

FULL CIRCLE AT CHATHAM



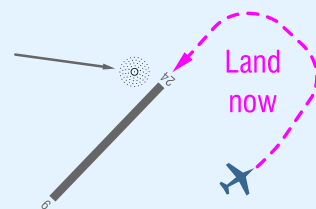
SCENARIO

In theory, it's a binary decision: You complete the approach to a landing or you go missed. In practice, however, there are times when commencing the missed puts you in a position where you could just come around the pattern and land. But when is that smart, and when is that just asking for trouble?

CHOICES

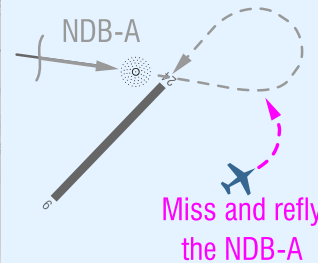
CHOICE 1

Power back and try the landing again right now, but account for the wind to not overshoot.



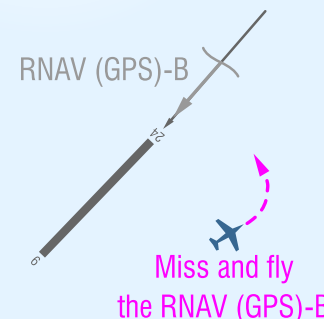
CHOICE 2

Continue the missed approach back to WHIPS to regroup. Then try the NDB-A again.



CHOICE 3

Continue the missed and request the RNAV (GPS)-B to avoid a circle, even though it's over water and the ceilings are ragged.

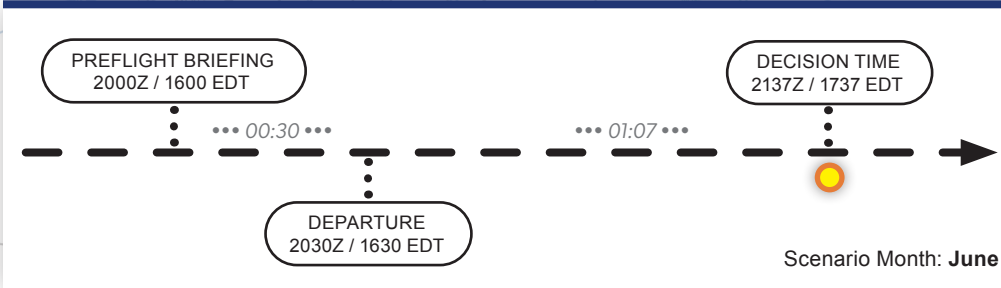


CHOICE 4

Continue the missed and divert to Hyannis (KHYA).



Timeline



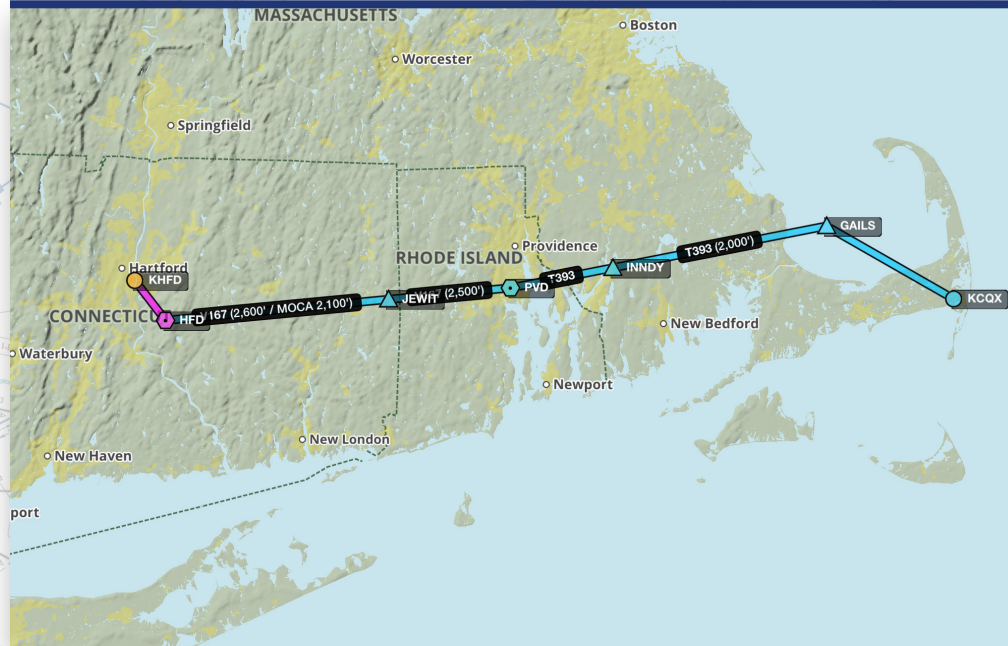
Flight Planning Information

Aircraft Beechcraft Sierra C24R	Estimated Flight Time (hh:mm) 00:55	
Cruise Altitude 7000 feet	Fuel on Board (hh:mm) 06:05	
Cruise Speed 126 KTS	Number Aboard 1	
Departure KHFD	Destination KCQX	Alternate KHYA
Route HFD V167 PVD T393 GAILS		

Pilot Experience

Total Time: 589 hours
Time in Type: 134 hours
Instrument-rated

Scenario Area



METARs and TAFs (Preflight)

