U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of the Airport Planning and Programming

800 Independence Ave, SW.
Washington, DC 20591

Dear Industry Stakeholder:

The Federal Aviation Administration (FAA) Office of Airport Planning and Programming, Planning and Environmental Division (APP-400), along with the Air Traffic Organization's Aeronautical Information Services (AJV-A), invites comments on draft recommendations for Noise Abatement Entries in the FAA's Chart Supplement.

Your review of and input on this draft document will help the FAA improve the quality and usability of the final document. The "Request for Industry Feedback" section in the draft summarizes the input the FAA particularly needs from industry.

Please submit your comments, including suggestions, questions and contrary opinions, as well as your reasoning and justification for all comments, on the provided comment matrix. Do not embed your comments in the draft document. Comments submitted in other formats or after the due date may be rejected.

To ensure proper consideration of your comments, please submit the completed comment matrix document to NACS@faa.gov by July 1, 2024.

Sincerely,

Jean Wolfers-Lawrence

Jean Wolfers-Lawrence
Manager, Airports Environmental Branch (APP-420)

FAA
Airports Planning & Environmental Division &
Aeronautical Information Services

Noise Abatement Entries in the Chart Supplement

Table of Contents

1.0 Introduction

The Federal Aviation Administration's (FAA's) Chart Supplement (CS) is intended as the first and primary reference for pilots to obtain operational airport noise abatement information (NAI). To accompany this practice, the Aeronautical Information Services (AJV-A) and Office of Airports (ARP) have developed a new draft structure and nomenclature for NAI published in the CS. A primary goal of this effort is to streamline access to and readability of NAI for use by the pilot community in the interest of improving voluntary pilot adherence with an airport's NAI.

The FAA's efforts to improve NAI access and useability in the CS include the following:

- Establishing a new noise entry in the Chart Supplement – Airport/Facility Directory Section, per specifications developed by the Interagency Air Committee (IAC) 8. **Figure 1** depicts the new noise section, highlights the new subsection's location (Item 24), and provides an example of how NAI is now published.
- Consulting with pilot, operator, and airport stakeholders on preliminary best practice recommendations, as part of the AJV-A 2021 Spring and Fall and 2022 Spring Charting Meetings.
- Publishing best practices for noise entry structure and nomenclature, as outlined in this memorandum.
- Expanding the CS abbreviation list to include terms commonly used to describe noise-related information.
- Incorporating guidance on including NAI within the CS into Section 9.3 of draft AC 150/5020-1, Noise Control and Compatibility Planning for Airports. The final version of this document on Noise Abatement Entries in the Chart Supplement is expected to become an appendix to AC 150/5020-1.
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1.1 Request for Industry Feedback

This document describes recommended best practices for the publication of NAI in the CS, with a focus on uniform structure and nomenclature for NAI entries to assist pilots operating in the National Airspace System (NAS). The FAA requests industry feedback from the pilot community, aircraft operators, and airport operators. In particular, the FAA seeks information on the following:

1. NAI is used as a general term that covers operational noise abatement information. This term is used instead of Noise Abatement Procedures (which have been confused with published instrument flight procedures or Air Traffic Control Tower (ATCT) standard operating procedures) or Noise Abatement Plan/Program (which is an airport- and community-centric term, but less relevant to the pilot community). Conveying this as "information" is meant to reflect that it's an informational "request" to the pilot.
    a. Is NAI an effective term, or should another term be used instead?
2. The vast majority of NAI is voluntary, as described in Section 2.2. As such, this document does not recommend including the word "voluntary" within each noise entry in the interest of brevity. Instead, any mandatory provisions will be so identified.
    a. For the pilot community, will this construct be readily understood?

b. For the airport community, will this construct be readily understood by your community stakeholders?

c. Quiet hours are defined as voluntary and curfews are defined as mandatory, as stated in this document. Will this be readily understood?

3. Certain airports include additional NAI in CS Section 3: Notices. The general guidance is to only include this material when there is complex information that cannot be readily incorporated in the CS Section 2 noise entry. Examples include graphical routes and landmarks[1] to avoid noise sensitive areas, complex route instructions, or specific aircraft noise performance criteria.

   a. Are there specific criteria that should be established to define when a CS Section 3 notice is recommended to supplement (not replace) the noise entry in CS Section 2?

4. Preferential runway use programs sometimes include calm wind runway use, which is reported by weather observation systems with wind velocity 3 knots or less. However, some preferential runway use programs use higher wind velocity (e.g., below 8 knots).

   a. For the purpose of runway selection, is a specific wind velocity value useable or should "calm" instead be broadly defined for NAI purposes, to aid pilot judgement and decisions?

5. The structure, nomenclature, and template (Section 6) needs to be usable to ensure airport operators can easily prepare NAI for submission to FAA for publication in the CS.

