	City: El Cajon
Name: Wyatt Allen	City: Lakeside
Name: Sandi Feiock	City: Lakeside
Name: Dan Chelius	City: Lakeside
Name: Terry Burke-Eiserling	City: Lakeside
Name: Dave Tyer	City: Lakeside

Gillespie Field
Community Relations Traffic Pattern Review

Appendix B

Airport Information

PILOT RESOURCE GUIDE



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INTRODUCTION

The contents of this resource guide are for informational purposes only. Current FAA orders, regulations and charts take precedence over the information contained in this guide. All procedures, charts, and diagrams are for reference only and not to be used for navigation.

Gillespie Tower is in operation seven days a week from 0700 until 2100 local time. During this period, the airspace operates under Class D Surface Area rules and regulations and authorization/clearance is required prior to entering the airspace. ATC clearance is also required for any operation on designated movement areas when the tower is operational. Operations on non-movement areas are conducted at the operator's discretion and own risk.

The Controller/Pilot relationship is a system of checks and balances requiring accurate information exchange through the communication process. In closing the communication loop by using the readback/hearback principle, both the controller and pilot verify receipt and understanding of the information exchanged. It is through this type of process and methodology that safety is enhanced throughout the ATC system. It is therefore imperative that pilots and controllers work together as partners.

Safety is paramount to the Federal Aviation Administration. If at any time a pilot is in question as to ATC instruction, the pilot should immediately confirm the instruction/clearance with ATC. Pilots should also seek clarification on clearances involving similar sounding callsigns or when the pilot believes mistaken aircraft identity is involved.

If you have questions related to Gillespie ATCT procedures, please contact the tower with them as we are more than pleased to explain them to you in order to alleviate any confusion. If you have any questions related to referenced publications, please consult the publication before contacting the tower staff. If you still have questions or confusion about a topic, please contact our staff Monday through Friday between 7 AM and 3 PM.

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FREQUENCY ETIQUETTE

Good radio technique and etiquette is essential to safety and effective communications between air traffic control and pilots. This requires pilots to be familiar with recommended radio techniques and air traffic control terminology. Following is a brief synopsis of some recommended techniques and practices.

LISTEN and MONITOR: Listen to the frequency before transmitting. Is the frequency clear? Is the communication between another pilot and ATC complete? If not, wait for this to be completed. This includes required readbacks, arrival/departure instructions, or any other necessary transmissions that require a pilot readback. Monitor the frequency at an adequate volume which will allow you to hear ATC transmissions such as, traffic calls/alerts, re-sequencing, or additional or amended clearances or instructions. Controllers multitask, so if you do not get an immediate response, wait a bit before calling again unless safety is involved.

BREVITY: Keep messages short. For large amounts of information, break it up into key elements. Avoid filling the airwaves with long pauses and superfluous speech such as "uh" and "um". Short messages allow a listener to break in if they need a message repeated. Know what it is you want to transmit before keying up your transmitter. Do not provide ATC with any additional information other than what is needed.

KISS: "Keep It Short and Simple" and only use the frequencies for what they are intended. Do not use it to convey personal messages to other pilots or dissatisfaction with service. Remember, it is not necessary to request permission to leave the tower frequency once outside of Class D Airspace.

For more on radio communications, terminology, and techniques refer to the Aeronautical Information Manual, Chapter 4 Section 2. Pilots can also search the Internet where more information can be found on good radio etiquette and practices.

GILLESPIE FIELD DATA

Runway & Taxiway Dimensions:

27R	Landing length – 4636'	Take off length – 5342'
9L	Landing length – 5342'	Take off length – 5342'
27L	Landing length – 2738'	Take off length – 2738'
9R	Landing length – 2738'	Take off length – 2738'
17	Landing length – 3695'	Take off length – 4145'
35	Landing length – 3458'	Take off length – 4145'

Maximum Allowable Wheel Loading:
S: single wheel main gear; D: dual wheel main gear; DT: dual-tandem main gear

27R & 9L	S -90; D – 120; DT – 200
27L & 9R	S -12
17 & 35	S -58; D – 106; DT - 195

Lights:
Rotating beacon and lighted windsock

9L/27R – MIRL; PAPI (P4L) and REIL
17/35 – MIRL and VASI (V2L)
9R/27L – no lights, closed dusk to dawn

Pilot Controlled Lighting (PCL):
Activate MIRL, PAPI/VASI & Taxiway lights via CTAF 120.70
3 x mic clicks = MIRL, PAPI / VASI & taxiway at 10% brightness
5 x mic clicks = MIRL, PAPI / VASI & taxiway at 30% brightness
7 x mic clicks = MIRL, PAPI / VASI & taxiway at 100% brightness & REILS

Traffic Pattern Information:

9L/27R	Day (dawn – dusk)	1,600' MSL/1200 AGL right traffic
	Night (dusk – dawn)	1,400' MSL/1000 AGL left traffic
17/35	Day (dawn – dusk)	1,200' MSL/800 AGL
	Night (dusk – dawn)	1,400' MSL/1000 AGL
9R/27L	Day (dawn – dusk)	1,200' MSL/800 AGL left traffic
	Night (dusk – dawn)	closed

NOISE ABATEMENT

Adaptations of the noise abatement procedures outlined in this guide have been in use since March 1974. These procedures have been developed gradually with input from: Fixed Base Operators, Chief Pilots, CFI's, Airport Management, Fletcher Hills Home Owner's Association, individual home owners, and the Federal Aviation Administration. No set of procedures will satisfy everyone, but the following procedures ensure flying safety while making the airport as compatible as possible with our airport neighbors.

For this effort to be successful, the cooperation of every pilot is needed. We earnestly solicit your help in adhering to the following recommended procedures.

RY 27L Closed Traffic Pattern:

Fly runway heading until abeam Fanita Drive, turn crosswind so to ensure that you are West of Fanita Drive on crosswind and turn downwind so that your downwind leg is over the first valley. Once reaching pattern altitude of 1200' reduce RPM's to 2300 or less. This pattern minimizes the amount of time you are over high terrain while keeping you on a downwind that is within gliding distance of a runway. If unable to comply due to aircraft or equipment limitations, please consider using an alternate runway.

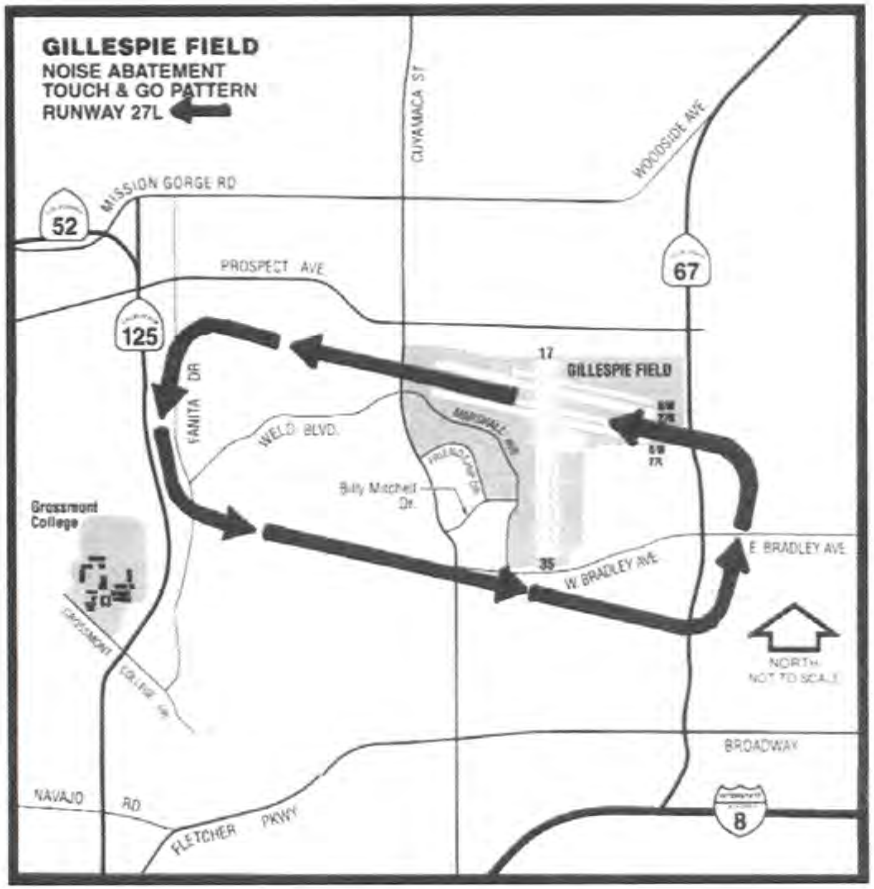
Departing 9L & 9R:
Fly runway heading until reaching 1,000' MSL before turning crosswind.