Departure

KHFD 261953Z 19011KT 10SM SCT055 BKN075 32/21 A2967

TAF KBDL 261720Z 2618/2724 23009KT P6SM BKN200

FM262000 25008KT P6SM VCSH BKN100

FM270000 20005KT 4SM SHRA OVC040

PROB30 2702/2706 2SM TSRA OVC015CB

FM270600 31006KT 6SM -SHRA OVC025

FM271000 29005KT P6SM OVC050

FM271400 30008KT P6SM SCT060

Enroute

KIJD 261952Z AUTO 20008G19KT 10SM FEW040 30/20 A2969

KPVD 261951Z 21015G22KT 10SM FEW043 SCT060 BKN300 30/21 A2969

TAF KPVD 261720Z 2618/2718 22012G19KT P6SM FEW030

FM270200 20007KT 4SM SHRA OVC030

PROB30 2702/2706 2SM TSRA OVC009CB

FM270900 24007KT 4SM SHRA OVC008

FM271000 25007KT 5SM BR OVC020

FM271300 29008KT P6SM BKN050

KPYM 261952Z AUTO 21010G19KT 10SM CLR 29/21 A2969

KFMH 261950Z 20015G20KT 10SM OVC012 25/21 A2976

TAF KFMH 261720Z 2618/2718 22016G26KT P6SM SCT008 BKN015

FM270200 23011G19KT P6SM VCSH BKN008

FM270600 22010G18KT 3SM -SHRA OVC010

PROB30 2706/2709 1SM TSRA OVC005CB

FM270900 23010G17KT 1 1/2SM -SHRA BR OVC008

FM271100 24009KT 6SM BR OVC008

FM271400 27009KT P6SM BKN050

KHYA 261956Z 21016G26KT 10SM BKN008 OVC065 24/21 A2973

TAF KHYA 261720Z 2618/2718 22017G28KT P6SM BKN008

FM270300 22013G21KT P6SM VCSH SCT008 BKN015

FM270600 22012G20KT 4SM -SHRA OVC008

PROB30 2706/2709 1SM TSRA BR OVC001CB

FM270900 22013G21KT 3SM -SHRA BR OVC015

FM271100 25011G20KT 6SM BR OVC008

FM271500 28009KT P6SM BKN050

Previous TAF

TAF KHYA 261122Z 2612/2712 23014G23KT P6SM SKC

FM261800 22014G23KT P6SM BKN050

FM262300 22013G21KT P6SM VCSH BKN040

FM270300 21013G21KT 5SM -SHRA BR OVC030

PROB30 2703/2706 2SM -TSRA SCT003 OVC012CB

Destination

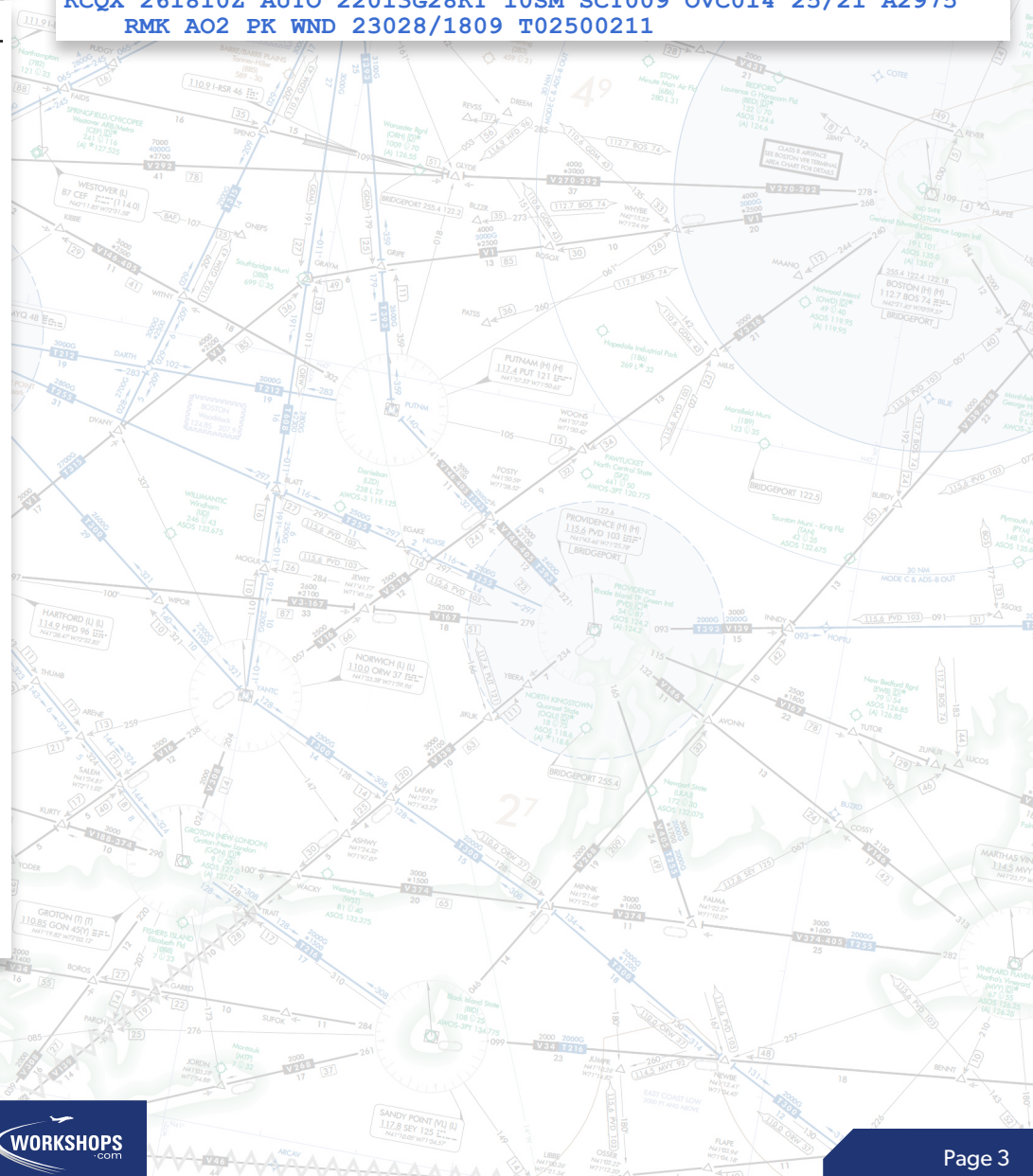
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PK WND 21027/1913 SLP075 T02390211

Previous METARs

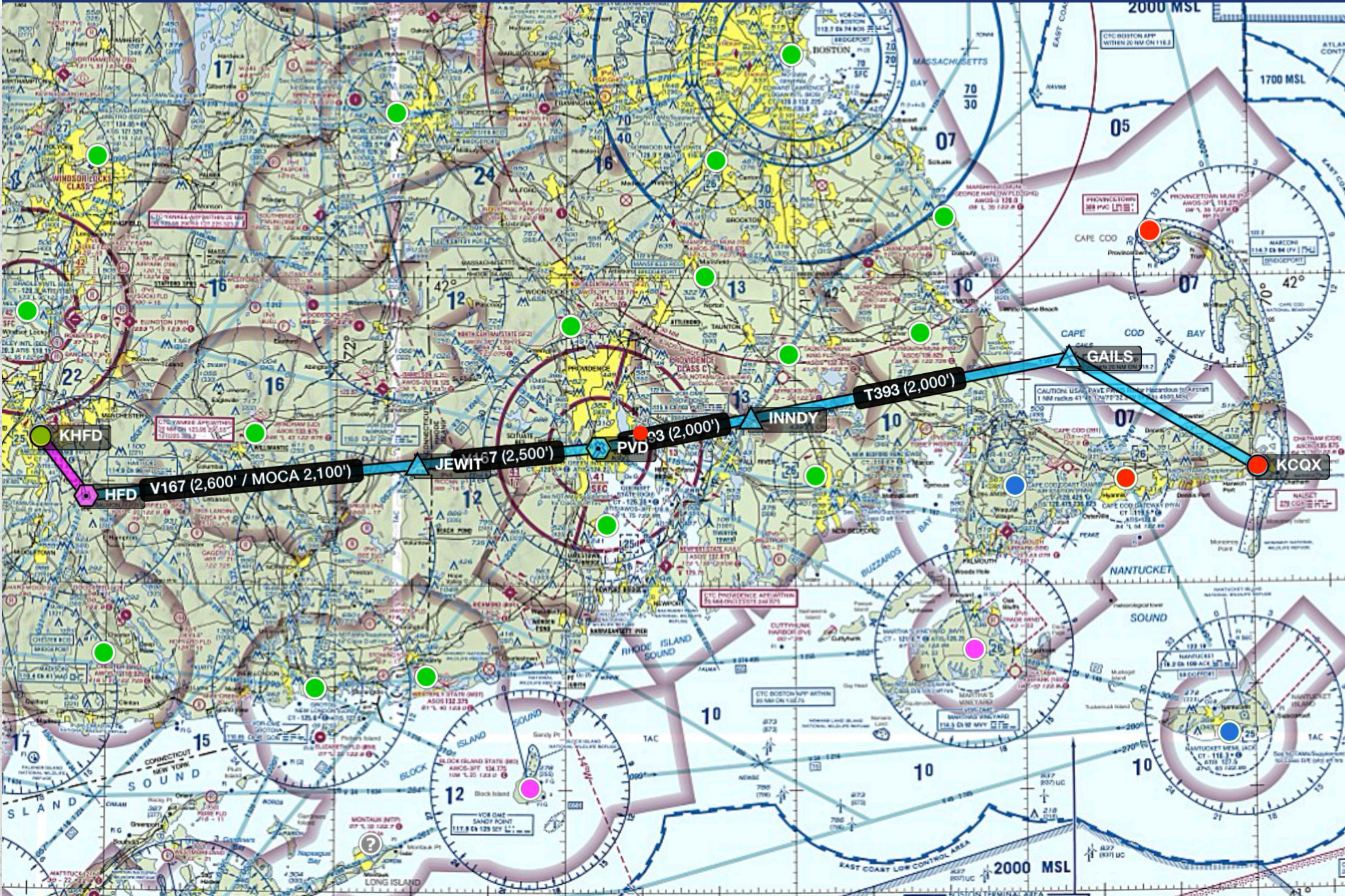
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PK WND 23028/1809 SLP075 T02440211