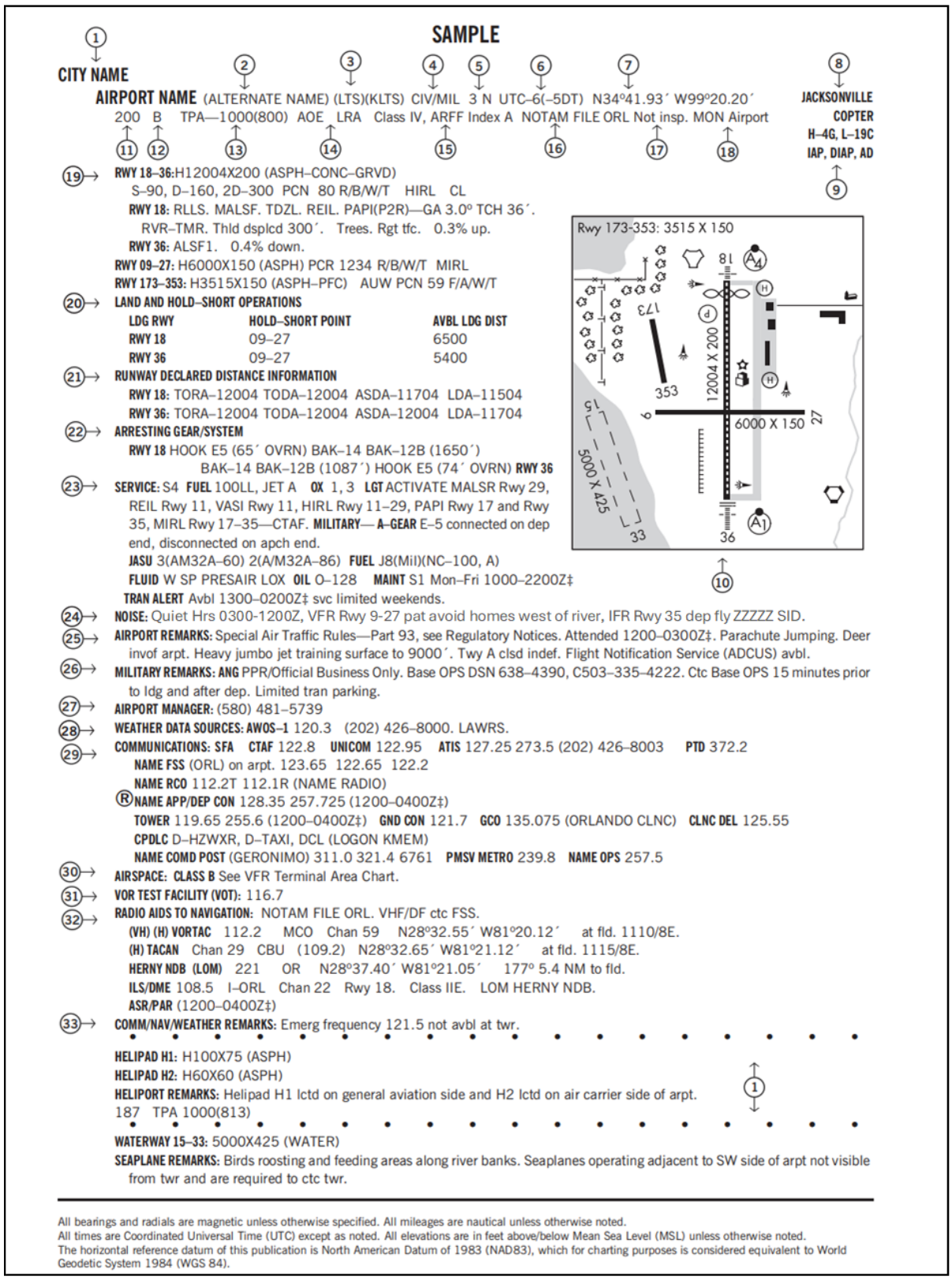
   a. Is the order of NAI categories for use in the noise entry in CS Section 2 logical? If not, what is a better order?

   b. With use of standardized nomenclature, what are remaining areas of potential confusion or undue ambiguity?

   c. To develop the recommended structure and nomenclature, FAA reviewed the existing 488 NAI published by airports. The resulting recommendations are meant to cover the vast majority of NAI that is commonly used across the system. It is understood that from time to time, unique terminology will be needed that is not covered in this memorandum. Are there any key missing types of NAI or operational related noise terms?

[1] Landmarks is inclusive of noise-sensitive areas as used in National Environmental Policy Act (NEPA) evaluations and FAA noise policies. The intent of using 'landmark' in NAI is to identify specific visual references that the pilot can easily recognize and so avoid noise sensitive areas.

Figure 1 – CS Section 2 Facility Directory with Noise Section



Source: FAA December 2022

2.0 Best Practices

The noise subsection in the Chart Supplement, Section 2, Facility Directory, is the first and primary location for pilots to obtain NAI. NAI is provided with textual descriptions that follow a common structure and nomenclature. If needed, graphical depictions in the CS Section 3 Notices are used to supplement the textual description in CS Section 2. **Table 1** details best practices for including NAI entries in the CS.

Table 1 – Noise Abatement Information Best Practices

Topic	Best Practice	Notes
Publication of Noise Abatement Information (NAI) in the CS	Publish NAI in Section 2 of the CS, providing pilots with one common location for NAI.	The CS is the primary source for NAI. However, temporary NAI during construction can be published via NOTAMs. The use of the current term for noise abatement (abbreviated today in the CS as NS ABTMT) is normally redundant and so not necessary. Avoid including web links in NAI, as the links often change and become outdated.
NAI Clarity	Provide clear, direct, and complete NAI that is flyable by the pilot.	NAI language is direct and avoids directing the pilot to other sources (e.g., the local air traffic control tower (ATCT), the airport's noise office, websites, or other publications).
NAI Clarity	Use simple and direct phraseology.	Avoid the use of redundant and excessive words and unnecessary adjectives or adverbs.
Section 3: Notices	In cases where NAI is complex, develop a graphic for publication in the CS Section 3, Notices, that supplements the textual description in CS Section 2.	Notices supplement but do not replace the NAI entry in CS Section 2. They are recommended when there are complex operational noise abatement routes or Noise Sensitive Landmarks (NSLs) to avoid that are better described graphically. Ensure the graphic location in the CS Section 3: Notices is referenced in the Section 2 noise entry.

Topic	Best Practice	Notes
Abbreviations	Use the abbreviations established in the CS and Terminal Publication Products (TPP) to describe NAI.	Only use listed abbreviations.
Noise Sensitive Landmark (NSL)	Specify the type of noise sensitive landmark that can be visually identified by the pilot (e.g., homes, houses, schools, parks, churches, etc.), their location in relation to the airport, and how to minimize noise over the areas as applicable (e.g., a minimum altitude or avoid overflight). If NSLs are identified without specific route information, provide location information so pilots can easily identify and avoid these areas.	Avoid using a generic, non-specific term such as noise-sensitive areas; specify recognizable landmarks instead.
Visual Flight Rules (VFR) vs Instrument Flight Rules (IFR)	The use of flight tracks by aircraft flying under either VFR or IFR is considered depending on the mix of users at the airport. Often, an airport needs to develop noise abatement flight tracks for both visual and instrument operations. Even if the preferred ground track is similar, the method by which the preferred flight track is accomplished varies between an aircraft flying VFR versus the same aircraft flying IFR and on an IFR clearance. Charted Visual Flight Procedures (CVFP) and Instrument Flight Procedures (IFPs) are published in the FAA Terminal Procedures Publication. If an IFP is used for noise abatement, the NAI should specifically reference the published IFP.	NAI are not described holistically as a “procedure,” as this term best describes published IFPs and/or Air Traffic Control (ATC) operating rules. To avoid confusion, do not refer to VFR routes and NAI as a procedure.
Vertical Profiles	Identify applicable profiles found in current AC 91-53 - *Noise Abatement Departure Profile*), ICAO, and/or National Business Aircraft Association (NBAA) approach and departure criteria, as applicable to jet aircraft.	Distant takeoff profiles are the default. Therefore, identify if a vertical profile other than the distant Noise Abatement Departure Profile (NADP) is requested. All jet operations on the same or parallel runway ends will use the same NADP.
Aircraft Type Groups	Specify when information and instructions pertain solely to particular aircraft groups.	Specify jet, turboprop, prop, civ acft, mil acft, or use ‘all acft’ when applicable.

