EAST COAST AERO CLUB

IN FLIGHT GUIDE

Pilots are responsible to ensure all information contained in this document is current and correct

IN FLIGHT GUIDE CONTENTS

ECAC LOCATIONS AND CONTACT INFORMATION

East Coast Aero Club (BED) | Bedford, MA
Dispatch: 781-274-6322
Pre-Heat: 781-354-0077
ecacbed@eastcoastaeroclub.com

East Coast Aero Club (ASH) | Nashua, NH
603-595-1395
ecacash@eastcoastaeroclub.com

East Coast Aero Club (OWD) | Norwood, MA
781-278-8800
ecacowd@eastcoastaeroclub.com

ECAC RUNWAY REQUIREMENTS AND RESTRICTIONS

East Coast Aero Club has specific minimum requirements for aircraft rentals, including runway length and fuel reserves.

East Coast Aero Club Aircraft are only permitted to land airports with:

- A **minimum** runway length of **3,000 feet**.
- Hard surface runways, meaning **no grass, dirt, or gravel surfaces.**
- **ECAC discourages taxing on grass, especially at KACK (Nantucket Memorial Airport**

These restrictions do not apply to emergency situations

East Coast Aero Club Approved Exceptions:

- Katama (1B2) MA
- Basin Harbor (B06) VT
- Additional exceptions may be made by management on a case-by-case basis

Students and renters are to inform dispatch of their intended route and destinations(s) for all flights.

USEFUL RADIO FREQUENCIES

GUARD 121.5
PRACTICE AREA - ALL 123.5

• • •

KBED - Bedford (Hanscom Airport)

ATIS ..... (781-372-5509) 124.6
ASOS ..... (781) 372-5512) 124.6
GROUND 121.7
TOWER 118.5
BOS APP 124.4
SIGNATURE (FUEL) ..... (781-274-0010) 130.8
ECAC BEDFORD DISPATCH ..... Tel: 781-274-6322

• • •

KOWD - Norwood (Norwood Memorial Airport)

ATIS ..... (781-769-3825) 119.95
GROUND 121.8
TOWER 126.0
BOS APP ..... 120.6 / 124.1
FLIGHT LEVEL (FUEL) ..... (781-769-8680) 129.42
ECAC NORWOOD DISPATCH ..... Tel: 781-278-8800

• • •

KASH - Nashua (Boire Field Airport)

ATIS ..... (603-578-0473) 125.1
AWOS ..... (603-578-0473) 125.1
GROUND 121.8
TOWER 133.2
BOS APP 124.9
INFINITY (FUEL) ..... (603-598-4526) 129.75
ECAC NASHUA DISPATCH ..... Tel: 603-595-1395

PASSENGER BRIEFING

LISTEN FOR OUR CALL SIGN AND NO TALKING IF YOU HEAR IT.
WE ARE IN AIRCRAFT N _____

S

- **SMOKING -** NO SMOKING, VAPING, OR USING AN OPEN FLAME.
- **SEAT BELTS AND SHOULDER HARNESS** - FASTENED FOR TAXI, TAKEOFF, AND LANDING. PLEASE WEAR THEM FOR THE ENTIRE FLIGHT IN CASE WE ENCOUNTER TURBULENCE.
- **SEAT POSITION** SEAT BACKS UPRIGHT, GENTLY LOCKED IN PLACE.

A

- **AIR VENTS** LOCATION AND OPERATION.
- ACTION IN CASE OF **PASSENGER DISCOMFORT/AIRSICKNESS**
- **AIRSICK BAGS.** LOCATION _____

F

- **FIRE EXTINGUISHER AND OPERATION -** UNLATCH, PULL PIN, SHOOT AT BOTTOM OF FIRE. ONLY ON MY COMMAND.

E

- **EXIT DOORS -** HOW TO OPERATE, LOCK / UNLOCK & OPEN.
- **EMERGENCY EVACUATION PLAN** – DOOR / BREAK WINDOW, OUT BAGGAGE COMPARTMENT.
- **RALLY POINT- (FIRE ON START).** CHOOSE A HARD OBJECT FIRE TRUCKS WON'T HIT AND AVOID PROP.
- **SURVIVAL KIT IF IN AIRCRAFT.** USE AIRCRAFT PARTS FOR SURVIVAL.
- **ELT OPERATION** CAN BE REMOVED AFTER OFF AIRPORT LANDING

T

- **TRAFFIC** - SCANNING, SPOTTING, - NOTIFY ME (PIC)
- **TALKING** - STERILE COCKPIT.