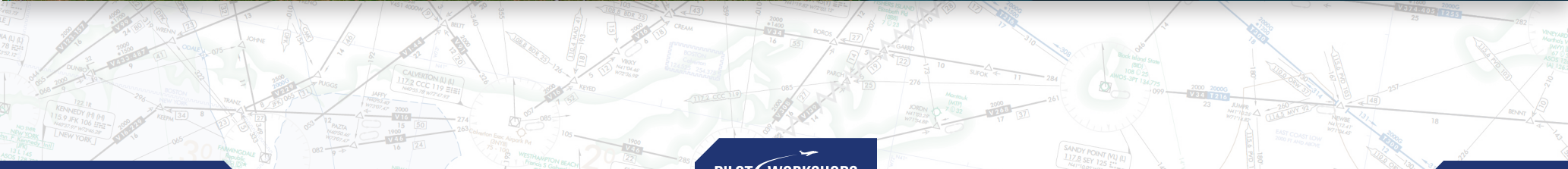
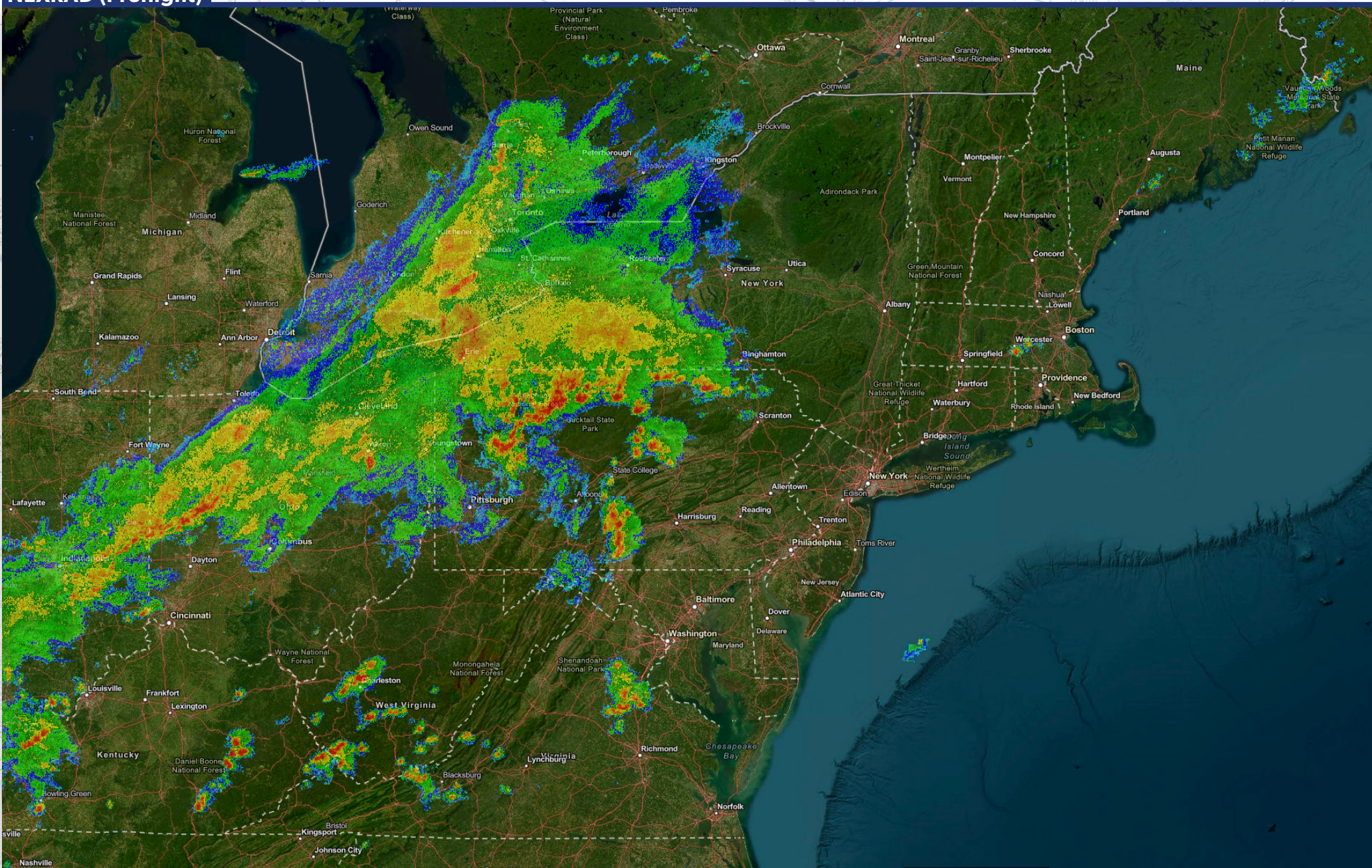
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RMK AO2 PK WND 23028/1809 T02610211