Topic	Best Practice	Notes
Altitude	Use mean sea level (MSL) to reference altitude instead of above-ground level (AGL) altitude.	
Time	Specify the time in Zulu, not local.	

SOURCE: Original

2.1 Abbreviations

Developing a common NAI nomenclature using standard abbreviations that pilots readily understand is most efficient. Abbreviations used in this document and proposed abbreviations for the CS appear in **Appendix A.** The proposed abbreviations reflect commonly used terminology.

2.2 Voluntary Use Concept

Aircraft flight and operational noise abatement measures are voluntary for pilots and ATC (unless approved by the FAA pursuant to Title 14 Code of Federal Regulations (CFR) Part 161- *Notice and Approval of Airport Noise and Access,* or grandfathered under the Airport Noise and Capacity Act of 1990), with usage depending on safety, wind, weather, and traffic flow management. Conditions may dictate that the pilot deviates from voluntary adherence to the recommended NAI. The final decision to accept and use operational noise abatement measures, including those assigned in IFR clearances, is with the pilot in command of the aircraft. The pilot in command is ultimately responsible for decisions about the safety of the aircraft. For these reasons, aircraft flight operational noise abatement measures are approved as "voluntary" in an airport Noise Compatibility Program prepared per 14 CFR Part 150 – *Airport Noise Compatibility Planning*. See also AC 150/5020-1 - *Noise Control and Compatibility Planning for Airports*.

Within the voluntary construct, the airport operator must consider the operational method (i.e., VFR or IFR) for how pilots use operational noise abatement measures. The operational method is a key consideration in developing flyable measures with recurring, repeatable use by pilots. Otherwise, the measures may not attain the noise benefits the airport and nearby communities seek. For example, a visual track from the departure runway end is effectively unusable by a jet departing on an IFR clearance that needs to connect to the en-route IFR airway structure.

Voluntary use extends to noise abatement measures assigned in ATC clearances, as the pilot has the option to refuse an ATC clearance that includes a runway or IFP that the aircraft cannot safely use. Instead, the pilot will coordinate with ATC for a different clearance that is flyable under the operative conditions. See 14 CFR Part 91.123 - *Compliance with ATC clearances and Instructions*. Note that any IFR clearance or a direct command issued by ATC takes precedence over any NAI detailed in the CS.

A common question with operational noise abatement measures is whether they are "mandatory" or voluntary. Certain NAI may have mandatory provisions (or "required" provisions, which has the same meaning as mandatory in this context). The most common "mandatory" instructions are those based on local agreements or ordinances implemented before the Airport Noise and Capacity Act of 1990; such pre-existing restrictions are considered "grandfathered." Other mandatory NAI can include formal runway use programs addressed in 14 CFR Part 91.129(h) – *Operations in Class D Airspace, Noise Abatement*. Required departure procedures may be established by FAA under 14 CFR Part 91.129(g) – *Operations in*

Class D Airspace, Departures. In addition, an airport operator may seek a new mandatory measure under 14 CFR Part 161, *Notice and Approval of Airport Noise and Access*, which ultimately requires FAA approval.

NAI is considered voluntary unless indicated otherwise. Accordingly, using the word "voluntary" in the NAI entry is not necessary. Using "mandatory" or "required" in a NAI for flight operations requires specific authority and must be validated by FAA before publication in the CS.

2.3 Nighttime Use Avoidance

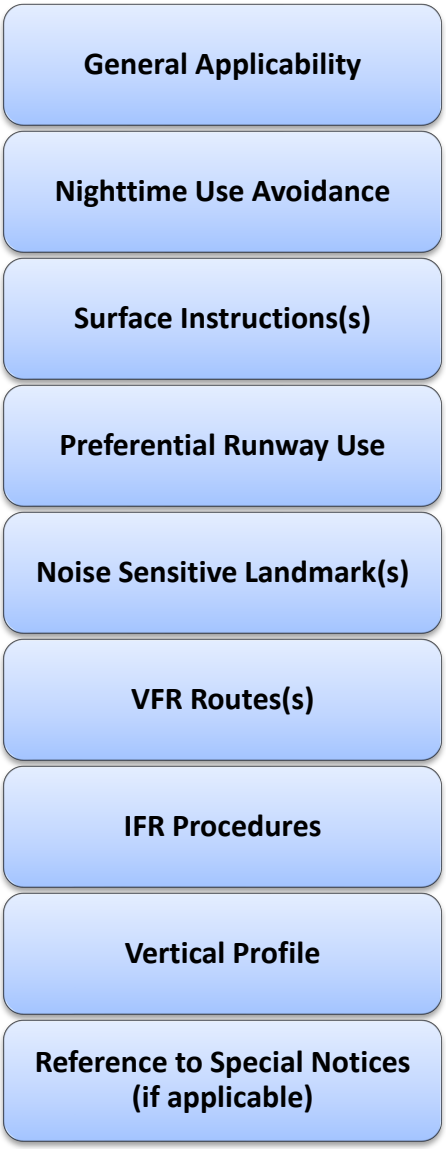
Many airports have noise programs that publish times of the day when aircraft operations are discouraged. To promote clarity in the descriptions of nighttime provisions, FAA recommends the following nomenclature:

- "Curfew Hrs" is used if the restriction/discontinuation of operations during a specific time period is *mandatory.*
- "Quiet Hrs" applies if the requested limitation of operations during a specific period is *voluntary.*

3.0 Consistent Structure

A consistent, standardized structure is used so the pilot can readily understand and use the NAI. **Figure 2** illustrates the recommended structure for NAI in the CS. NAI entries are organized into nine categories: (1) general applicability, (2) nighttime use avoidance, (3) surface instructions, (4) preferential runway use, (5) noise sensitive landmarks, (6) VFR routes, (7) IFR procedures, (8) vertical profiles, and (9) references to special notices contained in Section 3 of the CS. Not all categories will apply to all airports' NAI. However, the NAI should follow this order to promote consistency and readability.