Y

- **YOUR QUESTIONS- SPEAK UP.**

** FAR 91.519 Before each takeoff the pilot in command of an airplane carrying passengers shall ensure that all passengers have been orally briefed*

TAKEOFF BRIEFING

1. **PILOT IN COMMAND** ..... WHO IS THE PILOT FLYING / MONITORING
2. **TAKEOFF RUNWAY** _____ **DISTANCE AVAILABLE** _____ feet
3. **TAKE OFF TYPE** ..... NORMAL / SHORT / SOFT
4. **FLAP SETTING** ..... [_____] NOTCHES / [____]°
5. **ROTATE SPEED** (Vr) ..... [____] KIAS
6. **CLIMB OUT SPEED** ..... (Vx or Vy) [____] KIAS
7. **CRUISE CLIMB SPEED** ..... [____] KIAS
8. **INTENTIONS** .....STATE INTENTIONS

   STAY IN TRAFFIC PATTERN for ..... STOP & GOs / TOUCH & GOs

   - OR OTHER - **DEPARTURE DIRECTION**

9. **DEPARTURE RUNWAY** .....(does) or (does not) have an ODP (discuss).
10. **NOISE ABATEMENT PROCEDURES** ..... will be indicated with signs.
11. **ARE WE CLEARD TO FLY A SID?** ..... (yes/no)
12. **STERILE COCKPIT** ..... During taxi, takeoff, and landing.
13. **THREE WAY EXCHANGE OF CONTROLS**.....for entire flight and taxi

TAKEOFF EMERGENCY BRIEFING

1. For anything abnormal during takeoff roll (flight controls, engine, open door, annunciators warning lights etc)
   - Power to idle, brake to slow, exit runway if possible.
   - Call tower or CTAF you are aborting on runway.
2. Engine failure on takeoff (below 1,000' AGL):
   - Land on remaining runway, make the abort call.

   If no runway is available:
   - **LOWER THE NOSE TO BEST GLIDE ATTITUDE**
   - Make turns (max of 30° bank) to get to the best place to land.
3. Engine failure on takeoff above 1,000' AGL:
   - **LOWER THE NOSE TO BEST GLIDE ATTITUDE**
   - Turn into wind if no obstructions.
   - This will be a [left/ right] turn to land on a runway or taxiway
4. If you see anything unsafe let me know: Did I miss anything?
5. **STATE PILOT IN COMMAND IN THE EVENT OF INFLIGHT EMERGENCY** [_____]
6. Do you have any questions?

ECAC STUDENT PILOT LIMITATIONS

Wind Limitations for all ECAC student pilots:

- Max wind of 17 Kts
- Max cross wind of 7 Kts
- Gusts not to exceed 5 Kts

Ceilings and Visibilities for all ECAC student pilots:

Traffic pattern:

- 1,600' AGL ceiling and visibility P6SM or greater

Local practice area:

- 3,500 AGL ceiling and visibility P6SM or greater

Cross-country:

- 4,000' AGL ceiling
- P6SM visibility at the departure airport, along the entire route of flight at the destination airport.

Students may be limited to lower winds, higher ceilings and higher visibility limitations. If so, these limitations will be entered into the student's logbook

Runway Limitations

- Minimum runway length of 3,000 feet and 75 feet width.

ECAC FUEL REQUIREMENTS

ECAC requires all training flights in the vicinity of the airport or to a local practice area to have at least fuel to the tabs before engine start.

Cross-country Flights:

ECAC requires pilots to adhere to the FAR 91.151 required minimum fuel reserves.

ALL STUDENTS SHALL LAND WITH NO LESS THAN ONE HOUR FUEL FOR ALL FLIGHTS, LOCAL OR CROSS-COUNTRY.