KCQX 261810Z AUTO 22013G28KT 10SM SCT009 OVC014 25/21 A2975
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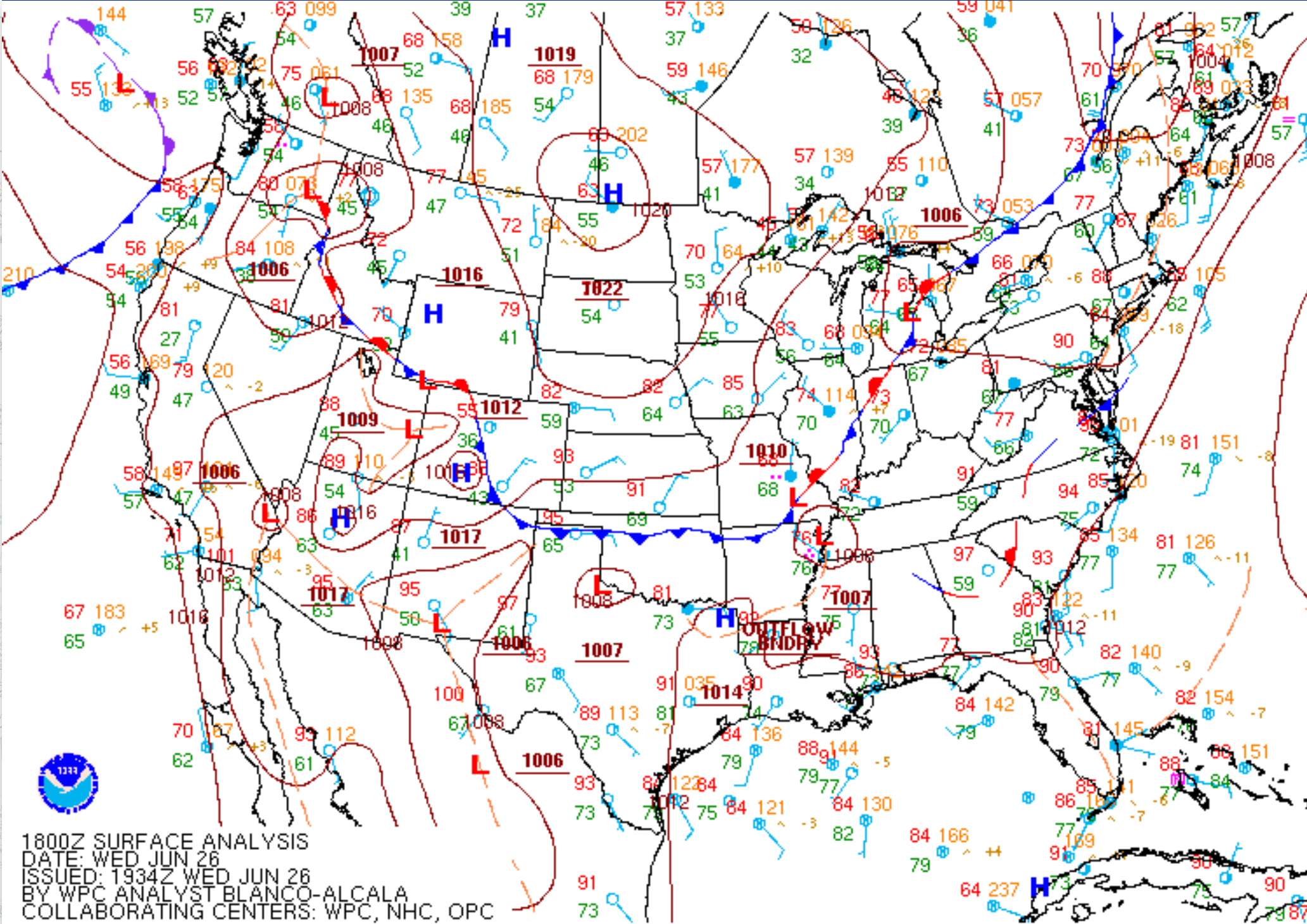


Flight Categories (Preflight)





Surface Analysis (Preflight)



1800Z SURFACE ANALYSIS
DATE: WED JUN 26
ISSUED: 1934Z WED JUN 26
BY WPC ANALYST BLANCO-ALCALA
COLLABORATING CENTERS: WPC, NHC, OPC

Cockpit View (Decision Time)



METARs (Decision Time)

KCQX 262052Z AUTO 22013G24KT 9SM OVC005 23/21 A2974

KHYA 262056Z 21016G25KT 10SM BKN008 BKN013 23/21 A2972

KCQX ASOS (Decision Time)

"Chatham Municipal Airport, Chatham Massachusetts, automated weather observation 2125Z. Wind 180 at 14 gusts 20. Visibility 8. Sky Condition: overcast 800. Temperature 23 Celsius. Dewpoint 21 Celsius. Altimeter 29.74."

LANDING DISTANCE—HARD SURFACE

ASSOCIATED CONDITIONS:

POWER.....RETARD TO MAINTAIN
800 FT/MIN. ON FINAL APPROACH

FLAPS.....DOWN (35°)

RUNWAY.....PAVED, HARD, DRY SURFACE

APPROACH SPEED...IAS AS TABULATED

BRACING.....MAXIMUM

WEIGHT ~ POUNDS	APPROACH SPEED	
	KNOTS	MPH
2750	70	81
2500	66	75
2300	62	71
2100	58	67

EXAMPLE:

OAT 25°C (77°F)

