AIRPORT NOTES:

•The run-up areas are located at each end of runway 06-24. Runway 24 run-up area, easternmost 200 feet of taxiway A, and taxiway A1 between taxiway A and the runway 24 hold short line are NOT visible from the control tower.

• When the tower is closed, activate Pilot Controlled Lighting by clicking 7 times within 5 seconds on CTAF (120.30) for high intensity.

• When the tower is closed, confirm snow removal operations and winter conditions on CTAF and ATIS / AWOS.

• When the tower is closed and weather conditions favor either runway, runway 24 is the preferred runway of use.

• All turbine powered aircraft are requested to use the NBAA recommended noise abatement procedures for arrivals and departures.

https://nbaa.org/aircraft-operations/environmental-sustainability/ noise-abatement-program/

• It is requested that turbine powered airplanes do not perform touch-and-go landings.

NOISE SENSITIVE AREAS: ALL QUADRANTS SURROUNDING AIRPORT.



Learn more about the City of Ann Arbor: www.a2gov.org

801 Airport Drive, Ann Arbor, MI 48108 www.a2gov.org/airport

Daily Control Tower Hours of Operation: 08:00-20:00 Local

AIRPORT INFORMATION:

Elevation: 839' MSL SVM VOR: 114.30 (214° 13.0 NM to field)

Runway 06-24:	3,505′ X 75′ (concrete, grooved)
Runway 12-30:	2,750′ X 110′ (turf)
ATIS: 134.55	Control Tower: 120.30
CTAF: 120.30	Ground Control: 121.60
DTW Clnc/Del (after	hours): 121.60

DTW Cinc/Del (affer hours): 121.60 DTW Approach/Departure: 118.95

CONTROL TOWER HOURS OF OPERATION:

08:00-20:00 Local (daily)

AIRSPACE CLASS:

Class "D" Airspace = 08:00-20:00 Local Class "G" Airspace = 20:00-08:00 Local

TRAFFIC PATTERN ACTIVITY:

Altitudes:

Piston Aircraft: 1,000' AGL (1,800' MSL) Turbine Aircraft: 1,500' AGL (2,300' MSL)

Direction:

• Runway 06 – Left Hand Pattern. *Right traffic* is preferred for noise abatement, please request when Control Tower open.

• Runway 24 – Left Hand Pattern. Pilots performing repetitive touch-and-go landings are encouraged to request a change in pattern direction from the Control Tower to minimize noise impacts, as pattern traffic allows.

PROCEDURES:

No pattern traffic (no repetitive touch-and go landings) on Memorial Day, July 4th, and Labor Day. Local pilots are encouraged to utilize nearby airports for currency.



ANN ARBOR MUNICIPAL AIRPORT - ARB

Community Friendly: Flight and Noise Abatement Procedures

This brochure has been prepared to help pilots operate their aircraft in the quietest manner possible, while remaining consistent with safety. It is also designed to help the airport be a good neighbor to the surrounding residential communities.

Pilot compliance with noise abatement procedures is requested unless deviations are necessary due to weather, ATC instructions or clearances, an inflight emergency or other safety considerations.

The procedures described in this brochure are not intended to preempt the responsibilities of the pilot-in-command for safe aircraft operations. Recommended procedures are not intended to conflict with instructions from ATC or those which are the exclusive authority of the FAA.

Your courtesy will enhance the airport's operating environment and assist in preserving this valuable community economic development asset and transportation gateway.

All inquires may be addressed to the airport manager at **734.794.6312** or by email at **airport**@**a2gov.org**

Thank you for visiting the Ann Arbor Municipal Airport. Have a great flight.

PILOTS ARE THE KEY TO A SUCCESSFUL NOISE ABATEMENT PROGRAM

THESE PROCEDURES ARE INTENDED TO REDUCE AND LIMIT THE SOUND FOOTPRINT OF DEPARTING AND ARRIVING AIRCRAFT OVER POPULATED AREAS.

RECOMMENDED ARRIVAL PROCEDURES:

IFR ARRIVALS: Fly arrival procedure as assigned by ATC. All turbine powered aircraft are requested to use the NBAA recommended noise abatement procedures for arrivals (https://nbaa.org/wp-content/ uploads/2018/02/nbaa-approach-andlanding-procedure-rev2015.pdf).