Departing 27R, 17 & 35:
Fly runway heading until reaching 800' MSL before turning crosswind.

Night Touch & Goes:
Due to currency requirements, late night stop and goes are sometimes required. Please be considerate of our neighbors. ***Please do not do Touch& Goes or Stop & Goes between the hours of 10pm-7am. Additionally, jet take-offs are also discouraged during this time.***

27L TOUCH & GO NOISE ABATEMENT PATTERN

1. Fly Upwind to abeam Fanita Drive
2. Turn Crosswind between Fanita and Hwy 125
3. Fly Crosswind over Hwy 125
4. Fly Downwind over the First Valley
5. Traffic Pattern 1200'
6. At 1200' Reduce RPM's to 2300 or Less



Please Fly Safely and Quietly Over our Neighbor's Homes

DEPARTURES

VFR Departures: Pilots departing to the North or East should request RY 27R/9L, aircraft performance permitting. South and West departures should request RY 27L/9R. This helps the tower provide a balanced traffic flow, expedite the movement of aircraft, and minimize any delays.

IFR Departures: Pilots are expected to be familiar with the SEE Obstacle Departure Procedure and Take-Off Minimums for each runway. This procedure and related information is too lengthy to read on frequency, therefore, pilots should have it on-board for reference. IFR flight plans should be filed by pilots in advance through FSS, DUATS, or other methods if requesting flight outside of the immediate San Diego Area or **CRQ, L18, MYF NKX, NRS, NZY, OKB, RNM, SAN, SDM, SEE**. IFR flight plans or clearances to these destinations are referred to as **Tower to Tower** clearances.

TEC ROUTES / SAN DIEGO NOVEMBER ROUTES

Pilots filing a **Tower Enroute Control (TEC) Route,** also commonly referred to as **San Diego November Route, SANN(route #)** to an airport need to specify the routing and altitudes as follows:

ROUTE: SEE direct TEC Route Airport (destination).

ALTITUDES:
6,000 for non-jet/turbo aircraft with cruise speed of 189 kts. or less.
6,000 for non-jet aircraft with cruise speed of 190 kts. or greater.
8,000 Turbo Props/Special with cruise speed of 190 kts. or greater.
10,000 for jet powered aircraft.

The computer system will automatically assign the required TEC route for ATC to issue. It is helpful if the pilot has the TEC/November route on board when contacting Clearance Delivery on 125.1. The exact routing for each TEC Route can be found in the FAA Airport/Facility Directory Southwest U. S. and other publications.

IFR FLIGHT PLANS TO OTHER DESTINATIONS

These should be filed as normal through FSS, DUATS, or other.
Please obtain IFR clearance prior to taxi!

TAXI CLEARANCE

When you are ready to taxi, have an airport diagram available to review the assigned taxi route. Obtain ATIS information prior to contacting GC. Monitor GC frequency prior to transmitting. Know what you want to say prior to transmitting. Do not interrupt or transmit over ATC or another pilot's readback. Contact Ground Control with your request and provide the following information:

1. **Who** you are, using full aircraft call-sign.
2. **Where** you are located.
3. **What** type of taxi you are requesting, parking, runway, or other.
4. State you have obtained the **ATIS** by using its phonetic code.

Readback the assigned runway and any "HOLD SHORT" instructions included in the taxi clearance. While taxiing do not turn down your radio volume. Remain alert to further transmissions or taxi route amendments. Traffic conditions change rapidly which may require you to stop or alter your taxi route. When taxiing, always be alert for other aircraft, airport vehicles/equipment, and pedestrians.

Note– It is extremely helpful when calling for taxi if the aircraft manufacturer's model is stated and the aircraft is positioned on the ramp in a location visible from the tower. This will help the controller visually locate the aircraft and expedite taxi instructions.

Examples–

Pilot: "Gillespie Ground, Bonanza 12345 at Air BP, with ATIS "Tango", request taxi to RY 27R."

Controller: "Bonanza 12345, RY 27R, taxi via Alpha, Delta, "hold short" of RY 35."

Pilot: "Runway 27R, taxi via A and D, "hold short" of RY 35, Bonanza 12345.

Pilot: "Gillespie Ground, Bonanza 12345, clear of RY 27L at Delta two, request taxi to Air BP."

Controller: "Bonanza 12345, taxi to Air BP via Delta, Alpha."

ARRIVALS

VFR ARRIVALS: Establish two-way radio communication prior to entering the Class D Airspace. Thereafter, maintain communication with the tower while operating in the airspace. It is recommended that initial contact be made at least 10 NM from the airport to preclude entry before communication is established. Contact the tower on the appropriate frequency as stated on the ATIS and provide the following:

1. Aircraft full call-sign. (Please use aircraft manufacturer or model.)
2. Aircraft position.
3. Altitude.
4. Pilot request. (Touch and go, land, transition, other.)
5. ATIS information by stating phonetic code.

Example: *Gillespie Tower, Cherokee 12345, San Vicente Reservoir, three thousand two hundred, request landing with Sierra (ATIS).*

Be alert for additional calls transmitted to you. Traffic conditions can change rapidly with new instructions or pertinent traffic information.

IFR ARRIVALS: When instructed by Approach Control to contact Gillespie Tower, switch to the tower frequency and contact the tower in a timely manner. Depending upon the active runway(s) your request for a specific runway will be approved or denied based on traffic conditions. Watch your approach course ensuring you do not drift off course or descend below applicable or assigned altitudes.

Remember, an IFR approach does not preclude pilots from scanning. The traffic patterns and airspace are often congested, so be alert for traffic and advise if you have to maneuver for traffic and or terrain.

If you have a particular request, make it known to ATC in a timely manner so the tower can try to accommodate it. Actively listen for traffic calls/alerts to you in addition to any other control or amended instructions.

Note– A pilot is expected to make minor maneuvers or speed adjustments to blend with the traffic flow or in order to follow the aircraft sequenced to follow. Unexpected maneuvers, such as a 360 degree turn, should not be made without ATC approval unless there is an emergency condition.

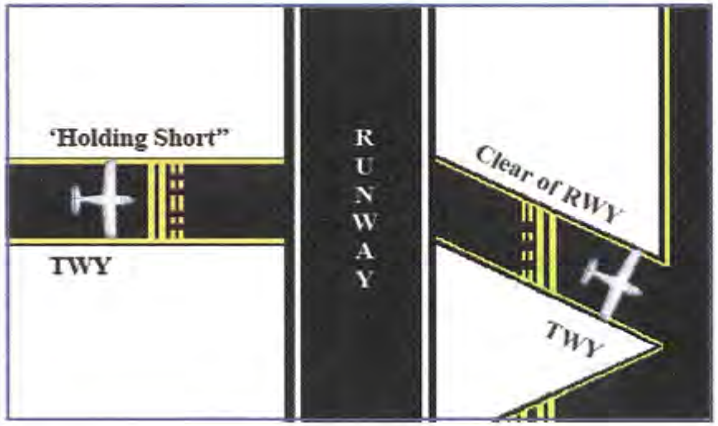
EXITING THE RUNWAY AFTER LANDING

After landing, reduce to taxi speed and exit the runway without delay at the first available taxiway or taxiway as instructed. Do not exit the landing runway onto another runway, stop on the runway, or reverse course on the runway for taxi unless authorized. Taxi clear of the runway and remain on Tower frequency when operating between Runway 27L and Runway 27R, unless otherwise directed by ATC. Contact Ground Control when instructed. If not instructed, request frequency change to Ground. If you receive no reply, wait a short period and contact Ground Control. Advise Ground Control of your position and state your taxi request.

An aircraft is considered clear of the runway when all parts of the aircraft are past the runway edge and there are no restrictions to its continued movement beyond the runway holding position markings. In the absence of ATC instructions, the pilot is expected to taxi clear of the landing runway by taxiing beyond the runway holding position markings associated with the landing runway, even if that requires the aircraft to protrude into or cross another taxiway or ramp area. Once all parts of the aircraft have crossed the runway holding position markings, the pilot must hold unless further instructions have been issued by ATC.

Readback all **"Hold Short"** instructions, stating the aircraft call-sign and specific runway, taxiway, or other point instructed to "Hold Short" of.

Illustration: Exiting Runway and "Holding Short" of a runway.