Low Fuel

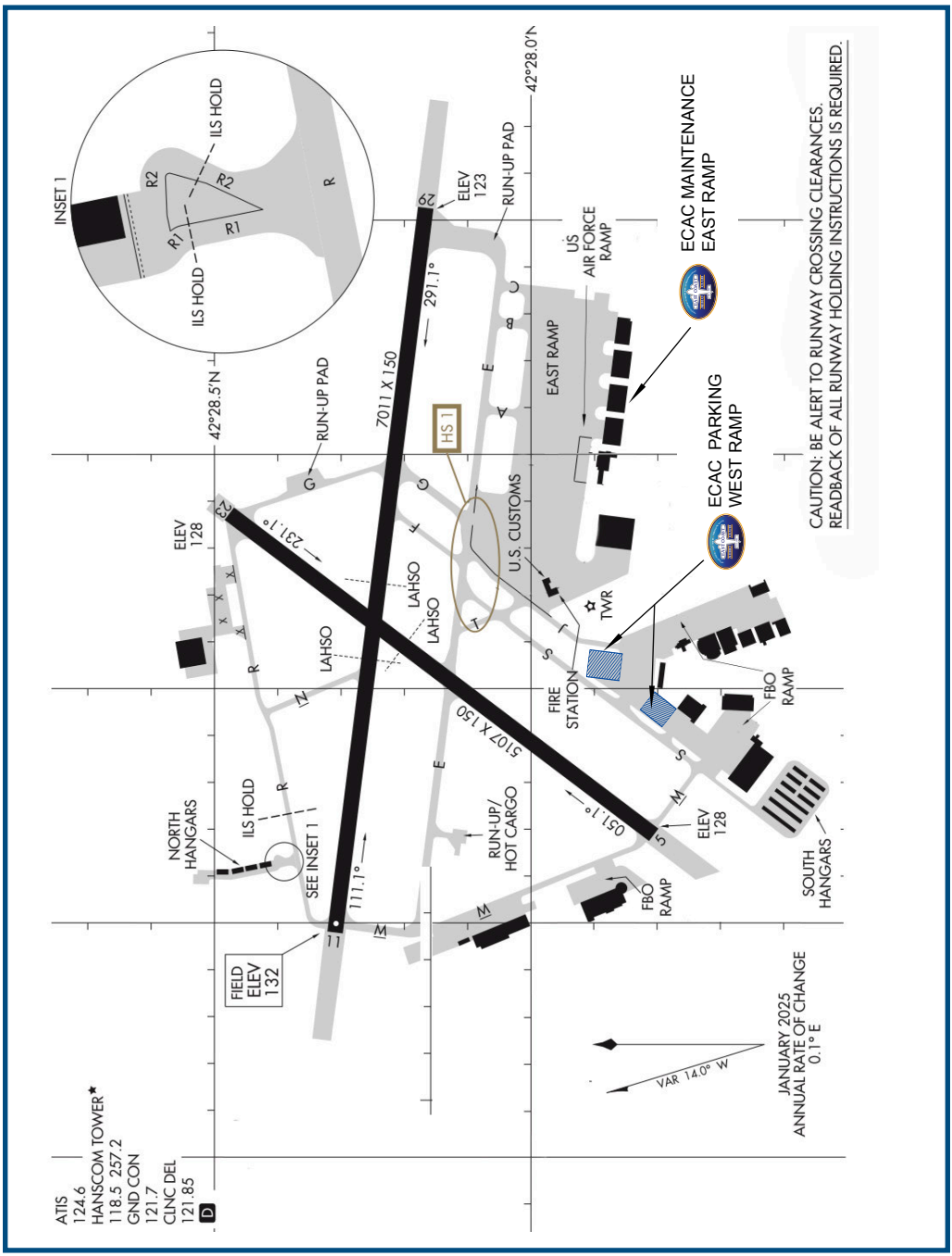
- Any low fuel situation must be addressed immediately
- Plan to land as soon as practicable.
- If necessary, divert to a nearby airport to ensure a safe landing.
- Advise ATC of "Minimum Fuel" - this indicates that any undue delay may result in landing with less than planned reserves.

DIVERSION FROM HANSCOM AIRPORT

AIRPORT NAME	ID		DIST	HDG	RWY	LENGTH	FREQ
Minute Man Airfield	6B6	G	10.2	281°	03-21	3110' x 48'	BOS APP 124.4 CTAF - 122.8
Boston Logan ***Diversion to Boston as last resort***	KBOS	B	14.1	131°	14 - 32 15R - 33L 15L - 33R 09 - 27 4R-22L 4L-22R	5000' x 100' 10,083' x 150' 2557' x 100' 7000' x 150' 10,006' × 150' 7864' x 150'	BOS APP 091°- 269° 124.1 270°- 090° 124.4 TWR East - 132.225 TWR West - 128.8
Lawrence Municipal	KLWM	D	17.7	040°	05-23 14-32	5001' x 100' 3655 x 100'	BOS APP 124.4 ATIS - 126.75 TWR - 119.25
Beverly Regional	KBVY	D	17.9	081°	09-27 16-34	4755' × 100' 5001' x 100'	BOS APP 124.4 ATIS-119.2 TWR-125.2
Norwood Memorial	KOWD	D	18.0	177°	35-17 28-10	4007' x 100' 3995' x 75'	BOS APP 124.1 ATIS-119.95 TWR - 126.0
Nashua Boire Field	KASH	D	21.2	346°	32-14	6000' x 100'	BOS APP 124.9 ATIS-125.1 TWR - 133.2
Fitchburg Municipal	KFIT	G	21.5	298°	14-32	5001' x 100'	BOS APP 124.4 ASOS -135.175 CTAF-122.7
Hopedale Ind' Park	1B6	G	23.9	218°	36-18	3172' x 90'	BDL APP 119.0 CTAF - 122.8
Mansfield Municipal	1B9	G	28.4	186°	32-14	3500'x75'	BOS APP 124.1 AWOS - 118.675 CTAF - 123.0
Manchester Regional	KMHT	C	28.5	001°	17-35 06-24	9250' × 150' 7651' x 150'	BOS APP -124.9 ATIS-119.55 TWR-121.3
Worcester Regional	KORH	D	28.8	259°	11-29 15- 33	7001' x 150' 5000' x 100'	BDL APP - 119.0 ATIS - 126.55 TWR - 120.5
Gardner Municipal	KGDM	G	32.6	293°	18-36	3000' x 75'	BOS CEN 123.75 CTAF - 122.8