VFR Arrivals: During ATC operations,

remain at or above 2,000' MSL until descent is necessary to join the traffic pattern at the appropriate traffic pattern altitude (1,800' MSL for piston aircraft) in accordance with ATC instructions. Other than ATC operations, remain at or above 2,000' MSL when practical outside of the traffic pattern boundaries.

RECOMMENDED DEPARTURE PROCEDURES:

IFR DEPARTURES: As cleared by ATC, maintain runway heading or assigned heading and best rate of climb (Vy) airspeed to assigned altitude. All turbine powered aircraft are requested to use the NBAA recommended noise abatement procedures for departures

(https://nbaa.org/wp-content/ uploads/2018/02/nbaa-departureprocedure-rev2015.pdf).

VFR DEPARTURES: Maintain runway heading and best rate of climb (Vy) airspeed to 1,300' MSL (500' AGL) when possible. Reduce power as soon as practical. Then...

VFR DEPARTURES:

RUNWAY 06:

a) When exiting the traffic pattern to the North or East (heading 300°) clockwise to 090°), remain south of East-West highway (I-94) over Ellsworth Road, then turn North over North-South highway (US-23) and fly heading 360° until reaching 2,500' MSL or clear of the city, then proceed on course.

b) When exiting the traffic pattern to the South or West (heading 090° clockwise to 300°) fly heading 180° until reaching 2,500' MSL, then proceed on course.

RUNWAY 24:

a) When exiting the traffic pattern to the North (heading 300° clockwise to 060), fly heading 300° until reaching 2,500' MSL, then proceed on course.

b) When exiting the traffic pattern to the South or East (heading 060 clockwise to 180°), fly heading 180° until 3 miles south of the runway centerline and at or above 2,500' MSL, then proceed on course.

c) When exiting the traffic pattern to the West (heading 180° clockwise to 300°), fly runway heading to 2500' MSL, then proceed on course.



RECOMMENDED TRAFFIC PATTERN PROCEDURES:

Maintain runway heading and best rate of climb (Vy) airspeed to Traffic Pattern Altitude when possible. Reduce power as soon as practical. When possible, vary crosswind turn location. Please be mindful of multiple Touch-and-Go landings, especially early morning and evening. *No pattern traffic flying on Memorial Day, July 4th and Labor Day.*

These procedures are intended to reduce and limit the sound footprint of departing and arriving aircraft over populated areas.

From:	Mark Perry
To:	Kulhanek, Matthew; "Alex Arts"; Watson, Chris; Briggs, Erica; fhall1954@yahoo.com; "Greg Farris"; "Jan Godek";
	"Kelly Burris"; "Matt Harshberger"; "Melanie McNicholas"; "Nelini Faulkner"
Subject:	RE: Noise Abatement Brochure - Draft
Date:	Friday, November 24, 2023 11:12:54 AM

This message was sent from outside of the City of Ann Arbor. Please do not click links, open attachments, or follow directions unless you recognize the source of this email and know the content is safe.

Matt,

Very well done. I also agree with your recommended revisions.

The updated logo is more reflective of the general character of ARB. Only suggestion I have, similar to the city's logo, consider adding an inner and outer circular ring around the curved wording: "CITY OF ANN ARBOR MUNICIPAL AIRPORT" Might also want to consider changing the font to be more consistent with city logo. Other suggestion might want to insert airport founding date at the bottom just above "MUNICIPAL AIRPORT" something like "Established 1928" or whatever the date was. Might have to shrink the airplane a schooh to make these suggested revisions balance out.

The noise abatement procedure verbiage added to the ground-based signs seems simple, clear, and concise without any complicated instructions consistent with recommended noise abatement practices. I might solicit input regarding adding a 3rd advisory for turbine planes as described in the brochure, something like:

"TURBINES perform NBAA "close-in" noise procedures."

Regrading typos, check the entire doc for spacing between words, noticed a couple where no space between words.

Regarding the procedure for no pattern work on federal holidays, I recommend inserting "no repetitive touch-and-go landings" between "traffic" and "on" making it crystal clear what no pattern work means on federal holidays.

