





THIS PRESENTATION DISCUSSES:

- Unique aspen airport operating characteristics
- ROARING FORK VALLEY TERRAIN FAMILIARIZATION
- PROMINENT LANDMARKS IN/AROUND THE ASPEN AREA
- Published instrument and visual approach procedures at aspen
- DEPARTURE PROCEDURES AT ASPEN
- RUNWAY SAFETY INFORMATION
- ASE ATC OPERATING PROCEDURES
- TRAFFIC MANAGEMENT INITIATIVES
- COMMON HOLDING FIXES AND PUBLISHED HOLDS
- NEARBY DIVERSION/ALTERNATE AIRPORTS
- OPERATIONAL TECHNIQUES & CONSIDERATIONS AT ASPEN AIRPORT

UNIQUE AIRPORT OPERATING CHARACTERISTICS

- ASPEN PITKIN COUNTY AIRPORT IS LOCATED IN THE ROARING FORK VALLEY WITH RAPIDLY RISING TERRAIN TO THE NORTHEAST THROUGH WEST (CLOCKWISE)
- AIRCRAFT TYPICALLY OPERATE ONE-WAY IN (RUNWAY 15) AND ONE-WAY OUT (RUNWAY 33)
 - Can be very challenging with rapidly shifting or gusty winds (tailwinds can and do occur often)
- Airport elevation: 7838' (Measured at highest point, approach end of runway 33)
- Runway <u>15</u> is <u>up</u> sloped 1.97% (primarily used for landing)
 - Runway 15 threshold is <u>158</u>' lower than runway 33
- Runway 33 is <u>down</u> sloped 1.97% (primarily used for takeoff)
- Parallel taxiway alpha is also sloped similar to runway 15/33 and typically requires additional thrust above idle to taxi southbound toward runway 33 (uphill)
- NO STRAIGHT IN <u>PUBLIC</u> PUBLISHED INSTRUMENT APPROACH PROCEDURES (CIRCLE-TO-LAND ONLY MINIMA)
- LOC/DME-E APPROACH REQUIRES A 6.59° VERTICAL PATH FROM FINAL APPROACH FIX (FAF) TO RUNWAY 15
- TAILWIND CONDITIONS OFTEN EXIST, CAREFULLY EVALUATE REPORTED AVERAGE & INSTANTANEOUS WINDS.
- During strong westerly wind conditions (25+ knots), windshear is likely abeam brush creek road, adjacent to the intercept lot. Expect possibility of an egpws windshear alert, if equipped.

UNIQUE AIRPORT OPERATING CHARACTERISTICS

- Takeoff on runway 15 is a unique procedure and requires written <u>PPR</u> from airport manager. Climb Gradient required is in excess of 11.3% (688'/nm) straight out. Consider use of a modified balked Landing procedure and additional training/familiarization prior taking off runway 15.
- All <u>public</u> instrument procedures are <u>not authorized</u> at <u>night</u> (past evening civil twilight)
- All published instrument approaches (public & <u>special</u>) are authorized for category A, B, and C aircraft only. Category D aircraft prohibited from published approaches (Vref > 140 kts)
- Ase airport is <u>closed</u> from 2300 0700 local time (ATCT closes at 2000)
 - NO DEPARTURES PERMITTED AFTER 2230 LOCAL
- AIRPORT IS LIMITED TO AIRCRAFT WITH A WINGSPAN OF 95' OR LESS
 - Taxiway alpha centerline and runway 15/33 centerline are only 320' apart
- Runway 15 papi angle is <u>3.50</u>° (372'/NM, TCH 55')
 - Unusable beyond 4nm from runway and beyond 7° right of centerline due to terrain
- Runway 15 landing distance available (LDA) is only <u>7006</u>' for landing distance computations due to
 faa runway safety area requirements at the departure end of runway 15 (1000' RSA)
- LINDZ9 SID REQUIRES AN <u>IMMEDIATE</u> RIGHT TURN TO 343° AS SOON AS PRACTICAL AFTER TAKEOFF FOR TRAFFIC AND TERRAIN SEPARATION

Sardy Field

Aspen/Pitkin County Airport

CRITERIA FOR AIRPORT DIRECTOR PRIOR PERMISSION FOR TAKE-OFF RUNWAY 15

ASPEN, COLORADO 81600

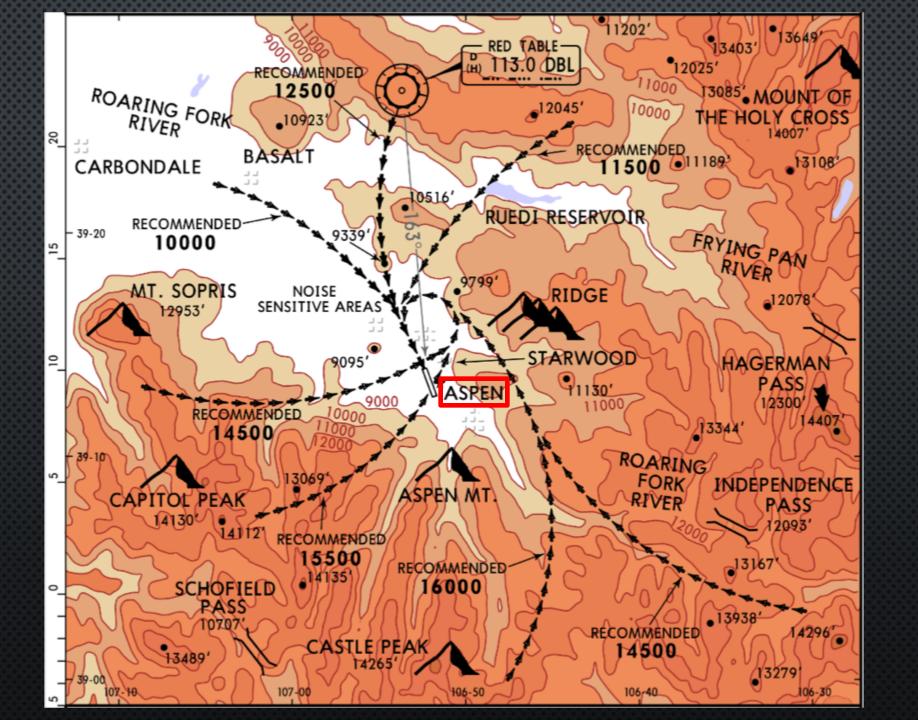
The preferred runway for departures from ASE is Runway 33. Departures using Runway 15 are not preferred principally because of rising terrain southeast of the Airport To Letection and use of a runway for departure is permission from the Director of Aviation for Chartures from Runway 15.

By this writing, Pitkin County wire the below signed p due to the surrounding to be below signed p County is not aware of the condition at ASE under the c to the inhereron stepresented by departures from Runwa

Runway 15. In consideration for such prior permission, dependents, successors, assigns and any other person or acknowledges that the undersigned is fully advised of the

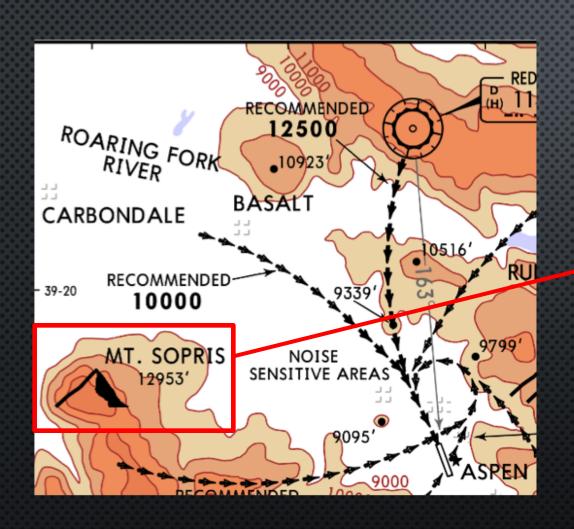
| Pilot-In-Command Signa | iture | Date | Director of Aviation/Representative | : · · Date |
|------------------------|---------------|------|-------------------------------------|------------|
| City State | | Zip | | *; |
| Address | | | | |
| Name | | | | |
| PILOT-IN-COMMANI | > : | | | |
| APPROVED AIRCRA | FT N-NUMBER: | | | |
| APPROVED AIRCRA | FT MAKE/MODI | EL | | |

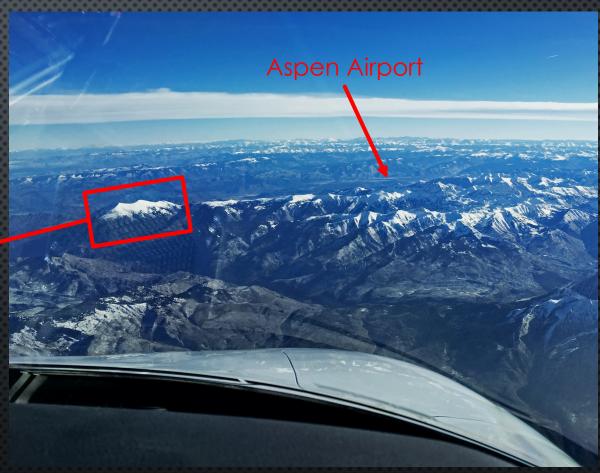
ROARING FORK VALLEY TERRAIN



PROMINENT LANDMARKS

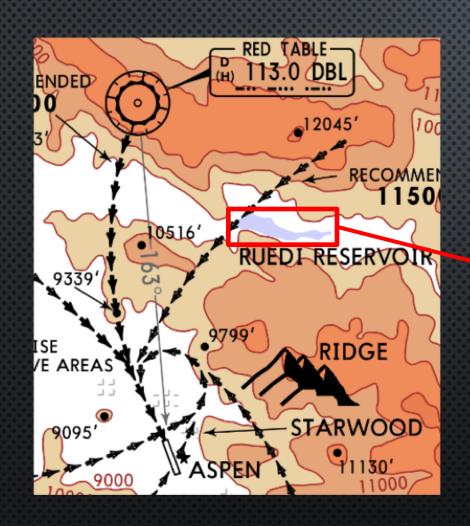
MT. SOPRIS (12,953')





Mt. Sopris, approaching from the west

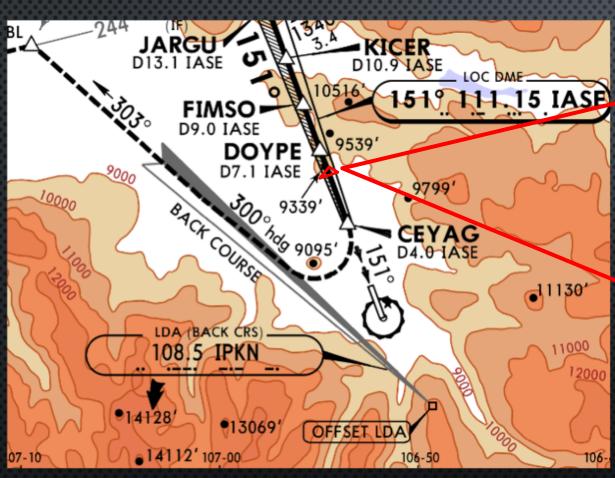
RUEDI RESERVOIR (7,800')