PILOTS USING THESE DIVERT CHARTS ARE RESPONSIBLE FOR CHECKING THAT THE DATA IS CURRENT PRIOR TO FLIGHT

HANSCOM AIRPORT DIAGRAM



FOR REFERENCE ONLY - PILOTS SHOULD REFER TO THE LATEST CHART SUPPLEMENT

DIVERSION FROM NORWOOD AIRPORT

AIRPORT NAME	ID		DIST`	HDG	RWY	LENGTH	FREQ
Mansfield Municipal	1B9	G	11.4	200°	32-14	3500'x75'	BOS APP 124.1 AWOS - 118.675 CTAF - 123.0
Boston Logan	KBOS	B	12.7	049°	14 - 32 15R - 33L 15L - 33R 09 - 27 4R-22L	5000' x 100' 10,083' x 150' 2557' x 100' 7000' x 150' 10,006' × 150'	BOS APP 091°- 269° 120.6 /124.1 270°- 090° 124.4 TWR East - 132.225 TWR West - 128.8
Diversion to Boston as last resort Hanscom Field	KBED	D	17.5	357°	11-29 5 - 23	7000' x 150' 5107' x 150'	BOS APP - 124.4 ATIS-124.6 TWR -118.5
Taunton King Field	KTAN	D	20.2	174°	30-12	3500' x 75'	BOS APP - 128.7 ASOS - 132.675 CTAF - 122.7
North Central State Airport	KSFZ	G	21.6	235°	23-05 15-33	5000' x 100' 3200' x 75'	PVD APP - 123.675 AWOS - 120.775 CTAF - 123.075
Minute Man Airfield	6B6	G	22.4	331°	03-21	3110' x 48'	BOS APP - 124.4 CTAF - 122.8
Marshfield Municipal	KGHG	G	23.0	118°	06-24	3900' x 100'	BOS APP - 124.1 AWOS - 120.0 CTAF - 122.8
Plymouth Municipal	KPYM	G	26.1	144°	06-24 33-15	4650' x 75' 4350 x 75'	BOS APP - 118.2 ASOS - 135.625 CTAF - 122.725
Beverly Regional	KBVY	D	26.2	040°	09-27 16-34	4755' × 100' 5001' x 100'	BOS APP - 124.4 ATIS-119.2 TWR -125.2
TF Green Int' Airport R.I	KPVD	C	30.3	216°	05-23 34-16	8700' × 150' 6081' x 150'	PVD APP 123.675 ATIS -124.2 TWR - 120.7
Worcester Regional	KORH	D	31.7	293°	29-11 33-15	7001' × 150' 5000' x 100'	BDL APP - 119.0 ATIS - 126.55 TWR - 120.5

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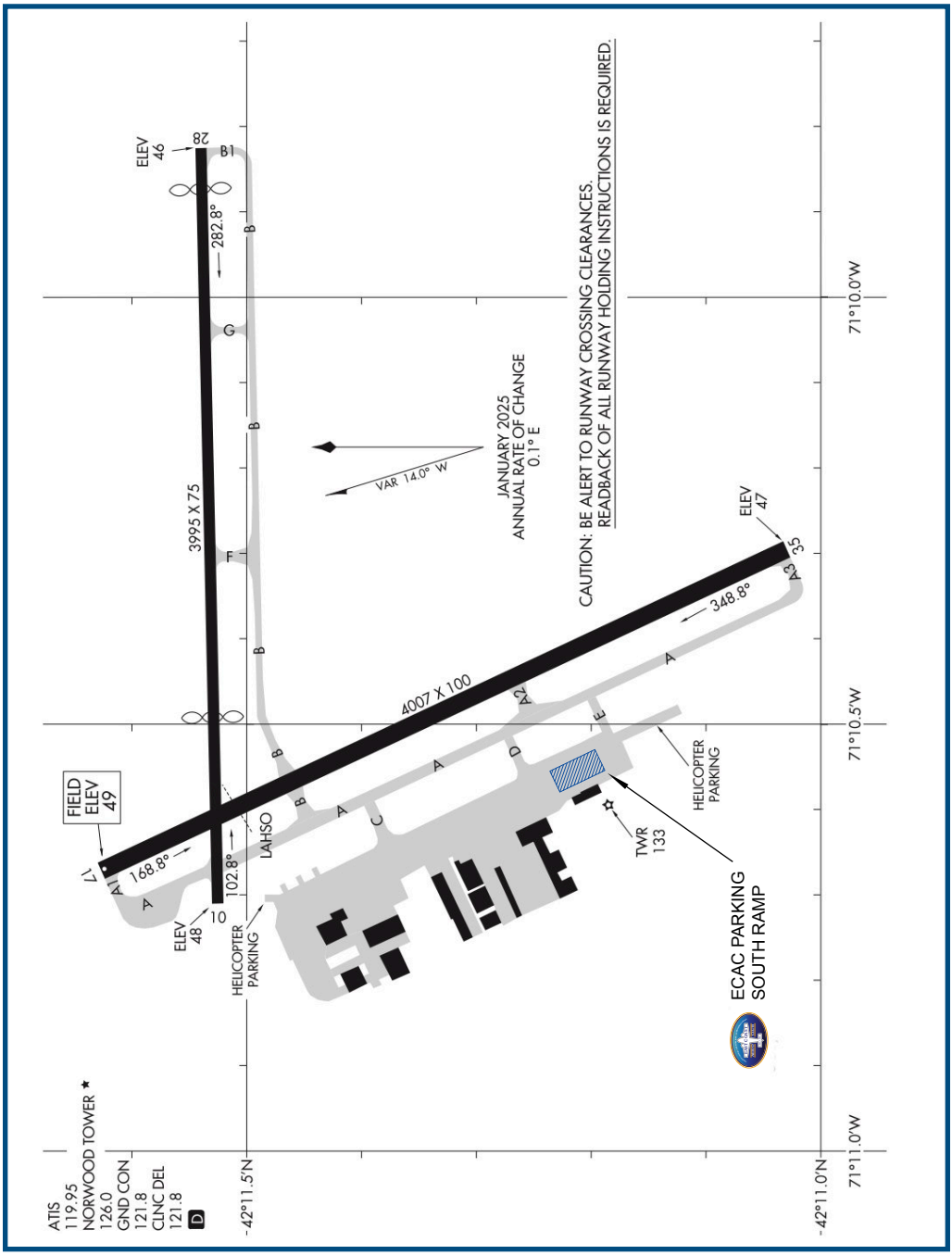
NORWOOD - AIRPORT DIAGRAM