PRESSURE ALTITUDE 3925 FT

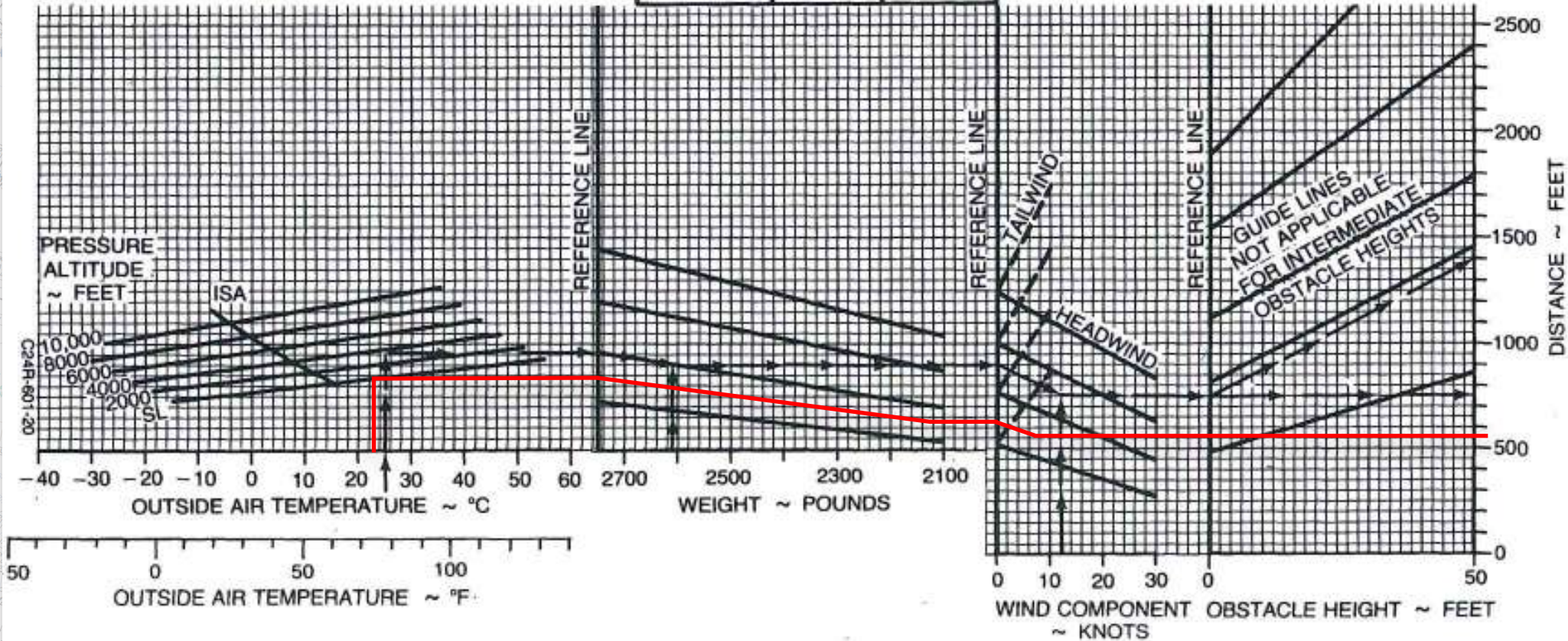
LANDING WEIGHT 2606 LBS

HEADWIND COMPONENT 12 KTS

GROUND ROLL 750 FT

TOTAL OVER 50 FT OBSTACLE 1400 FT

APPROACH SPEED 68 KTS (78 MPH)



KCQX NDB-A

CHATHAM, MASSACHUSETTS

AL-5247 (FAA)

24249

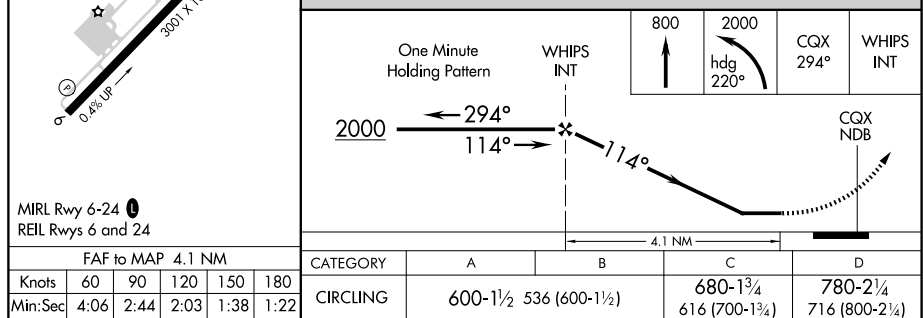
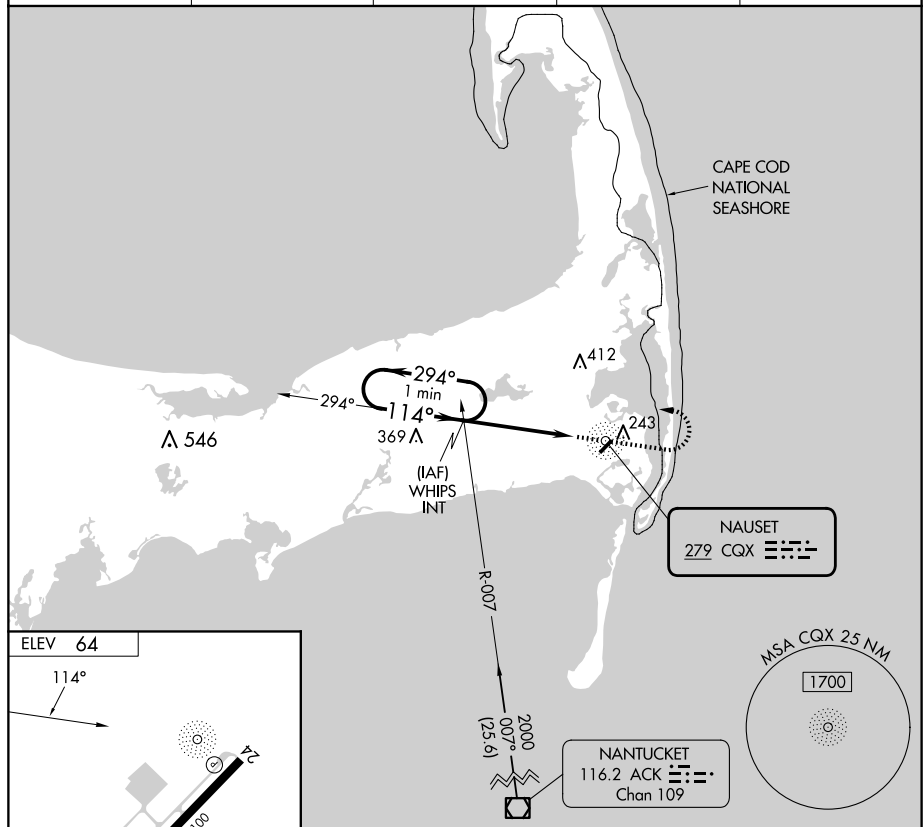
NDB CQX	APP CRS	Rwy Idg TDZE	N/A
279	114°	Apt Elev	64

NDB-A
CHATHAM MUNI (CQX)

When local altimeter setting not received, use Hyannis altimeter setting and increase all MDA 40 feet and Circling visibility Cat D ¼ SM. When VGSI inop, procedure NA at night. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 800 then climbing left turn to 2000 heading 220° and 294° bearing from CQX NDB to WHIPS INT and hold.

ASOS	BOSTON APP CON	CLNC DEL	UNICOM	122.95
135.875	118.2	127.3	122.8 (CTAF)	



FAF to MAP 4.1 NM	MIN:SEC	4:06	2:44	2:03	1:38	1:22
REIL Rwy 6 and 24	MIN:SEC	4:06	2:44	2:03	1:38	1:22

CHATHAM, MASSACHUSETTS
Amdt 1C 30DEC21

41°41'N - 69°59'W

CHATHAM MUNI (CQX)
NDB-A

KCQX RNAV (GPS)-B

CHATHAM, MASSACHUSETTS

AL-5247 (FAA)