View of Ruedi Reservoir from the West, looking East

TRIANGLE MOUNTAIN/PEAK (9,239')



'500 Smart Call' from EGPWS/TAWS may be heard twice on final if overflying Triangle Mountain at approximately 9800' MSL

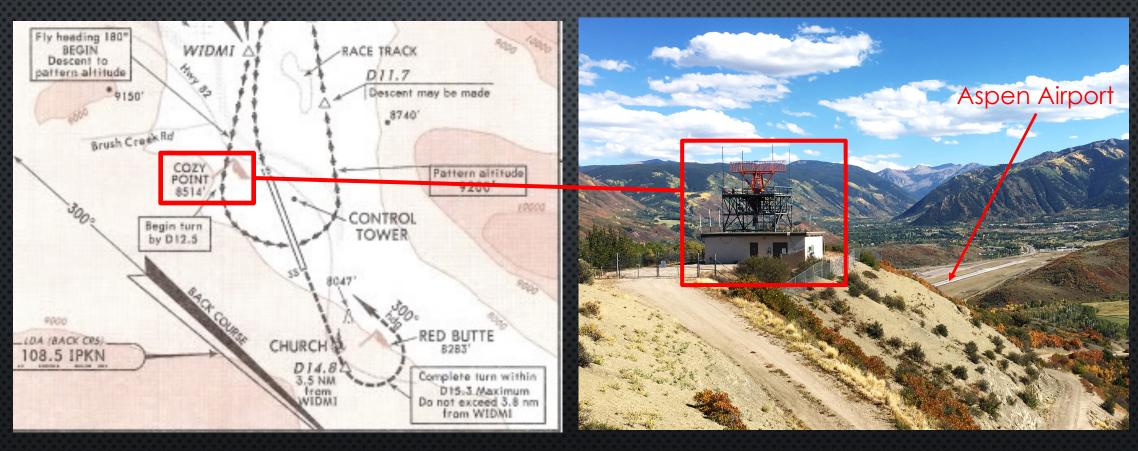


View from Atlantic ramp, looking northwest



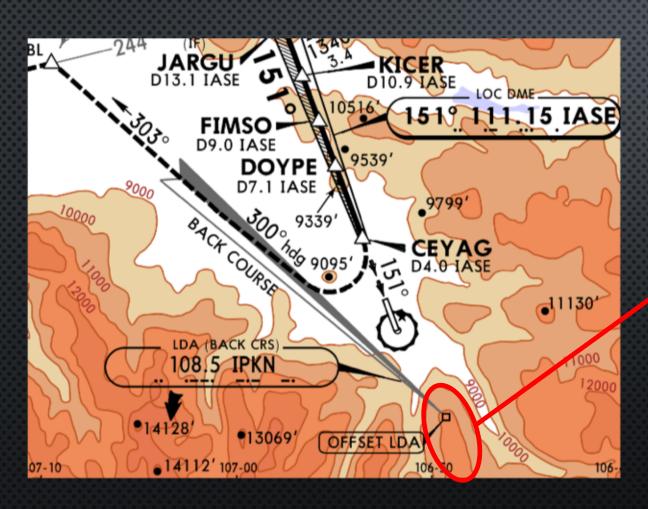
View on 6 NM final to Runway 15

COZY POINT (8,514')



Aspen ASR-4 Radar Site (Cozy Point), looking southeast at Aspen Airport (Secondary Surveillance Radar only, Primary Radar not available)

ASPEN MOUNTAIN (PEAK 11,212')





View of Aspen Mountain, on Final to Runway 15

SHALE BLUFFS (TERRAIN)



Located 0.25 – 1.0 nm northwest of Runway 15 Approach End (West of the Runway 15 Extended Centerline, adjacent to Highway 82)

"INTERCEPT LOT" (PARKING LOT)



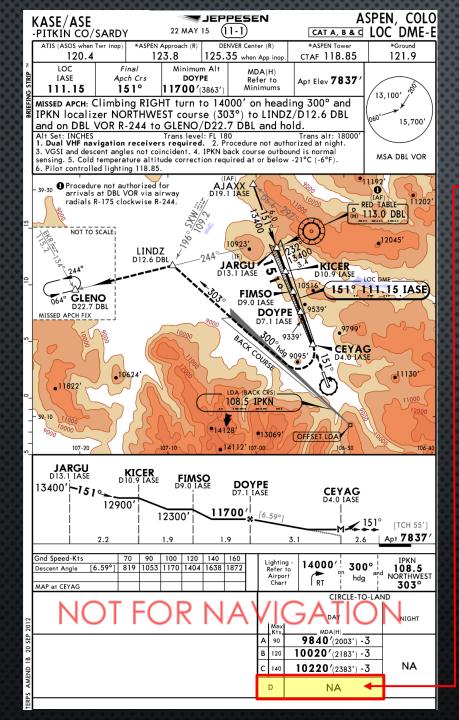
View of Intercept Lot, approximately 1.25 NM final to Runway 15

PUBLISHED INSTRUMENT AND VISUAL APPROACH PROCEDURES

PUBLISHED INSTRUMENT APPROACH PROCEDURES

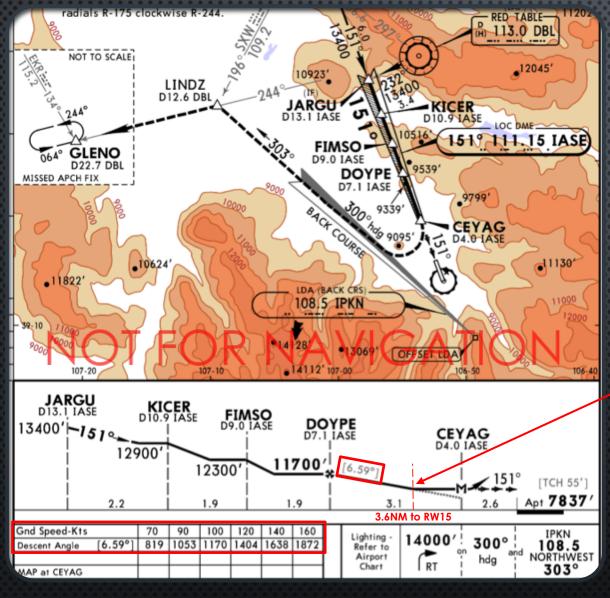
- **PUBLIC** APPROACHES:
 - LOC/DME-E (PREFERRED)
 - LOWEST MINS FOR CATEGORY C AIRCRAFT: 2383' 3
 - VOR DME-C
 - RNAV (GPS)-F
- NOTE: NO STRAIGHT-IN PUBLIC APPROACHES (CIRCLE MINS ONLY)

- **SPECIAL AUTHORIZATION** APPROACHES (STRAIGHT IN):
 - LOC/DME RWY 15*
 - Lowest mins; 1080' 2%
 - RNAV (GPS) Z RWY 15*
 - RNAV (RNP) Y RWY 15* (NETJETS)
- *Requires two-pilot crew + additional training + specific aircraft performance + faa approval (loa)

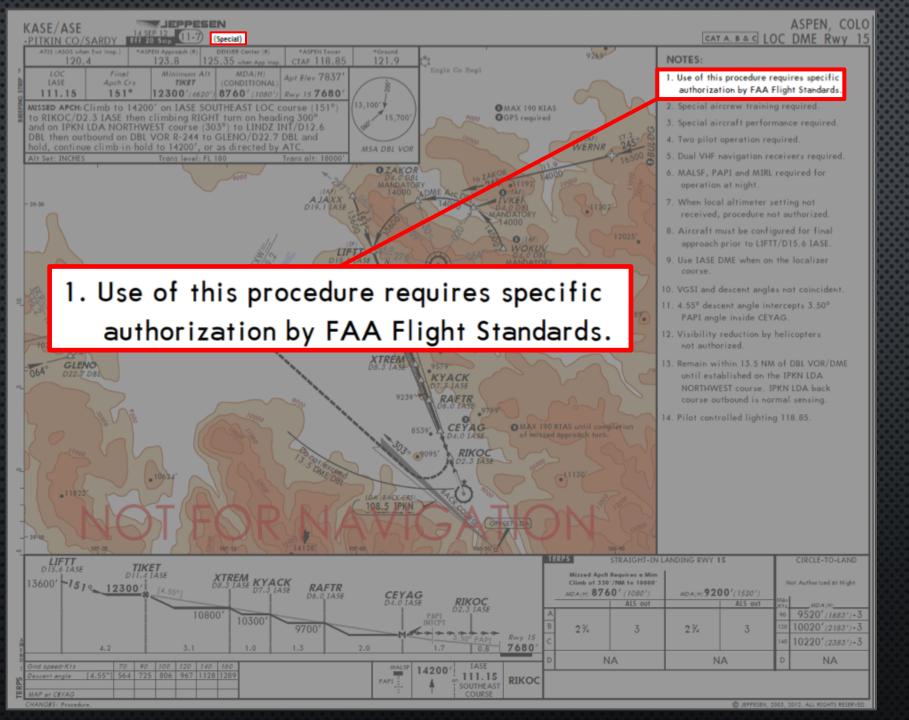


LOC/DME-E

- Dual vhf receivers required (for missed approach)
- CIRCLE-TO-LAND ONLY; NOT AUTHORIZED AT NIGHT
- CATEGORY D MINIMA NOT AUTHORIZED!
- COLD TEMPERATURE CORRECTIONS REQUIRED BELOW -21°C
- 696'/NM DESCENT GRADIENT EXCEEDS TERPS MAXIMUM OF 400'/NM FOR STRAIGHT IN; CIRCLE-TO-LAND MINS PUBLISHED
- CONSIDER FULLY CONFIGURING AIRCRAFT PRIOR TO JARGU
- MISSED APPROACH REQUIRES AN <u>IMMEDIATE</u> CLIMBING RIGHT TURN TO 14,000' ON HEADING 300° FOR TERRAIN AND OBSTRUCTION CLEARANCE
- MISSED APPROACH INCORPORATES AN LDA (BACK COURSE)
 WHICH IS <u>NORMAL</u> SENSING WHEN TUNED TO 303° ON <u>GREEN</u>
 NEEDLES (RAW DATA)
- IF THE AIRPORT IS VISUALLY ACQUIRED DURING THE LOC/DME-E APPROACH, A <u>VISUAL APPROACH</u> CLEARANCE <u>MUST</u> BE RECEIVED BEFORE DESCENDING BELOW ANY STEPDOWN ALTITUDE ON THE PROCEDURE. ASE ATCT CAN ISSUE A VISUAL APPROACH CLEARANCE IF ALREADY SWITCHED TO TOWER.