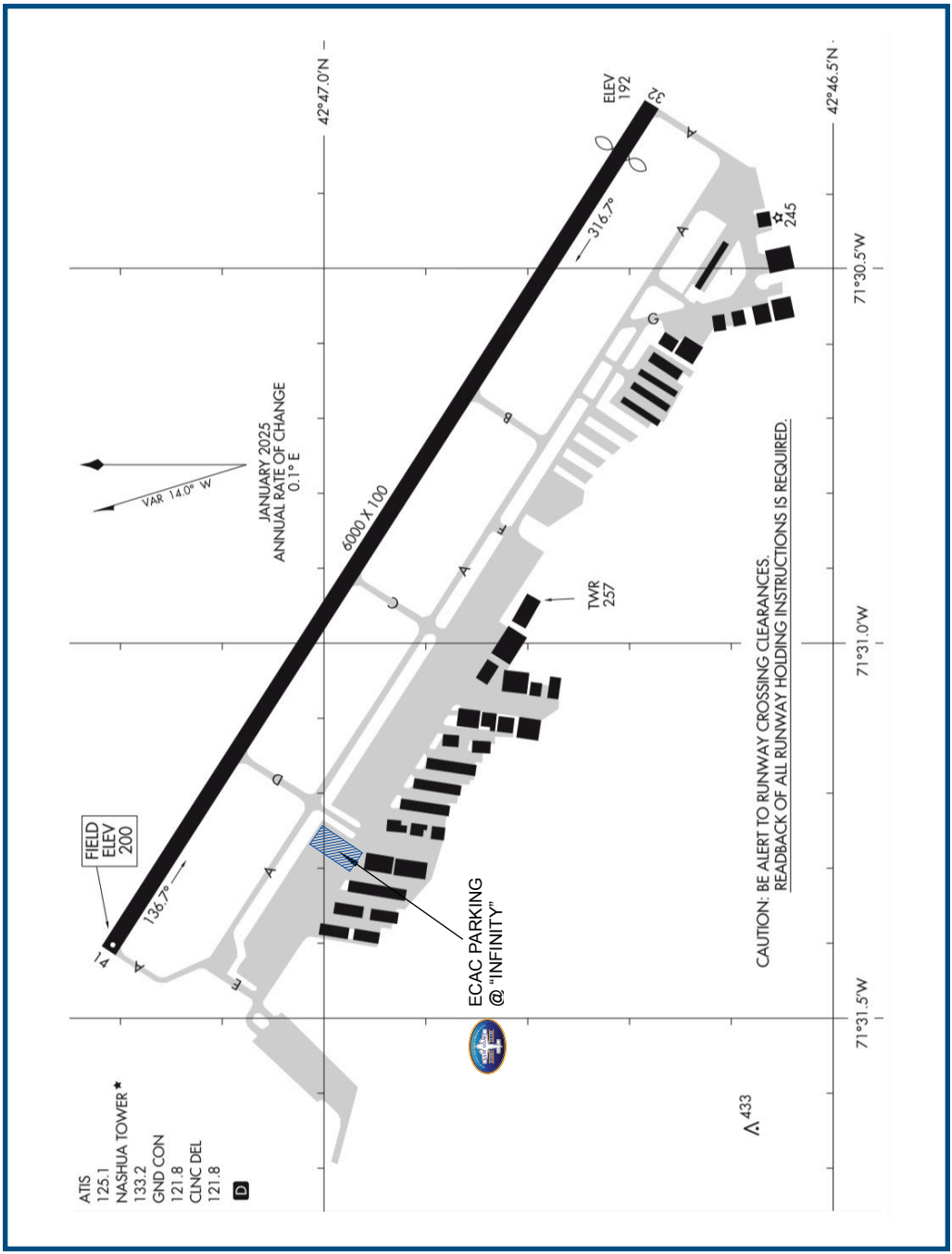
FOR REFERENCE ONLY - PILOTS SHOULD REFER TO THE LATEST CHART SUPPLEMENT

DIVERSION FROM NASHUA AIRPORT

AIRPORT NAME	ID		DIST`	HDG	RWY	LENGTH	FREQ
Manchester Regional	KMHT	C	9.7	34°	17-35 06-24	9250' x 150' 7651 x 150'	BOS APP - 124.9 ATIS - 119.55 TWR - 121.3
Fitchburg Municipal	KFIT	G	17.5	232°	14-32	5001' x 100'	BOS APP - 124.4 ASOS - 135.175 CTAF - 122.7
Lawrence Municipal	KLWM	D	17.7	116°	05-23 32-14	5001' x 100' 3655' x 100'	BOS APP - 124.4 ATIS - 126.75 TWR - 119.25
Minute Man Airfield	6B6	G	19.3	194°	03-21	3110' x 48'	BOS APP - 124.4 CTAF - 122.8
Hanscom Field	KBED	D	21.2	165°	11-29 5 - 23	7000' x 150' 5107' x 150'	BOS APP - 124.4 ATIS-124.6 TWR -118.5
Jaffrey Airport	KAFN	G	21.6	287°	30-12	2982' x 134'	BOS CEN 123.75 ASOS -135.875 CTAF - 122.8
Concord Municipal	KCON	G	25.2	015°	12-30 17-35	3200 x 75 6005' x 100'	BOS APP - 127.35 ASOS - 132.325 CTAF - 122.7
Gardner Municipal	KGDM	G	26.2	252°	18-36	3000' x 75'	BOS CEN - 123.75 ASOS - CTAF - 122.8
Beverly Regional	KBVY	D	29.0	127°	09-27 16-34	4755' × 100' 5001' x 100'	BOS APP - 124.4 ATIS-119.2 TWR -125.2
Boston Logan	KBOS	B	33.8	152°	14 - 32 15R - 33L 15L - 33R 09 - 27 4R-22L 4L-22R	5000' x 100' 10,083' x 150' 2557' x 100' 7000' x 150' 10,006' × 150' 7864' x 150'	BOS APP 091°- 269° - 124.1 270°- 090° - 124.4 TWR East - 132.225 TWR West - 128.8