AIRSPACE

Gillespie Class D Airspace
SVC 1500–0500Z‡ other times CLASS G.
Below 2,400 MSL to Surface

Arrival or Through Flight Entry Requirements. Two-way radio communication must be established with Air Traffic Control prior to entering controlled airspace and maintain those communications while in the airspace. Pilots of arriving aircraft should contact the control tower on the publicized frequency and give their position, altitude, destination, and any request(s). Radio contact should be initiated far enough from the Class D Airspace boundary to preclude entering the Class D Airspace before two-way radio communications are established.

Note- If a controller responds to an inbound aircraft, "Calling (XYZ Tower) standby", two-radio communications have not been established and the aircraft **is not** authorized to enter the airspace. The call-sign of the aircraft is essential in establishing two-way communications unless the controller informs the pilot to proceed inbound. If traffic conditions prevent immediate entry into Class D Airspace, controllers will normally inform pilots to remain outside the airspace until conditions permit entry.

CONTROLLED AIRSPACE
IN THE VICINTY OF GILLESPIE FIELD

Be aware of Southern California TRACON, Miramar MCAS, and Lindbergh's Class B Airspace. In addition, please note the close proximity of San Diego Montgomery and Brown Field Class D Airspaces.

Gillespie Tower cannot provide nor coordinate a Class "B" clearance for departing aircraft. Request an early frequency change and contact SOCAL Approach on the appropriate frequency based on direction of flight. Plan an alternate route in case SOCAL cannot accommodate a Class "B" clearance.

More on airspace requirements can be found in Chapter Three of the Aeronautical Information Manual.

SAN DIEGO AIRSPACE is very complex and busy with commercial and military flights in addition to those conducted by general aviation. Every pilot should have current charts on board and review them before flight. During the preflight process, check current NOTAMs, TFRs, and weather forecasts to preclude an airspace deviation or experiencing rapidly deteriorating weather conditions!

NAVIGATION

SEE Coordinates
N32°49.57' W116°58.35'

SEE ILS
110.5 I–SEE RY 27R
LOC ONLY (Unmonitored when tower closed)

MZB (H) VORTACW
117.8 Chan 125 N32°46.93' W117°13.52'

OCN (H) VORTAC
115.3 Chan 100 N33°14.44' W117°25.06'

OTHER NEARBY NAVIGATIONAL AIDS

VORTAC/VOR RADIAL/ DISTANCE NM	VORTAC VOR NAME	FREQ.	VAR.
PGY R347/13.0	POGGI VORTAC	109.80	14 E
MZB R063/13.1	MISSION BAY VORTAC	117.8	15 E
TIJ R343/17.2	TIJUANA VOR/DME	116.50	14 E
JLI R343/17.2	JULIAN VORTAC	114.00	15 E
OCN R123/33.5	OCEANSIDE VORTAC	115.30	15 E

LOST COMMUNICATIONS

Standard procedures for lost communications (NO Radio, NORDO) are specified in 14 CFR Part 91. During two-way radio communications failure, when confronted by a situation not covered in the regulation, pilots are expected to exercise good judgment. The contents of 14 CFR Part 91 are too lengthy to address in this publication. The Tower has therefore elected to provide general guidance on this subject matter and encourages pilots to review the cited reference.

General Guidance

If the failure occurs in VFR conditions, or if VFR conditions are encountered after the failure, continue flight under VFR and land as soon as practicable.

1. If equipment capabilities exist, adjust the transponder to reply on Mode A/3, Code 7600.

2. Continue to try and re-establish communications. It is possible that only once component of your transceiver is not functioning properly. Therefore, the Tower may hear you even though you might not hear the Tower. Conversely, you may be able to hear the Tower, but not able to transmit.

3. Circle at least 500 feet above the highest traffic pattern altitude (TPA) and determine the flow of traffic.

4. Enter the pattern behind any traffic remaining above the TPA as specified and watch the Tower for light gun signals. Acknowledge light gun signals by "rocking wings" or flashing landing light at night.

5. After landing, continue visual observation of the tower and look for the appropriate light gun signal authorizing you to taxi.

EXERCISE EXTREME CAUTION AND GOOD JUDGMENT WHENEVER YOU LOSE RADIO COMMUNICATIONS WITH ATC!

Note– If you have a cell phone try using it to contact ATC or others, to relay your radio status.

BEST PRACTICES FOR AIRFIELD SAFETY (Pilots)

The best practices were developed by FAA staff to help pilots improve safety by giving guidelines that should be followed to keep skills and focus current and vigilant. Remember: Over 80% of pilot- caused runway incursions occur during taxi to the departure runway.

PRE-FLIGHT PLANNING:

1. Review and understand airfield signage and markings.
2. Review the appropriate airport diagrams. Review any Hot Spots identified on the diagram. Print a copy for use in the cockpit.
3. Review airfield NOTAMS and current ATIS for any taxiway closures, runway closures, construction activity, or other airfield specific risks.
4. Brief any passengers on the importance to minimize discussions, questions, and conversation during taxi (maintain a "sterile cockpit").

TAXI:

1. Have the airport diagram out and available for immediate reference during taxi.
2. Review current ATIS for any taxiway closures, runway closures, construction activity, or other airfield specific risks.
3. During radio transmissions, use correct terminology and proper voice cadence.
4. Copy the taxi clearance and use the airport diagram to review the taxi route to the assigned runway prior to releasing brakes and beginning taxi.
5. Eliminate distractions while taxiing in the operational area.
6. Focus attention and have your "eyes out" of the cockpit when taxiing.
7. Maintain appropriate taxi speed.
8. Be alert to similar sounding call signs operating on the field.
9. STOP aircraft on the taxiway and request ATC clarification if there is confusion regarding aircraft position or ATC taxi clearance.
10. Prior to crossing any runway during taxi, ensure you have a clearance to cross. Visually check to ensure there is no conflicting traffic prior to crossing the runway.
11. If there is any doubt that the runway is clear, reconfirm crossing clearance with ATC.
12. Be aware that hold short lines can be as far as 400' from the runway due to new Precision Obstacle Free Zone (POFZ) requirements.
13. Maintain a "sterile cockpit" when taxiing.

BEST PRACTICES FOR AIRFIELD SAFETY (*continued*)

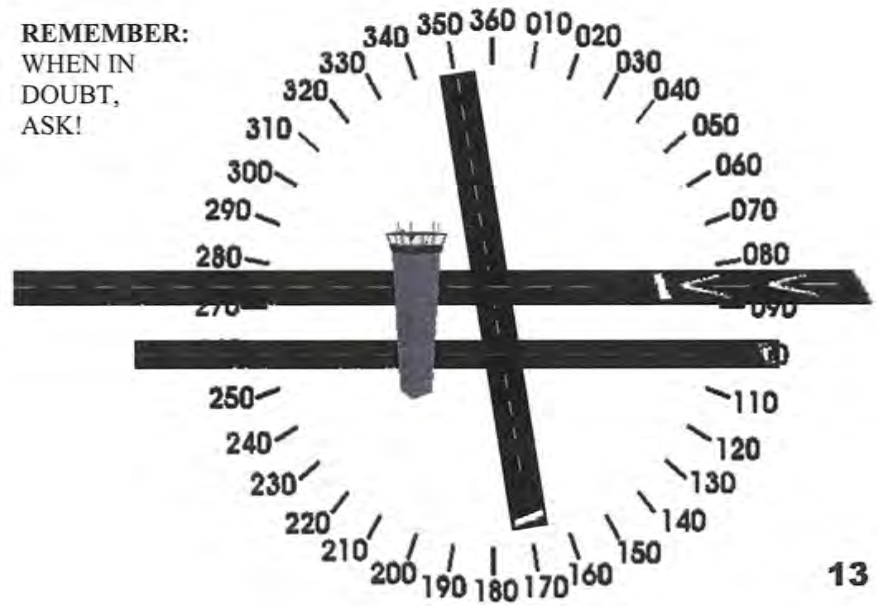
TAKE-OFF:

1. If cleared to "line up and wait", turn on all exterior lights except take-off/landing lights. If you have been holding in position on the runway for more than 90 seconds, or upon seeing a potential conflict, contact the tower.
2. When "cleared for takeoff", turn on all exterior lights, including take-off/landing lights.
3. Note that if you see an aircraft in take-off position on a runway with take-off/landing lights ON, that aircraft has most likely received its take-off clearance and will be departing immediately.
4. When assigned a departure at an intersection versus a full length takeoff, state "intersection departure" at the end of the take-off clearance readback.
5. Conduct "Clearing Turns" to check all areas prior to entering any runway.