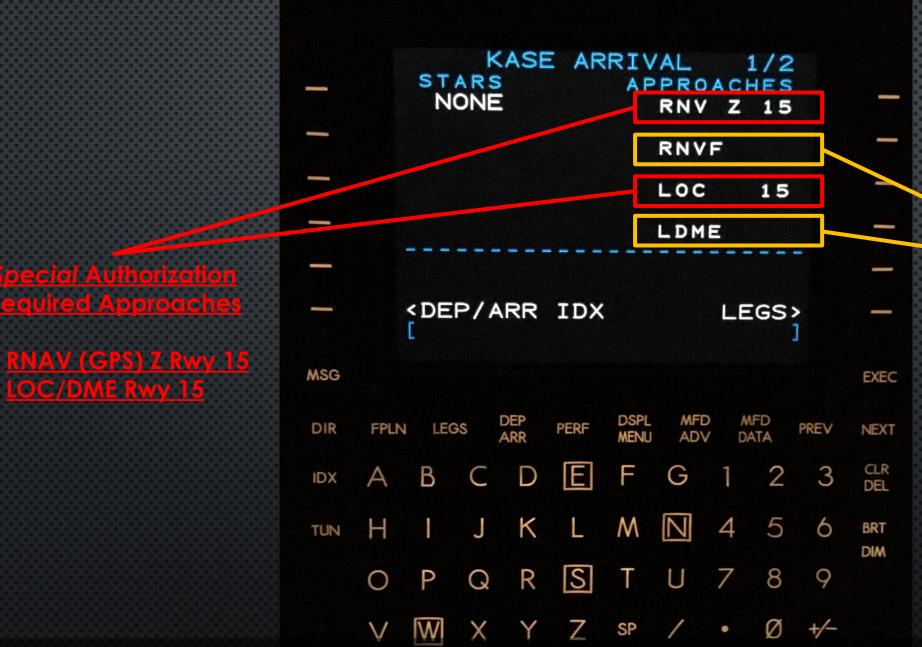


- The LOC/DME-E APPROACH REQUIRES A 6.59° DESCENT FROM DOYPE TO RUNWAY 15
 - MOST FMS/AVIONIC SUITES WILL NOT VNAV INSIDE THE FAF WITH A VERTICAL PATH ANGLE (VPA) > 6.0°
 - IF THE AIRPORT ENVIRONMENT IS VISUALLY ACQUIRED BY DOYPE (FAF), A STRAIGHT IN DESCENT/LANDING MAY BE ACCOMPLISHED IF STABLE & IN A SAFE POSITION TO LAND
 - IF THE AIRPORT ENVIRONMENT IS NOT VISUALLY ACQUIRED UNTIL PAST DOYPE (BUT WITHIN TERPS CIRCLING RADIUS), A LEFT 360° CIRCLING MANEUVER MAY BE NECESSARY TO CONTINUE DESCENT AND LAND (NOT RECOMMENDED UNLESS TRAINED, PROFICIENT, AND FAMILIAR)
- DOYPE IS LOCATED JUST PRIOR TO TRIANGLE MOUNTAIN
 - 5.7 NM FROM RUNWAY 15 & 3965' ABOVE TCH [55']
 - WITH A 6.59° DESCENT ANGLE, MDA 10,220' WILL BE REACHED ~3.6NM FROM RUNWAY 15
 - OPERATORS SHOULD CONSIDER THIS INFORMATION WHEN DETERMINING WHETHER TO DISPATCH/BEGIN THE APPROACH OR DIVERT TO AN ALTERNATE AIRPORT
 - MANY OPERATORS RECOMMEND APPROXIMATELY 4000-5
 TO BEGIN THIS APPROACH AND LAND SAFELY
- NOTE THE HIGH DESCENT RATE REQUIRED (FPM) IN LOWER LEFT HAND TABLE ON JEPPESEN CHART
- MAP (CEYAG) IS LOCATED 2.6NM PRIOR TO RUNWAY 15



- PECIAL LOC/DME RWY 15
 REQUIRES SPECIFIC
 AUTHORIZATION BY FAA FLIGHT
 STANDARDS (FSDO)
- APPROVAL (LOA) REQUIRES:
 - TWO PILOT OPERATION
 - SPECIAL CREW TRAINING
 - SPECIAL AIRCRAFT PERFORMANCE
 - APPROACH CURRENCY
- SPECIAL LOC/DME RWY 15 HAS NUMEROUS TERPS WAIVERS FOR TERRAIN/OBSTACLE CLEARANCE AND FINAL APPROACH SEGMENT DESCENT GRADIENT [4.55°]
- WHEN SELECTING LOC/DME-E
 APPROACH IN THE FMS, USE
 CAUTION TO NOT SELECT SPECIAL
 LOC/DME RWY 15 APPROACH
 FROM THE DATABASE

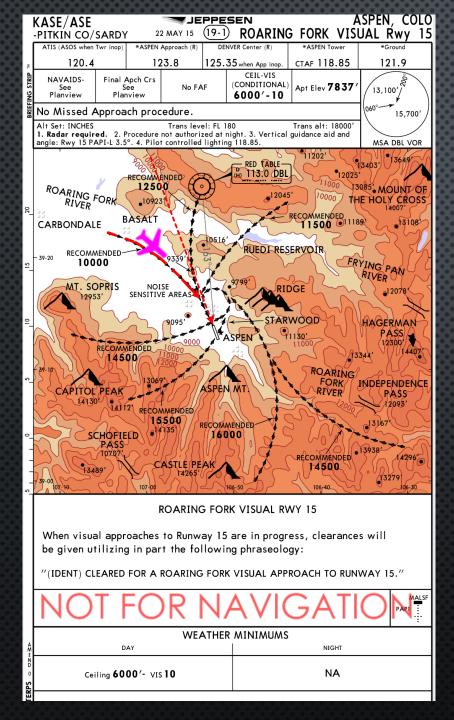
Air Carrier CRJ-700 on short final to Runway 15, executing the LOC/DME RWY 15* (Special) approach in winter snow conditions



Public/Published
Approaches

- RNAV (GPS)-F
- LOC/DME-E

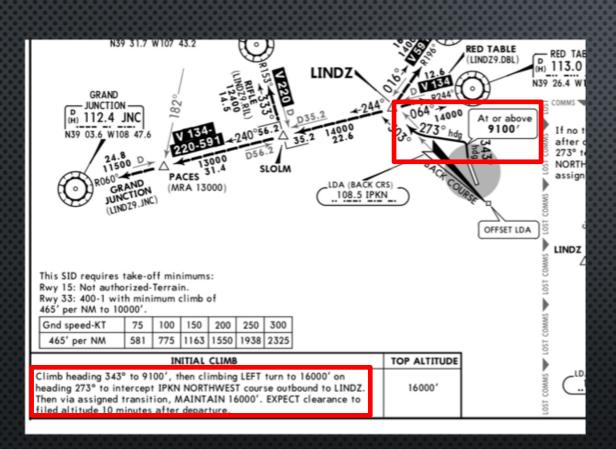
Note that some FMS Databases may include <u>Special</u> Authorization Required Approaches. Special LOC/DME RWY 15* (<u>LOC 15</u>) and LOC/DME-E (<u>LDME</u>) can often be confused. Use caution!

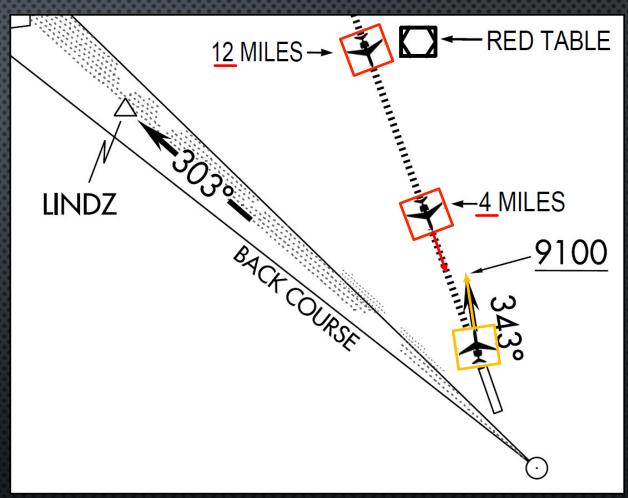


- ASPEN HAS A CHARTED VISUAL FLIGHT PROCEDURE
 (CVFP) TITLED "ROARING FORK VISUAL" TO RUNWAY 15
- THIS <u>CVFP</u> IS NOT OFTEN ISSUED EXCEPT BY PILOT REQUEST, HOWEVER THE PLAN VIEW OF THIS CHART IS EXTREMELY USEFUL FOR SITUATIONAL AWARENESS WHEN NAVIGATING LOCAL TERRAIN, ESPECIALLY WHEN <u>GEO-REFERENCED</u>
- A "VALLEY ARRIVAL" WHICH STARTS NEAR THE TOWN OF BASALT AND FOLLOWS HIGHWAY 82 TO RUNWAY 15
 ALLOWS AIRCRAFT TO DESCEND IN THE ROARING FORK VALLEY WITH SUFFICIENT TERRAIN CLEARANCE AT A MORE FAVORABLE RATE OF DESCENT (PREFERRED, IF FAMILIAR)
- AIRCRAFT ON A VISUAL APPROACH TO RUNWAY 15 MAY BE INSTRUCTED TO FLY "ON OR EAST OF THE RUNWAY 15 EXTENDED CENTERLINE" FOR OPPOSITE DIRECTION TRAFFIC DEPARTING RUNWAY 33
 - This deconflicts runway 15 arrival traffic from runway 33 departure traffic, which will be turning westbound toward the valley after passing 9100'



LINDZ9 - STANDARD INSTRUMENT DEPARTURE (SID)

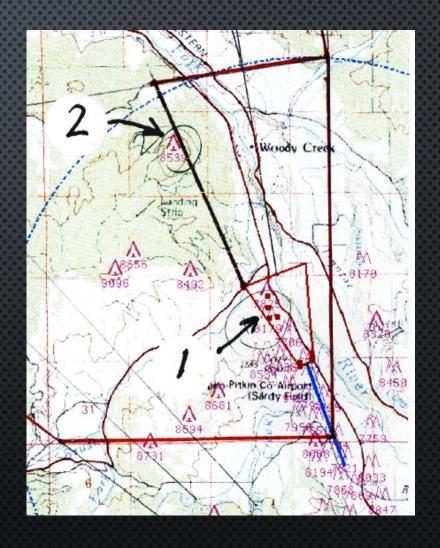




The LINDZ9 SID requires an **IMMEDATE** right turn to heading 343° as soon as practical after takeoff to ensure traffic separation with arrival aircraft. At 9100', begin a **PROMPT** left turn to heading 273°

