

15 December 2021

EXPANDING RNP CAPABILITIES

Honeywell



HONEYWELL FLIGHT TECHNICAL SERVICES

Supporting the Operational and Training Needs of Honeywell Pilot Customers Through:

Pilots.Honeywell.com

- A one-stop website for pilot guides, videos and other familiarization material on Honeywell Business and Regional Jet avionics

Honeywell Direct-To Newsletter

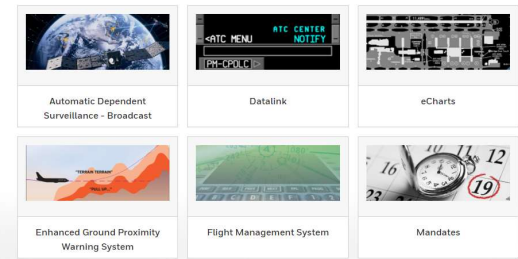
- Monthly articles on topics of interest to Pilots
- Access to articles [here](#)
- Subscribe to newsletter [here](#)

Technical Support and Consultancy Services

- Consultation and operational support for upgrades
- Operational approvals for RNP AR
- Operational troubleshooting: FTS@Honeywell.com

Select a Virtual Classroom

Home > Classrooms



WHY DID WE DECIDE TO TACKLE ASPEN?

- RNP is an untapped resource
- Offer more value to our RNP customers
- Bring approaches to underserved airports

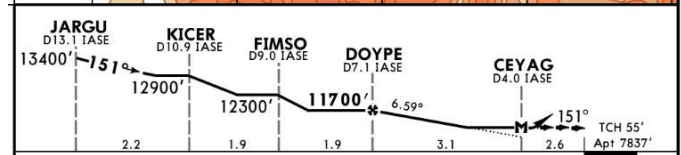
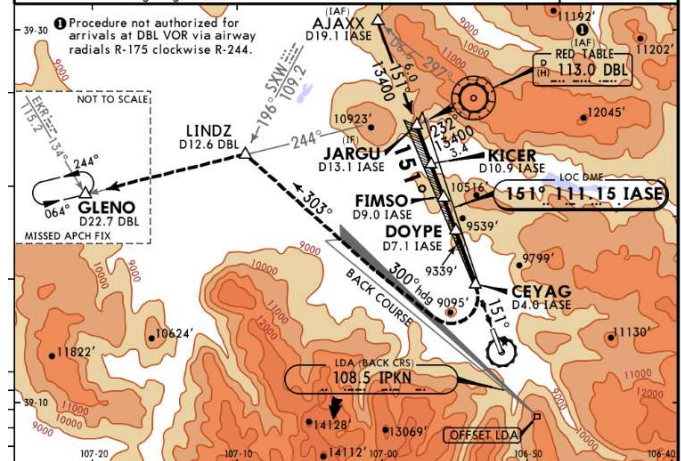


KASE/ASE -PITKIN CO/SARDY

ATIS (ASOS when Twp Inop)	*ASPEN Approach (R)	DENVER Center (R)	*ASPEN Tower	*Ground
LOC IASE 111.15	Final Apch Crs 151°	DOYPE 11700' (3863')	MDA(H) Refer to Minimums	Apt Elev 7837'
120.4	123.8	119.85 when App Inop.	CTAF 118.85	121.9

MISSED APCH: Climbing RIGHT turn to 14000' on heading 300° and IPKN localizer NORTHWEST course (303°) to LINDZ/D12.6 DBL and on DBL VOR R-244 to GLENO/D22.7 DBL and hold.

Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'
1. Dual VHF navigation receivers required. 2. Procedure not authorized at night.
3. VGS1 and descent angles not coincident. 4. IPKN back course outbound is normal sensing. 5. Cold temperature altitude correction required at or below -22°C.
6. Pilot controlled lighting 118.85.



Grnd Speed-Kts	70	90	100	120	140	160
Descent Angle	6.59°	819	1053	1170	1404	1638

MAP at CEYAG						

Max Kts	MDA(H)
A 90	9840' (2003') -3
B 120	10020' (2183') -3
C 140	10220' (2383') -3
D	NA

CHANGES: Cold temperature note.