LANDING:

1. Wait until you have exited the active runway and you are sure of your taxi clearance prior to beginning an after-landing checklist
2. Follow the same TAXI Best Practices above.

REMEMBER:
WHEN IN DOUBT, ASK!



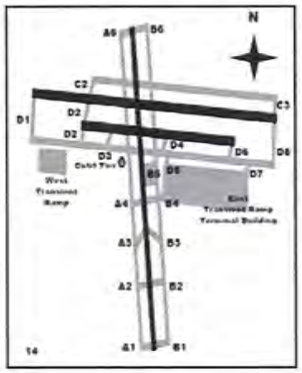
BEST PRACTICES FOR AIRFIELD SAFETY - VEHICLE DRIVERS

1. Review and understand airfield signage and markings.
2. Review the airport diagram prior to moving the vehicle. Have the airport diagram out and available for immediate reference while driving in the operational area.
3. Review current airfield information for any taxiway closures, runway closures, construction activity, or other surface risks.
4. Ensure appropriate vehicle lights (high beams, flashers, beacons, and strobes) are operational prior to driving in the operational area. Flashers and beacons help ATC, aircrew and other vehicle operators see vehicles in the operational area, especially during periods of reduced visibility and at night.
5. Use service roads whenever possible to minimize time spent on taxiways and runways.
6. During radio transmissions, use correct terminology and proper voice cadence.
7. Copy your clearance and review the assigned route. Read back all clearances.
8. Eliminate distractions while driving in the operational area. Do not use cell phones while driving in the operational area.
9. Focus attention and have your "eyes out" of the vehicle.
10. Maintain appropriate speed.
11. Be alert to similar aircraft and vehicle call signs operating on the field.
12. STOP the vehicle on the taxiway and request ATC clarification if there is confusion regarding your position or your clearance.
13. When cleared to cross any runway or taxiway, first visually check to ensure there is no conflicting traffic. If there is any doubt that the runway is clear, reconfirm crossing clearance with ATC
14. Note that if you see an aircraft in take-off position on a runway with take-off/landing lights ON, that aircraft has most likely received its take-off clearance and will be departing immediately.
15. If your radio fails while you're in the operational area and the tower is open, alert the controllers by flashing your high/low beams towards the tower. They will respond using the light gun, refer to back cover for signal meanings. If the tower is closed, visually clear your route and exit the operational area as quickly as possible.
16. If the tower is closed, broadcast your location and intent on the CTAF.

NOTE– County of San Diego Airports require vehicles operating on movement areas to have a roof mounted yellow rotating beacon or an orange and white checkered flag.

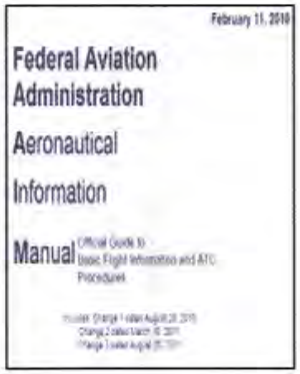
APPENDICES

A. Illustration: Taxiways and Taxiway Designators



B. Illustration: VFR Reporting Points

C. AIM - Pilot/Controller Terminology

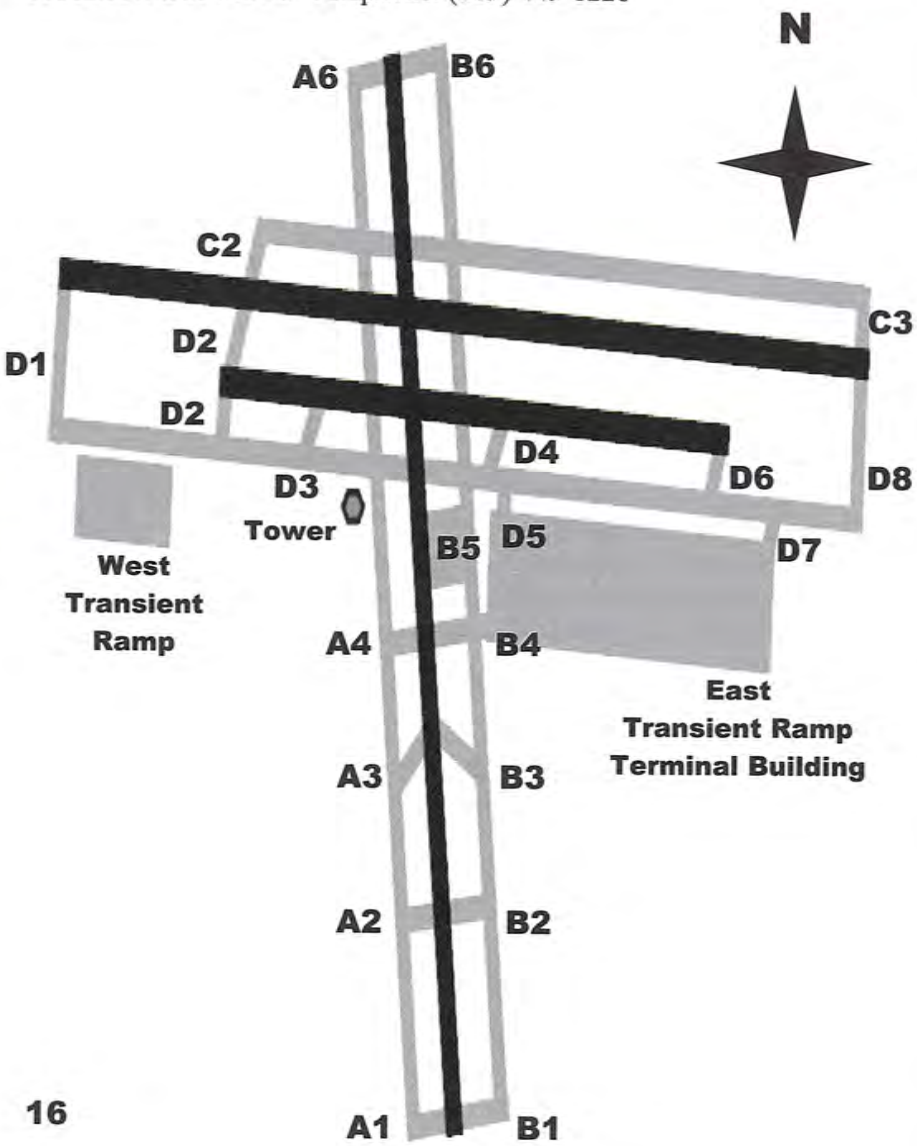


Appendix A.

ILLUSTRATION: TAXIWAY AND TAXIWAY DESIGNTORS

(For illustration purposes only, not to scale or to be used for navigation.)

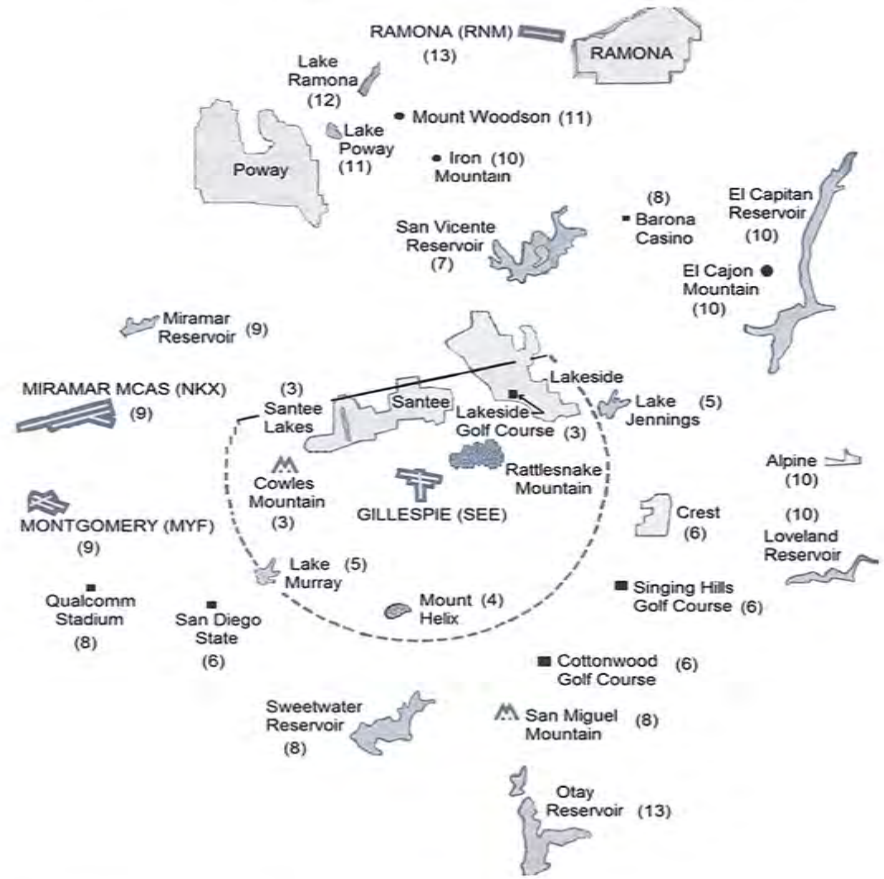
Tower: 120.7 RY 27R/L (123.8 RY 27L when advertised on ATIS)
Ground: 121.7
Clearance: 125.1 When the tower is closed, call SOCAL Approach Control (800) 448–3724
ATIS/AWOS: 125.45 Telephone: (619) 449-1228



Appendix B.

