OPS GROUP

NORTH ATLANTIC
AIRCRAFT PLOTTING AND PLANNING CHART
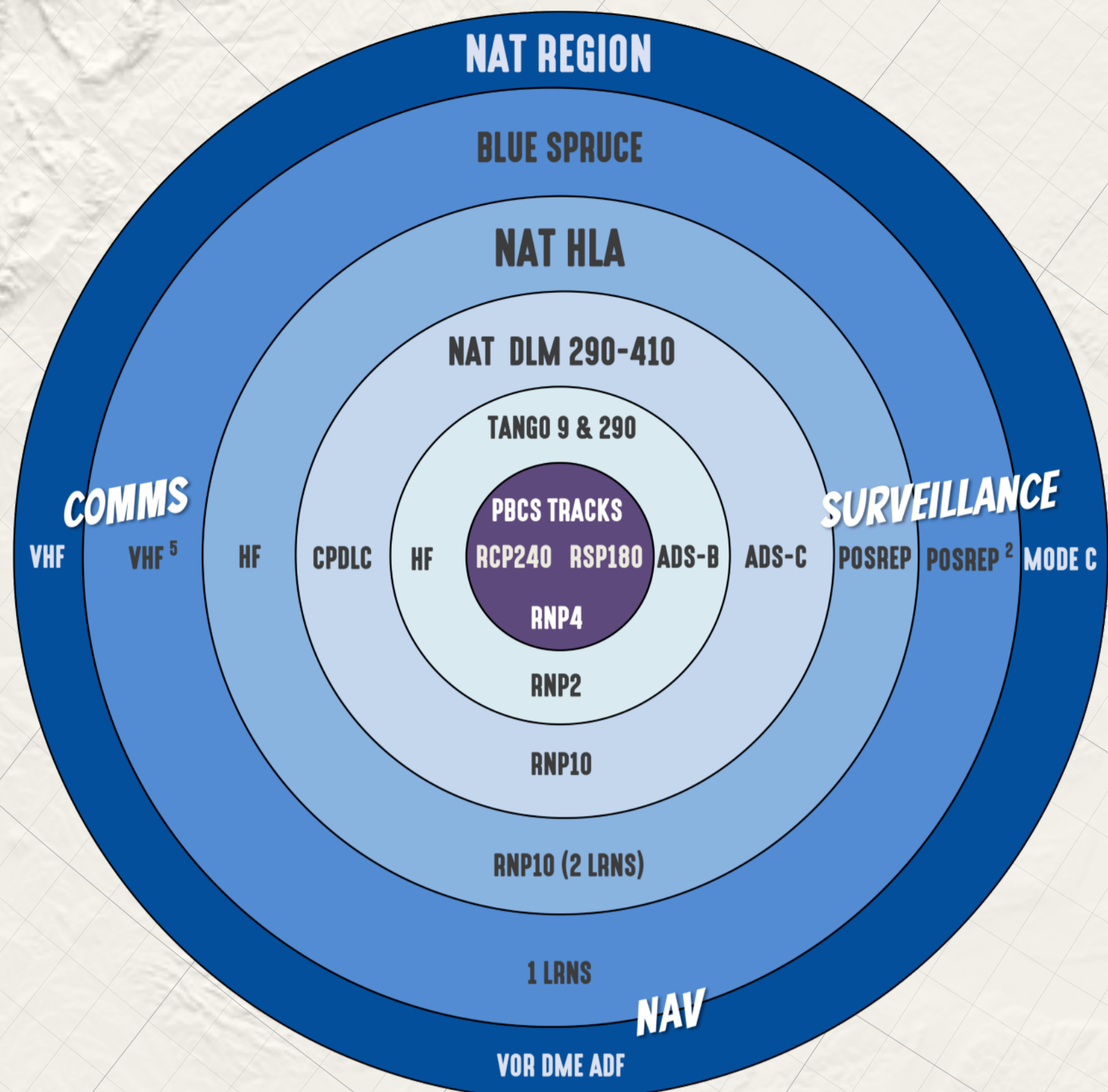### EDITION: JULY 2021

NOTICE TO PLOTTERS: We hope you enjoy using this chart. Do not use it to navigate, you will get lost and run out of fuel. If you find errors, please email pubs@ops.group. If you have good ideas for the next edition, do the same, and we'll send you a free one!