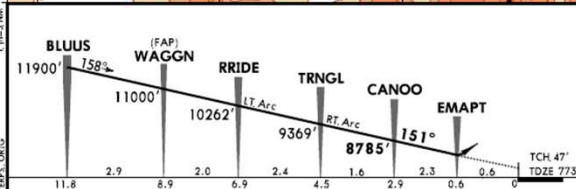
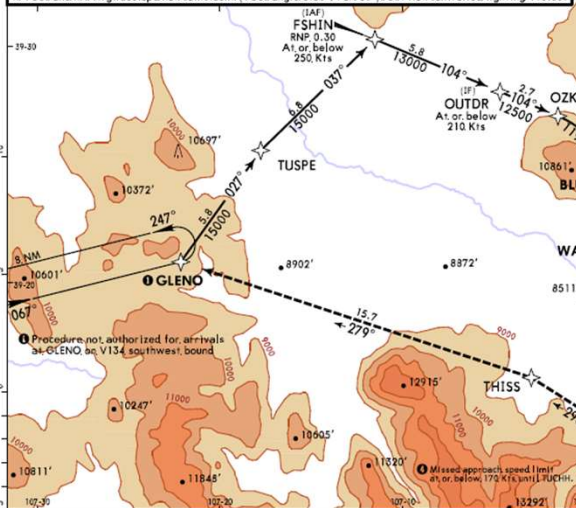
© JEPPESEN, 2005, 2021. ALL RIGHTS RESERVED.

KASE/ASE -PITKIN CO/SARDY

ATIS (ASOS when Twp Inop)	*ASPEN Approach (R)	DENVER Center (R)	*ASPEN Tower	*Ground
LOC IASE 111.15	Final Apch Crs 151°	DOYPE 11700' (3863')	MDA(H) Refer to Minimums	Apt Elev 7837'
120.4	123.8	119.85 when App Inop.	CTAF 118.85	121.9

MISSED APCH: (Do not exceed 170 KTS until TUCHH). Climb to 15,500' on track 151° to FREZY, RIGHT turn to CANTT, RIGHT turn to TUCHH, track 293° to THISS, track 279° to GLENO and hold. Missed approach requires RNP less than 1.0.

Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'
1. Procedure requires permission from owner and special authorization from FAA Flight Standards.
2. Procedure not authorized for aircraft with wingspan greater than 136'.
3. For uncompensated Baro-VNAV systems, procedure not authorized below -28°C or above 46°C.
4. VGS1 and RNAV glide slope not coincident (VGS1 angle 3.50°/TCH 56'). 5. Pilot controlled lighting 118.85.



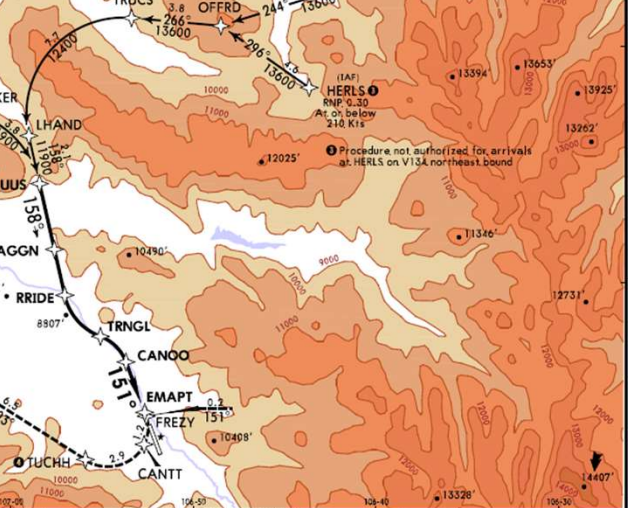
CHANGES: New, tail lined procedure.