24249

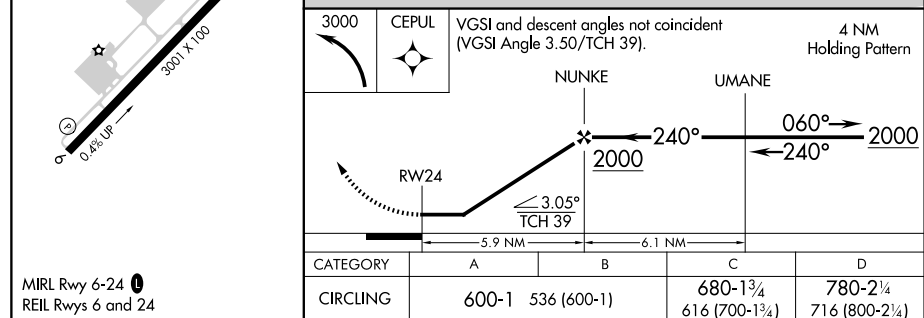
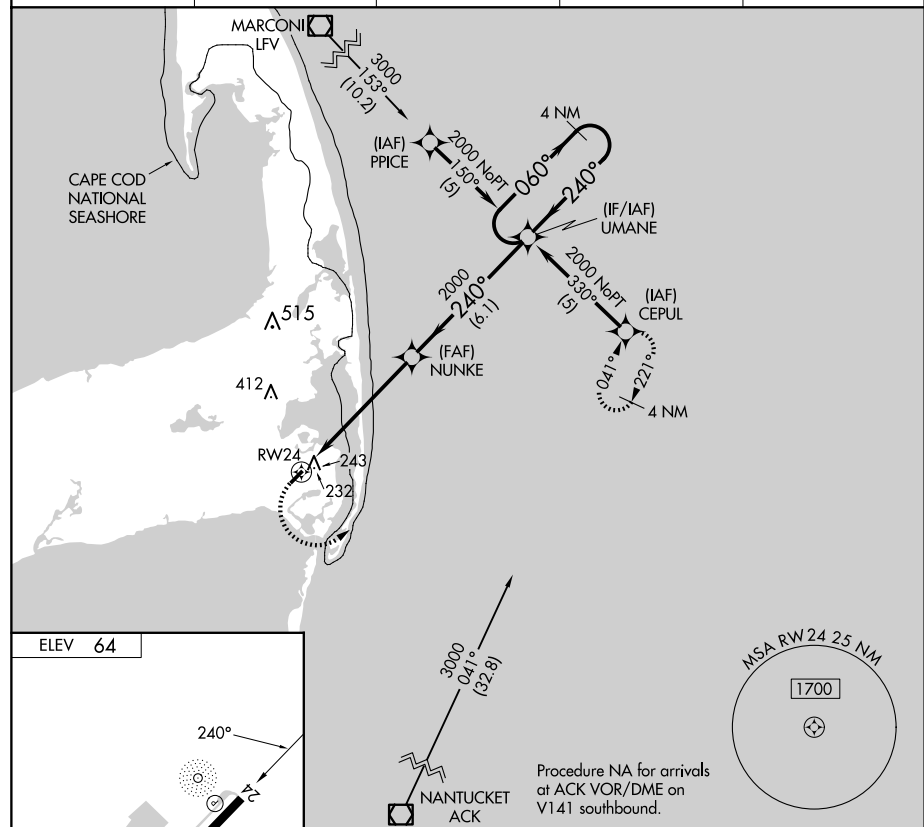
APP CRS	Rwy Idg TDZE	N/A
240°	Apt Elev	64

RNAV (GPS)-B
CHATHAM MUNI (CQX)

DME/DME RNP-0.3 NA. When local altimeter setting not received, use Hyannis altimeter setting and increase all MDA 40 feet and Circling visibility Cat D ¼ SM. When VGSI inop, procedure NA at night. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climbing left turn to 3000 direct CEPUL and hold.

ASOS	BOSTON APP CON	CLNC DEL	UNICOM	122.95
135.875	118.2	127.3	122.8 (CTAF)	



FAF to MAP 4.1 NM	MIN:SEC	4:06	2:44	2:03	1:38	1:22
REIL Rwy 6 and 24	MIN:SEC	4:06	2:44	2:03	1:38	1:22

CHATHAM, MASSACHUSETTS
Orig-C 30DEC21

41°41'N - 69°59'W

CHATHAM MUNI (CQX)
RNAV (GPS)-B

KHYA ILS or LOC RWY 24

HYANNIS, MASSACHUSETTS

AL-675 (FAA)

24249

ILS or LOC RWY 24

CAPE COD GATEWAY (HYA)

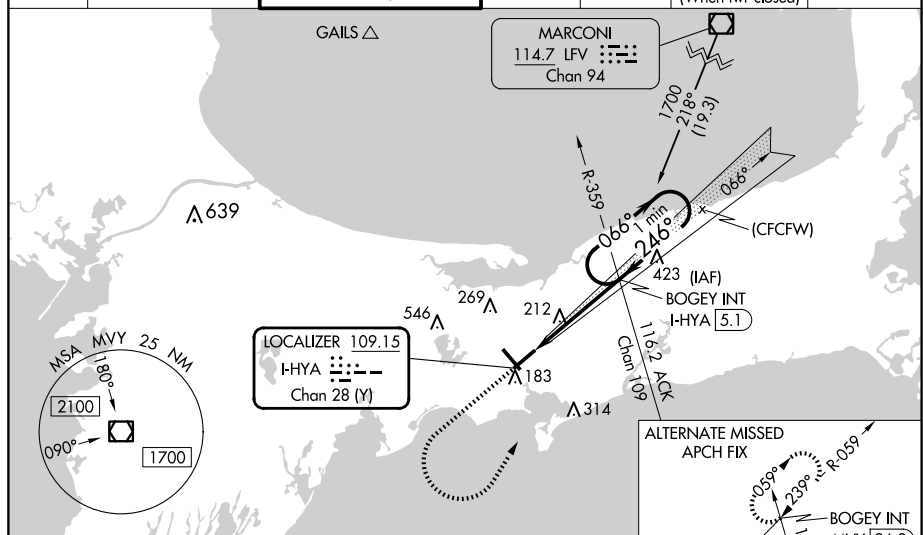
LOC/DME I-HYA 109.15 Chan 28 (Y)	APP CRS 246°	Rwy Idg TDZE Apt Elev 5425 43 54
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RADAR required.

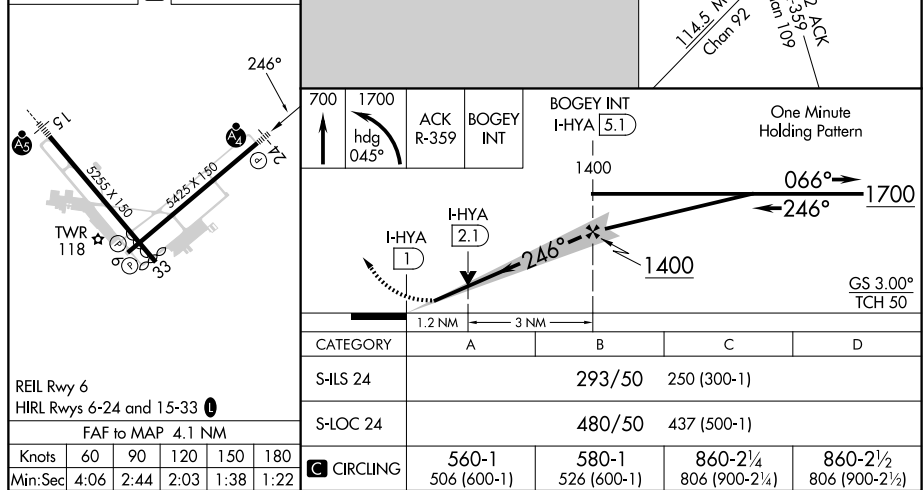
When local altimeter setting not received, use Chatham altimeter setting and increase all DA to 325 feet and increase all MDA 40 feet, increase S-LOC 24 Cats C/D visibility to RVR 6000 and increase Circling Cats C/D visibility 1/4 SM. Inop table does not apply to S-ILS 24 all Cats and S-LOC 24 Cats A/B. For inop ALS, increase S-LOC 24 Cats C/D visibility to 1 1/4 SM. For inop ALS, when using Chatham altimeter setting, increase S-LOC 24 Cats C/D visibility to 1 1/4 SM. Straight-in/Circling Rwy 24 at night, operational VGSI required, remain on or above VGSI glidepath until threshold. Rwy 24 helicopter visibility reduction below RVR 5000 NA.