ILLUSTRATION: VFR REPORTING POINTS

(For illustration purposes only, not to be used for navigation.)



Initial Contact with Control Tower: When making initial contact with the tower, wait for a break on the frequency, including ATC or pilot acknowledgement/reply, then contact the tower and provide the following:

- Aircraft (full) call-sign (Aircraft manufacturer/model preferred.)
- Location and Altitude
- Request/Intentions i.e., "to land, touch and go, or transition"
- Provide ATIS phonetic code, e.g., "with Tango"

Note– Please make initial contact with the tower at least 10 NM from the airport. Do not enter the airspace without having established two-way radio communications with the control tower.

AIM Aeronautical Information Manual

(Official Guide to Basic Flight Information and ATC Procedures)

The following are common terms and definitions found in AIM Pilot/ Controller Glossary. This is not a complete list of and therefore aviators are encouraged to refresh themselves on other terms contained in the AIM. The AIM is free on-line to view or download in PDF format at: http://www.faa.gov/air_traffic/publications/ATpubs/AIM/

Note– In order to match related topics the following terms are not in alphabetical order.

Acknowledge – Let me know that you have received my message.

Affirmative – Yes

Negative – No

Expedite – Used by ATC when prompt compliance is required to avoid the development of an imminent situation. Expedite climb/ descent normally indicates to a pilot that the approximate best rate of climb/descent should be used without requiring an exceptional change in aircraft handling characteristics.

Immediately – Used by ATC or pilots when such action compliance is required to avoid an imminent situation.

Movement Areas – The runways, taxiways, and other areas of an airport/heliport which are utilized for taxiing/hover taxiing, air taxiing, takeoff, and landing of aircraft, exclusive of loading ramps and parking areas. At those airports/heliports with a tower, specific approval for entry onto the movement area must be obtained from ATC.

Nonmovement Areas – Taxiways and apron (ramp) areas not under the control of air traffic.

Negative Contact – Traffic called out by ATC is not in sight or pilot was unable to contact ATC on a particular frequency.

Traffic in sight – Used by pilots to inform a controller that previously issued traffic is in sight.

Roger – I have received all of your last transmission. It should not be used to answer a question requiring a yes or a no answer.

Make Short Approach – Used by ATC to inform a pilot to alter his/her traffic pattern so as to make a short final approach.

Say Again – Used to request a repeat of the last transmission. Usually specifies transmission or portion thereof not understood or received.

Stand By – Means the controller or pilot must pause for a few seconds, usually to attend to other duties of a higher priority. Also means to wait as in "stand by for clearance." The caller should reestablish contact if a delay is lengthy. "Stand by" is not an approval or denial.

Tower En Route Control Service - The control of IFR en route traffic within delegated airspace between two or more adjacent approach control facilities. This service is designed to expedite traffic and reduce control and pilot communication requirements.

Unable – Inability to comply with a specific instruction, request or clearance.

Verify – Request confirmation of information; e.g., "verify assigned altitude.

Quick Reference Chart

Airport Coordinates: N32°49.57' W116°58.35'
Field Elevation: 388 MSL

Tower Frequencies:
120.7 RY 27R/27L
123.8* RY 27L
* When ATIS advises frequencies are split.

Ground Control:
121.7

Clearance Delivery:
125.1
For Clearance Delivery when the tower is closed,
call SOCAL APCH (800) 448–3724.

ATIS and AWOS:
125.45 Telephone (619) 449-1228

Local SOCAL TRACON Frequencies:
North – 132.2/125.3 **West** – 119.6 **South & East** 124.35

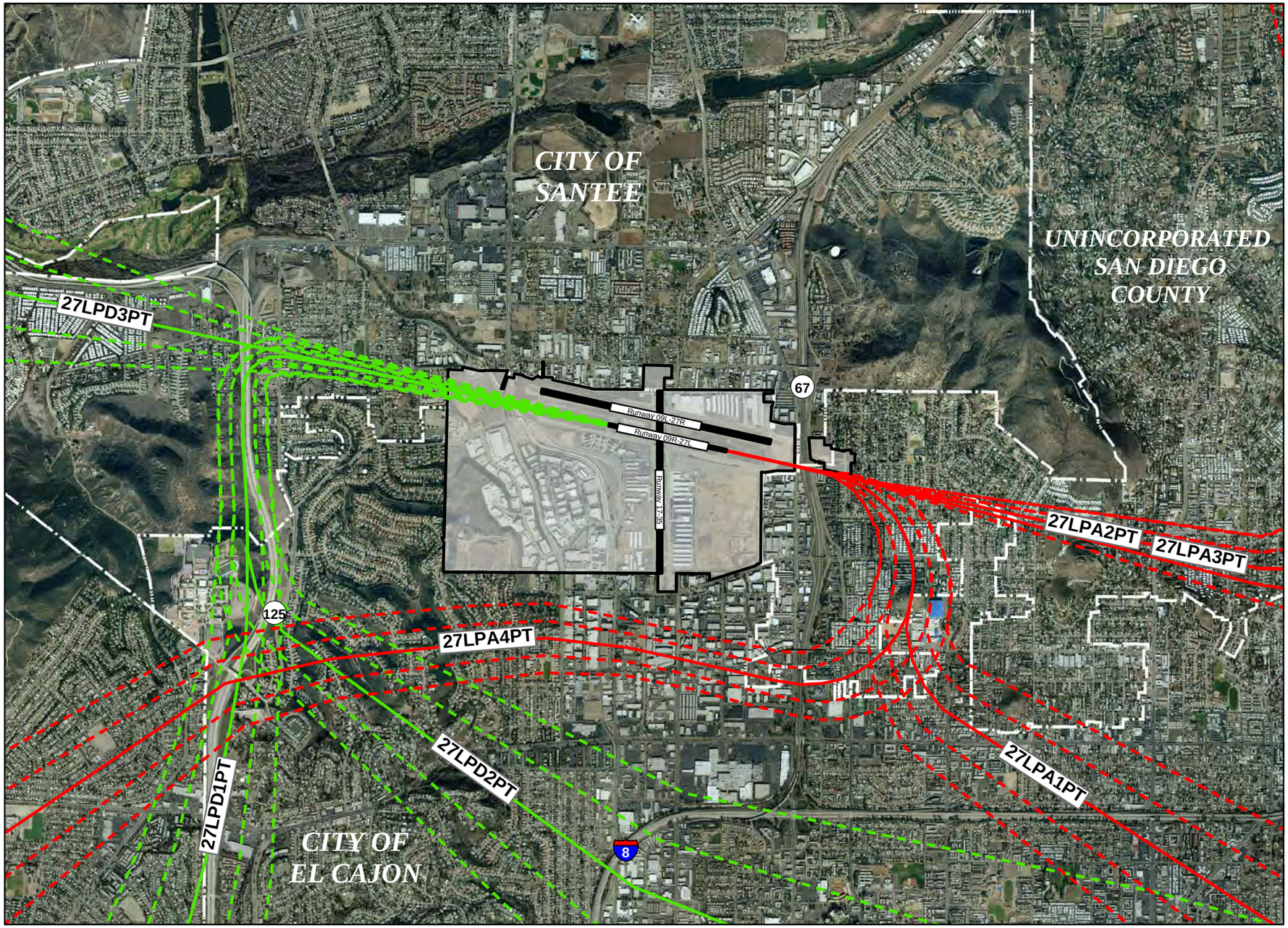
ATC LIGHT SIGNALS

Color & Type of Signal	Meaning		
	Aircraft on the Surface	**Aircraft in Flight**	**Vehicles & Equipment**
Steady Green ●	Cleared for Take-off	Cleared to Land	Cleared to cross; proceed
Flashing Green ● ● ● ●	Cleared to Taxi	Return for landing (to be followed by steady green at proper time)	
Steady Red ●	Stop	Give way to other aircraft & continue circling	Stop
Flashing Red ● ● ● ●	Taxi clear of run-way in use	Airport unsafe do not land	Clear the taxiway/ runway
Flashing White ○ ○ ○ ○	Return to starting point on airport		Return to starting point on airport
● **Alternating** ● **Red & Green**	Exercise extreme caution	Exercise extreme caution	Exercise extreme caution