Private ASPEN, COLO 20 AUG 21 (12-21) RNAV (RNP) N Rwy 15

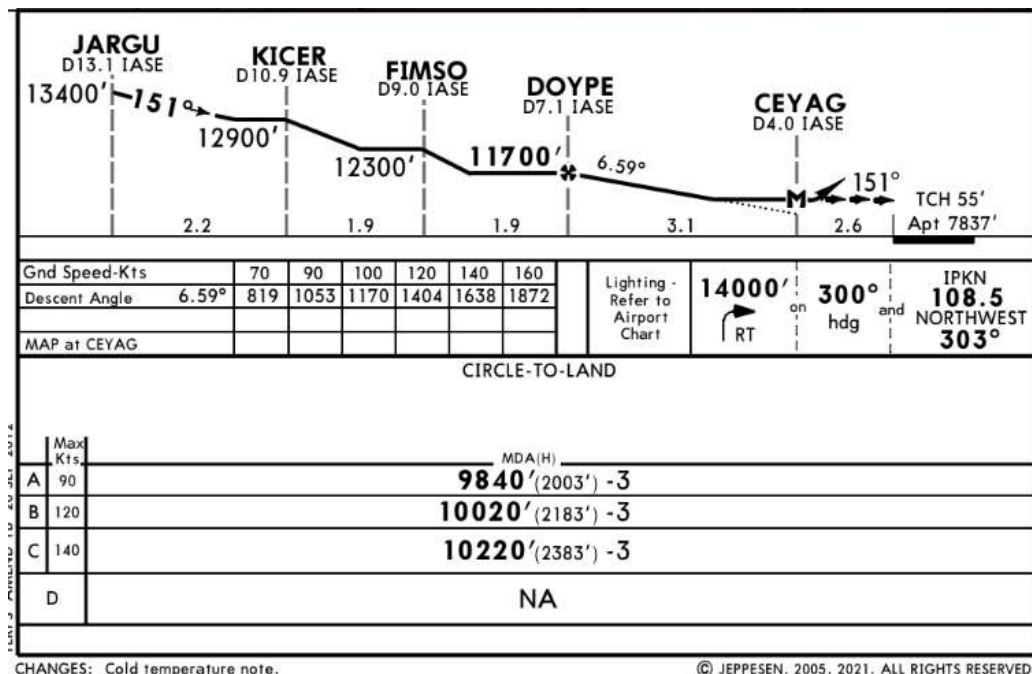
ATIS (ASOS when Twp Inop)	*ASPEN Approach (R)	DENVER Center (R)	*ASPEN Tower	*Ground
LOC IASE 111.15	Final Apch Crs 151°	DOYPE 11700' (3863')	MDA(H) Refer to Minimums	Apt Elev 7837'
120.4	123.8	119.85 when App Inop.	CTAF 118.85	121.9

MISSED APCH: (Do not exceed 170 KTS until TUCHH). Climb to 15,500' on track 151° to FREZY, RIGHT turn to CANTT, RIGHT turn to TUCHH, track 293° to THISS, track 279° to GLENO and hold. Missed approach requires RNP less than 1.0.

Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'
1. Procedure requires permission from owner and special authorization from FAA Flight Standards.
2. Procedure not authorized for aircraft with wingspan greater than 136'.
3. For uncompensated Baro-VNAV systems, procedure not authorized below -28°C or above 46°C.
4. VGS1 and RNAV glide slope not coincident (VGS1 angle 3.50°/TCH 56'). 5. Pilot controlled lighting 118.85.

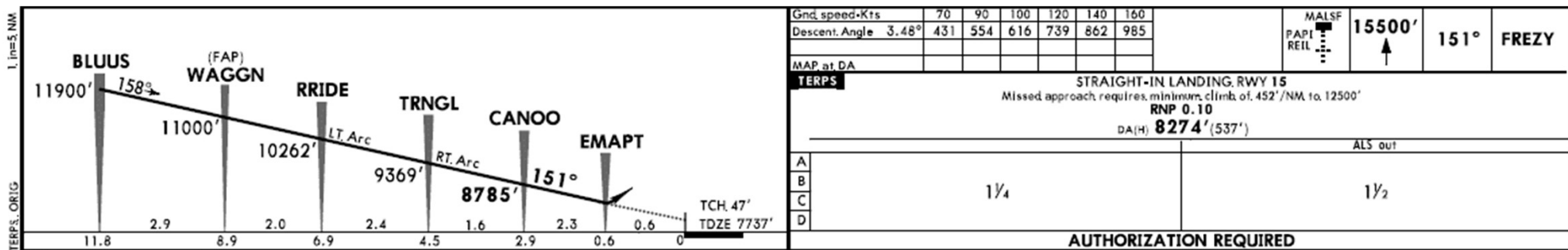


CHANGES: New, tail lined procedure.