PROCEDURES:

No pattern traffic (no repetitive touch-and-go landings) on Memorial Day, July 4th, and Labor Day. Local pilots are encouraged to utilize nearby airports for currency.

That's it. Very well done.

GO GREEN, BEAT PENN STATE; GO BLUE, BEAT THE CHESTNUTS

Mark

From: Kulhanek, Matthew <MJKulhanek@a2gov.org>

Sent: Tuesday, November 21, 2023 3:40 PM

To: Alex Arts <aarts@umich.edu>; Watson, Chris <CWatson@a2gov.org>; Briggs, Erica <EBriggs@a2gov.org>; fhall1954@yahoo.com; Greg Farris <greg.t.farris@gmail.com>; Jan Godek <godekj@loditownshipmi.org>; Kelly Burris (kelly@burrisiplaw.com) <kelly@burrisiplaw.com>; Mark Perry <mperry07@comcast.net>; Matt Harshberger <harshbergerm@pittsfield-mi.gov>; Melanie McNicholas <mcnichom9@me.com>; Nelini Faulkner <rosemarynelini@gmail.com> Subject: Noise Abatement Brochure - Draft

AAC Members,

Attached is an updated draft of the proposed noise abatement brochure. I would say it is in final form with one exception, the photo of the on-airfield signage. We'll likely change the color of the signage to high visibility yellow, but more importantly I wanted to vet out the language shown on the sign based on the discussion at our last meeting. Suggestions can be provided at any time.

While you are thinking of what final message we share with our pilots before they take off, please review the rest of the document with a fine-tooth comb. Since I'm not a pilot, I really rely on the pilots on the Committee for review and feedback on the technical issues. Share with others, especially CFI's for input as well. I would like to nail down any language changes by the middle of December and then we can make some final decision on the signage language prior to our January meeting. I appreciate everyone's help on this effort and wish you all a happy Thanksgiving.

Matthew J. Kulhanek Fleet & Facilities Manager City of Ann Arbor | Guy C. Larcom City Hall | 301 E. Huron, 6th Floor · Ann Arbor · MI · 48104 734.794.6312 Office | Internal Extension 43113 mjkulhanek@a2gov.org | www.a2gov.org

From:	Christopher Gordon
To:	Mark Perry
Cc:	Ray Hunter; Eric Gettel; Kulhanek, Matthew; Greg Farris
Subject:	Re: FW: Noise Abatement Brochure - Draft
Date:	Monday, November 27, 2023 12:18:40 PM

This message was sent from outside of the City of Ann Arbor. Please do not click links, open attachments, or follow directions unless you recognize the source of this email and know the content is safe.

Mark, thanks for the opportunity to comment. In general the brochure seems pretty busy, although I like how all the noise abatement procedures fit on the single sheet so it can be reproduced as a poster. I'm not a big fan of repeating information in this local brochure that is published in other "official" sources like the Chart Supplement, because then you have to update this every time the controlling guidance changes. But you do need to fill up the other side to make a tri-fold brochure...

AIRPORT NOTES

Suggest you repeat the language from the Chart Supplement: "Runway 24 runup area, easternmost 200 feet of taxiway A, and taxiway A1 between taxiway A and the runway 24 hold short line are NOT visible from the control tower."

The NBAA "Close-In" procedures and terminology were replaced in 2015. Suggest this change: "All turbine powered aircraft are requested to use the NBAA recommended noise abatement procedures for arrivals and departures." The updated link is: https://nbaa.org/aircraft-operations/environmental-sustainability/noise-abatement-program/

AIRPORT INFORMATION

If you feel the need to include the SVM VOR information then I would also include "214° 13.0 NM to field" from the Chart Supplement, since the VOR is not located at the field.

TRAFFIC PATTERN ACTIVITY

Direction:

• Runway 06 – Right Hand Pattern. Neither the VFR Sectional Chart nor the Chart Supplement specify the right pattern for runway 6. We know to expect this from the tower, usually, but you could be introducing a conflict during hours when the tower is closed by specifying this in the noise abatement brochure when the official guidance indicates a standard (left) pattern for runway 6.