MISSED APPROACH:
Climb to 700 then climbing left turn to 1700 on heading 045° and on ACK VOR/DME R-359 to BOGEY INT/I-HYA 5.1 DME and hold.

ATIS 123.8	BOSTON APP CON 118.2 284.6	HYANNIS TOWER ★ 119.5 (CTAF) 0 257.8	GND CON 118.45	CLNC DEL 125.15	CLNC DEL 120.125 (When twr closed)	UNICOM 122.95
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ELEV	54	TDZE	43
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HYANNIS, MASSACHUSETTS

Amdt 19B 15JUN23

41°40'N-70°17'W

CAPE COD GATEWAY (HYA)

ILS or LOC RWY 24

KHYA RNAV (GPS) RWY 24

HYANNIS, MASSACHUSETTS

AL-675 (FAA)

24249

RNAV (GPS) RWY 24

CAPE COD GATEWAY (HYA)

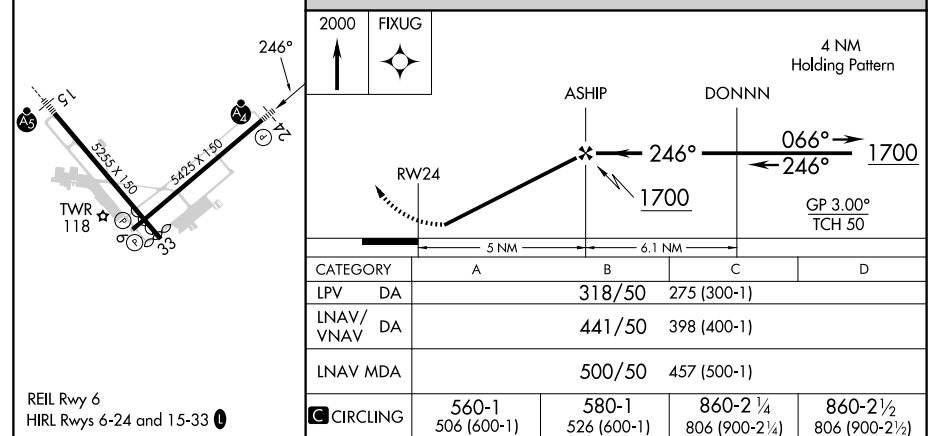
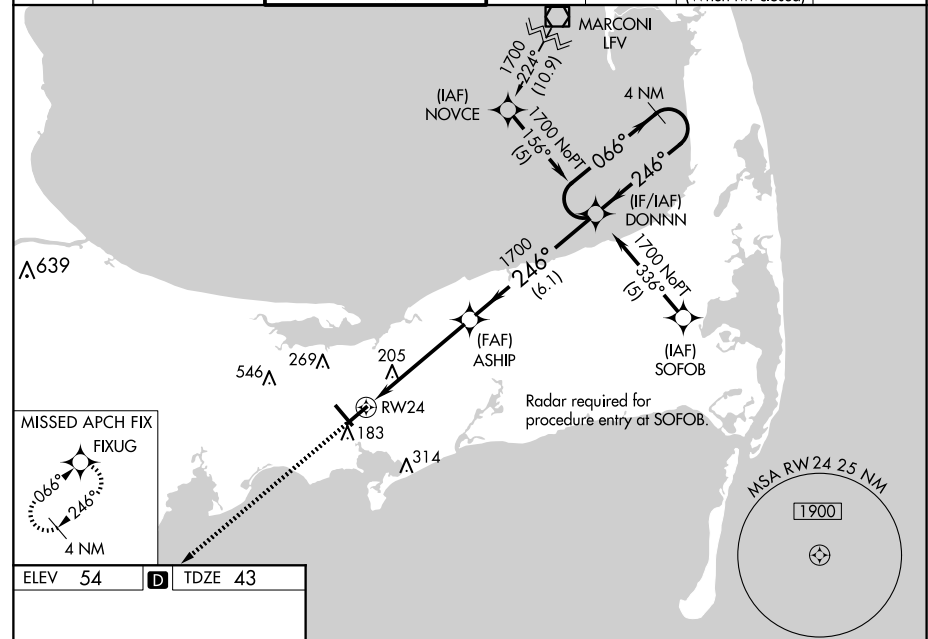
WAAS CH 77812 W24A	APP CRS 246°	Rwy Idg TDZE Apt Elev 5425 43 54
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RNP APCH - GPS.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 48°C. Rwy 24 helicopter visibility reduction below RVR 5000 NA. When local altimeter setting not received, use Chatham altimeter setting; increase LPV DA to 350 feet; increase LNAV/VNAV DA to 473 feet; increase all MDAs 40 feet, LNAV visibility Cats C and D to RVR 6000, and Circling visibility Cats C/D 1/4 SM. Baro-VNAV NA when using Chatham Muni altimeter setting. For inop ALS, increase LNAV/VNAV all Cats visibility to RVR 6000, LNAV Cat C/D visibility to 1 1/4 SM. Inop table does not apply to LPV all Cats, and LNAV Cats A and B. Straight in/Circling Rwy 24 at night, operational VGSI required, remain on or above VGSI glidepath until threshold. For inop ALS when using Chatham altimeter setting, increase LNAV/VNAV visibility all Cats to 1 1/4 SM.

MISSED APPROACH:
Climb to 2000 direct FIXUG and hold.

ATIS 123.8	BOSTON APP CON 118.2 284.6	HYANNIS TOWER ★ 119.5 (CTAF) 0 257.8	GND CON 118.45	CLNC DEL 125.15	CLNC DEL 120.125 (When twr closed)	UNICOM 122.95
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HYANNIS, MASSACHUSETTS

Amdt 1C 15JUN23

41°40'N-70°17'W

CAPE COD GATEWAY (HYA)

RNAV (GPS) RWY 24

KCQX Chart Supplement

CHATHAM MUNI (CQX)(KCQX) 2 NW UTC-5(-4DT) N41°41.30' W69°59.38'

64 B NOTAM FILE CQX

RWY 06-24: H3001X100 (ASPH) S-30 MRL 0.5% up NE

RWY 06: REIL. PAPI(P2L)—GA 3.5° TCH 39'. Trees.

RWY 24: REIL. PAPI(P2R)—GA 3.5° TCH 39'. Tank.

SERVICE: S3 FUEL 100LL, JET A, A+ LGT Actvt MRL Rwy 06-24-122.95.

NOISE: Noise abatement Rwy 06-24. Use full rwy and avoid intersection departures. Minimize/avoid touch and go ldg opns. 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.