LINDZ9 SID – PROMPT RIGHT TURN TO HEADING 343°

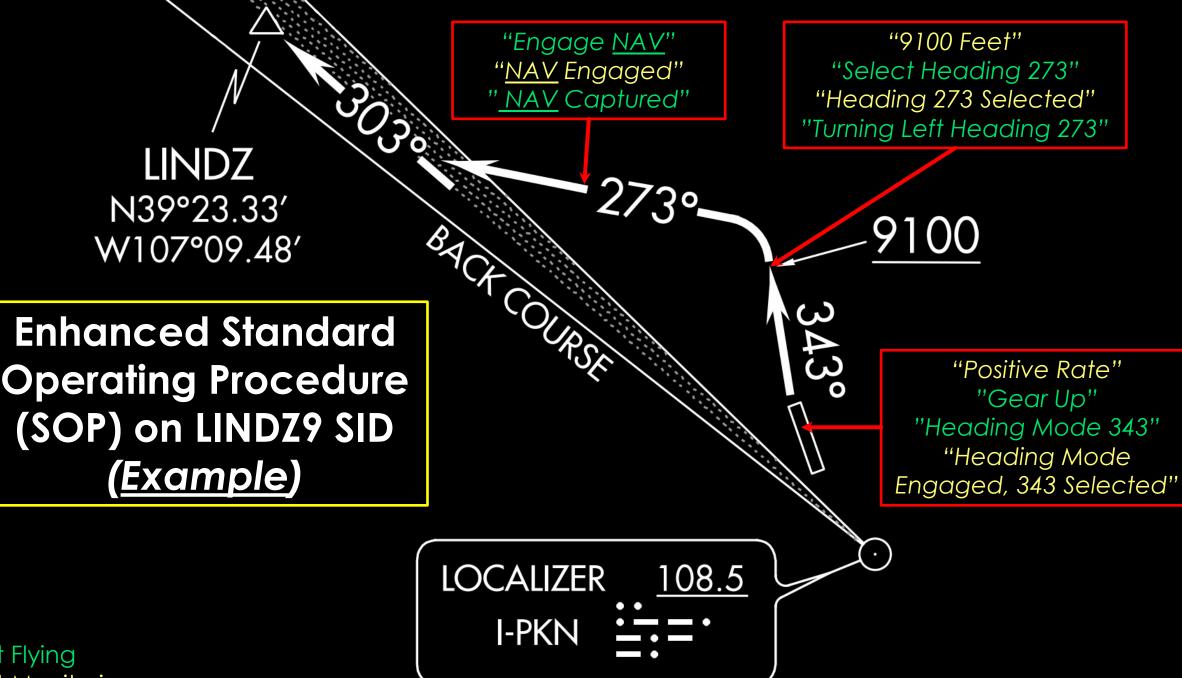
- The LINDZ9 Initial Climb Area (ICA) begins at the Departure Reference Point (DRP), 2000' from the APPROACH END OF RUNWAY 33 AND EXTENDS OUTWARD TO THE NORTHWEST ON A HEADING OF 343° OUT TO 2NM
- OBSTACLE CLEARANCE HAS BEEN EVALUATED BEGINNING 2000' NORTH OF THE APPROACH END OF RUNWAY 33 (ABEAM TAXIWAY A6) ON HEADING 343°
- A PROMPT RIGHT TURN TO HEADING 343° MAY BE ACCOMPLISHED BELOW 400' AGL AT PILOT'S DISCRETION AND IS ENCOURAGED, CONSISTENT WITH SAFE AIRCRAFT OPERATIONS
- A PROMPT RIGHT TURN FACILITATES SAFE TERRAIN CLEARANCE FROM SHALE BLUFFS, LOCATED NORTHWEST OF RUNWAY 33, AS WELL AS TRAFFIC SEPARATION FROM OPPOSITE DIRECTION ARRIVALS TO RUNWAY 15
- CREWS ARE ENCOURAGED TO COMPLY WITH THE INITIAL 343° HEADING AS SOON AS ABLE. HDG MODE WITH MANUAL PILOT INPUT SUGGESTED FOR INITIAL PORTION OF THE LINDZ9 SID (USE OF LNAV DISCOURAGED ON INITIAL PORTION OF LINDZ9 SID DUE TO DELAYED CAPTURE OF H343°)







GPS/FMS navigation guidance will not sequence to H343° until reaching 400' AGL (8240' MSL). Use of <u>HDG</u> Mode with manual pilot input encouraged to facilitate prompt flight director guidance to H343° after takeoff. <u>NAV</u> Mode selection encouraged only <u>after</u> established on H273° per LINDZ9.



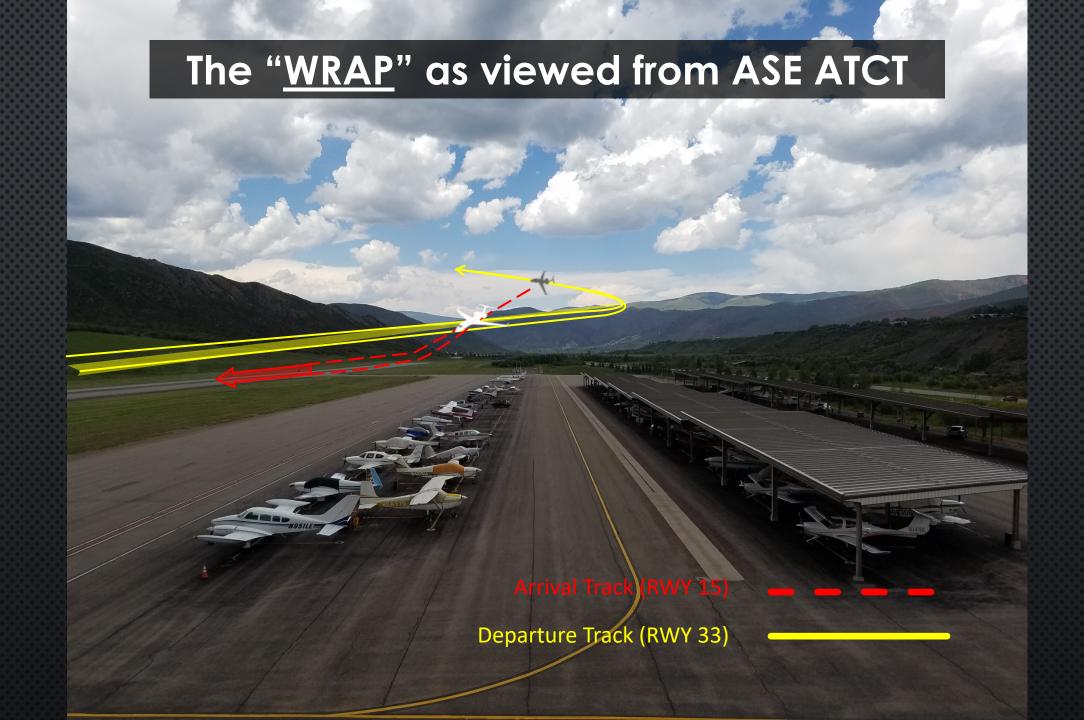
Pilot Flying
Pilot Monitoring

ASE ATCT "WRAP" PROCEDURE

- THE "WRAP" PROCEDURE IS AN OPERATION CONTROLLED BY ASPEN TOWER UNDER VISUAL METEOROLOGICAL
 CONDITIONS (VMC) WHERE A RUNWAY 33 DEPARTURE OFFSETS EAST OF THE RUNWAY 15 FINAL, THEN TURNS
 WESTBOUND ABOVE OR BEHIND A RUNWAY 15 ARRIVAL
 - INCREASES AIRPORT EFFICIENCY
 - REDUCES DEPARTURE/ARRIVAL DELAYS
- THE "WRAP" PROCEDURE REQUIRES **PROMPT** AND **EXPEDITIOUS** COMPLIANCE WITH ATC INSTRUCTIONS FOR TRAFFIC SEPARATION
- EXPECT TO PASS IN CLOSE PROXIMITY TO ARRIVING AIRCRAFT
- Initial right turn to heading 343° should be accomplished <u>as</u>
 <u>SOON AS PRACTICAL AFTER TAKEOFF</u> TO ENSURE TERRAIN CLEARANCE
 WITH SHALE BLUFFS (LOCATED NORTHWEST OF RUNWAY 33) IN ADDITION
 TO TRAFFIC SEPARATION WITH OPPOSITE DIRECTION ARRIVALS
 - TURN MAY BE INITIATED <u>BELOW 400' AGL AND PRIOR TO DEPARTURE END OF</u>

 <u>RUNWAY</u> (DER) AT PILOT'S DISCRETION IN VMC. A PROMPT RIGHT TURN
 BELOW 400' AGL IS ENCOURAGED, IF ABLE.
- ASE ATCT MAY INSTRUCT AIRCRAFT TO CONTINUE H343° AFTER TAKEOFF AND WILL ADVISE WHEN TO BEGIN LEFT TURN TO H273° TO PROVIDE SEPARATION FROM OPPOSITE DIRECTION ARRIVAL AIRCRAFT. THIS TURN WILL BE INITIATED BY NO LATER THAN 3.05 NM FROM THE DER, AS INSTRUCTED BY ASE ATCT. COMPLIANCE WITH AMENDED ATC INSTRUCTIONS IS CRITICAL FOR AIR TRAFFIC SEPARATION.

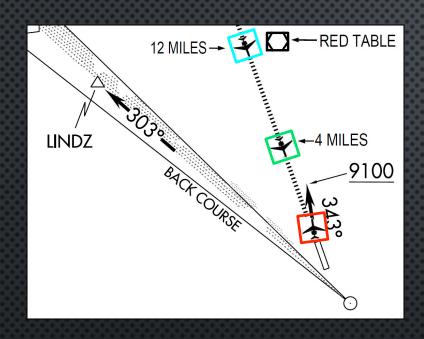


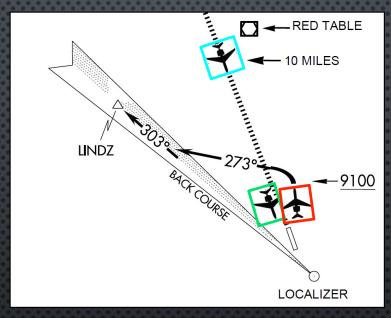


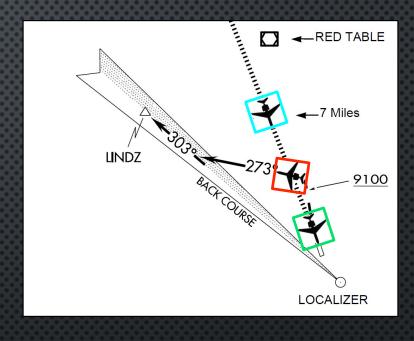
"WRAP" as viewed from the Cockpit
After takeoff, <u>Initiate a Prompt Right Turn H343° per LINDZ9 SID</u>
(prior to Departure End of Runway 33, preferred)



"WRAP" AND "WESTBOUND-IN-FRONT-OF" OPERATION







Aircraft A departs Runway 33 and "Wraps" behind (or above) opposite direction Aircraft B landing Runway 15.