Figure 2 – NAI Structure Used in the CS Section 2 Noise Entry



SOURCE: Federal Aviation Administration, May 2023

Table 2 further describes the proposed structure for NAI published within the CS. A key motivation for a standard structure is to ensure the pilot quickly understands it. Thus, the categorical order presented remains consistent whether there is relevant information is in a given category. Each new category in the hierarchy begins with an identifier.

152 **Table 2 – Detail of the Recommended NAI Structure**

NAI Structure	Ident	Description	Conditions, as Applicable	Example
General Applicability		Voluntary use is assumed unless a mandatory provision exists. If all categories of NAI have the same effective times, indicate times here or 24 hours if that is the case.	To be used as an introduction for publishing of NAI, if needed	In eff 0300Z-1200Z ***or*** In eff 24 hrs.
Nighttime Use Avoidance	Quiet Hrs, or Curfew Hrs	"Quiet Hrs" is to be used when nighttime use avoidance is voluntary. "Curfew Hrs" is used when nighttime use avoidance is mandatory. Publish time in effect using Zulu as the time standard.	Time of Day (Zulu) Aircraft Group Civil or Military	Quiet Hrs, 0100Z-1200Z
Surface Instructions(s)	SFC	Surface instructions are specific to ground maneuvers, such as engine runups or using a ground runup enclosure (GRE).	Time of Day (Zulu), Aircraft Group, Locations	SFC 0300Z-1200Z No runups
Preferential Runway Use	PREF RWY	Identify the preferential runway use for arrival and/or departure operations if applicable. This includes calm wind runways or nighttime runway use. Identify any requests on Stop and Go (SG) or Touch and Go (TG) provisions here also.	Time of Day (Zulu) Runway for arrivals and/or departure	PREF RWY USE 0300Z-1200Z Rwy 09 pref calm winds. 1700Z-0300Z no TG or SG Rwy 09
Noise Sensitive Landmark(s)	NSL	If applicable VFR routes are not identified, then identify the type and location (distance and direction) to noise sensitive landmarks so pilots can select visual maneuvers to avoid these areas as much as possible or to fly over them at or above a recommended altitude.	Aircraft Group, Type of landmark (houses, school, hospital, etc.), Distance to landmark	NSL TBJT, avoid ovft of houses 3 NM SE of arpt blo 1,000 ft. MSL.
VFR Routes(s)	VFR	Flight routes specific to aerial maneuvering about a horizontal track and/or altitude per runway end and aircraft group. Avoid VFR routes that rely on a distance from the runway end (e.g., fly 1 mile then turn), as the pilot cannot easily judge distance flown behind them.	Time of Day Runway Aircraft Group	VFR, dep Rwy 18 fly rwy hdg to end or 1500´ MSL prior to turn
IFR Procedures	IFR	Aircraft operating under IFR can use published Instrument Flight Procedures (IFPs), such as Standard Instrument Approach Procedures (SIAPs), Standard Instrument Departures (SIDs), Standard	arr or dep Time of Day	IFR dep 0300Z-1200Z RWY 27, file

NAI Structure	Ident	Description	Conditions, as Applicable	Example
		Terminal Arrival Route (STAR) and/or CVFP to mitigate noise. Reference the applicable IFP used for noise abatement.	Runway (unless included in IFP name) IFP Name	ZZOOO SID. IFR arr RNAV (GPS) Y RWY 21L.
Vertical Profile	PROF	Some airport operators request jet aircraft operators to conduct approach and departure profiles, such as those published by the NBAA, ICAO, or AC 91-53. Jet aircraft operating on the same runway will use the same profile.	Runway ends	NADP, all rwys use NBAA profiles.
Reference to Special Notices (if applicable)	NOTE: See Special Notices	"NOTE: See Special Notices" is included after the Noise subsection when a supplemental graphic is published in Section 3: Notices, Special Notices.	Complex Instructions Graphic Depiction Lengthy Instructions	NOTE: See Special Notices

SOURCE: Original

4.0 Nomenclature for Commonly Used NAI

Nomenclature is the devising or choosing of names for things, particularly the term(s) applied to something as a commonly understood reference. NAI nomenclature has historically included a mix of information and inconsistent use of terms, leading to pilot confusion and lower adherence to intended NAI. NAI entries should provide pilots with clear information to enable voluntary adherence to the local noise abatement programs in effect.

Within the PREF RWY, NSL, VFR, IFR and PROF categories that are linked to arrival or departure by runway, the NAI should follow a generally consistent order. The recommended sequence is:

- Category Identifier, Time in effect (Z),
    - Runway 01 Arrival
    - Runway 02 Arrival
    - Runway 01 Departure
    - Runway 02 Departure
    - Runway 01 Pattern
    - Runway 02 Pattern

Tables 3 to **10** show examples of recommended ways to describe commonly used NAI, as aligned to the categories in Figure 2 and Table 2**. Appendix A** includes abbreviations relevant to NAI used in this report.

