Reliever Airports: NOISE ABATEMENT PLAN
St. Paul Downtown Airport (STP)

1 INTRODUCTION

The noise abatement plan for the St. Paul Downtown Airport (STP) was prepared in recognition of the need to make the airport and the surrounding community as environmentally compatible as possible. The plan, as set forth here, is the culmination of a cooperative effort between airport users, airport businesses, the St. Paul Downtown Airport Advisory Council, City of St. Paul officials, Federal Aviation Administration representatives, and the Metropolitan Airports Commission (MAC). In addition, this plan includes the provisions and recommended procedures that were outlined in the June 19, 2006 Supplemental Conditions of Agreement for the floodwall at STP.

The goal of the noise abatement plan is to direct the bulk of STP traffic over sparsely-populated areas such as the Mississippi River Valley, and/or nearby interstate highways or railroad areas to limit flying over residential areas. The additional step of raising the traffic pattern altitude to 1,200 feet helps to reduce noise levels over sensitive areas. The procedures outlined in this plan are recommended and are not intended to replace safe aircraft operations and/or compliance with Federal Aviation Regulations.

2 MAC AIRPORT USE AND INFRASTRUCTURE LIMITATIONS

The MAC approved the Supplemental Conditions of Agreement at its June 19, 2006 board meeting. The Supplemental Conditions of Agreement outline certain representations and commitments by the MAC for the nature and use of STP.

2.1 Runway Infrastructure Characteristics

Two elements in the Supplemental Conditions of Agreement do not require actions on the part of the operators; rather, they represent commitments by the MAC. These commitments include provisions regarding runway infrastructure characteristics and the nature of airport use.

2.1.1 Runway Length

As part of the conditions of agreement the MAC will not take any action to increase the length of the runways at STP in excess the of the current length, unless required to do so by State law, provided that the MAC will not initiate, promote, or otherwise support enactment of such law.

2.1.2 Pavement Strength

As part of the conditions of agreement the MAC will not take any action to increase the Runway Pavement Weight-Bearing Capacity at STP beyond the maximum presently available, unless required to do so by State law, provided that the MAC will not initiate, promote, or otherwise support enactment of such law.

2.2 Cargo Operations

The MAC represents that, based on operational and space limitations, major air cargo transfer/sortation operations (such as Federal Express, UPS and other similar companies) are not able to use STP, nor will the MAC take action to accommodate such activity.

3 NOISE ABATEMENT TAKEOFF AND APPROACH PROCEDURES

3.1 A basic noise mitigation strategy is the use of noise abatement takeoff and landing procedures. There are a number of alternatives within this strategy including runway selection, takeoff and landing profiles and power settings, and approach or departure paths. Runway selection is affected by winds, airspace procedures with adjacent air traffic facilities, navigational aids, local air traffic control tower procedures, aircraft performance and requirements, and traffic density. When linked with appropriate landing and takeoff profiles and approach/departure paths, runway selection should provide relief when compared to an unconstrained airport environment.

The following takeoff and approach procedures shall apply to operations at STP:

1. When the winds are calm (less than 5 knots) the preferred runway shall be Runway 14. However, if traffic density or air traffic procedures dictate, Runway 32 may also be used.

2. In most circumstances winds, weather, or traffic density will dictate the runway to be used. However in some circumstances there will be an option as to which runway can be used. To have the least impact on the

surrounding community, and to provide for an orderly flow of traffic during non-towered hours, the following priorities are recommended when selecting a runway:

Piston Engine Aircraft or Turbo Prop Aircraft:

Arrivals: Runways 32, 31, 27, 14, 13, 9
Departures: Runways 14, 13, 9, 32, 31, 27

Jet Aircraft:

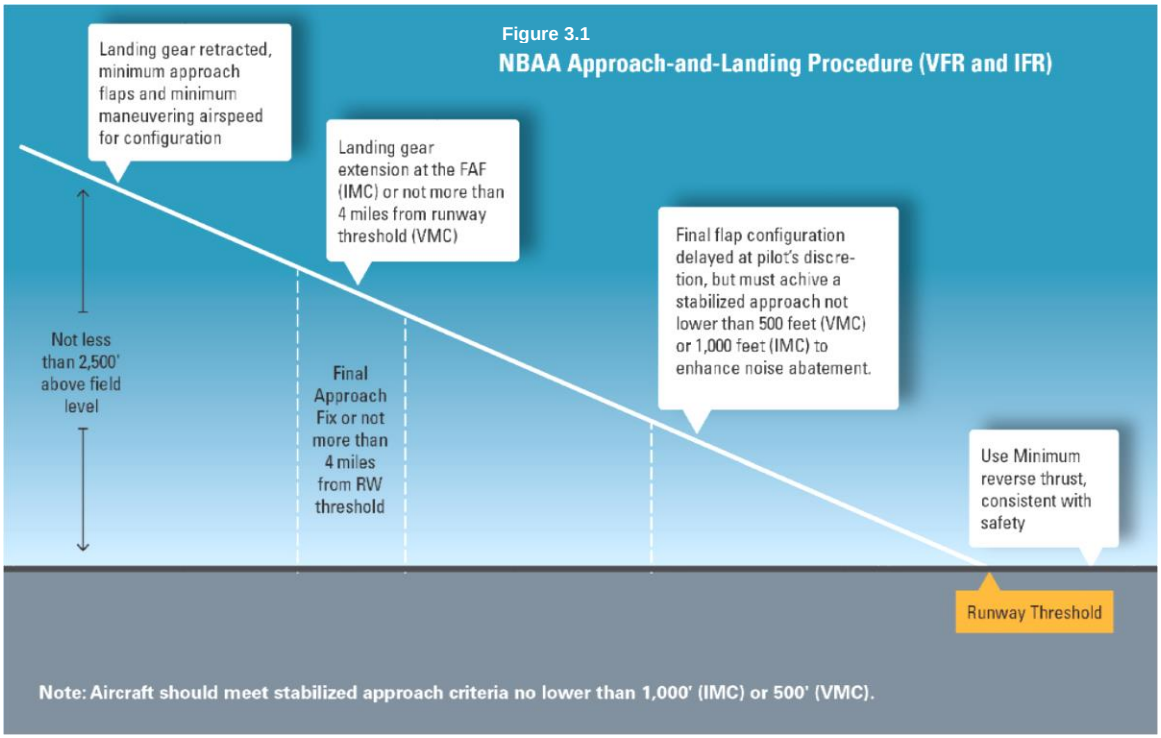
Arrivals: Runway 32
Departures: Runway 14

During tower hours, Air Traffic Control will dictate the active runway.

Unless otherwise instructed by Air Traffic Control, aircraft should follow the procedure detailed below while approaching to land at STP to minimize impact on the surrounding community.

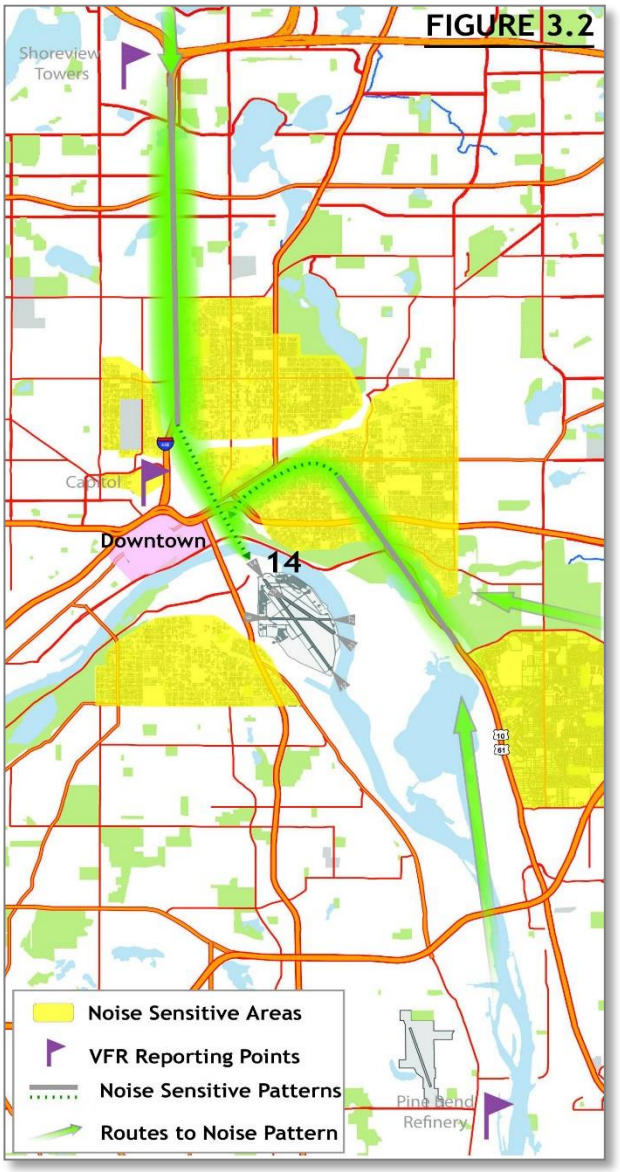
3.2 An airplane approaching to land on a runway served by a visual approach slope indicator or precision approach path indicator shall maintain an altitude at or above the glide slope until a lower altitude is necessary for a safe landing, and, unless otherwise instructed by Air Traffic Control, all general aviation aircraft shall use National Business Aircraft Association Noise Abatement Approach and Landing Procedure when arriving at the airport (see Figure 3.1).