Expeditious compliance with initial H343° is critical for air traffic separation with opposite direction arrival aircraft.

At or above 9100' MSL, departing

Aircraft A turns west to H273°. First
arrival Aircraft B lands straight in.
Arrival Aircraft C remains on the
Runway 15 extended centerline
unless otherwise instructed by
ASE ATCT/TRACAB.

Departing Aircraft A continues "Westbound-In-Front-Of"

Aircraft C tracking the extended centerline for Runway 15.



LINDZ9 DEPARTURE – ADDITIONAL INFO

- OPERATORS ARE ENCOURAGED TO FILE THE LINDZ INTERSECTION (VICE LINDZ SID)
 - THE FAA'S FLIGHT DATA COMPUTER DOES NOT RECOGNIZE TRANSITIONS ON THE LINDZ9 SID
 - FILE **LINDZ** INTERSECTION, THEN THE FOLLOWING VOR/FIX/WAYPOINT, AS APPROPRIATE
- EXPECT "<u>Cleared to…via the lindz</u>9 <u>Departure</u>, to the lindz intersection, direct xyz, <u>Then as filed</u>" phraseology from aspen clearance delivery
- While a custom tailored runway analysis is prudent and may include an engine
 Out departure procedure (eodp), always fly the <u>assigned sid</u> unless a loss of
 Engine thrust occurs (<u>emergency</u>)
- THE ONLY SPECIAL AUTHORIZED DEPARTURE PROCEDURE IS THE GLENO3 RNAV SID (NETJETS)
- I-PKN LDA COURSE GUIDANCE (RAW DATA) SHOULD BE DISPLAYED IN THE COCKPIT DURING THE LINDZY DEPARTURE, EVEN IF COUPLED TO GPS/IRS/FMS GUIDANCE
 - Consider placing 108.50 in NAV2 and display raw data on standby or pilot monitoring primary flight display



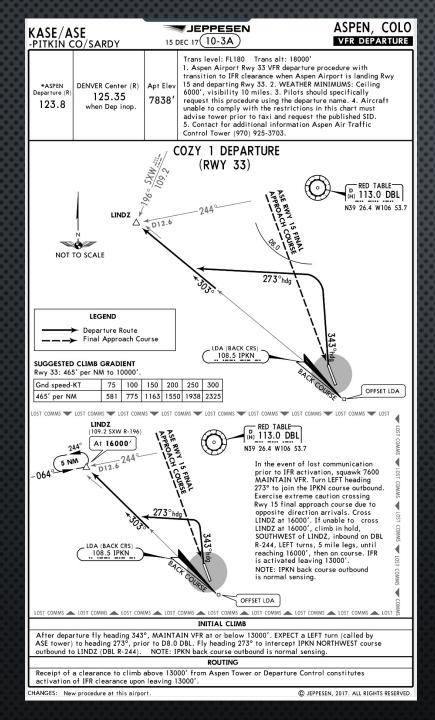
'VFR CLIMB' PROCEDURE

PURPOSE:

- RETAINS IFR FLIGHT PLAN STATUS; REFER TO AIM 4-4-8(C) AND OPSPEC C077(E), IF APPLICABLE (PART 121 OR 135)
- Relieves ATC of terrain/obstruction clearance requirements until an aircraft on a 'VFR Climb' reaches 13,000' MSL
- FACILITATES DEPARTURES FOR AIRCRAFT OPERATING UNDER FAR 91, IF UNABLE TO MEET THE IFR ALL-ENGINES OPERATING CLIMB GRADIENT ON LINDZ9

FLIGHT CREW RESPONSIBILITIES:

- SEE-AND-AVOID OTHER AIRCRAFT AND MAINTAIN OWN TERRAIN/OBSTRUCTION CLEARANCE WHILE ON AN ATC AUTHORIZED 'VFR CLIMB'
- MAINTAIN 14 CFR 91.155 BASIC VFR WEATHER MINIMUMS BELOW 13,000' MSL
- IF ABLE, REQUEST A 'VFR CLIMB' ON INITIAL CONTACT WITH ASPEN ATCT/CLEARANCE DELIVERY (AVAILABLE BY PILOT REQUEST ONLY)
- EXPECT THE FOLLOWING PHRASEOLOGY FROM ASPEN CLEARANCE, "CLEARED TO ABC AIRPORT VIA THE LINDZ9 DEPARTURE, TO LINDZ, DIRECT XYZ, THEN AS FILED. CLIMB VFR BELOW 13,000', MAINTAIN 16,000'..."
- Fly the LINDZ9 SID or as assigned by ASE ATCT; Comply with any amended instructions as assigned by ASE ATC
- <u>Turn right heading 343° as soon as practical after takeoff!</u> (Below 400' AGL and/or prior to <u>D</u>eparture <u>E</u>nd of <u>R</u>unway 33 acceptable) This ensures separation from opposite direction traffic and rising terrain near Shale Bluffs northwest of DER
- AT 9100' OR AS ASSIGNED BY ASE ATCT, TURN LEFT TO 273° HEADING PER THE LINDZ9 SID
- ASE ATCT MAY INSTRUCT AIRCRAFT TO CONTINUE HEADING 343° AND DELAY THE LEFT TURN (WESTBOUND) TO 273° UNTIL ADVISED FOR SEPARATION WITH OPPOSITE DIRECTION TRAFFIC; EXPEDITIOUS COMPLIANCE WITH AMENDED ATC INSTRUCTIONS IS CRITICAL FOR TRAFFIC SEPARATION
- HDG MODE WITH MANUAL PILOT INPUT ENCOURAGED TO ENSURE EXPEDITIOUS COMPLIANCE WITH LINDZ9 SID UNTIL ESTABLISHED ON H273°
- ADVISE ASE ATC AS SOON AS POSSIBLE IF UNABLE TO 'CLIMB VFR' DUE TO WEATHER (CLOUDS) OR IF UNABLE TO COMPLY WITH THE ASSIGNED
 ROUTE/HEADING DUE TO TRAFFIC OR TERRAIN/OBSTACLES ALONG THE INTENDED FLIGHT PATH

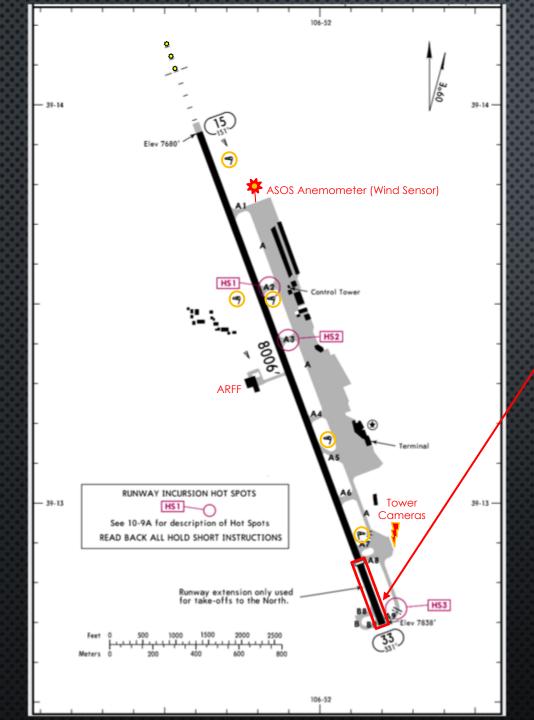


COZY ONE VFR DEPARTURE

- Published in the "Special Notices" Section of the Southwest Chart Supplement (Formerly the Airport/Facility Directory or A/FD)
 - ALSO PUBLISHED BY JEPPESEN (10-3A)
- PROCEDURE ISSUED BY ASE ATCT UPON <u>PILOT REQUEST ONLY</u>
- VFR Departure which transitions to IFR automatically at 13,000'
 SIMILAR TO THE DALTON 2 VFR DEPARTURE PROCEDURE AT TETERBORO
- FOLLOWS SIMILAR LATERAL PATH AS THE LINDZ9 SID, HOWEVER THE LEFT TURN TO HEADING 273° <u>SHOULD NOT</u> BE INITIATED UNTIL INSTRUCTED TO DO SO BY ASE ATCT
- PART 121/135 OPERATORS SHOULD VERIFY ELIGIBILITY TO REQUEST/ACCEPT THE COZY ONE VFR DEPARTURE VIA OPSPEC C077(d). SEE FAA NOTICE N8900.470, EFFECTIVE 5/17/18 FOR MORE DETAILS.
- MAY BE BENEFICIAL FOR AIRCRAFT WHO ARE UNABLE TO COMPLY WITH THE ALL-ENGINES OPERATING CLIMB GRADIENT ON THE LINDZ9 OR OTHER SIDS