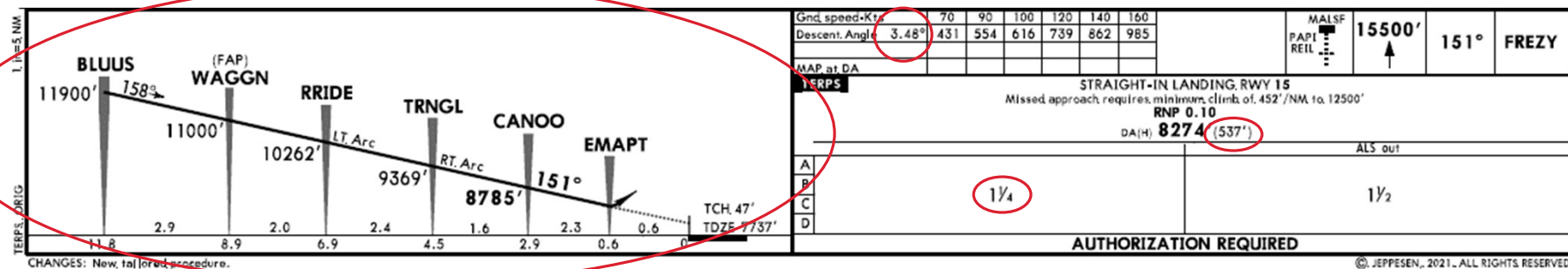
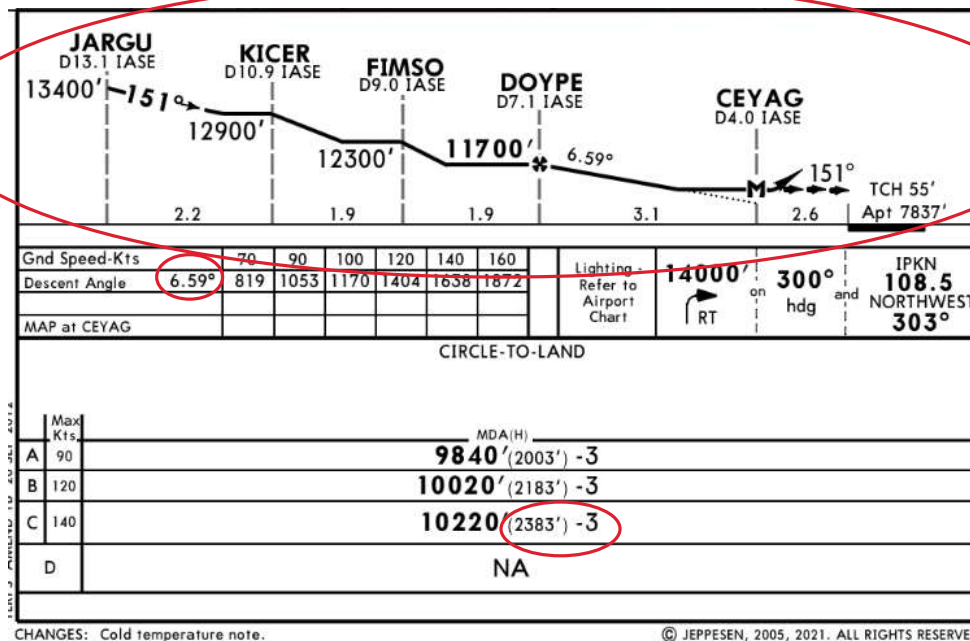
CHANGES: Cold temperature note.

© JEPPESEN, 2005, 2021. ALL RIGHTS RESERVED.



CHANGES: New, tailored procedure.