Figure 3.1
NBAA Approach-and-Landing Procedure (VFR and IFR)

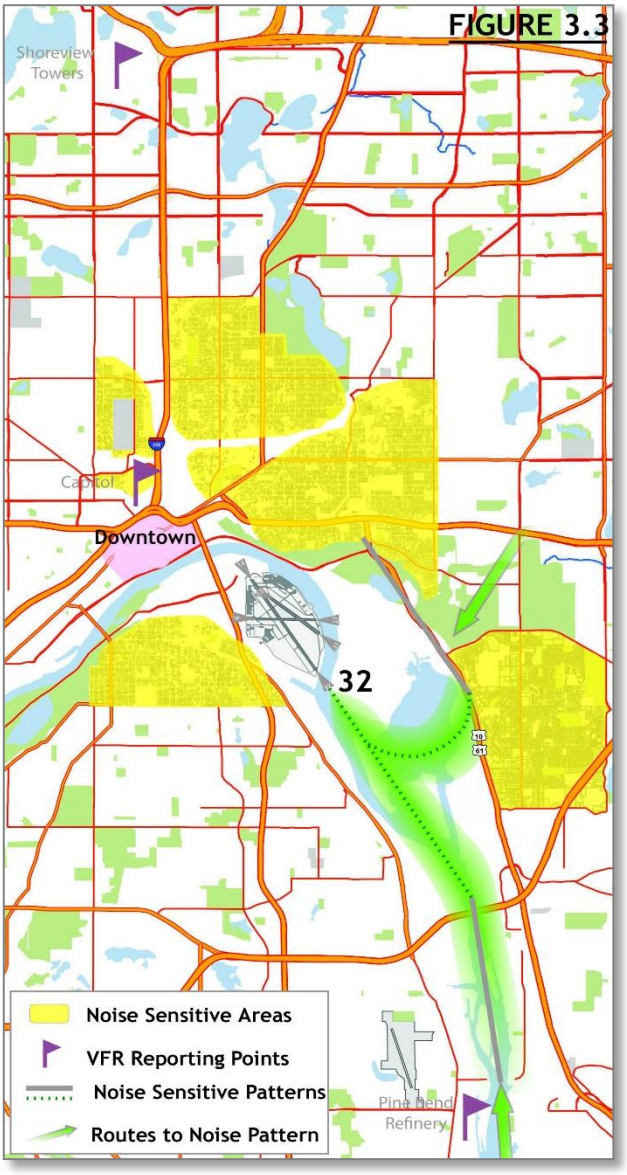


3.3 During non-tower hours, aircraft flying under visual flight rules should follow the procedures detailed below while approaching to land at STP on Runway 14 or Runway 32 to minimize impact on the surrounding community.