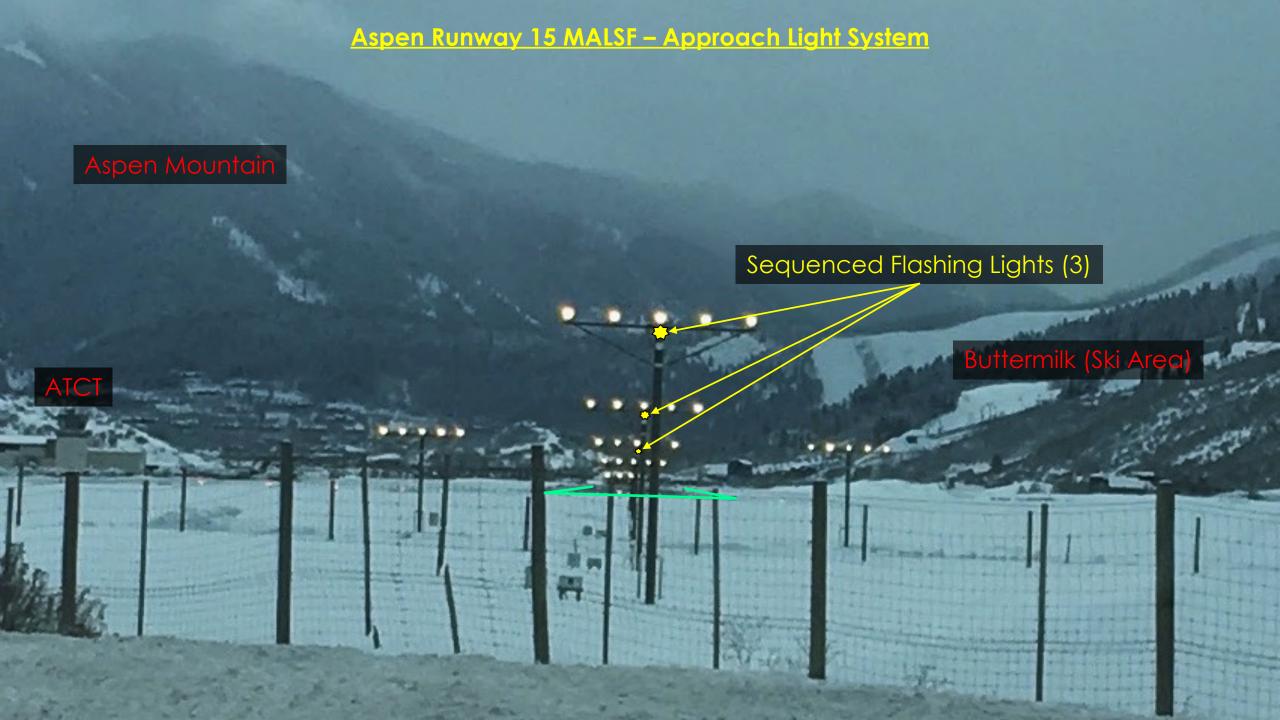
RUNWAY SAFETY INFORMATION



| ADDITIONAL RUNWAY INFORMATION USABLE LENGTHS | | | | | | |
|---------------------------------------------------------------------------------------------|------------------|----------------------------|----------------|-------------|----------|-------|
| l . | LANDING BEYOND — | | | | | |
| RWY | | | Threshold | Glide Slope | TAKE-OFF | WIDTH |
| ¹⁵ 0 ,, | MIRL | MALSF PAPI-L (angle 3.50°) | ₫ 7006' | | NA | 100' |
| 33 | MIRL | ⊘ REIL | 7006' | | | 100 |
| ① Grooved. | | | | | | |
| 🖸 Activate 118.85 when Twr inop. | | | | | | |
| 3 PAPI unusable beyond 4 NM from runway threshold and beyond 7° right of runway centerline. | | | | | | |
| O Last 1000' not available for landing distance computations. | | | | | | |
| RUNWAY INCURSION HOT SPOTS | | | | | | |
| (For information only, not to be construed as ATC instructions.) | | | | | | |
| | | | | | | |
| HS1 Twy A2. Short taxi distance from ramp to runway. | | | | | | |
| HS2 Twy A3. Short taxi distance from ramp to runway. | | | | | | |
| HS3 Rwy 33 and Twy A9. Non typical location for Rwy holding position marking. | | | | | | |
| | | | | | | |

- The last 1000' of Runway 15 pavement may not be used for landing distance <u>computations</u> (7006' LDA)
- This area is used as the "Runway Safety Area" or RSA
- Note the slightly offset position of the Hold Short

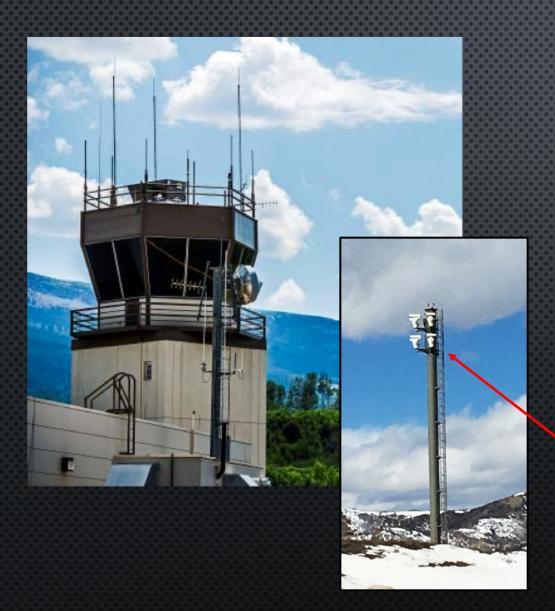
 Markings for Runway 33 at Twy A9 (Approach End)
- Runway 15 is equipped with a <u>MALSF</u> Approach Light System with 3 <u>Sequenced</u> <u>Flashing</u> <u>Lights</u> (each <u>SFL</u> is mounted to the outermost steady light arrays)