Table 3 – Nighttime Use Avoidance Nomenclature

Example	Case	Original Entry	Recommended Nomenclature
1	**Time of day-related instruction**	Full stop ldgs only Mon-Sat btn 0300-1300Z and Sun btn 0300-1700Z due to quiet hr	Quiet Hrs Mon-Sat 0300-1300Z and Sun 0300-1700Z (Note: TG or SG requests to be listed in PREF RWY category)
2	**Simple request to observe quiet hours**	Urge no ops 0400-1200Z	Quiet Hrs 0400-1200Z
3	**Simple identification of quiet hours**	NS ABTMT Quiet hrs 0230-1130Z	Quiet Hrs 0230-1130Z
4	**Simple identification of quiet hours**	Voluntary restrictions exist for all acft ops 0330-1130Z	Quiet Hrs 0330-1130Z
5	**Limitations during quiet hours**	Acft rstd to full stop only btn 0300-1100Z	Quiet Hrs 0300-1100Z (Note: TG language to be listed in PREF RWY category)
6	**Curfew** **(Used only when approved under 14 CFR Part 161 or grandfathered under ANCA)**	No operations 0300-1100Z	Curfew Hrs 0300-1100Z
7	**Restriction** **(Used only when approved under 14 CFR Part 161 or grandfathered under ANCA)**	Extreme noise sensitive area. Noise Ordinance Curfew: No tkf for acft exceeding 74 DBA (PER AC36–3) between 0600–1500Z‡, except military, mercy flights and law enforcement acft. nighttime hrs are 0430–1200Z	Curfew Hrs 0600-1500Z no deps exceeding 74 DBA per AC36–3 except military, medical, and law enforcement acft, Quiet Hrs 0430Z – 1200Z

SOURCE: Original

174 **Table 4 – Surface Instructions Nomenclature (SFC)**

Example	Case	Original Entry	Recommended Nomenclature
1	**Specific limitation of a surface instruction**	No run ups authorized on any ramp	SFC no runups on any ramp
2	**Specific time of day limitation of a surface instruction**	Engine runups other than preflt are ltd to hrs of 1500-0500Z weekdays and 1700-0500Z weekends and hol	SFC runups allowed 1500-0500Z wkd and 1700-0500Z wknd and hol only, except preflight
3	**Engine idle and runup language**	Lengthy engine idling and runups on ramp area are prohibited	SFC, minimize engine idling and runups on ramp area

175 SOURCE: Original

176 **Table 5 – Preferential Runway Use Nomenclature (PREF RWY)**

Example	Case	Original Entry	Recommended Nomenclature
1	**Preferential runway use linked to tower operating hours**	When twr clsd Rwy 07 is preferred	PREF RWY Rwy 07 pref when twr closed
2	**Preferential runway use during calm winds**	Rwy 03 is preferred for calm wind and NS ABTMT	PREF RWY Rwy 03 pref with calm winds
3	**Aircraft groups preferred to operate on specific runways**	Rwy 12R-30L is preferred rwy for jet acft and Rwy 12L-30R is the preferred rwy for piston acft	PREF RWY Rwy 12R-30L for jet acft and Rwy 12L-30R for prop acft
4	**Arrivals and departures use specific runways**	When wind and weather permit use Rwy 32 for arrival and Rwy 14 for departure	PREF RWY Rwy 32 pref for arr, Rwy 14 pref for dep
5	**Preferential use when wind speed is below a specific threshold**	When winds are less than 8 kts requested use of Rwy 11 or Rwy 29	PREF RWY Rwy 11 or 29 pref when wind is 8 kts or less[1]
6	**Preferential runway use for nighttime operations**	Nighttime operations, use Rwy 07	PREF RWY 0300–1100Z Rwy 07
7	**Intersection takeoffs**	All jet acft take-offs are to be initiated from end of rwy unless directed otherwise by twr	PREF RWY all jet acft, no int tkf unless directed by twr
8	**Limitations during quiet hours**	Acft rstd to full stop only btn 0300-1100Z	PREF RWY 0300-1100Z full stop only

Example	Case	Original Entry	Recommended Nomenclature
9	**Touch and Go Operations**	TG and SG authorized for Rwy 29 only	PREF RWY Rwy 29 pref for SG or TG

177 SOURCE: Original

178 **Table 6 – Noise Sensitive Landmark Nomenclature (NSL)**

Example	Case	Original Entry	Recommended Nomenclature
1	**Noise sensitive landmark is directionally described but without distance indicators**	Noise sensitive area off the departure end of Rwy 27, 3 miles to the west, 2 miles to the southwest, and south, and off the departure end of Rwy 34 to the northwest	NSL Rwy 27 dep, houses 3 miles W, 2 miles SW and S, Rwy 34 dep, houses to the NW
2	**Sensitive noise area described with a specific distance in feet**	Avoid noise sensitive area 3000' northwest of arpt	NSL avoid houses 0.5 mi NW of arpt
3	**Distance indicated but not type of sensitive noise area**	Avoid over flight of noise sensitive area located 7 miles south of arpt	NSL avoid park 7 mi S of arpt
4	**The type of sensitive noise area specifically described**	Avoid overflight of noise sensitive areas, church 1.8 mi NW of Rwy 25 end and village of Albany 2 mi E of apch end Rwy 25	NSL Rwy 25 arr avoid Village of Albany 2 mi E, Rwy 25 dep, avoid ovft of church 1.8 mi NW
5	**Multiple specific sensitive noise areas are described with locations and distances**	Noise abatement sensitive area: 2 miles N of Rwy 17; 1 mile SE of Rwy 35; half-mile SW of Rwy 35	NSL Rwy 35 arr avoid school one-half mi SW, Rwy 17 dep avoid houses 2 mi N, Rwy 35 dep avoid hospital 1 mi SE
6	**Non-linear distance used to describe noise-sensitive landmarks**	Noise sensitive area 1.5 miles in radius off north end of Rwy 15-33	NSL Rwy 15 arr avoid houses on final approach N of thld, Rwy 33 dep, avoid houses 1.5 mi N