Gillespie Field
Community Relations Traffic Pattern Review

Appendix C

Noise Analysis



Legend

- Arrival Track
- Arrival Subtrack
- Departure Track
- Departure Subtrack
- 27LPA1PT Propellor Aircraft INM Flight Track
- Airport Boundary
- Municipal Boundary

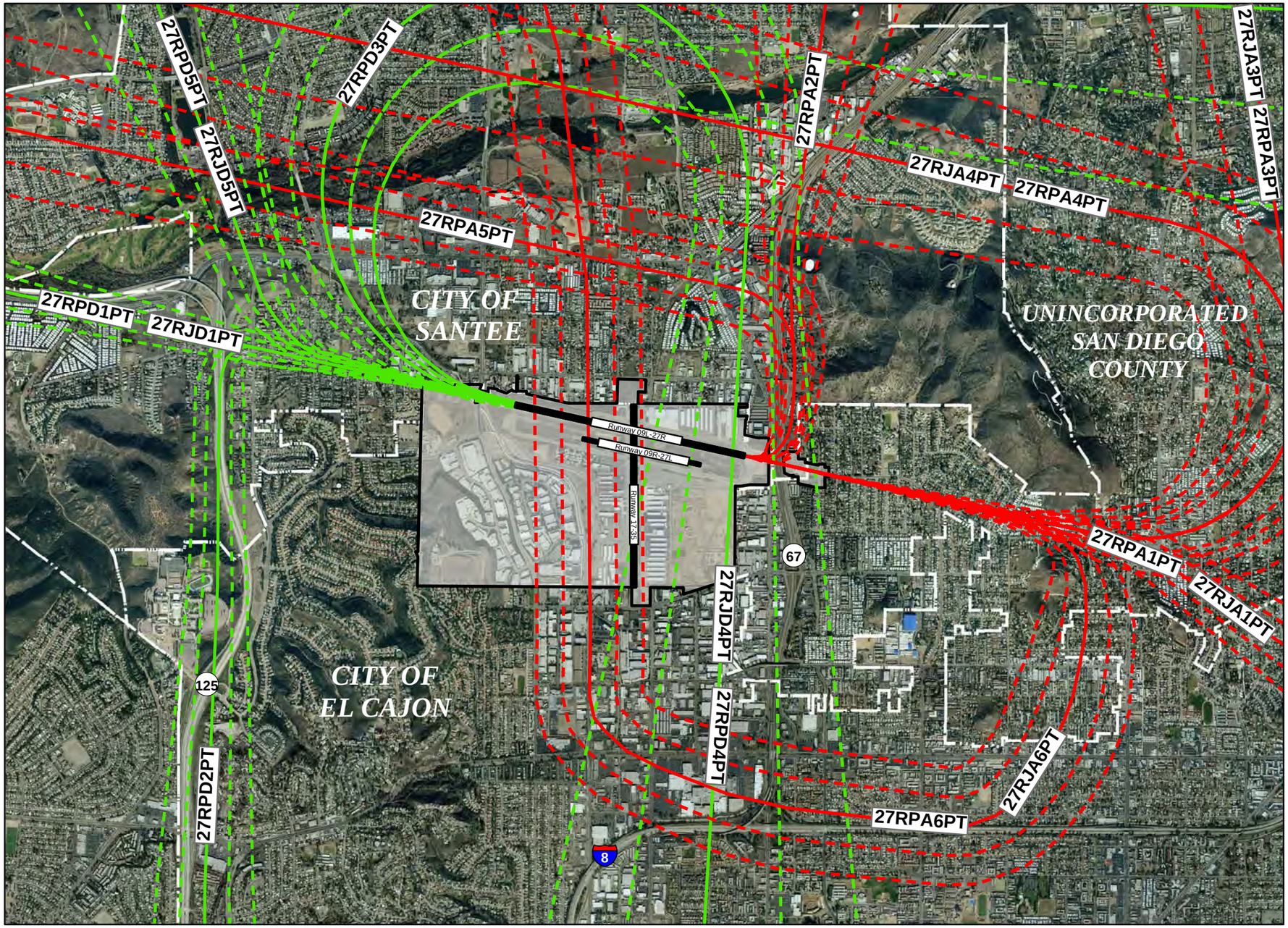
Sources: SANGIS, SANDAG 2008, AirPhotoUSA 2007, INM Model: Version 7.0 and Ricondo & Associates, Inc., 2008
Prepared by: Ricondo & Associates, Inc., October 2008

Exhibit I-5

0 2500 ft. north

Note: Flight tracks depicted not intended to represent specific aircraft flight tracks, but generalized flight tracks for noise modeling purposes.

Runway 27L Flight Tracks



Legend

- Arrival Track
- Arrival Subtrack
- Departure Track
- Departure Subtrack
- 27RPD1PT Jet Aircraft INM Flight Track
- 27RJA1PT Propellor Aircraft INM Flight Track
- Airport Boundary
- Municipal Boundary

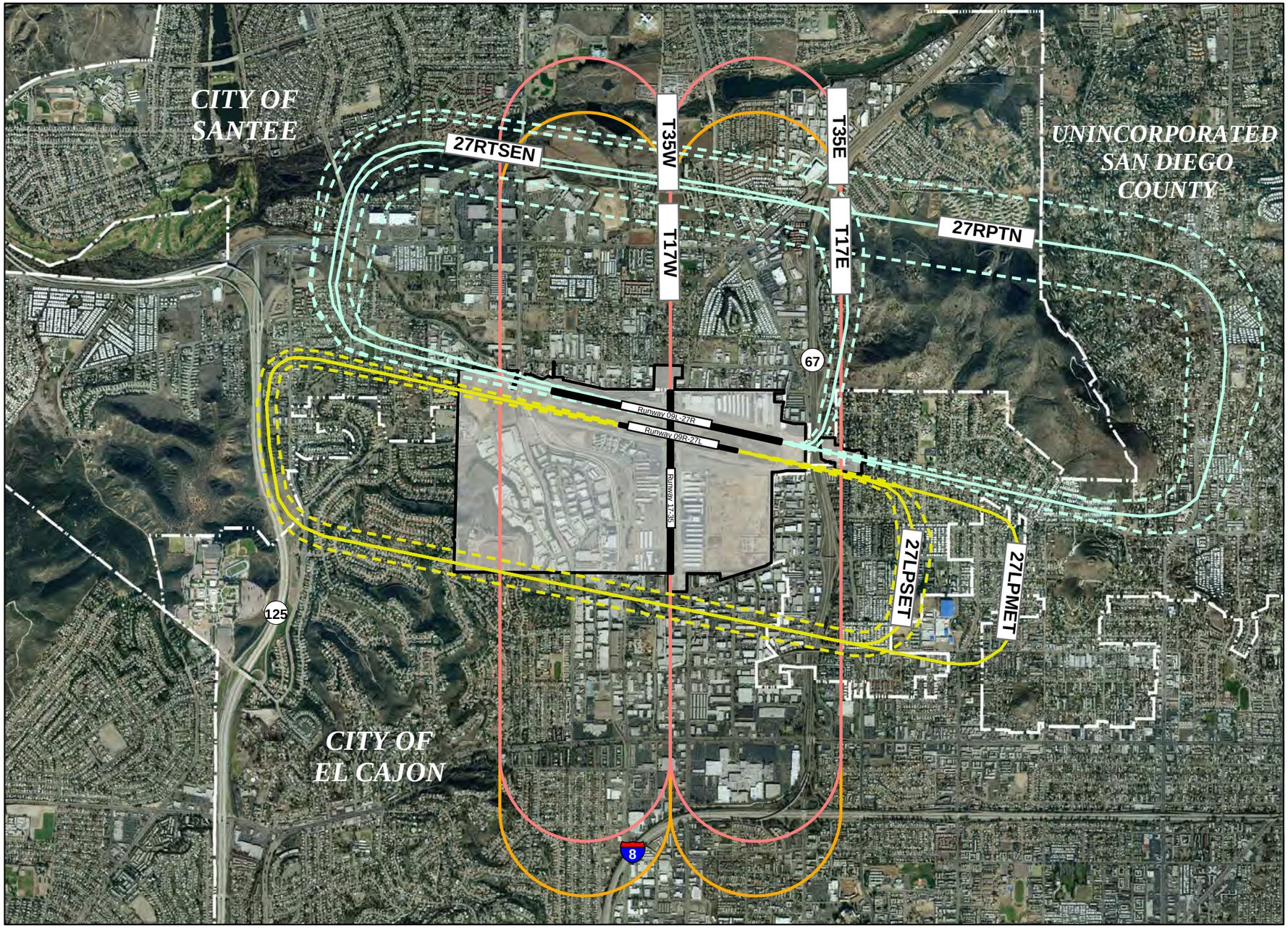
Sources: SANGIS, SANDAG 2008, AirPhotoUSA 2007, INM Model: Version 7.0 and Ricondo & Associates, Inc., 2008
Prepared by: Ricondo & Associates, Inc., October 2008

Exhibit I-6

0 2500 ft. north

Note: Flight tracks depicted not intended to represent specific aircraft flight tracks, but generalized flight tracks for noise modeling purposes.

