4/20/23 AIM

Beyond the diverse obstacle Aircraft reaches en route assessment area (25/46 NM) obstacle clearance of there might be significantly 1,000' (nonmountainous areas) higher obstacles. or 2,000' (in mountainous areas). 25/46 NM Departure End of Runway 40:1 OIS at 152 FPNM (DER) 14 NM Runway

FIG 5-2-1
Diverse Departure Obstacle Assessment to 25/46 NM

### EXAMPLE-

TAKEOFF OBSTACLE NOTES: Rwy 14, trees 2011' from DER, 29' left of centerline, 100' AGL/3829' MSL. Rwy 32, trees 1009' from DER, 697' left of centerline, 100' AGL/3839' MSL. Tower 4448' from DER, 1036' left of centerline, 165' AGL/3886' MSL.

## NOTE-

Compliance with 14 CFR Part 121 or 135 one-engine-inoperative (OEI) departure performance requirements, or similar ICAO/State rules, cannot be assured by the sole use of "low, close-in" obstacle data as published in the TPP. Operators should refer to precise data sources (for example, GIS database, etc.) specifically intended for OEI departure planning for those operations.

**5.** Climb gradients greater than 200 FPNM are specified when required to support procedure design constraints, obstacle clearance, and/or airspace restrictions. Compliance with a climb gradient for these purposes is mandatory when the procedure is part of the ATC clearance, unless increased takeoff minimums are provided and weather conditions allow compliance with these minimums.

### NOTE-

Climb gradients for ATC purposes are being phased out on SIDs.

# EXAMPLE-

"Cross ALPHA intersection at or below 4000; maintain 6000." The pilot climbs at least 200 FPNM to 6000. If 4000 is reached before ALPHA, the pilot levels off at 4000 until passing ALPHA; then immediately resumes at least 200 FPNM climb.

# EXAMPLE-

"TAKEOFF MINIMUMS: RWY 27, Standard with a minimum climb of 280' per NM to 2500." A climb of at least 280 FPNM is required to 2500 and is mandatory when the departure procedure is included in the ATC clearance.

## NOTE-

Some SIDs still retain labeled "ATC" climb gradients published or have climb gradients that are established to meet a published altitude restriction that is not required for obstacle clearance or procedure design criteria. These procedures will be revised in the course of the normal procedure amendment process.

**6.** Climb gradients may be specified only to an altitude/fix, above which the normal gradient applies.

An ATC-required altitude restriction published at a fix, will not have an associated climb gradient published with that restriction. Pilots are expected to determine if crossing altitudes can be met, based on the performance capability of the aircraft they are operating.

Departure Procedures 5\_2\_9