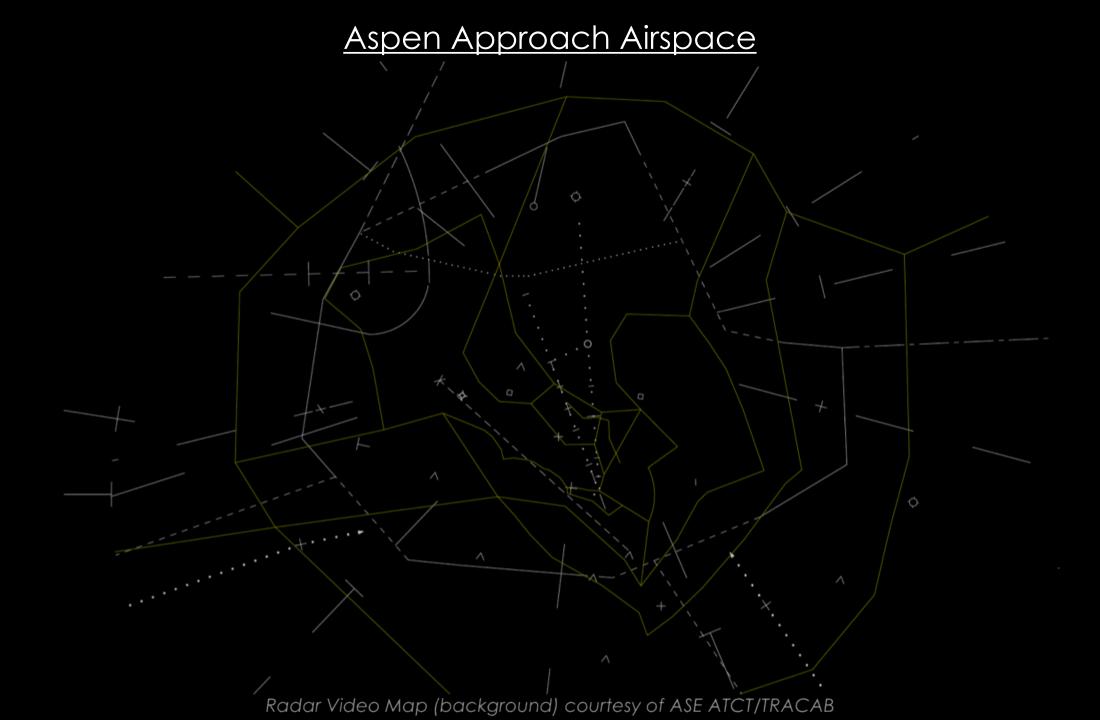


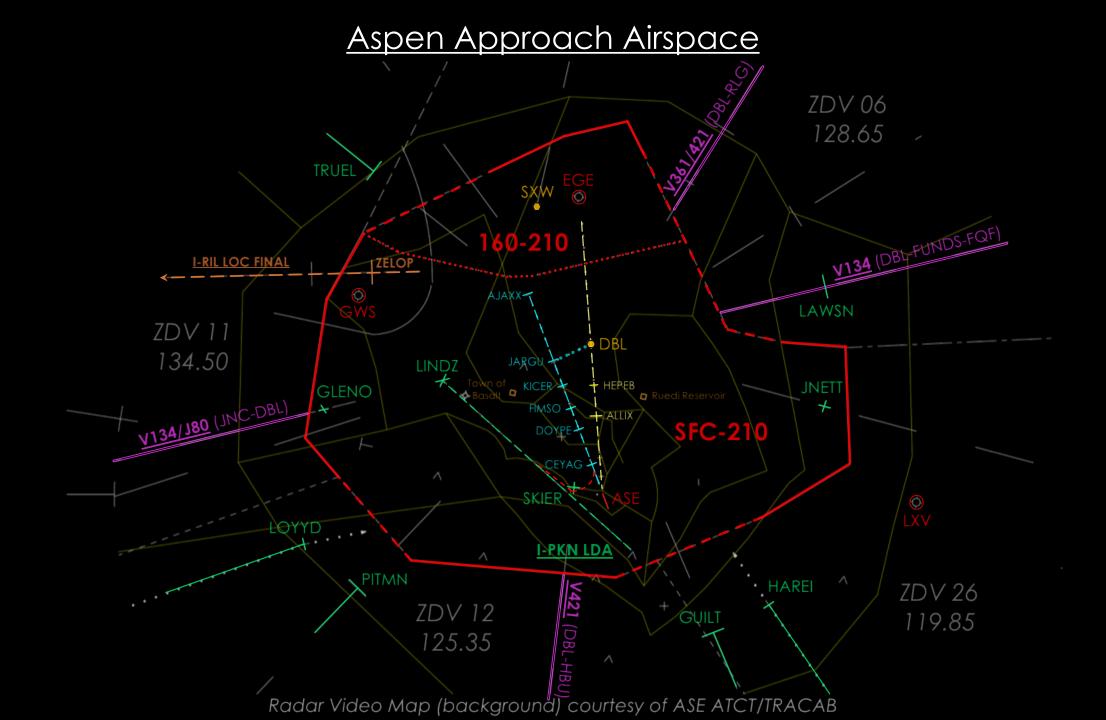


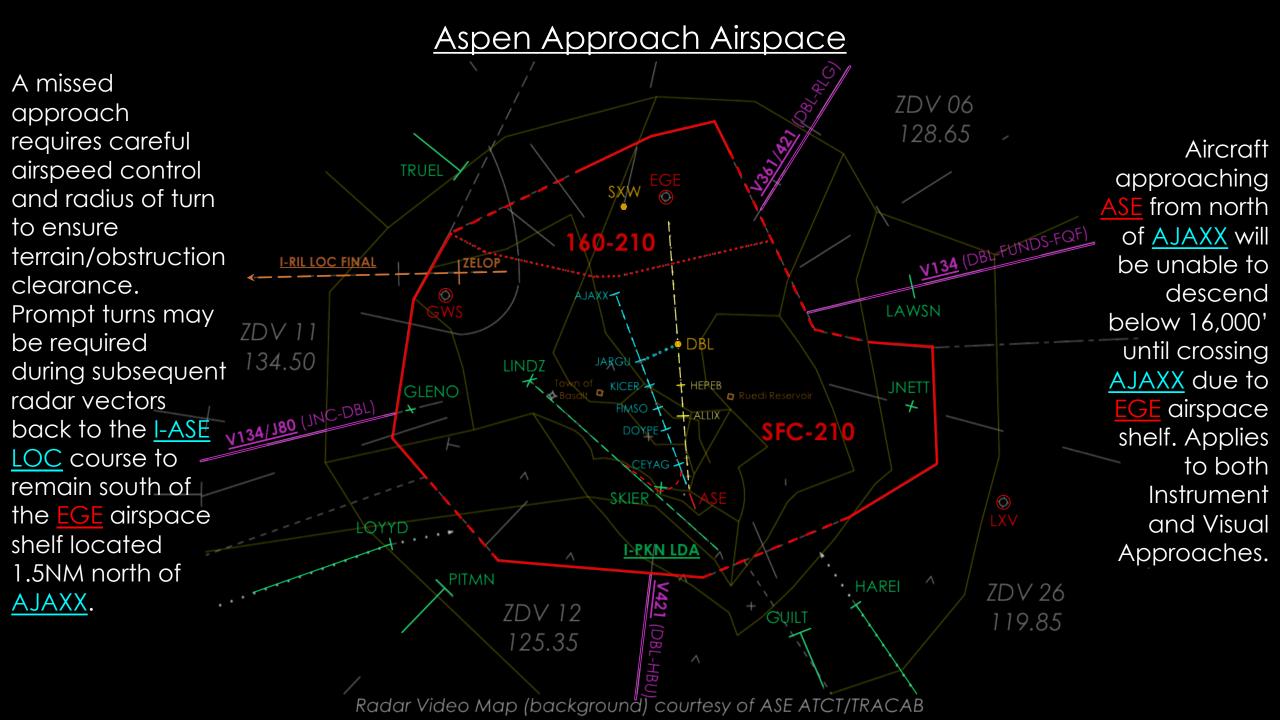
ASE ATCT/TRACAB

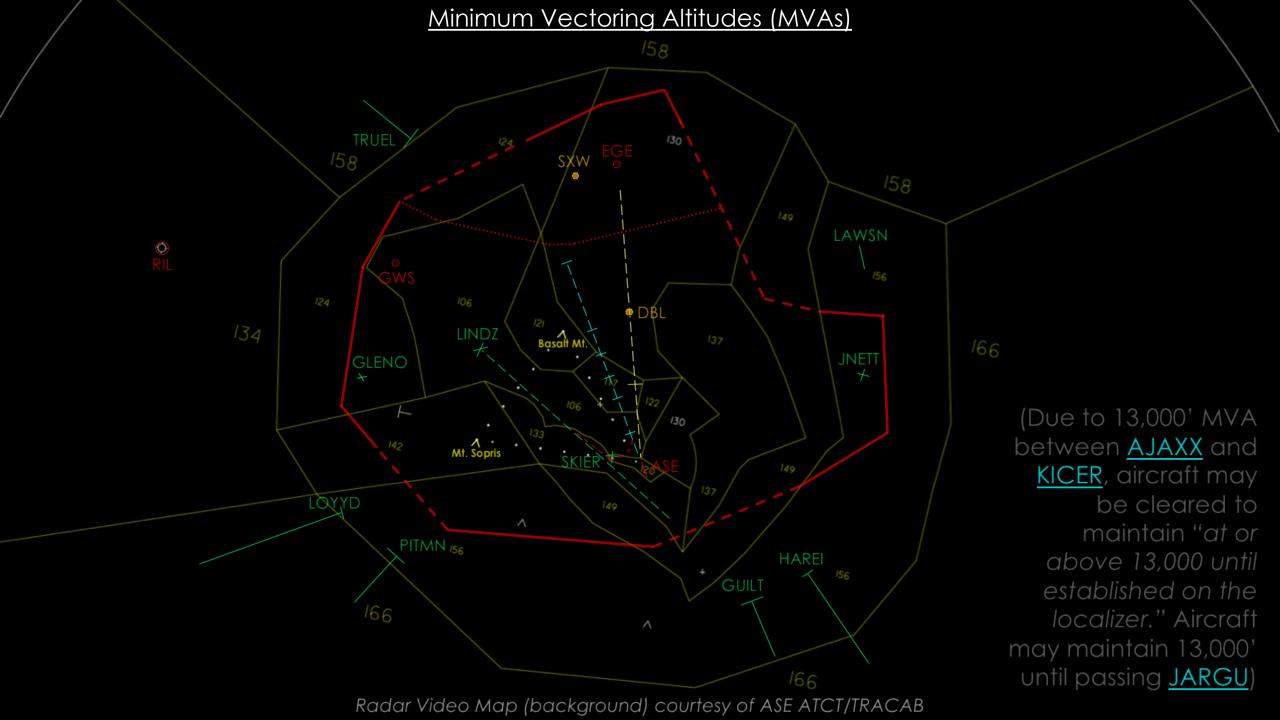


- ASE ATCT IS LOCATED MIDFIELD, ABEAM TAXIWAY A2
- THE FACILITY IS CONSIDERED A TRACAB, AS THE SINGLE POSITION APPROACH CONTROL IS LOCATED IN THE TOWER CAB (WITH ACCESS TO REAL-TIME WIND/WEATHER INFO)
- THE TOWER CAB HAS 4 MAIN POSITIONS:
 - APPROACH/DEPARTURE (RADAR)
 - Local Control ("Tower")
 - GROUND CONTROL
 - FLIGHT DATA ("CLEARANCE DELIVERY")
- TOWER VISIBILITY OF AIRCRAFT HOLDING SHORT OF RUNWAY
 33 AT A9 IS LIMITED (LOCATED ~1SM FROM TOWER CAB)
 - TO IMPROVE EFFICIENCY AND SAFETY, ASE ATCT HAS A DIGITAL
 VIDEO FEED SYSTEM ADJACENT TO THE DE-ICE PAD WHICH
 DISPLAYS ON LARGE SCREENS IN THE TOWER CAB TO PROVIDE
 CONTROLLERS WITH A VISUAL IMAGE OF AIRCRAFT AWAITING
 DEPARTURE









ASE ATC OPERATING PROCEDURES

- Aspen is a unique operation in that 95% of aircraft depart runway 33 and 90% arrive runway 15, requiring careful and timely sequencing of opposite direction traffic
- ASPEN APPROACH WILL NORMALLY SEQUENCE SUCCESSIVE ARRIVALS AT LEAST 10 MILES IN TRAIL, TO ALLOW FOR DEPARTURE GAPS
- With an inbound aircraft on final inside of 10 nm, the local controller may only clear an aircraft for takeoff on runway 33 if he/she has visually acquired the inbound arrival aircraft and can keep it in sight (Tower-Applied Visual Separation)
- THE "CUT-OFF POINT" FOR ISSUING A TAKEOFF CLEARANCE ON RUNWAY 33 IS WHEN AN INBOUND ARRIVAL AIRCRAFT REACHES A 5NM FINAL FOR RUNWAY 15 (NEAR TRIANGLE MOUNTAIN)
 - If an inbound arrival has reached a 5nm final and the local controller has not visually acquired the aircraft, he/she must allow the aircraft to land on runway 15 before clearing an aircraft for takeoff on runway 33
 - In this scenario, an aircraft instructed to "<u>line up and wait</u>" on runway 33 may be instructed to vacate the runway to the left at taxiway <u>bravo 8</u> and <u>hold short</u> of runway 33 at <u>bravo 9</u>
 - OPERATORS ARE ENCOURAGED TO SELECT <u>PULSE LIGHTS ON</u> (IF EQUIPPED) UNTIL AT LEAST TRIANGLE MOUNTAIN TO
 ASSIST CONTROLLERS IN VISUALLY ACQUIRING INBOUND ARRIVAL AIRCRAFT, INCREASING OPERATIONAL EFFICIENCY
- ASE ATCT RETAINS OUTBOUND FLIGHT PLANS FOR 3 HOURS PAST PROPOSED DEPARTURE TIME
- ASE ATCT/TRACAB DOES <u>NOT</u> HAVE WEATHER RADAR AND CANNOT PROVIDE CONVECTIVE WEATHER INFO

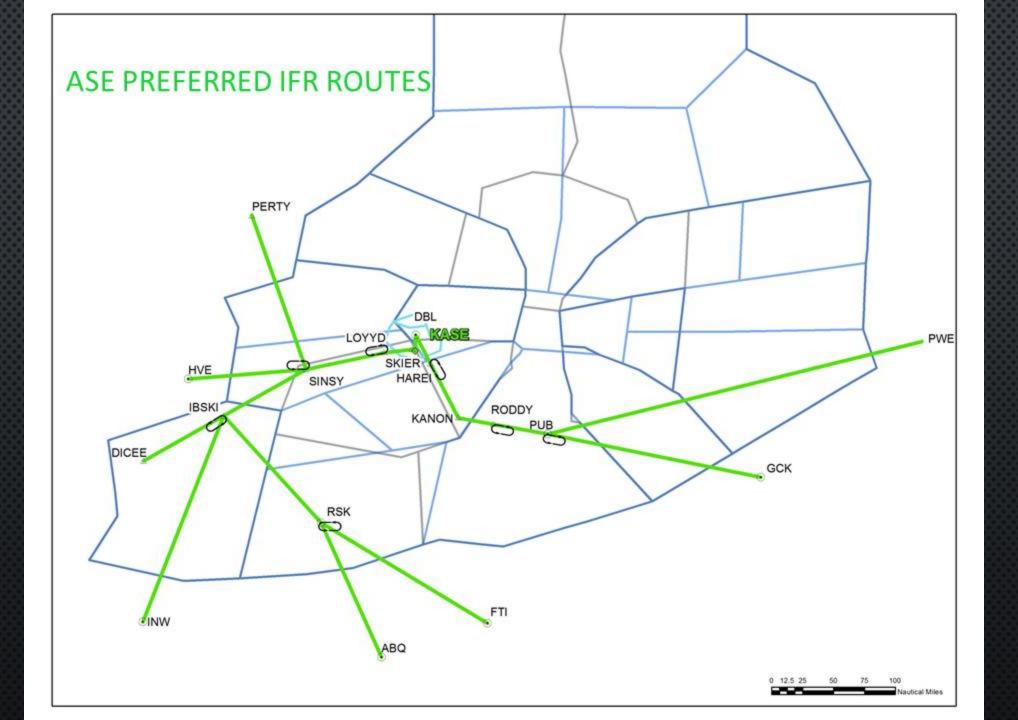
ASE ATC OPERATING PROCEDURES

- Due to airspace restrictions, ase approach may blend (radar vector) aircraft into a single flow of inbound arrival aircraft for runway 15 depending on traffic/volume
 - This may require radar vectors over the airport and then a turn to the northwest to join an extended left downwind for sequence (arriving from the west)
 - DUE TO EAGLE (VAIL) AIRPORT ARRIVALS AND DEPARTURES WITH ZDV (DENVER CENTER), ARRIVAL AIRCRAFT BOUND FOR
 ASPEN MAY BE RESTRICTED OVER EAGLE AIRPORT TO AT/ABOVE 16,000 FEET
- Traffic permitting, departure aircraft which can maintain vfr conditions (and own terrain/obstacle clearance) during the initial climb may request a "<u>vfr climb</u>" on initial contact with aspen departure to expedite a turn in the direction of the first flight plan waypoint after lindz
 - VFR CLIMBS, DEPENDING ON DIRECTION, MAY REQUIRE COORDINATION WITH THE ADJACENT ZDV SECTOR PRIOR TO APPROVAL (FOR EXAMPLE, A VFR CLIMB DIRECT <u>JNC</u> MAY REQUIRE COORDINATION WITH ZDV SECTOR 12 TO TRANSIT THE NORTHWEST CORNER OF THEIR AIRSPACE)
- Tailwind conditions can and often exist. Monitor winds reported by the tower
 - Winds issued by the tower are a 2 minute digitally calculated average, which includes peak gusts over the last 10 minutes
 - "INSTANTANEOUS WINDS" ARE REAL TIME WINDS, MEASURED IN THE LAST 3 SECONDS AT THE ASOS ANEMOMETER,
 LOCATED ADJACENT TO THE THE NORTH END OF THE ATLANTIC AVIATION RAMP, ABEAM THE RUNWAY 15 AIMING POINT MARKINGS (1000' MARKERS)