Diversion to Boston as last resort							
Keene Dillant Hopkins	KEEN	G	34.1	296°	02-20 32-14	6201' x 100' 4001 x 75'	BOS CEN 123.75 AWOS - 119.025 CTAF - 123.0
Worcester Regional	KORH	D	35	222°	29-11 33-15	7001' × 150' 5000' x 100'	BDL APP - 119.0 ATIS - 126.55 CTAF - 120.5
Norwood Memorial	KOWD	D	39	171°	35-17 28-10	4007' x 100' 3995' x 75'	BOS APP 124.1 ATIS-119.95 TWR - 126.0

PILOTS USING THESE DIVERT CHARTS ARE RESPONSIBLE FOR CHECKING THAT THE DATA IS CURRENT PRIOR TO FLIGHT

NASHUA AIRPORT DIAGRAM



FOR REFERENCE ONLY - PILOTS SHOULD REFER TO THE LATEST CHART SUPPLEMENT

LOST PROCEDURES

DON'T PANIC & REMEMBER THE 7 C's

1. CONFIRM
- Verify Your Heading
- Enroute Check Points - Locate Landmarks
- Check the elapsed time since departure to determine remaining fuel
- Use your airspeed to calculate how far you have travelled.
- Use ALL available resources
  - Utilize VOR, Tune to a known local VOR and determine the radial you are on
  - GPS / EFBs / Phone or other tech to locate your position.

2. CLIMB (if able)
- Gives better visibility (of landmarks etc)
- Better range for Nav aids (e.g VOR)
- Better VHF comms radio range

3. CIRCLE
- Don't continue onward if you don't know where you are heading.
- Perform turns around a point & try to spot your last checkpoint.
- Try to figure out your position as you circle.