179 SOURCE: Original

180 **Table 7 – VFR Routes Nomenclature (VFR)**

Example	Case	Original Entry	Recommended Nomenclature
1	**VFR arrival**	Avoid noise sensitive area on approach to Rwy 08	VFR Rwy 08 arr avoid houses 4 miles from rwy thld.
2	**VFR pattern**	Fly downwind leg for Rwy 30, 1/2 mile offset from ruway centerline, avoid noise sensitive areas.	VFR Rwy 30 fly downwind leg along US Hwy 2, avoid houses and school 1 mile W of rwy thld
3	**VFR departure path with sequential steps**	VFR departures Rwy 21 turn left 10º over SMO VOR then turn right 225º	VFR Rwy 21 dep turn left 10º over SMO VOR then turn rgt 225º
4	**VFR departure path with turn**	Rwy 26 tkf recommend heading 210º at arpt perimeter	VFR Rwy 26 dep fly rwy hdg to arpt perimeter then turn lft 210º
5	**VFR departure path with turn**	When dep Rwy 31L/R turn rgt, heading 040º, over dep end	VFR Rwy 31L/R dep fly to rwy end turn rgt hdg 040º
6	**VFR departures path with altitude specifications**	Rwy 05, turn left hdg 020º until reaching 1000', then on crs, Rwy 23 turn left hdg 210º until reaching 1000' then on crs, Rwy 33 fly rwy heading until reaching 1000', then on crs	VFR Rwy 05 dep turn left hdg 020º til 1000' then on crs, Rwy 23 dep turn lft hdg 210º til 1000' then on crs, Rwy 33 dep fly rwy hdg til 1000' then on crs
7	**VFR paths with NSL avoidance without specific headings to fly**	Avoid flying over residential area at departure end of Rwy 18 during both takeoff and landing, avoid low alt and/or high-power settings in this area	VFR Rwy 18 dep avoid ovft of houses S, Rwy 36 arr avoid ovft of houses on approach
8	**VFR departure path using runway heading**	On dep maintain rwy hdg to 1100' MSL or the end of the rwy (whichever occurs last) prior to turning	VFR Rwy 18 dep rwy hdg til 1100' or rwy end (whichever occurs last) prior to turn
9	**VFR departure path using landmark**	Acft departing Rwy 16 fly rwy heading to 1945' MSL (1000' AGL) and 2 NM before left turn	VFR Rwy 16 dep rwy hdg til 1945' and "XYZ landmark" before lft turn

181 SOURCE: Original

182 **Table 8 – IFR Procedure Nomenclature (IFR)**

Example	Case	Original Entry	Recommended Nomenclature
1	**IFR departure SID for noise abatement**	IFR departures Rwy 20R, climb I-SNA loc S to I-SNA 1 DME, turn lft heading 177°, cross SLI R-132 then turn rt heading 202°	IFR dep file <ZZZZZ> SIDs
2	**IFR departure using radar vectors since no published SID**	NS ABTMT Rwy 23L and Rwy 23R: All IFR dep exc low performance acft (C12, T1, etc.) whose initial turn is SW–North, fly rwy hdg until 12 DME before turning on crs.	IFR Rwy 23L/R dep, use obstacle departure procedures and request radar vectors to fly runway heading til 12 DME then on crs.
3	**IFR Practice Approaches in VMC**	Noise sensitive areas west of arpt on SAC River. Local turn discouraged for jet acft. When conducting IFR apch in VFR conditions execute missed apch at dep end of rwys. Plan VFR patterns to east. Use minimum power settings.	IFR apch training in VMC execute missed approach at far end of rwy and use VFR flight patterns
4	**IFR departure using radar vectors for turn** **No Published SID**	Rwy 16 departure, make left turn for noise and obst avoidance.	IFR Rwy 16 dep use obstacle departure, request radar vectors left turn to avoid homes and terrain
5	**IFR arrival and approach**	Runway 29 Arrivals, fly over XYZ VORTAC via the ABC R-281 to TWINZ/36 DME, then via the DEF R-075 to intercept the ILS	IFR Rwy 29 arr file <YYYYY> STAR to <XXX> ILS RWY 29 SIAP.
6.	**IFR with nighttime use of SID**	Runway 27 departures from 0300Z-1200Z fly rwy hdg until 12 DME before turning on crs.	IFR, 0300Z-1200Z RWY 27 dep, file ZZOOO SID.

183 SOURCE: Original

184 **Table 9 – Vertical Profile Language Guidance (PROF)**

Example	Case	Original Entry	Recommended Nomenclature
1	**Vertical Profile**	Use distant NS ABTMT dep profile.	PROF all rwys use distant

Example	Case	Original Entry	Recommended Nomenclature
2	**Vertical Profile by Runway**	All turbojet acft use distant NS ABTMT dep profile from rwy 9 and close-in from runway 27	PROF Rwy 9 use close-in NADP, Rwy 27 use distant NADP
3	**Vertical Profile using NBAA**	Tbjts use FAA dsnt noise abatement dep profile (or acr opns specs) or NBAA dep profile	PROF all rwys use distant NADP or NBAA
4	**Vertical Profile with Aircraft Weight**	Turbojet pwrd acft with a max certified tkf wt over 75,000 lbs should execute the std NS ABTMT dep profile for all deps in accordance with FAA AC 91–53.	PROF all rwys use distant NADP

185 SOURCE: Original

186 **Table 10 – Special Notice Reference Language (NOTE)**

Example	Case	Original Entry	Recommended Nomenclature
1	**Special Notice**	NOTE: See Special Notices—Westchester Co Noise Abatement Procedures.	No revision needed
2	**Special Notice**	Special noise level standards for acft operating at arpt. Restriction on number of daily flts depending on acft capacity and size.	NOTE: See Special Notice – “XYZ airport” Noise Level Standards
3	**Special Notice**	NOTE: See Special Notices, VFR Noise Abatement Procedures.	NOTE: See Special Notices – “XYZ airport” VFR Noise Abatement Procedures

187 SOURCE: Original

188 5.0 Examples of Legacy NAI Revised to Use Best Practices

189 The following sections provide four examples in **Tables 11** to **14** to show how the structure and
190 nomenclature, outlined in Table 2 and Tables 3–10, respectively, can be applied to existing or legacy
191 noise remarks to align them with new NAI best practices.

192 Each example includes the original/legacy text description, and then a table showing how to deconstruct
193 the NAI to align with the recommended structure and nomenclature. A revised entry for publication in the
194 Chart Supplement, Section 2, Airport/Facility Directory, noise entry is then shown.

5.1 Example 1

This example shows how to revise and structure NAI to be clear about quiet hours, preferential runway use, and IFR procedures.