Runway 27R Flight Tracks



Legend

- Runway 17 Track
- Runway 35 Track
- Runway 27R Track
- Runway 27R Subtrack
- Runway 27L Track
- Runway 27L Subtrack
- 27RPTN Propellor Touch-and-Go Track
- Airport Boundary
- Municipal Boundary

Sources: SANGIS, SANDAG 2008, AirPhotoUSA 2007, INM Model: Version 7.0 and Ricondo & Associates, Inc., 2008
Prepared by: Ricondo & Associates, Inc., October 2008

Exhibit I-8

0 2500 ft. north

Note: Flight tracks depicted not intended to represent specific aircraft flight tracks, but generalized flight tracks for noise modeling purposes.

Touch-and Go-Tracks

RICONDO
& ASSOCIATES

MEMORANDUM **VIA E-MAIL**

Date: August 20, 2008

To: Mr. Nelson Olivas, LUEG Program Manager
County of San Diego, Department of Public Works
Environmental Services Unit

From: Stephen C. Smith [ORIGINAL SIGNED]

Subject: GILLESPIE FIELD RUNWAY 27R-27L FIELD OBSERVATIONS

On behalf of the County of San Diego (County), Ricondo & Associates, Inc. (R&A) was assigned the task of conducting an independent field survey observation of traffic pattern use at Gillespie Field when Runway 27R is in use. Runway 27R is the predominant runway used during the year at Gillespie Field Airport (Airport). The purpose of the field survey was to log aircraft operational information and to provide a visual verification of flight track usage by aircraft category at the Airport. Specifically, R&A was tasked to observe arrival paths to Runway 27R and initial departure headings from Runway 27R.

Methodology

R&A conducted the survey for three consecutive days starting Thursday, August 14, 2008 and ending Saturday, August 16, 2008. R&A staff were positioned at two locations and observed traffic for 13 consecutive hours (between 8:00 a.m. and 9:00 p.m.). One site was located east of the Airport on Snake Mountain located near the newly constructed water tank and cell towers. This site provided a view of the entire Airport and arrivals that either operated east or west of Snake Mountain. The second site was located west of the Airport on a vacant pad near the County of San Diego Park and Recreations facility. This location provided a view of Runway 27R departures and the initial headings that were conducted by each aircraft. R&A staff logged the time, operation mode (arrival/departure) and aircraft category (single-engine, multi-engine and jet) and initial heading for departures and final approach path for arrivals.

Results

Table 1 summarizes the results of the three day observation period related to the final approach and initial departure paths for Runway 27R. Based on the observations, no jet aircraft utilized the short or "low" approach to Runway 27R. The short approach involves aircraft coming from the north or west and approaching the runway west of Snake Mountain. Approximately 26 percent of all arrival propeller aircraft utilized the short approach. The remaining 74 percent of arriving propeller and all arriving jets that landed on Runway 27R did so via the extended final straight-in approach which starts east of Snake Mountain.

5860 OWENS AVENUE, SUITE 250, CARLSBAD, CA 92008
TEL (760) 444-0106 • FAX (760) 602-8367

Table 1

Observed Runway 27R Flight Path Use

	Arrival			Departure			
	Short Final	Long Final	Total	Left Turn to South	Right Turn to Northwest	Straight-West	Total
Propeller[1/]	26%	74%	100%	8%	86%	6%	100%
Jet	0%	100%	100%	0%	64%	36%	100%

Note:
1/ Includes single-engine and multi-engine aircraft.

Sources: Ricondo & Associates, Inc., August 2008.
Prepared by: Ricondo & Associates, Inc.

Table 2 contains the Runway 27R route use assumed for the Year 2000 and the use assumptions provided by the FAA Air Traffic Control Tower on July 29, 2008. The information below is compared to the observations in Table 1.

Table 2

Previous (Year 2000 & FAA 2008) Assumptions Provided for Runway 27R Flight Path Use

	Arrival			Departure			
	Short Final	Long Final	Total	Left Turn to South	Right Turn to Northwest	Straight-West	Total
			Year 2000[1/2]				
Propeller[1/]	40%	60%	100%	38%	50%	12%	100%
Jet	41%	59%	100%	7%	84%	9%	100%
			FAA[/3]				
Propeller[1/]	3%	97%	100%	2%	97%	1%	100%
Jet	0%	100%	100%	0%	100%	0%	100%

Notes:
1/ Includes single-engine and multi-engine aircraft.
2/ Flight route use was determined based on interviews with pilots, airport management and FAA ATCT in 2000.
3/ Flight route use was provided based on interviews with airport management and FAA ATCT in 2008.

Sources: Ricondo & Associates, Inc., August 2008.
Prepared by: Ricondo & Associates, Inc.

R&A utilized the observation results to compare which of the two sets of assumptions best reflect current conditions. Overall, R&A concluded that the assumptions based on FAA ATCT interview during July 2008 best matches the observations, primarily based on the percentage of route use by jet as zero and the minimal use of the short final approach to Runway 27R by propeller aircraft as compared to the 2000 assumptions. The FAA's assumptions for the use of the short final approach to Runway 27R by propeller aircraft appears low compared to actual observations. Therefore, R&A will adjust the use based on the observations as part of the aircraft noise modeling input. This is also the case for the straight west departures and left turns to the south over State Route 125 from Runway 27R. The percentages are not exactly the same as those observed because the sample size was small; therefore, we assigned the percentages to nearest 5 percent increment. **Table 3** shows the route utilization that R&A will apply as part of the aircraft noise modeling input.

Table 3

R&A Assumptions for Runway 27R Flight Path Use

	Arrival			Departure			
	Short Final	Long Final	Total	Left Turn to South	Right Turn to Northwest	Straight-West	Total
Propeller[1/]	25%	75%	100%	5%	90%	5%	100%
Jet	0%	100%	100%	0%	75%	25%	100%

Note:
1/ Includes single-engine and multi-engine aircraft.

Sources: Ricondo & Associates, Inc., August 2008.
Prepared by: Ricondo & Associates, Inc.

In addition to observing Runway 27R flight patterns, R&A also confirmed the touch-and-go pattern for Runway 27L. R&A concluded based on the observations that most of the pilots are following the recommended touch-and-go pattern designed to abate aircraft noise levels. We will maintain the same track modeled based on previous assumptions.

In summary, no additional observations are required, at this time, to finalize the noise modeling inputs.

If you have any questions related to our findings, please call me at 760-444-0108 or email at s_smith@ricondo.com.

cc: 08-14-0475-03
Ray Hrenko, Cynthia Curtis, EDAW
Joe Huy, R&A
Read File

Gillespie Field
Community Relations Traffic Pattern Review

Appendix D

Noise Abatement

27L TOUCH & GO NOISE ABATEMENT PATTERN

1. Fly Upwind to abeam Fanita Drive
2. Turn Crosswind between Fanita and Hwy 125
3. Fly Crosswind over Hwy 125
4. Fly Downwind over the First Valley
5. Traffic Pattern 1200'
6. At 1200' Reduce RPM's to 2300 or Less

Please Fly Safely and Quietly Over our Neighbor's Homes

current

RECEIVED

APR 16 2008

Gillespie Field

U.S Department
of Transportation

**Federal Aviation
Administration**

Western-Pacific Region
Los Angeles Airports District Office

P.O. Box 92007
Los Angeles, CA 90009

April 15, 2008

Mr. Roger Griffith
Airport Manager
County of San Diego
1960 Joe Crosson Drive
El Cajon, CA 92020-1235

Dear Mr. Griffith:

Gillespie Field
Request to Alter/Modify Air Traffic Pattern Altitude
Airspace Case No. 2008-AWP-158-NRA

The Federal Aviation Administration (FAA) has completed an airspace study review on your submitted proposal, on FAA Form 7480-1, *Notice of Landing Area Proposal*, originally dated February 2, 2007 and assigned airspace case number 2007-AWP-218-NRA, that was subsequently resubmitted via email dated February 26, 2008, for a request to modify the air traffic pattern altitude (TPA) from 1188 ft. MSL to 1388 ft. MSL for runway 9R/27L.