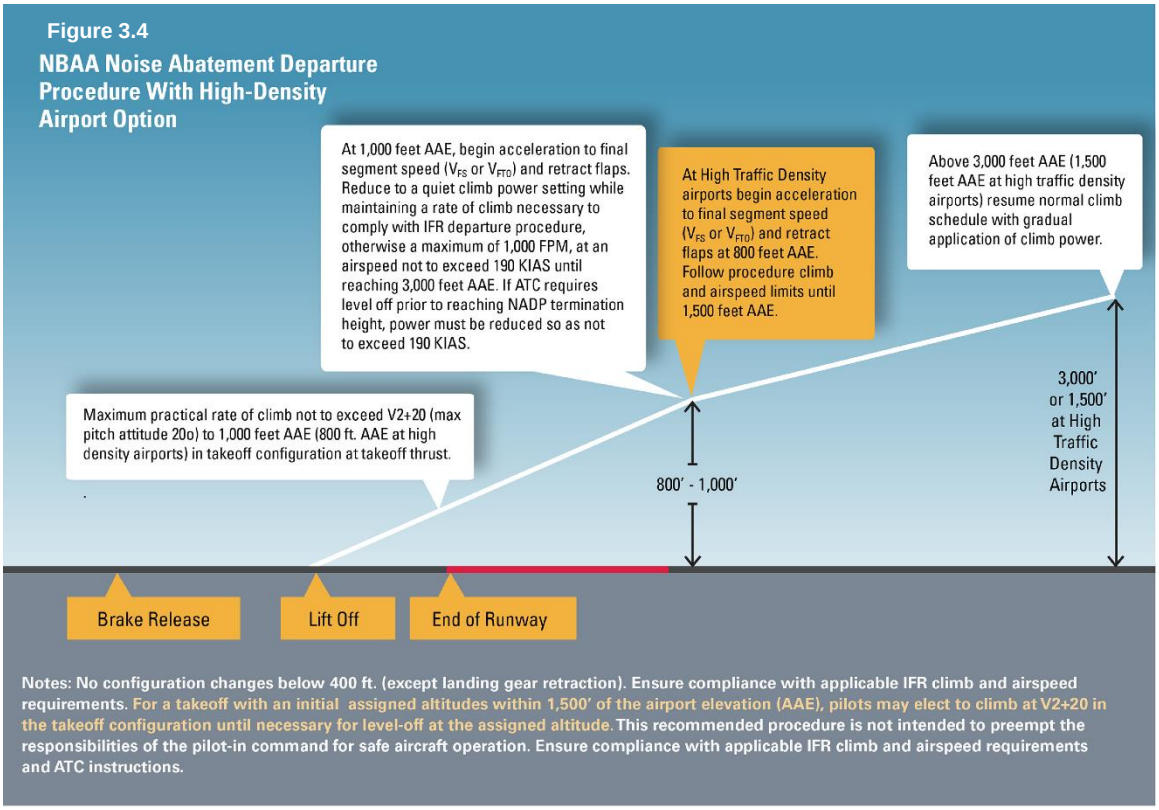
During non-tower hours, aircraft landing on Runway 14 should follow the preferred noise abatement arrival routes (interstate 35E or Mississippi River) and avoid noise-sensitive residential areas (see Figure 3.2).