NAT REGION

- BLUE SPRUCE
- NAT HLA
- NAT DLM 290-410
- TANGO 9 & 290

COMMS: VHF · VHF[5] · HF · CPDLC · HF

SURVEILLANCE: ADS-B · ADS-C · POSREP · POSREP[2] · MODE C

- PBCS TRACKS RCP240 RSP180 RNP4
- RNP2
- RNP10
- RNP10 (2 LRNS)
- 1 LRNS

NAV: VOR DME ADF

CIRCLE OF ENTRY: WHAT DO I NEED TO GET IN?

1 : The NAT HLA (formerly MNPS) is FL285-420 and everyone needs HLA approval in this area.

2 : Blue Spruce routes: 1 LRNS ok, VHF ok on most, but since 2021 more restrictive: datalink needed FL290-410 on southerly routes, ADS-B over Greenland (if no ADS-C), and HLA approval FL285-420.

3 : You need Datalink (CPDLC and ADS-C) from FL290-410 in the entire HLA, except for: North of 80N, NYC Oceanic, Tango 9 & 290, and 'surveillance airspace' over Iceland/Greenland (latter needs ADS-B).

4 : PBCS Tracks (half degree apart), when published, are FL350-390 requiring Datalink with RCP240 and RSP180, and RNP4. Normal NAT Tracks (one degree apart) just need HF, Datalink, and RNP10.

5 : Shanwick OCA needs HF, no exceptions (even Blue Spruce). T9 & T290 need HF, RNP2, and ADS-B, but not datalink. You can normally climb and descend through most airspace even if you don't have the gear to cruise in it. You need TCAS 7.1 everywhere in the NAT, and RVSM FL290-410. SLOP right on all tracks, including random. Outside VHF areas 2 LRCS are required – HF must be one, Satcom or CPDLC for the other.

NAT TIPS

1 : NAT Tracks: Westbound OTS Day 1130-1900Z (time for crossing 30W) published by Shanwick at 2200Z; Eastbound OTS Night 0100-0800Z Published by Gander at 1400Z. If going against the tracks, file above them, or plan at least 1 degree N or S of them.

2 : SLOP is always to the right. Choose 0, 1 or 2nm offset, or 0.1 offsets if you have it.

3 : AFTN: FPL for Gander to CZQXZQZX, New York KZNYZQZX, and for the other four (Shanwick, Santa Maria, Bodø, and Iceland) to EUCHZMFP and EUCBZMFP (Eurocontrol, who then send it on to the OCA's).

4 : Voice position report sounds like this: "Shanwick, Shanwick, KLM604, position 54N20W time 0604, FL370, estimate 54N030W 0642, 55N40W next."

5 : The best tip we can ever give for the NAT: When you get your Oceanic Clearance, don't climb to it without requesting a level change from Domestic ATC. Many fail this.

6 : The NAT area can be complex. If you're stuck, contact the Oceanic Area you're flying through. You'll find them very helpful. Phone numbers in the OPSGROUP Members Dashboard (contact list). Or just ask the OG team.

