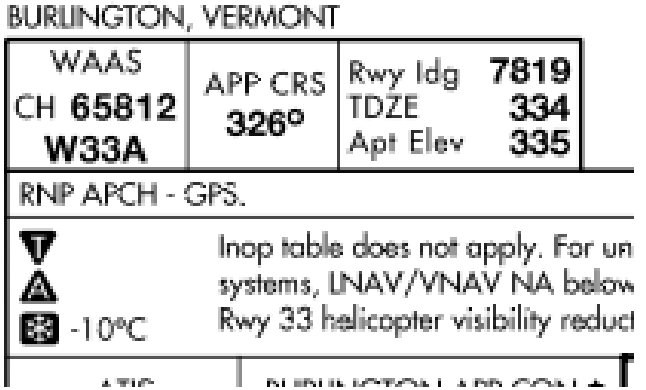
Cold Comfort:
Cold Temp Restricted Airports

- Pilot requirement at certain airports, not assigned by ATC
- Unrelated to Baro-VNAV temperature restrictions
- “High-to-low, look out below” due to density
- Procedure and table in AIM Chapter 7-3
- Approaches only, not MIA or MVA, but you can request higher for safety

Starting Point: The Chart

- Need to check for snowflake restriction in “notes box”
- Active when reported surface temperature is at or below limit
- Example we’ll use at right is KBTV RNAV Z RWY 33


BURLINGTON, VERMONT

WAAS	APP CRS	Rwy Idg	7819
CH 65812	326°	TDZE	334
W33A		Apt Elev	335

RNP APCH - GPS.

-10°C

Inop table does not apply. For un
systems, LNAV/VNAV NA below
Rwy 33 helicopter visibility reduct

Step Two: Affected Segments

- Optional: find segments affected in Cold Temperature Airports document

https://aeronav.faa.gov/d-tpp/Cold_Temp_Airports.pdf

U55	Panguitch Municipal	-28C		X	X	
Vermont						
KBTV	Burlington Intl	-10C		X		
KDDH	William H. Morse State	-14C			X	

- KBTV above is intermediate segment only; can be initial, intermediate, final, or missed.
- At pilot's option, may modify all segments.

Segment Details

- For initial and intermediate segment, use FAF altitude and adjust all altitudes from IAF leading up to (and including) FAF.
- For final segment, use MDA or DA and adjust all fixes past FAF.
- For missed segment, use final missed altitude and adjust that one only.

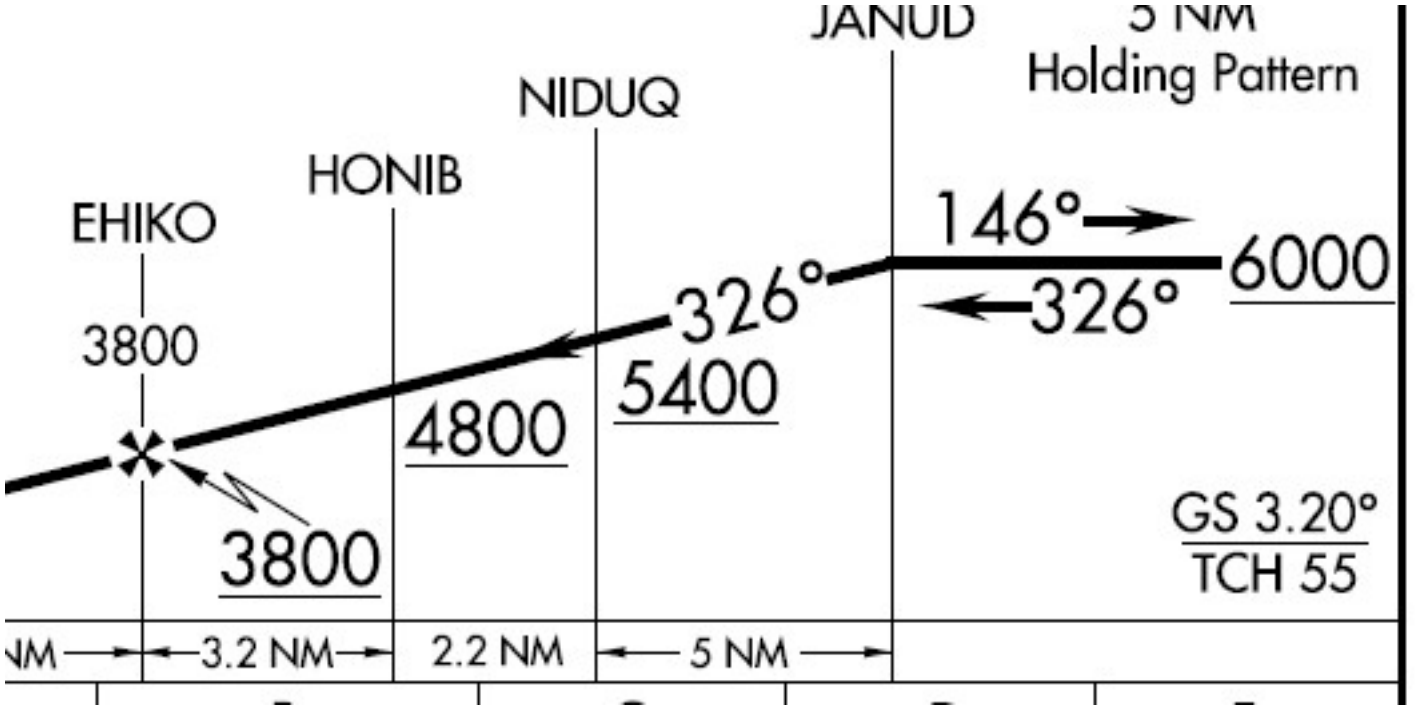
Step Three: Compute Adjustments

- Find height above ground (FAF 3800 – 335 elevation = 3465)
- Look up in ICAO Doc 8168 or AIM 7-3-5
- If it's -20C, compute 495’ from the table, round up to 500’, and add that to intermediate and FAF altitudes

	200	300	400	500	600	700	800	900	1000	1500	2000	3000	4000	5000
+10	10	10	10	10	20	20	20	20	20	30	40	60	80	90
0	20	20	30	30	40	40	50	50	60	90	120	170	230	280
−10	20	30	40	50	60	70	80	90	100	150	200	290	390	490
−20	30	50	60	70	90	100	120	130	140	210	280	420	570	710
−30	40	60	80	100	120	140	150	170	190	280	380	570	760	950

Initial and Intermediate Adjustment Results

- 3800+500=4300, 4800+500=5300, 5400+500=5900, 6000+500=6500



Repeat: Final and Missed

- Select minimum. LPV is 584’, 584-335=249. Add 40’ from chart, so new minimum is 624’.
- Missed is 3000’. 3000-335=2665. Via chart, 300’ correction. New missed altitude is 3300’.

Step Four: Notify ATC

- If initial, intermediate, or missed are adjusted, must notify ATC
- No ATC notification for adjustments to final segment, either for step-downs or for minimums
- Phrasing: “Require 4300 feet until EHIKO for cold temperature operations”
- ATC cannot refuse this request

Final Thoughts

- You'll want to compute these things ahead of time, because it's complicated and not supported by ForeFlight or other EFBs
- Doesn't affect your ability to get in when weather is low; actual altitude is the same
- Only airports with a runway greater than 2500' evaluated; others at pilot discretion
- Doesn't affect glide slope but can change DA
- Garmin V6.50 on 750/650 can compute it in some installations; see AFM