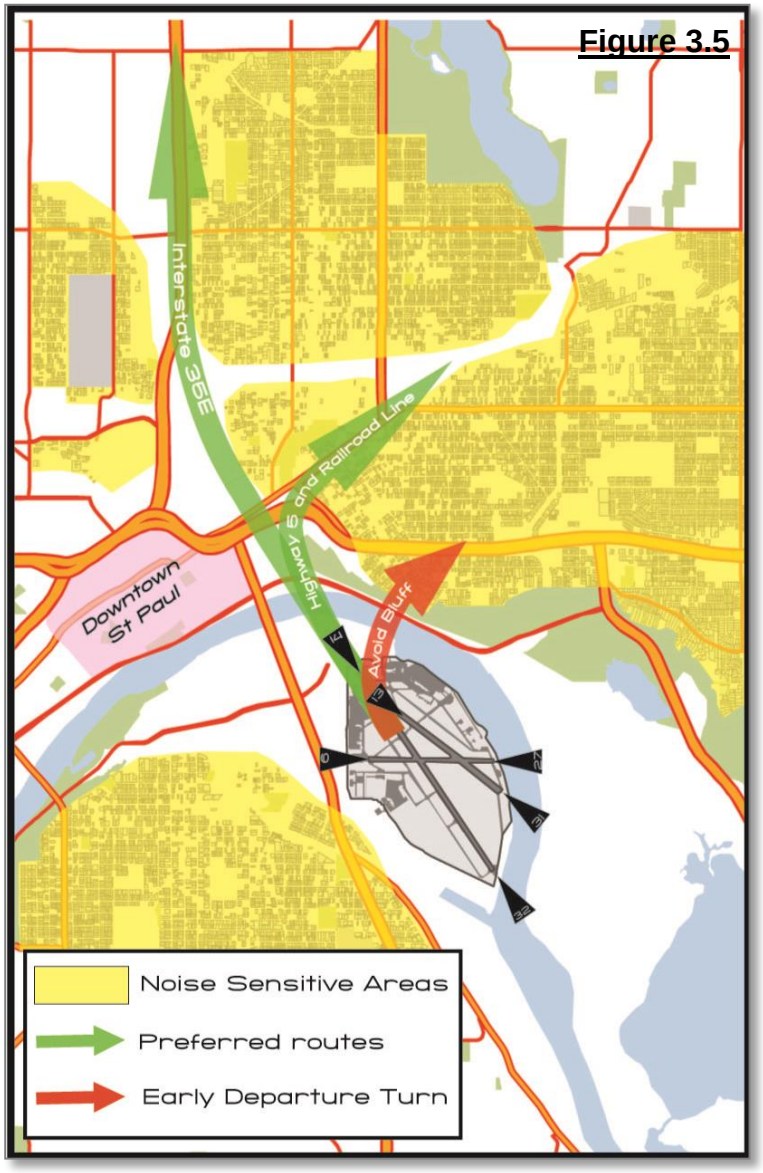
During non-tower hours, aircraft landing on Runway 32 should follow the preferred noise abatement routes (Mississippi River/Downwind over highway 61) and avoid noise-sensitive residential areas (see Figure 3.3).