ARCTIC RADIO
VHF 126.700

BGSF Sondrestrom
RWY 09/27 2810m/9220ft
LOC RFF5 11-20 Mon-Sat

AIR-TO-AIR
VHF 123.450

ICELAND RADIO
VHF 127.850 / 129.625

CYFB Iqaluit
RWY 16/34 2622m/8605ft
ILS1/RNAV RFF5 H24

BIKF Keflavik
RWY 10/28 3065m/10056ft
ILS2 RFF7 H24

BGBW Narsarsuaq
RWY 06/24 1830m/6004ft
RNAV RFF5 11-20 Mon-Sat

EGPK Prestwick
RWY 12/30 2986m/9797ft
ILS1 RFF7 H24R

CYYR Goose Bay
RWY 08/26 3368m/11051ft
ILS1/LOC/RNAV RFF8 H24

EGAA Belfast
RWY 07/25 2780m/9121ft
ILS3 RFF7 H24

CYQX Gander
RWY 03/21 3109m/10200ft
ILS1/RNAV RFF7 H24

EINN Shannon
RWY 06/24 3199m/10495ft
ILS2 RFF7/9 H24

CYDF Deer Lake
RWY 07/25 2440m/8005ft
ILS1/RNAV RFF6 H24

CYJT Stephenville
RWY 09/27 3051m/10011ft
ILS1/RNAV RFF6 H24

CYYT St Johns
RWY 11/29 2591m/8502ft
ILS3 RFF7 H24

TXKF Bermuda
RWY 12/30 2958m/9705ft
ILS1/RNAV RFF9 H24R

LPLA Lajes
RWY 15/33 3310m/10860ft
ILS1

LPPD Ponta Delgada
RWY 12/30 2323m/7621ft
RNP/ILS1 RFF7 H24

LPAZ Santa Maria
RWY 18/36 3048m/10000ft
ILS1/VOR RFF6 H24R

NAT FPL CODES
C LORAN C   D DME
E1 FMC WPR ACARS
E2 D-FIS ACARS
E3 PDC ACARS
F ADF   G GNSS   H HF   I INS
J1 CPDLC ATN VDL Mode 2
J2 CPDLC VDL Mode A/G
J3 CPDLC VDL Mode 2
J4 CPDLC VDL Mode 2
J5 CPDLC SATCOM (INMARSAT)
J6 CPDLC SATCOM (MTSAT)
J7 CPDLC SATCOM (Iridium)
M1 ATC RTF SATCOM (INMARSAT)
M2 ATC RTF SATCOM (MTSAT)
M3 ATC RTF (Iridium)
P2 CPDLC RCP 240   O VOR
R PBN (Item 18 PBN/01 etc)
S Standard Equipment VHF VOR ILS
V VHF   W RVSM   X HLA   Y 8.33
Z Other Equipment (Comm/nt in 18)

==Transponder==
C Mode C only
C Mode S basic
E/H/I/L/P/S/X Mode S extended
B1/B2/U1/U2/V1/A2 ADS -B
D1/G1 ADS -C

==PBN codes==
A1 10nm Oceanic
B2 RNP2 GPS   B3 DME   B4 VOR
C2 RNP2 GPS   C3 DME
D2 RNP DLC VDL   D3 DME
L1 RNP4
SUR/RSP180 ADS-C RSP180

CONTINGENCY
1. Turn 30 degrees right or left
2. Establish 5nm offset
3. Descend below FL290
4. Vertical offset 500ft

WEATHER DEVIATION
1. If deviating less than 5nm = maintain level
2. If deviating more than 5nm = SAND 300ft (South – ascend, North – descend)

COM FAILURE
1. No clearance, not in NAT: Divert. If you must enter, fly the flight plan but do not change speed/level from flight plan.
2. With clearance, not in NAT: Fly the clearance. Do not revert to flight plan.
3. Already in NAT: Fly the clearance. Relay position on 123.45

CZQX Gander
VHF clearance 127.90
Call 90-30 mins prior
SATCOM 431631
HF 5616/8864 (US a/c)
HF 5649/8879 (Euro a/c)