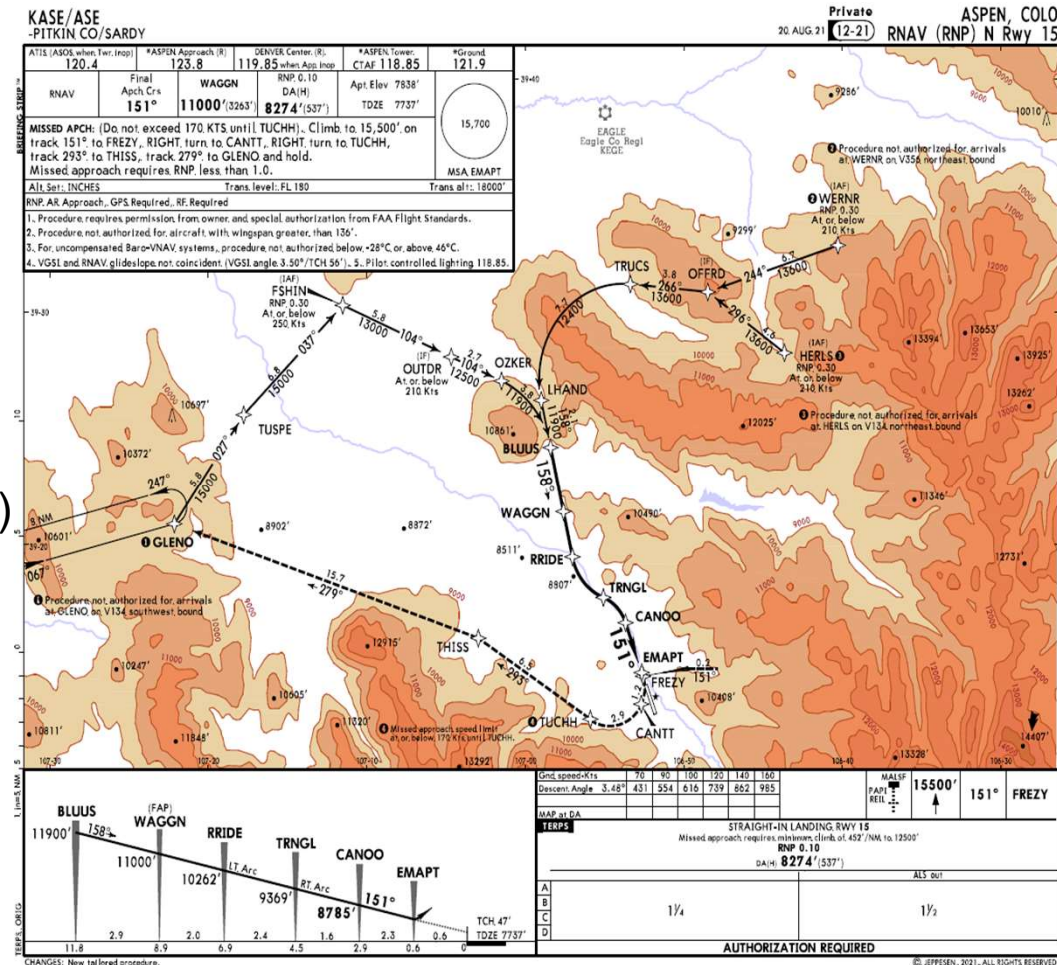
© JEPPESEN, 2021. ALL RIGHTS RESERVED.