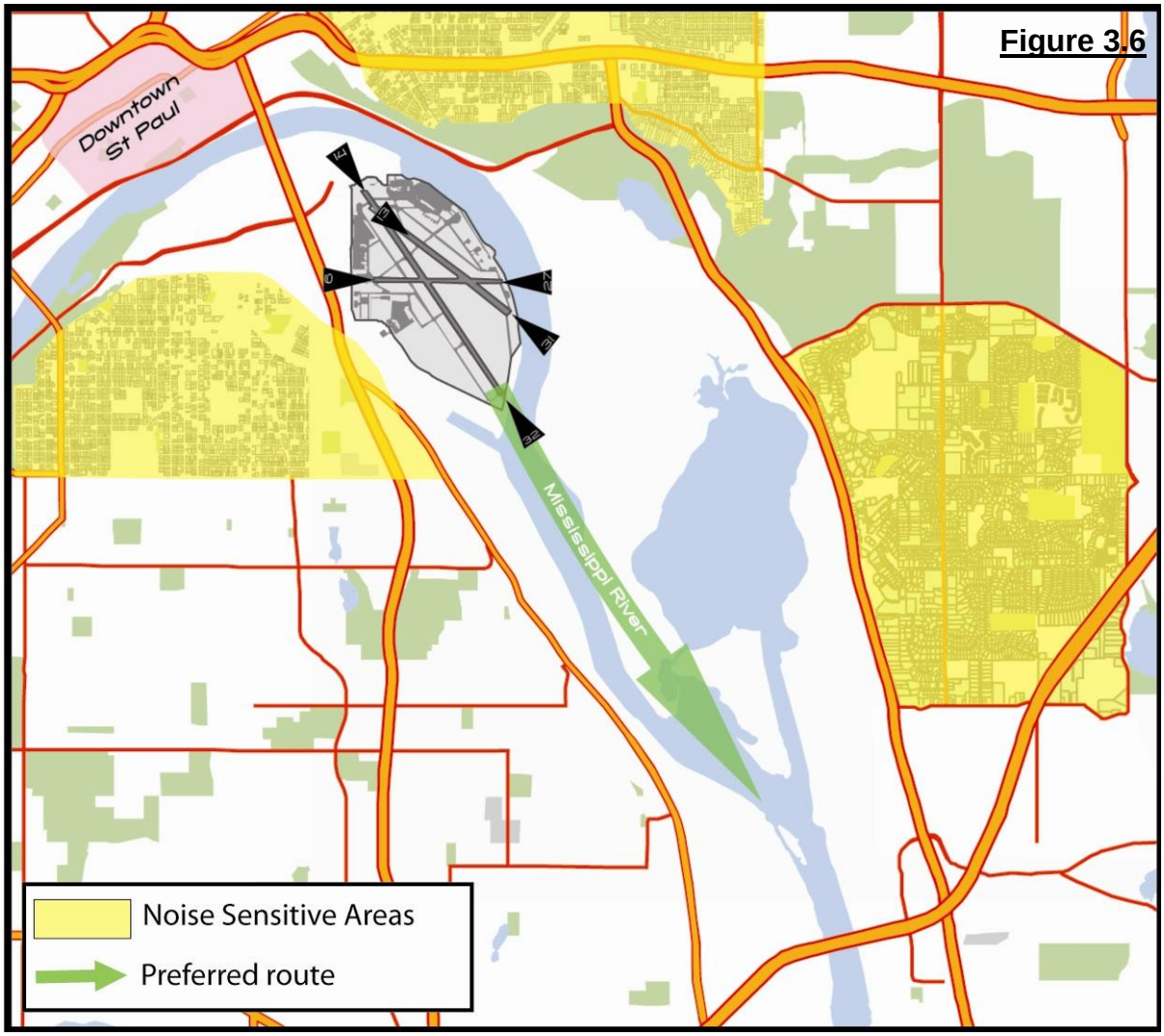
3.4 Unless otherwise instructed by Air Traffic Control, turbojet aircraft departing on Runways 32 or 31 shall use the National Business Aircraft Association Close-In Departure Procedure (see Figure 3.4).



3.5 During non-tower hours, when departing Runway 32, aircraft shall fly runway heading for 1.7 nautical miles before turning to a northerly or northeasterly heading to Interstate 35E or Highway 5/Railroad Line (see Figure 3.5).



3.6 During non-tower hours, when departing Runway 14, aircraft shall follow the preferred noise abatement route (Mississippi River) whenever possible and avoid noise-sensitive residential areas (see Figure 3.6).



4 TRAFFIC PATTERN PROCEDURES

The traffic pattern is the specified path to be flown by aircraft operating in the vicinity of an airport. The components of a typical traffic pattern are: upwind leg, crosswind leg, downwind leg, base leg, and final approach (see Figure 4.1).