This determination was made with respect to the safe and efficient use of navigable airspace by aircraft and with respect to the safety of persons and property on the ground. In making this determination, FAA has considered matters such as the effect the proposal would have on existing or planned traffic patterns, the effects it would have on the existing airspace structure and projected programs of the FAA, and the effects that existing or proposed manmade objects and natural objects within the affected area would have on the airport proposal.

Several months ago, the potential new TPA was implanted at the air traffic control tower at Gillespie Field to test its feasibility. Based upon the result at the completion of the test, we have determined that this proposal would adversely affect the safe and efficient use of the navigable airspace and the safety of persons and property on the ground, therefore FAA objects to the proposal, as submitted, due to the following:

- The new TPA causes the pattern to grow laterally. Pilots turn downwind after reaching pattern altitude, which often positions an aircraft much further south than when flying the previous TPA. The further the aircraft are from the air traffic control tower, the more difficult they are to see, which is especially true during times when marginal Visual Flight Rule (VFR) visibility is in effect.
- When aircraft depart Gillespie Field via the existing published departure procedure, they will cross the downwind leg of the Rwy 27L traffic pattern. The increase of 200 ft. in TPA, reduces the margin of error.

The increased workload in issuing crossing restrictions combined with the added difficulty in sighting VFR operations makes this proposal not an efficient nor functional use of the navigable airspace by aircraft from an air traffic standpoint.

If you have any questions, please contact Ms. Karen McDonald, Air Traffic Specialist at 310/725-6557.

Sincerely,

Margie Drilling

Margie Drilling
Airport Planner

Gillespie Field
Community Relations Traffic Pattern Review

Appendix E

Flight Training Procedures

TSA Student Checklist

Department of Homeland Security Response Letter

IF TRAINING NON-U.S. CITIZENS

- Introductory flights, flight reviews, proficiency checks, tailwheel, high performance, or complex endorsements are exempt.
- Flight training for sport, recreational, private certificates, or instrument, multiengine rating;
  - Flight training provider registers with TSA (www.flightschoolcandidates.gov/fsindex.html) Student submits a flight training request with TSA (www.flightschoolcandidates.gov)
  - Flight training provider confirms student's request.
  - Student pays TSA $130 processing fee.
  - Flight training provider and candidate receive preliminary TSA decision.
  - Student submits fingerprints to TSA.
  - TSA confirms receipt of fingerprints and fee and allows flight training to begin.
  - Student photo taken on first day of flight training and sent to TSA.
  - TSA notifies flight training provider if training needs to stop.
- **Okay to begin training**

Flight school/instructor keeps the following: student record for five years, photo of candidate that was taken prior to his/her flight training; TSA approval; name, gender, and date of birth; TSA ID number; copy of current and previous passports and visas; country of birth and citizenship, including previous country of citizenship (if any); requested dates, type, and location of training; U.S. pilot certificate and number (if any); current address and phone number, including previous five years; copy of $130 TSA processing fee payment receipt.

For latest information visit:
www.aopa.org/tsa_rule
http://flighttraining.aopa.org/cfi_tools/
800/USA-AOPA

STATUS OF STUDENT'S FLIGHT TRAINING REQUEST:
E-MAIL TSA AT AFSP.Help@dhs.gov

FLIGHT INSTRUCTOR
FLIGHT TRAINING VALIDATION RULE CHECK LIST

www.aopa.org/tsa_rule

TRANSPORTATION SECURITY ADMINISTRATION (TSA)
FLIGHT TRAINING VALIDATION RULE

FOR AIRCRAFT WEIGHING LESS THAN 12,500 LBS, THESE REQUIREMENTS APPLY ONLY TO FLIGHT TRAINING FOR THE SPORT, RECREATIONAL, OR PRIVATE PILOT CERTIFICATE, OR THE INSTRUMENT OR MULTIENGINE RATING.

AIRSHIPS, BALLOONS, AND GLIDERS ARE EXEMPT.

U.S. Citizens—prove citizenship status before beginning flight training
Non-U.S. Citizens—complete a background check with TSA. Receive TSA clearance to begin flight training
Flight Schools/Instructors—Complete initial and recurrent security awareness training for each active instructor and any employee in direct contact with flight students. Receive and maintain documentation of this training, and have available for TSA inspections.

IF TRAINING U.S. CITIZENS

- Introductory flights, flight reviews, proficiency checks, tailwheel, high performance, or complex endorsements are exempt.
- Flight training for sport, recreational, private certificates, or instrument, multiengine ratings;
  - Check student's proof of U.S. citizenship*
  - Keep copy of student ID for five years, **OR** endorse instructor and student logbook:

"I certify that [insert student's name] has presented me a [insert type of document presented, i.e. U.S. birth certificate or U.S. passport and control or sequential number on document] establishing that [he or she] is a U.S. citizen or national in accordance with 49 CFR 1552.3(h). [Insert date and instructor's signature and CFI number.]"

- Okay to begin training

*U.S. passport **OR** one of the following; birth certificate; certification of birth abroad with raised seal; certificate of U.S. citizenship with raised seal; certificate of repatriation; or U.S. naturalization certificate with raised seal, accompanied by government-issued picture ID

For latest information visit:
www.aopa.org/tsa_rule
http://flighttraining.aopa.org/cfi_tools/
800/USA-AOPA

Office of Congressional Relations

U.S. Department of Homeland Security
500 12th Street, SW
Washington, D.C. 20536

U.S. Immigration and Customs Enforcement

MAY - 9 2012

The Honorable Duncan Hunter
U.S. House of Representatives
Washington, D.C. 20515

Dear Representative Hunter:

Thank you for your April 18, 2012 letter to Nelson Peacock, Assistant Secretary for Legislative Affairs at the Department of Homeland Security, on behalf of Advocates for Safe Airport Policies (ASAP). ASAP contacted your office requesting information about the vetting process for foreign students receiving flight training at Gillespie Field, California. Your letter was referred to U.S. Immigration and Customs Enforcement (ICE), within DHS, for response.

In order to receive flight training in the United States, a foreign student must apply to a flight school that has been certified by ICE's Student Exchange Visitor Program (SEVP). SEVP has a comprehensive certification process for schools seeking to enroll nonimmigrant students to ensure that only legitimate foreign students gain entry to the United States. A designated school official at a SEVP-certified flight school reviews the foreign student's application and issues the student a Form I-20M-N, Certificate of Eligibility for Nonimmigrant (M-1) Student Status for Vocational Students. An applicant must then apply for an M-1 student visa with the U.S. Department of State (DOS), which determines whether to issue the visa. The vetting process continues when the potential student applies for entry in the United States at a designated port of entry, where the applicant is examined by a U.S. Customs and Border Protection (CBP) officer who determines whether the applicant is admissible into the United States.

In addition to being vetted by DOS and CBP, applicants are also vetted by DHS's Transportation Security Administration (TSA) through the Alien Flight Student Program, which includes a review of the student's submission of fingerprints to TSA. If TSA does not discover any derogatory information about a student during this process, the student is issued a security threat assessment, which allows foreign flight students to fly in the United States.

ASAP also raised concerns about the number of Chinese students enrolled at the Scandinavian Aviation Academy (SAA) and about security procedures at the Gillespie Field Airport. SAA was certified by SEVP to provide vocational or technical education flight training and currently has 52 flight students from the People's Republic of China, which represents 55 percent of the school's foreign student population. SAA is a civilian flight school and SAA's students do not have access to military aircraft or military flight training simulations.

Regarding ASAP's concerns about security procedures at the Gillespie Field Airport, the Gillespie Field Airport is owned by the County of San Diego and any security concerns regarding the airfield should be addressed to county officials.

Thank you once again for contacting ICE. Please feel free to contact my office if you have any additional questions.

Sincerely,

Elliot Williams
Assistant Director for
Congressional Relations