4.COMMUNICATE
- Contact any nearby facilities (Towered airports, FSS, Unicom etc) Use the frequencies from your charts, Chart Supplement, GPS, EFB Flight App, etc

5. CHECK FREQUENCIES
- Attempt to contact ATC on last used or a known local ATC frequency.

IF THE SITUATION IS THREATENING THE SAFETY OF THE FLIGHT (e.g LOW FUEL) YOU CAN DECLARE AN EMERGENCY ON 121.5 AND SQUAWK 7700

6. CONFESS
- Explain your situation to ATC / Guard
- What the plan for you fight was.
- That you are uncertain of your position.

7. COMPLY WITH ATC INSTRUCTIONS
- If you request assistance from ATC - comply with instructions and requests for information.
- If you are unable to comply with ATC instruction notify ATC of this with "unable" and the reason!
- If you need to - speak in regular English to explain the situation / emergency do so! It is important to be clear and concise to make the situation understood for the facility to provide assistance.

TWO-WAY RADIO COMMUNICATION FAILURE

(LOST COMMS / NORDO) AIM 4–2–13 / 6-4-1

If you experience two-way radio communications failure during a flight, you are expected to exercise good judgment in whatever action you elect to take. (AIM 6-4-1) If you are in IFR conditions comply with AIM 6–4–1

If the failure occurs in VFR conditions, continue the flight under VFR and land as soon as practicable.

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Verify Receiver Inoperative.

- **Check:** Electrical Power Radio Master On - Check breaker
- **Check:** Radio Setup (Comm1/2) - Volume - Frequencies - Headset Connections - Batteries - Squelch - Stuck Mic
- **Attempt to contact another station** on a different frequency, (last frequency used or 121.5 MHz (guard).

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Entering Class D Airspace

- Verify Your Heading
- Remain outside or above the Class D surface area until the direction and flow of traffic has been determined.
- Squawk 7600
- Look for light signals which may be addressed to your aircraft.
- Join the airport traffic pattern.
- During hours of daylight, acknowledge light signals by rocking your wings.
- At night, acknowledge by blinking the landing or navigation lights.
- Comply with ATC light gun signals

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General

- Make good decisions & exercise best judgment.
- Whenever possible - carry a portable backup radio when you are flying
- Avoid Class B, C, airfields if possible
- If you are in Class B, C, D and communicating to ATC: Squawk 7600.
- If able - contact the ATC facility by other means (telephone / hand held radio).
- Join the traffic pattern with a 45° entry and watch the tower for light gun signals
- After entering the airspace, fly the traffic pattern (at TPA) and wait for light gun signals.
- If you are in the pattern and no light gun signals are observed continue in the pattern until you see light gun signals - comply with the signals. (SEE ATC LIGHT GUN SIGNALS - NEXT PAGE)
- Should the situation so dictate do not be reluctant to use the emergency action (91.3(b))
- Note: NORDO procedure arrivals are not accepted at busy airports.

ATC LIGHT GUNS SIGNALS

COLOR & TYPE	GROUND	AIR
Steady Green 	Cleared for Takeoff	Cleared To Land
Flashing Green 	Cleared for Taxi	Return for landing (to be followed by steady green at the proper time)
Steady Red 	STOP!	Give way to other aircraft & continue to circle
Flashing Red 	Taxi clear of runway in use	Airport unsafe, do not land
Flashing White 	Return to starting point on airport	N/A
Alternating Red / Green 	Exercise Extreme Caution	

TRANSPONDER SQUAWK CODES

CODE	MEANING
1200	VFR Traffic
7500	Hijacked Aircraft
7600	Aircraft with Radio Failure
7700	Aircraft in an Emergency State

MAINTENANCE ISSUES AWAY FROM HOME AIRFIELDS

If an East Coast Aero Club aircraft develops a maintenance problem while away from a home airport, please make sure the following steps are completed:

- Try to SAFELY troubleshoot the issue to the best of your ability .
- Collect as much information as possible about the problem
  - Make detailed notes and be prepared to provide a full description of the issues and any indicators you may be getting (annunciators, engine gauges, unusual noises or smells etc)
  - Take photos that will help maintenance staff diagnose the issue.
  - Take video footage if possible.

Call the ECAC Bedford Office 781-274-6322 with the information
(Leave a message if no answer)

- Follow the directions of ECAC dispatch staff and or members of the maintenance team while trying to diagnose / remedy the issue.

⚠ **<u>If an emergency was declared</u>, please call 781-236-3166.**
This will send a message to Mark Holzwarth and Adam Harris.

If you are unable to successfully resolve the issue and must abandon the aircraft

- Leave the keys under the left seat
- Secure the flight controls
- Try to park and secure the aircraft facing into the prevailing wind if possible.
- Bring aircraft binder back
- Cover aircraft & tie-down (use chocks if tie-down not possible)
- Note parking location of aircraft
- Get name and phone number of responsible party at FBO or Airport that is responsible for care and custody of aircraft
- Notify local FBO or Airport Authority that the aircraft is not abandoned and give the number for ECAC Bedford (above)

WINTER OPERATIONS

East Aero Club aircraft engine preheats are required under 40°F – if in doubt, ASK!