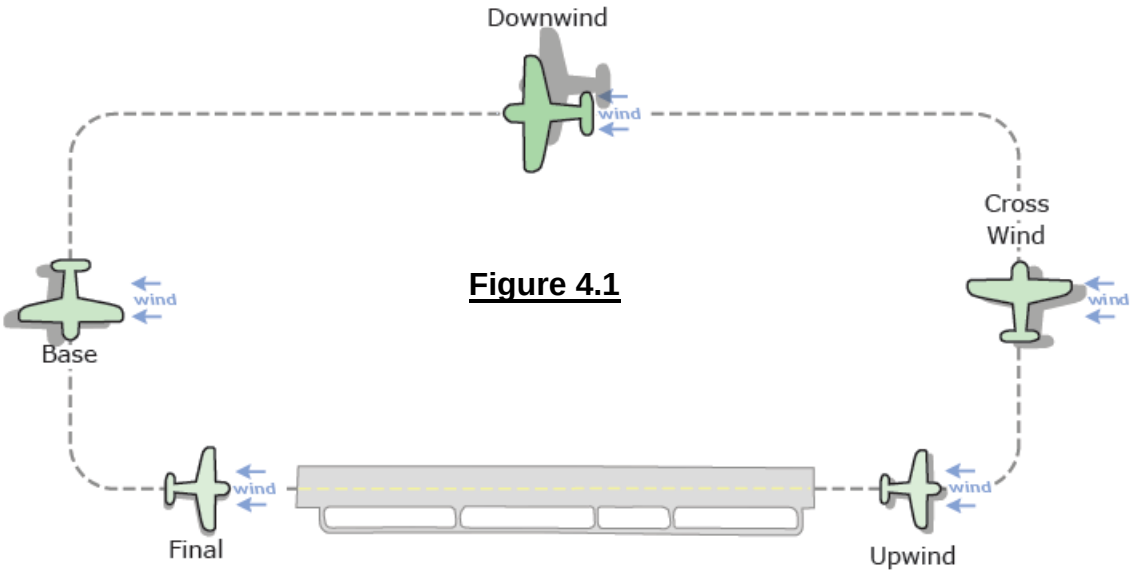


Figure 4.1

The following procedures shall be adhered to while operating in the traffic pattern at STP:

4.1 Consistent with recommended airport operating procedures and minimum safe altitudes as established in Part 91 of the Federal Aviation Regulations, the traffic pattern altitude shall be 1,200 feet above ground level.

4.2 Multiple training events by jet aircraft in the traffic pattern are prohibited.

4.3 Extended legs in the traffic pattern are not permitted unless required by Air Traffic Control or for operational safety.

4.4 Whenever feasible, aircraft remaining in the traffic pattern shall use Runway 13/31.

4.5 During non-tower hours, avoid noise-sensitive residential areas and avoid repeated training operations over the same noise-sensitive areas.

5 MAINTENANCE RUN-UPS

Two locations at STP are designated for engine tests and maintenance run-ups, as specified below. These locations are selected to minimize the amount of noise projected toward adjacent residential areas.

5.1 Between 1700 and 2200 local time all engine tests and maintenance run-ups in excess of 5 minutes shall be conducted in the designated area.

5.2 Aircraft will be parked on a heading of 270 to 320 degrees whenever practical.

5.3 Except in emergencies, engine tests and maintenance run-ups are prohibited between 2200 and 0800 local time.

5.4 Run-up Areas

The run-up pad adjacent to the threshold of the active runway should be used.

6 HELICOPTER PROCEDURES

The unique design characteristics and capabilities of helicopters allow and sometimes require operations to and from movement areas not designated for fixed wing aircraft. In general, helicopter operators are instructed to avoid the flow of fixed wing aircraft. The following procedures shall apply to helicopter training at STP:

6.1 Helicopter training in the traffic pattern area is prohibited from 2200 to 0800 local time.

6.2 Air Traffic Control shall determine traffic pattern procedures for training helicopters, keeping in mind the noise-sensitive areas surrounding the airport.

6.3 During non-tower hours, helicopters shall follow the preferred noise abatement routes (Interstate 35E, Highway 5/Railroad Line, and the Mississippi River) whenever possible and avoid noise-sensitive residential areas, as detailed in Figures 3.2, 3.3, 3.6 and 3.7.

7 NIGHTTIME RESTRICTIONS

The period of 2200 hours to 0700 hours is when most people are resting and are most sensitive to noise intrusions. To help mitigate the effect of airport operations on the surrounding community, the following voluntary nighttime restrictions are in effect at STP.

7.1 Operators are asked to refrain voluntarily from conducting operations during the quiet hours, 2200 to 0700 local time.

If operations must occur during the quiet hours, operators shall follow the departure and arrival procedures previously outlined and avoid flying over noise-sensitive residential areas.

7.2 No training may be conducted in the traffic pattern between 2400 and 0700 local time. *Note: Operations between 2200 and 2400 local time may need to be conducted for the purposes of meeting nighttime flight currency requirements.*

7.3 Intersection takeoffs at STP are discouraged at all times. There may be no intersection takeoffs between the hours of 2200 and 0700 local.

8 COMPLAINT PROCEDURES

The MAC maintains a noise complaint and information line 24 hours a day, seven days a week. Residents may call this number (612-726-9411) or the locally listed number (651-224-2203) to file noise complaints about specific operations at STP or to request a return call. Residents may also log complaints using the Noise Program website: www.macnoise.com.