• Runway 24 – Left Hand Pattern. Pilots *performing repetitive touch-and-go landings* are encouraged to request a change in pattern direction from the Control Tower to minimize noise impacts, as pattern traffic allows.

Cover leaf with ARB logo

Can we eliminate some of the words here to increase the font size similar to the rest of the brochure?

The Ann Arbor Airport Noise Abatement Procedures focuses on pilot education and ecooperation. This message is conveyed with the large banner on the bottom of the brochure, "PILOTS ARE THE KEY TO A SUCCESSFUL NOISE ABATEMENT

PROGRAM"

Pilot compliance with noise abatement procedures is requested unless deviations are made necessary by *due to* weather, ATC instructions or clearances, an inflight emergency or other safety considerations.

Your courtesy will enhance the airport's operating environment and assist in preserving this valuable community economic development *asset and transportation gateway*.

Noise abatement procedures

RECOMMENDED ARRIVAL PROCEDURES:

IFR ARRIVALS: Fly arrival procedure as assigned by ATC. All turbine powered aircraft are requested to *use the NBAA recommended noise abatement procedures* for arrivals (<u>https://nbaa.org/wp-content/uploads/2018/02/nbaa-approach-and-landing-procedure-rev2015.pdf</u>)

VFR Arrivals: *Remaining at or above 2,000' MSL when practical <u>until within traffic</u> <u>pattern boundaries</u> is inconsistent with AIM and other FAA guidance that aircraft should be established at the appropriate traffic pattern altitude <u>before</u> joining the traffic pattern. Suggest: "Remain at or above 2,000' MSL until descent is necessary to join the traffic pattern at the appropriate traffic pattern altitude (1,800' MSL for piston aircraft) in accordance with ATC instructions."*

RECOMMENDED DEPARTURE PROCEDURES:

IFR DEPARTURES: As cleared by Air Traffic Control (ATC), maintain runway heading or assigned heading and best rate of climb (Vy) airspeed to assigned altitude. All turbine powered aircraft are requested to *use the NBAA recommended noise abatement procedures* for departures (https://nbaa.org/wp-

content/uploads/2018/02/nbaa-departure-procedure-rev2015.pdf).

VFR DEPARTURES: Maintain runway heading and best rate of climb (Vy) airspeed to 1,300' MSL (500' AGL) when possible. Reduce power as soon as practical. Then... RUNWAY 06: These procedures need to be spelled out more like the runway 24 procedures with reference to the final on-course heading. The turn south once reaching 1300 MSL depicted on the graphic has no textual description. Recommend Matt consults with ARB ATC to determine appropriate headings, some suggestions:

(a) When exiting the traffic pattern to the North or East (heading 300° clockwise to 090°) remain south of East-West highway (I-94) over Ellsworth Road, then turn North over North-South highway (US-23) and fly heading 360° until reaching 2,500' MSL or clear of the city, then proceed on course.

(b) When exiting the traffic pattern to the South or West (heading 090° clockwise to 300°) fly heading 180° until reaching 2,500' MSL, then proceed on course. RUNWAY 24:

a) When exiting the traffic pattern to the North or East (heading 300° clockwise to 060), *fly heading* 300° until reaching 2,500' MSL, then proceed on course.

b) When exiting the traffic pattern to the South or East (heading 060 clockwise to 180°), *fly heading* 180° until 3 miles south of the runway centerline and at or above 2,500' MSL, then proceed on course.

c) When exiting the traffic pattern to the South or West (heading 180° clockwise to 300°), *fly* runway heading to 2500'MSL, then proceed on course.

Add links to the NBAA recommended noise abatement procedures for arrivals and departures (<u>https://nbaa.org/aircraft-operations/environmental-sustainability/noise-abatement-program/</u>)

somewhere on the sheet with the noise abatement procedure text and graphics.

This FAA presentation does a nice job presenting best practices: Keep the terminology standard, and if you really want pilots to follow this guidance then consider publishing the procedures in the Chart Supplement because that is where pilots look for extra airport-specific information.

Chris Gordon

On Fri, Nov 24, 2023 at 11:37 AM Mark Perry <<u>mperry07@comcast.net</u>> wrote:

Matt is updating ARB's noise abatement procedure; your review and comments are encouraged.