Legacy Entry**:** *Voluntary ngt curfew in effect from 0400-1100Z. No high pwr engine/maint runups from 0300-1200Z. When twr closed takeoff Rwy 03R; no intersection takeoffs or touch and goes 0300-1200Z dly and Sun 1400-1700Z. Noise sensitive area all quadrants, pilots use close-in departure procedures.*

Table 11 – Template Applied to Example 1

Rules	New Text
Applicability	N/A
Nighttime Use Avoidance	Quiet Hrs 0400-1100Z.
Surface Instructions	SFC 0300-1200Z all acft, no hi pwr eng/maint runups.
Preferential Runway Use	PREF RWY when twr is clsd dep Rwy 03R; 0300-1200Z dly and Sun 1400-1700Z no int tkfs, no TG.
Noise Sensitive Landmark(s)	N/A
VFR Routes	N/A
IFR Procedures	IFR arr RNAV (GPS) Y RWY 21L
Vertical Profile	NADP all rnws dep close-in profile
Reference to Section 3: Notices	N/A

SOURCE: Original

Revised Entry:

Noise: Quiet Hrs 0400-1100Z. SFC 0300-1200Z, all acft, no hi pwr eng/maint runups. PREF RWY USE when twr is clsd dep Rwy 03R; 0300-1200Z dly and also Sun 1400-1700Z, no int tkfs, no TG. IFR arr RNAV (GPS) Y RWY 21L. PROF all rwys dep close-in prof.

5.2 Example 2

This example shows how TG information ambiguity can be fixed by specifying a time and replacing the distance information with landmarks for VFR pilot reference.

Legacy Entry: *Noise abatement Rwy 06–24. Use full rwy and avoid intersection departures. Minimize/avoid touch and go ldg opr. Climb out on rwy heading until 1000´ over water then proceed on course. Reduce power as soon as practical. Rwy 06–24, fly pattern downwind leg 1/2 to 1 mile out from rwy as practicable.*

Table 12 – Template Applied to Example 2

Category	New Text
Applicability	N/A
Nighttime Use Avoidance	N/A
Surface Instructions	N/A
Preferential Runway Use	PREF RWY 0300Z – 1200Z no TG, Rwy 06-24 use full rwy and avoid int dep.
Noise Sensitive Landmark(s)	N/A
VFR Routes	Rwy 06 arr fly pattern downwind to the river shoreline, Rwy 24 arr fly pattern downwind leg to highway, Rwy 24 dep fly rwy hdg to 1000’ and river shoreline then proceed on crs.
IFR Procedures	N/A
Vertical Profile	N/A
Reference to Section 3: Notices	N/A

SOURCE: Original

Revised Entry:

Noise: PREF RWY USE 0300Z – 1200Z avoid TG, Rwy 06-24 use full rwy avoid int dep. VFR Rwy 06 arr fly pattern downwind leg to the river shoreline; Rwy 24 arr fly pattern downwind leg to highway; Rwy 24 dep fly rwy hdg to 1000’ and the river shoreline then proceed on crs.

5.3 Example 3

This example shows how to revise and structure NAI to be clear about preferential runway use and VFR operations.

Legacy Entry: *No touch and go ops are permitted btn 0300–1100Z. NS ABTMT procedures in effect are as follows, Rwy 05, turn left hdg 020º until reaching 1000´, then on crs, Rwy 23, turn left hdg 210º until reaching 1000´, then on crs, Rwy 33, fly rwy hdg until reaching 1000´, then on crs.*

Table 13 – Template Applied to Example 3

Category	New Text
Applicability	N/A
Nighttime Use Avoidance	N/A
Surface Instructions	SFC 0300Z-1200Z, no maint runups exc when rqr for early morning publ sched.
Preferential Runway Use	PREF RWY arr/dep use Rwy 23 with calm winds, 0300–1100Z no TG.

Category	New Text
Noise Sensitive Landmark(s)	N/A
VFR Routes	VFR Rwy 05 dep, turn left hdg 020º til 1000' then proceed on crs, Rwy 23 dep, turn left hdg 210º til 1000' then proceed on crs, Rwy 33 dep fly rwy hdg til 1000' then proceed on crs.
IFR Procedures	N/A
Vertical Profile	N/A
Reference to Section 3: Notices	N/A

SOURCE: Original

Revised Entry:

Noise: SFC 0300-1200Z no maint runups exc when rqr for early morning publ sched. PREF RWY USE arr/dep use Rwy 23 with calm winds; 0300–1100Z no TG. VFR Rwy 05 dep turn left hdg 020º til 1000' then proceed on crs; Rwy 23 dep turn left hdg 210º til 1000' then proceed on crs; Rwy 33 dep fly rwy hdg til 1000' then proceed on crs.

5.4 Example 4

This example shows how to revise and structure NAI to be clear about quiet hours, ground instruction, VFR operations, and vertical profile and to include a reference to a graphical depicture in the CS Section 3: Notices, Special Notices.

Legacy Entry: *Voluntary NS ABTMT procedures in effect all times all acft. Voluntary curfew 0300–1200Z. Use NBAA profiles std NS ABTMT apch and departure procedures. All acft use recommended departures: Rwy 05 left turn 360º stay W of Interstate 42 to 1500´; Rwy 23 rgt turn hdg 255º as soon as practicable after passing rwy end to 1500´; avoid residential areas, overfly mall area. For NS ABTMT info call 561–391–2202. Rwy 05 pat make crosswind turn prior to avoid houses 1 mile from extended rwy end. Arr Rwy 23 remain W of I–42 until as close in as practicable to avoid over flt of residential area. Noise sensitive arpt. Maintenance runups prohibited 0100–1300Z.*

Table 14 – Template Applied to Example 4

Category	New Text
Applicability	N/A
Nighttime Use Avoidance	Quiet Hrs 0300-1200Z.
Surface Instructions	SFC 0100–1300Z no maint runups.
Preferential Runway Use	PREF RWY 24 hrs int tkfs and SG discouraged. Mon-Fri 1400-2200Z TG permitted. Rwy 05-23 arr use full rwy.
Noise Sensitive Landmark(s)	N/A