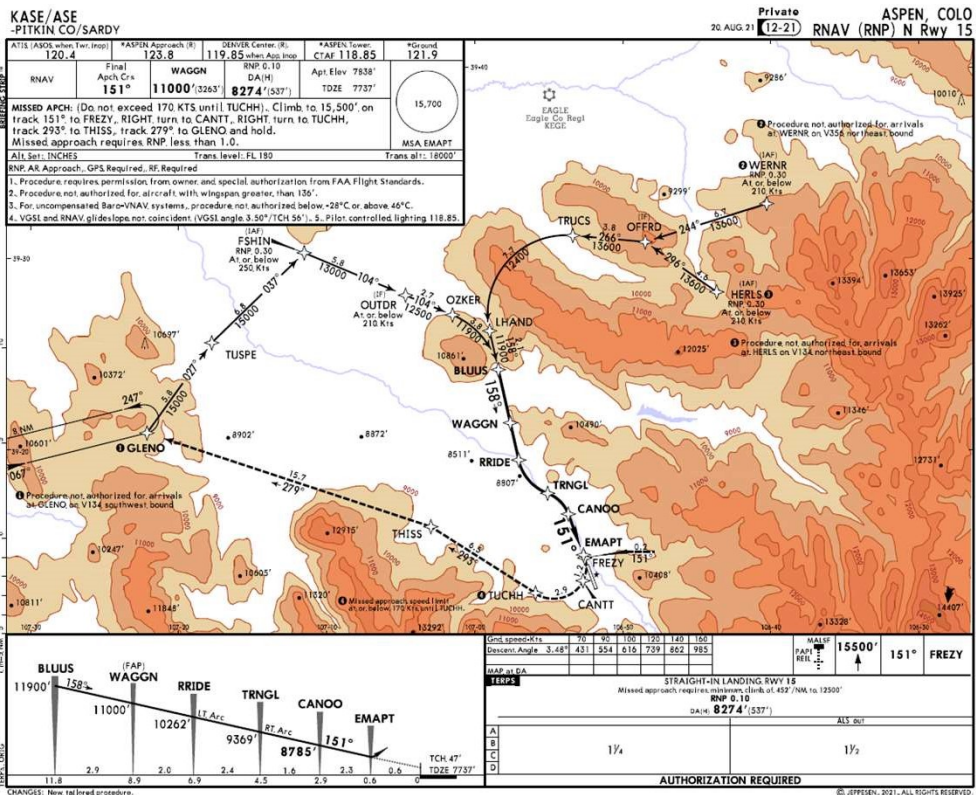


BENEFITS

Aspen RNAV (RNP) N RWY 15

- Honeywell's RNP procedure for the Aspen Pitkin Co airport brings the following advantages over public procedures:
 - Lower minimums (537' vs 2383')
 - Stabilized approach glidepath (3.5° vs 6.59°)
 - Authorized for night operations
 - Authorized for Category A, B, C, D aircraft
 - Guided missed approach for safe extraction





OPPORTUNITIES AT TETERBORO?

- Must have significant improvement over existing procedures
- Must work for Air Traffic
- Minimal Training
- Add value for our RNP customers

.....Safety

TEB's 'Non-Circling, Circling Approach'

If you think the conditions are just too taxing for man and machine, ask for a different approach or divert

BY JAMES ALBRIGHT james@code 7700.COM

Editor's note: On May 15, 2017, a Learjet 35A crashed on approach to Teterboro Airport in New Jersey, killing both pilots, the only persons aboard. Winds at the time were reported as 320 at 16 kt, gusting to 32 and the aircraft had been cleared for the ILS Runway 6, circle to land Runway 1. While the NTSB's final report isn't expected until sometime next year, a review of procedural considerations under such conditions can help ensure flight safety.

When is a circling approach not a circling approach? If you are in the simulator flying the Memphis International Airport, Tennessee (KMEM) Localizer to Runway 27, chances are you will be circling to Runway 18R and will be expected to do so at minimums. In a Category D aircraft, you will be evaluated on your ability to keep the airplane at the 1,020-ft. Minimum Descent Altitude (MDA), which is just 679 ft. above the landing surface, and within 2.25 sm of the airport or risk losing sight. You are circling.

Now, let's say you are in your airplane on a clear day with

great visibility. In fact, the only blemish on this otherwise perfect day for flying is that the winds are 340/24G40. At Teterboro Airport, New Jersey (KTEB), this means you will be flying the ILS to Runway 6, circle to Runway 1, using a left base with an overshooting wind. You can't fly a straight-in because that will impact the heavy traffic pattern at Newark Liberty International Airport, New Jersey (KEWR). You can't overfly the airport for a more desirable right base into the wind, because Teterboro is just too busy. New York Approach Control and Teterboro Tower both use the same terminology: "Cleared the ILS Runway 6, circle to 1." So you are circling, right?