EGGX Shanwick
VHF clearance:
123.95 (US a/c) 127.65 (Euro a/c)
Call 90-30 mins prior
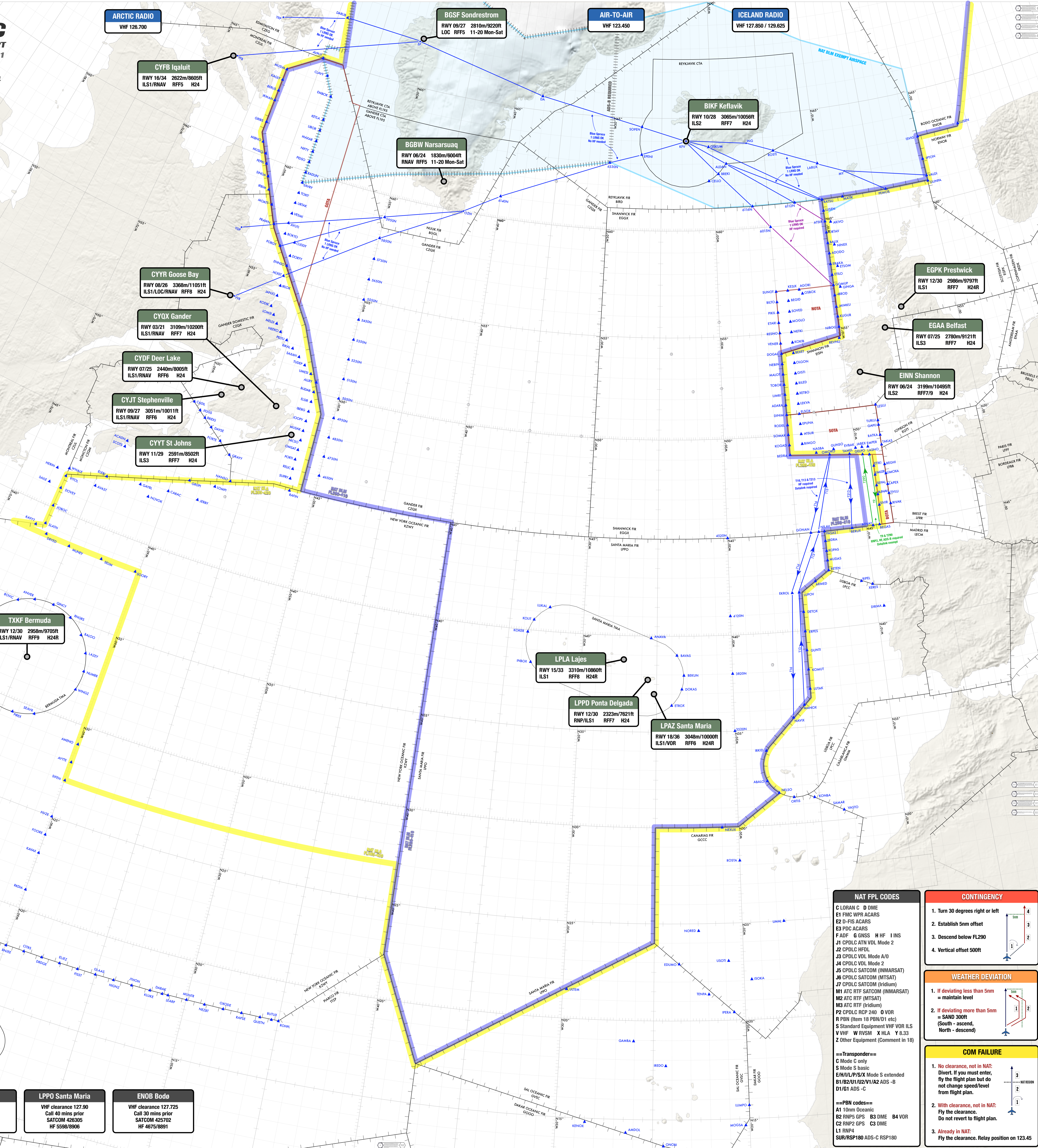SATCOM 425002
HF 5616/8864 (US a/c)
HF 5649/8879 (Euro a/c)

KZWY New York
VHF clearance 122.60
Call 45-30 mins prior
SATCOM 436623
HF 6628/8825

BGGL Nuuk
CZQX/BIRD CTA above FL195
VHF info 121.30
SATCOM 421902
HF 8945/10042

BIRD Reykjavik
VHF clearance 127.85
Call 40 mins prior
SATCOM 426305
HF 5598/8906

LPPO Santa Maria
VHF clearance 127.90
Call 40 mins prior
SATCOM 425105
HF 4675/8891

ENOB Bodø
VHF clearance 127.725
Call 30 mins prior
SATCOM 425702
HF 4675/8891