Category	New Text
VFR Routes	VFR Rwy 23 arr, remain W of I-42 as practicable to avoid ovft of houses Rwy 05 dep turn left to hdg 360º i, remain W of I-42 til 1500' Rwy 23 dep, turn rgt to hdg 255º beyond rwy end til 1500' Rwy 05 pat make crosswind turn prior to avoid houses 1 mile from extended rwy end
IFR Procedures	N/A
Vertical Profile	PROF fly NBAA apch and dep prof.
Reference to Section 3 Notices	NOTE: See Special Notices – Complex Example Airport (CEA) Noise Abatement Information

SOURCE: Original

Revised Entry:

Noise: Quiet Hrs 0300-1200Z. SFC 0100–1300Z no maint runups. PREF RWY 24 hrs int tkfs and SG discouraged, Mon-Fri 1400-2200Z TG permitted, Rwy 05-23 arr use full rwy. ; VFR Rwy 23 arr remain W of I-42 as practicable to avoid ovft of houses; Rwy 05 dep turn left to hdg 360º remain W of I-42 til 1500'; Rwy 23 dep turn rgt to hdg 255º beyond rwy end til 1500'. Rwy 05 pat make crosswind turn prior to avoid houses 1 mile from extended rwy end. PROF fly NBAA apch and dep prof. NOTE: See Special Notices – Complex Airport (OPX) Noise Abatement Information.

6.0 Summary: Template and Instructions to Assist Airport Managers

These recommendations are designed to simplify and streamline the communication of NAI developed by airports for use by pilots. Best practices, new structure, and nomenclature have been developed to achieve this goal. **Table 15** is a template for airport managers to use when submitting noise abatement information to the FAA for publication in the CS. **Appendix A** lists the abbreviations used in the examples presented in this document, including proposed abbreviations to be added to the CS.

Table 15 – Template for Completing Noise Abatement Entries in the Chart Supplement

Category	Identifier	Instructions[1]
Application	Noise	1. Enter general information regarding the applicability of the NAI, if needed.
Nighttime Use Avoidance	Quiet Hrs or Curfew Hrs	1. Select Quiet Hrs or Curfew Hrs. 2. Enter quiet or curfew hours using Zulu time.
Surface Instructions	SFC	1. Enter surface operating instructions. Use format of time, arrival instruction, time, departure instruction. 2. Use only approved abbreviations.

Category	Identifier	Instructions[1]
Preferential Runway Use	PREF RWY	1. Enter preferential runway use. Use format of time, runway/arrival, instruction; runway/departure, instruction. 2. Reference calm wind conditions, if applicable. 3. Include TG and SG requests in this category only. 4. Use only approved abbreviations.
Noise Sensitive Landmark(s)	NSL	1. Identify noise sensitive landmarks by calling out each sensitive land use by type, such as homes, parks, schools, places of worship, etc. 2. Use format of runway/arrival, instruction; runway/departure, instruction. 3. Use only approved abbreviations. 4. Use statute miles and round distances to nearest ½ mile
VFR Routes	VFR	1. Enter using format of time, runway/arrival, instruction; runway/departure, instruction. 2. Define route clearly using course, direction, altitude, and landmarks. 3. Do not use distance measures behind aircraft to define turns or altitude instructions. 4. Use only approved abbreviations
IFR Procedures	IFR	1. For IFR arrivals, enter using format of time, runway/arrival, published IFR procedure such as STARs, IAP, CVFP. 2. For IFR departures, enter using format of time, runway/departure, published IFR procedure such as SID, obstacles departure, or radar vectors.
Vertical Profile	PROF	1. Generally applicable to jet aircraft only. Unless otherwise indicated, most aircraft will select a profile similar to the Distant NADP. 2. Identify runway(s), then select Distant or Close-in NADP, or NBAA. All jet operations on the same or parallel runway ends will use the same NADP.
Reference to back matter	NOTE: See Special Notices	1. Enter the name of the special notice, if applicable

SOURCE: Original

Notes:
1. End textual entries for each category with a period.

Appendix A

Table A1 – Abbreviations Used in Examples

Abbreviation	Description	Abbreviation	Description
Acft	Aircraft	NS ABTMT	Noise Abatement
Arpt	Airport	NW	Northwest
Amgr	Airport Manager	*NSL*	*Noise Sensitive Landmark*
Apch	Approach	Ops	Operations
Apv	Approved	*Ovfl*	*Overfly*
Arpt	Airport	Ovft	Overflight
Auth	Authorized	Ovrn	Overrun
Blo	Below	Pat	Pattern
Btn	Between	Prac	Practice
Clsd	Closed	Pref	Preferred
Cond	Conditions	*PREF RWY USE*	*Preferential Runway Use*
Crs	Course	Pro	Procedures
Ctc	Contact	Prof	Profile
Dep	Departure	Procs	Procedures
Dly	Daily	Proh	Prohibited
dtl; dtls	*Detail/Details*	Publ	Published
Dur	During	Pwr	Power
E	East	Rgt	Right
Eff	Effect	Rqr	Required, i.e., mandatory
Eng	Engine	Rwy	Runway
Exc	Except/Exception	S	South
Flt	Flight	SE	Southeast
Hdg	Heading	*SG*	*Stop and Go*
Hrs	Hours	Sked	Schedule
Hi	High	Str	Straight
Jet	*Turbojet*	SW	Southwest

Abbreviation	Description	Abbreviation	Description
IFR	Instrument Flight Rules	*Tbprp*	*Turboprop*
Int	Intersection	Tfc	Traffic
Lctd	Located	*TG*	*Touch and Go*
Ldgs	Landings	Til	Until
Maint	Maintenance	Thld	Threshold
Mi	Mile	Tkof	Takeoff
Mil	Military	Twr	Tower
MSL	Mean Sea Level	VFR	Visual Flight Rules
N	North	*vis hdg*	*Visual headings*
NAI	*Noise Abatement Information*	W	West
NE	Northeast	*Wknd*	*Weekend*
NM	Nautical Mile	Z	Zulu

SOURCE: FAA Chart Supplement and original

Notes:
Italics indicate proposed new terms.