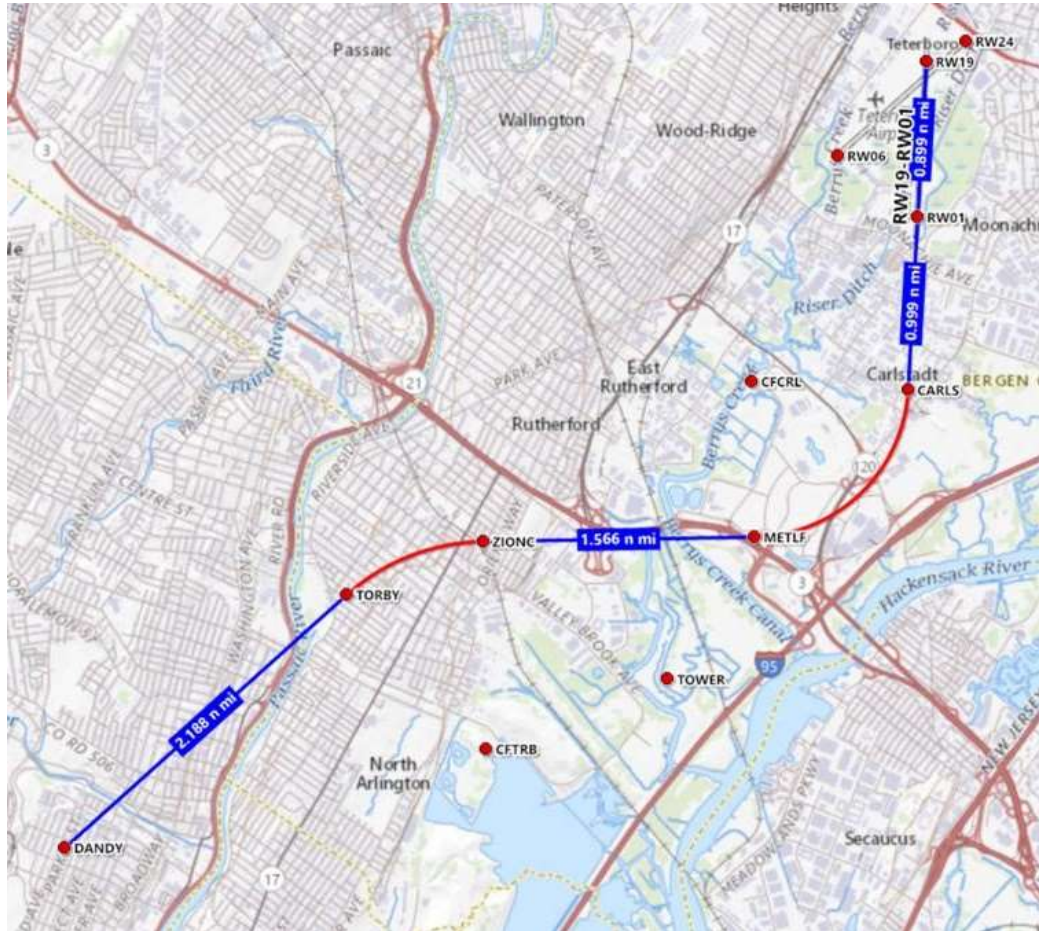
It depends on what you mean by "circling," and your understanding of the terminology makes all the difference. Of course, Teterboro is not unique when it comes to the need to circle in visual meteorological conditions (VMC), but its extremely high traffic density and proximity to several major New York City area airports probably makes it the most challenging example. Once you understand what it is you are

A Gulfstream GIV lands on Runway 24 at Teterboro.



Honeywell Confidential - ©2021 by Honeywell International Inc. All rights reserved.

RNAV/RNP VISUAL RWY 6 CIRCLE RWY 1



Assumptions:

- easiest/quickest to implement
- follows existing flight paths
- no additional instrument approaches
- prototype for future instrument approach
- easily manage eligible aircraft

THANK YOU

For More Information:

FTS@Honeywell.com

Jim Johnson

James.Johnson2@Honeywell.com

Derek Fiedler

Derek.Fiedler@Honeywell.com

David Rogers

David.Rogers@Honeywell.com

Honeywell