AIRPORT REMARKS: Attended 1300Z±-dusk. Birds, primarily gulls and wildlife on or invof arpt. Be aware of hi-speed mil jet and heavy helicopter tfc invof Cape Cod CGAS. Avoid residential areas as much as possible. Recommended minimum alt 2000' AGL from northeast to southeast of arpt over national seashore. Water ldg area clsd perm.

AIRPORT MANAGER: 508-945-9000

WEATHER DATA SOURCES: ASOS 135.875 (508) 945-5034.

COMMUNICATIONS: CTAF/UNICOM 122.8

® **BOSTON CONSOLIDATED TRACON APP/DEP CON** 118.2 **CLNC DEL** 127.3

CLEARANCE DELIVERY PHONE: For CD ctc Boston Apch at 603-594-5554.

RADIO AIDS TO NAVIGATION: NOTAM FILE BDR.

MARCONI (VH) (DH) VORW/DME 114.7 L FV Chan 94 N42°01.03' W70°02.23' 190° 19.8 NM to fld. 151/16W.

VOR unusable:

245°-250° byd 40 NM

NAUSET NDB (MHW) 279 CQX N41°41.52' W69°59.26' at fld. 56/16W. NOTAM FILE CQX.

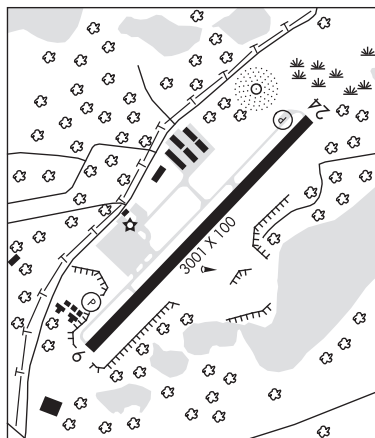
NDB unusable:

220°-280° byd 20 NM

NEW YORK

L-33D

IAP



KHYA Chart Supplement

CAPE COD GATEWAY (HYA)(KHYA) 1 N UTC-5(-4DT) N41°40.16' W70°16.82'

54 B LRA ARFF Index—See Remarks NOTAM FILE HYA MON Airport

RWY 06-24: H5425X150 (ASPH-GRVD) S-30, D-108

PCR 384 F/A/X/T HIRL

RWY 06: REIL. PAPI(P4L)—GA 3.0° TCH 37'. RVR-R Thld dsplcd 406'. Tree.

RWY 24: MALSF. PAPI(P4L)—GA 3.0° TCH 50'. RVR-T Railroad.

RWY 15-33: H5255X150 (ASPH-GRVD) S-30, D-108

PCR 355 F/A/X/T HIRL

RWY 15: MALSR. RVR-T P-line.

RWY 33: PAPI(P4L)—GA 3.0° TCH 53'. RVR-R Thld dsplcd 150'.

LAND AND HOLD—SHORT OPERATIONS

LDG RWY

HOLD—SHORT POINT

AVBL LDG DIST

RWY 15 06-24 4150

RWY 24 15-33 4650

RUNWAY DECLARED DISTANCE INFORMATION

RWY 06: TORA-5425 TODA-5425 ASDA-5425 LDA-5019

RWY 15: TORA-5255 TODA-5255 ASDA-5255 LDA-5255

RWY 24: TORA-5425 TODA-5425 ASDA-5425 LDA-5425

RWY 33: TORA-5255 TODA-5255 ASDA-5255 LDA-5105

ARRESTING GEAR/SYSTEM

RWY 24: EMAS

SERVICE: S4 FUEL 100LL, JET A LGT Actvt MALSR Rwy 15; MALSF Rwy 24; HIRL Rwy 06-24 and 15-33—CTAF.

NOISE: Arpt has noise abatement ctc arpt manager 508-778-7765. Tgl opns prohibited btn 0200-1059Z± PPR by AMGR.

AIRPORT REMARKS: Attended continuously. Birds, coyotes on and invof arpt. AVGAS unavailable btn 0000Z± and 1100Z± daily.

Call Griffin aft hrs 508-367-2140. Clsd to unskd acf ops with more than 9 pax seats 0500-1100Z± expc 1 hr PPR amgr 508-778-7770. Be aware of high-spd mil jet & hvy hel tfc vcnty of Joint Base Cape Cod. Do not confuse Joint Base Cape Cod, 10 NM W with Cape Cod Gateway. Ant on tank 4,600' SE elev 208'; standpipe 7.050' N 236'; obstn lgtd. Class I, ARFF Index A. ARFF Index B svcs prvd btn 1100-0259Z± dly. ARFF Index A svcs prvd durg otr times. For Index B svcs btn 0300-1059Z±, 1 hr 30 min PPR at 508-778-7770. Twy B clsd to acft with wingspan grtr than 118'. Twy B btn Twy D and Rwy 06-24 clsd to acft with wingspan grtr than 78'. Twy B from Rwy 33 to east ramp has soft shoulders and marked. Ldg fee for all acft over 6000 lbs.

AIRPORT MANAGER: 508-775-2020

WEATHER DATA SOURCES: ASOS (508) 862-2601 LAWRS.

COMMUNICATIONS: CTAF 119.5 ATIS 123.8 (508) 778-1143 UNICOM 122.95

® **BOSTON CONSOLIDATED TRACON APP/DEP CON** 118.2

HYANNIS TOWER 119.5 (1100-0300Z±) **GND CON** 118.45 **CLNC DEL** 125.15 120.125 (when twr clsd)

AIRSPACE: CLASS D svc 1100-0300Z±; other times CLASS G.

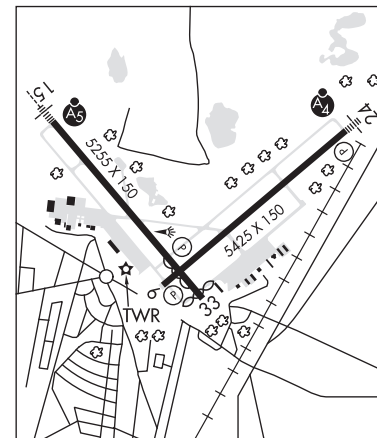
RADIO AIDS TO NAVIGATION: NOTAM FILE MVY.

MARTHAS VINEYARD (L) (L) VORW/DME 114.5 MVY Chan 92 N41°23.77' W70°36.76' 057° 22.2 NM to fld. 62/15W.

ILS/DME 108.95 I-BCU Chan 26(Y) Rwy 15. Class IB. Unmonitored when ATCT clsd.

ILS/DME 109.15 I-HYA Chan 28(Y) Rwy 24. Class IT. Unmonitored when ATCT clsd. Autopilot cpd apchs NA blw 700' MSL.

COMM/NAV/WEATHER REMARKS: Emerg frequency 121.5 not avbl at twr. All tsnt and GA pilots must ctc arpt ops on freq 122.95 prior to eng shtdn for airfield escort btn 0300-1059Z±.



NEW YORK

H-101, 11D, 12K, L-33D

IAP, AD

Bonus Resources

For additional resources, visit the IFR Mastery Hangar for this scenario.