Preheat can be requested by calling or texting 781-354-0077 on the day of your flight:

- Preheats are required under 40°F

Aircraft will not be dispatched when:

- Temperatures are at or below 10°F
- Within 2 hours of 10°F

You must call or text the following information to the preheat phone number on the day of your flight, provide:

- Your name,
- Aircraft
- Engine start time (The time you plan to turn the key to start, NOT the time your reservations starts.)

ECAC does not use de-icing chemicals on ECAC aircraft, therefore the sun must melt off any contamination. If there is ice or frost on your car there is likely the same on the aircraft. Remove ice and snow only with brush in baggage compartment. never us a credit card or other method as these will damage windows and aircraft skin.

Cross-country Flying

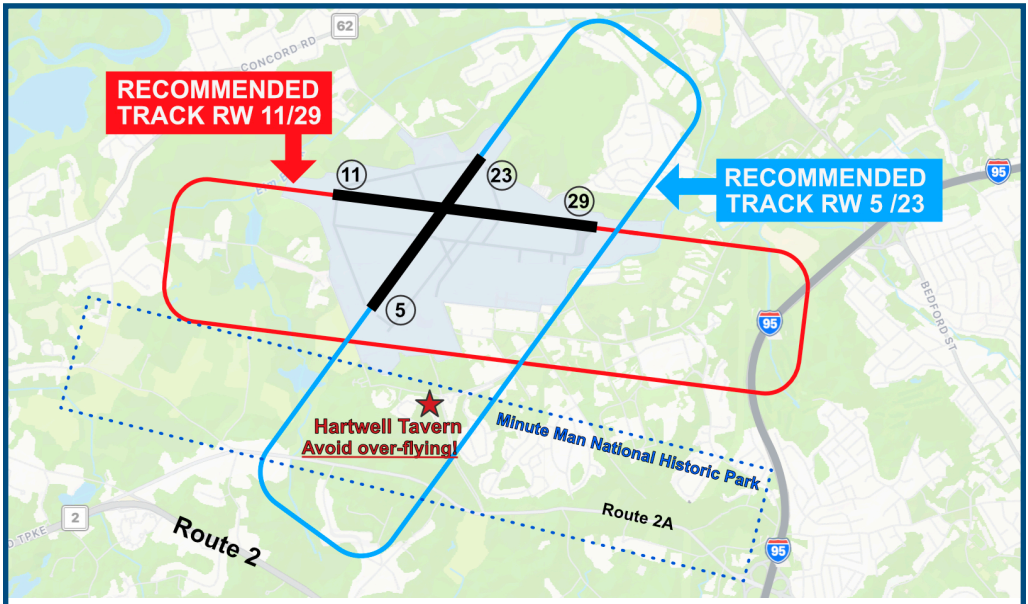
When flying to another airport, do not shut down for extended periods of time without arranging pre-heat services beforehand. Wind chill can cool an engine down in as little as 15 minutes. If no preheat services are available, do not plan to shut down.

Please include in the comments section of the reservation your intended hobbs time, destination, and affirm you have arranged pre-heat services

Dispatchers will not allow you to depart if you have not arranged pre-heat services at your destination airport.

FLIGHTS INTO THE ALTON BAY ICE RUNWAY ARE STRICTLY PROHIBITED! THERE ARE NO EXCEPTIONS

HANSCOM AIRPORT HISTORICAL SITE AVOIDANCE



FOR RUNWAY 11 OR 29
(Unless otherwise instructed by ATC)

- Climb at best rate of climb (Vy) until pattern altitude
- Fly patterns at 1000' AGL (1132'-1200' MSL)
- Fly the downwind leg as close to ½ NM from the runway as practical

Runway 29

- For left traffic, fly downwind leg approximately 500' south of the RW 5 chevrons, or over the old T-Hangars
- If available per ATC, use right traffic.

Runway 11

- For right traffic, fly downwind leg approximately 500' south of the RW 5 chevrons, or over the old T-Hangars
- If available per ATC, use left traffic.

FOR RUNWAY 05 OR 23
(Unless otherwise instructed by ATC)

- Climb at best rate of climb (Vy) until pattern altitude
- Fly patterns at 1000' AGL (1132' - 1200' MSL)

Runway 23

- Conditions permitting, continue on runway heading to 1000' AGL (1132' MSL), turning crosswind over Route. 2.
- For left traffic, fly downwind leg approximately 500' east of the RW 29 chevrons.

Runway 5

- For right traffic, fly downwind leg east of the RW 29 chevrons.
- Conditions permitting, extend downwind leg to Rt. 2.
- Avoid early base turns.


AIRCRAFT RENTAL • FLIGHT TRAINING • COMPUTERIZED TESTING
EAST COAST
AERO CLUB
Est. 1985