Keep in mind, the existing noise abatement procedure brochure is being updated and refreshed. I do not believe there are no material changes being suggested other than a refresh on the appearance and graphics in brochure and ground signage adding the procedure. While the goal is to make the noise abatement procedure more effective, we are trying to keep the procedure as similar as possible for all levels of pilot skills.

Matt is asking all comments to be submitted in early December.

Thanks.

Mark

Matt,

Appreciate all the work that was put into updating the Noise Abatement Brochure. Only have a couple of suggestions for the diagram because it is important to use the correct terminology¹:

- Reword "1300' turn 300 continued climb to 2500' before turning on course" to "1300'MSL, turn lft (or rgt, which ever applies) to 300°, continue climb to 2500' MSL before turning on crs."
- 2) Reword "1300' turn 180 continued climb to 2500' before turning on course" to "1300'MSL, turn rgt, to 180°, continue climb to 2500' MSL before turning on crs."

I do, however stand by my belief that the desired outcome will not come to the attention of local or transiting pilots unless additional steps are taken to put the information out there. I come to this conclusion after discussing with many pilots who use KARB: private pilots, CFI's, instrument pilots, commercial pilots, and pilots who work for air carriers or airlines who have told me they are either unaware of a noise abatement procedure at the airport or if they know about it, they don't know where to get the information. And, because part of their preflight planning process is to refer to the Chart Supplement, if the noise procedure isn't noted, they don't consider the need to search for it.

Here is a list of attention getters:

- 1) A graphic/diagram of the procedure and written instructions, i.e. the brochure, should be posted in several places in the Terminal Building, e.g. the rest room, near the coffee pot, the pilots' lounge, etc. (Keep in mind that I haven't come across anyone who uses a Jeppesen binder in years.)
- 2) There should be succinct signs that bring the procedure to a pilot's attention at the departure end of **all 4 runways**. (Noise abatement should be a priority in the summer when the grass strip is used.)
- 3) A notice that there is a voluntary noise abatement procedure in effect at KARB should be added to the Chart Supplement (formerly known as the AF/D). A complex procedure, like the one that is published in the brochure can be placed in the Chart Supplement Special Notices section for reference rather than just publishing the statement to "see airport Manager's contact info".

The Chart Supplement Modernizartion Program² began in 2020 and is making progress on updating the Chart Supplement. Currently, the airport manager only has to submit a request to have the noise abatement information for KARB published. Under the section that describes KARB, it will read something like this: Voluntary noise abatement procedures in effect, refer to xxx (wherever the location is in the Supplement). Then the pilot can look at a graphic that describes the procedure and a full description written out (which is good, because KARB's procedure is complex). The FAA will have draft recommendations in a few weeks to help with the wording and language used in the Special Notices section and, although this info can be published soon after it's received, it will be able to be updated, if needed, with terminology that is standard FAA fare. I have been talking to Kent Duffy, who is in charge of this program at the FAA, and he is going to send me the portal information that you, the airport manager, can use to get this started. He has said that they have surveyed and asked many pilots where they would most likely want to view this info, where it's most likely to come to the pilot's attention while flight planning and the answer is the **Chart Supplement**.

Here is the information I received from Kent Duffy:

Here is a link describing the process and then the link for the actual submission(s): <u>https://www.faa.gov/air_traffic/flight_info/aeronav/aero_data/CS_Notice_Submissions/</u> The link for submissions is <u>https://nfdc.faa.gov/</u>

--For changes under the "NOISE" field in the AFD section, an Aeronautical Data Change (ADC) must be submitted to the data team. Once processed, it will be updated in NASR (database) and then make its way to the Chart Supplement.

--For requesting additional information under Special Notices, an Aeronautical Chart Change (ACC) must be submitted to ATO under chart supplement option for evaluation and processing.

I'll let you know when the best practice recommendations are published, also.

Hope this helps!

Best,

Melanie

¹ <u>https://www.faa.gov/air_traffic/flight_info/aeronav/acf/media/Presentations/21-01-Noise-Abatement-Duffy.pdf</u>

² <u>https://www.faa.gov/air_traffic/flight_info/aeronav/acf/media/Presentations/20-02-Chart-Supplement-Lamphier.pdf</u>