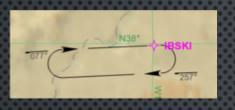
TRAFFIC MANAGEMENT INITIATIVES

TRAFFIC MANAGEMENT INITIATIVES

- During peak travel days, faa atcscc (command center) will implement <u>I</u>raffic
 <u>M</u>anagement <u>I</u>nitiatives (TMI's) to manage the flow of inbound ifr traffic to aspen (and surrounding airports including eagle)
 - THESE INCLUDE GROUND STOPS (GS), GROUND DELAY PROGRAMS (GDP), AND AIRSPACE FLOW PROGRAMS (AFP)
 - SEE FAA AND NBAA RESOURCES FOR MORE INFO
 - HTTPS://WWW.NBAA.ORG/OPS/AIRSPACE/ISSUES/SKI-COUNTRY/
 - Faa will publish advisories when "Ski Country" Routes are required to aspen and eagle
 - OPERATORS **MUST** FILE THESE REQUIRED ROUTES
 - POP-UP ARRIVALS TO ASPEN/EAGLE WILL NOT BE PERMITTED IF FLOW PROGRAMS ARE IN EFFECT
 - AIRCRAFT WILL TYPICALLY BE ROUTED OVER EITHER SINSY & LOYYD (SW) OR KANON & HAREI (SE)
 ARRIVAL GATES
 - FILE A FLIGHT PLAN AS EARLY AS POSSIBLE IN ADVANCE OF A TRIP TO AVOID SIGNIFICANT DELAYS (MOST PEAK TRAFFIC ARRIVES ASPEN BETWEEN 10 AM AND 5 PM LOCAL TIME)
 - HOURLY ARRIVAL RATE IS TYPICALLY 10-12 AIRCRAFT PER HOUR WHEN IFR; 14-18 WHEN VFR



COMMON HOLDING FIXES & PUBLISHED HOLDS

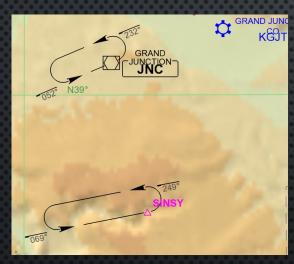


IBSKI - 077° Inbound, RT, 9NM Legs

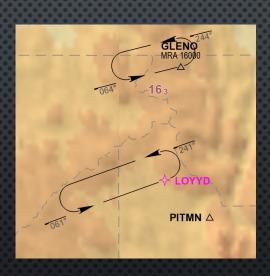


RODDY - 267° Inbound, LT, 1:30 Legs

LOYYD - 061° Inbound, LT, 9NM Legs



SINSY - 069° Inbound, LT, 10NM Legs

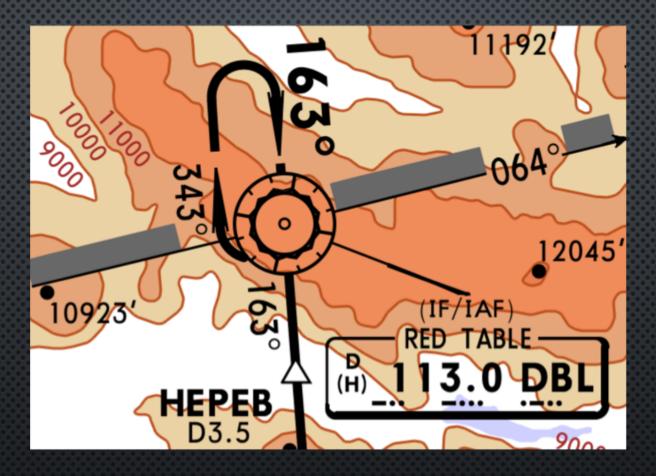


HAREI - 318° Inbound, RT, 9NM Legs

VER 132.85 134.5

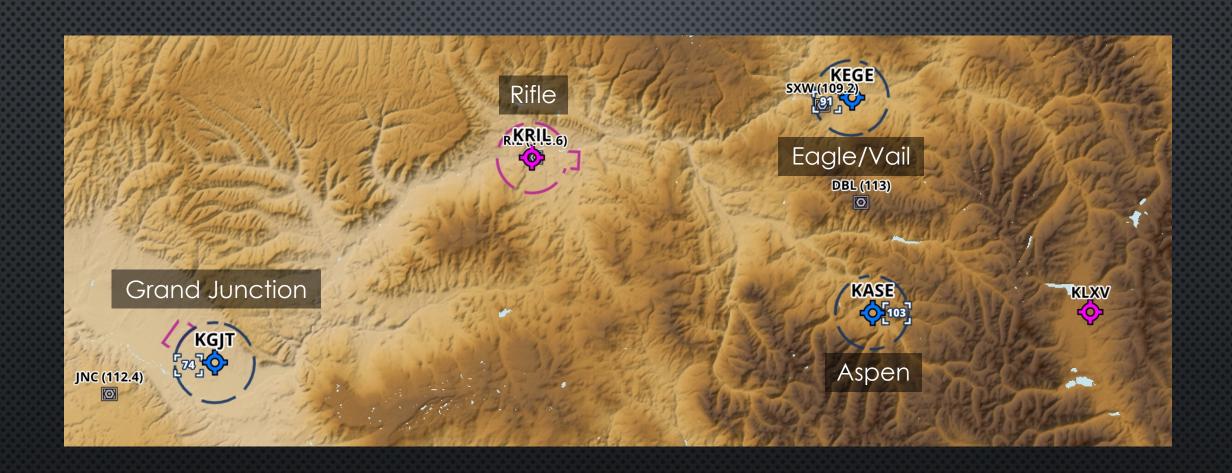
Published holds outside ASE Airspace are located on the HI Enroute Chart (Use the Search function on the Enroute/Map page if using JeppFD)

"HOLD NORTHWEST OF RED TABLE VOR ON THE 343 DEGREE RADIAL, 7 MILE LEGS, RIGHT TURNS."



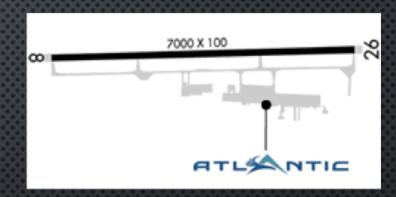
As traffic permits, Denver ARTCC (ZDV) will release aircraft from enroute holds outside ASE Approach Airspace. Upon entering ASE Approach Airspace, aircraft may be held again (closer to the airport) for traffic volume and sequencing at DBL VOR/DME as depicted on the 343° radial, 7NM legs (to remain within ASE Airspace). ASE Approach will typically hold up to 4 aircraft at a time over DBL at 17,000', FL180 (when useable), FL190, and FL210.

NEARBY DIVERSION/ALTERNATE AIRPORTS



DIVERSION/ALTERNATE AIRPORTS

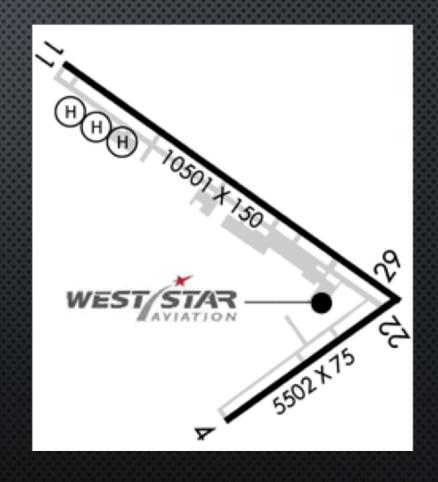
- KRIL (RIFLE) GARFIELD CO
 - RWY 8/26, 7000'x100'
 - ILS 26, GPS/LPV 26, RNAV/GPS 8, RNP TO RWYS 8/26
 - HIGH MINIMUMS ON ILS $(1263 4) \& LPV (763 2\frac{1}{4})$
 - Runway 26 ILS/LPV VPA is 3.6°
 - Non-standard alternate minima, verify on Jeppesen 10-9 chart
 - IFR DEPARTURE FROM RUNWAY 26 REQUIRES RNAV 1 CAPABILITY
 - GOOD SERVICES, HANGAR, ETC.
 - SIGNIFICANTLY LESS TERRAIN IMMEDIATELY SURROUNDING AIRPORT THAN ASE/EGE
 - APPROXIMATELY 1+20 DRIVE FROM RIL TO DOWNTOWN ASPEN
- KEGE (EAGLE/VAIL) EAGLE CO
 - RWY 7/25, 9000'x150'
 - LDA/DME RWY 25 (W/ GLIDESLOPE)
 - LDA w/ GS has a 4.3 NM "FLY VISUAL" SEGMENT SEE AIM 5-4-5(L)
 - High minimums on LDA/GS, (1790 3; 5 sm at night)
 - Non-standard alternate minima, verify on Jeppesen 10-9 chart
 - GOOD SERVICES, HAS AIRLINE SERVICE, LIMITED HANGAR DURING PEAK TIMES
 - APPROXIMATELY 1+30 FROM EGE TO DOWNTOWN ASPEN, HOWEVER DRIVE CAN BE SIGNIFICANTLY LONGER (OR SOMETIMES IMPOSSIBLE) IN WINTER WEATHER IF GLENWOOD CANYON ON I-70 IS RESTRICTED OR CLOSED





DIVERSION/ALTERNATE AIRPORTS

- KGJT (GRAND JUNCTION)
 - RWY 11/29, 10501'x150'
 - ILS 11, GPS/LPV 11, RNP 11, LDA/DME 29, RNAV/GPS 29
 - GOOD SERVICES, HANGAR, MAINTENANCE (WESTSTAR SUPPORTS ALL MAJOR TURBINE/JET AIRCRAFT TYPES)
 - AIRLINE SERVICE, DISTANT TERRAIN
 - APPROXIMATELY 2+15 DRIVE FROM GJT TO DOWNTOWN ASPEN

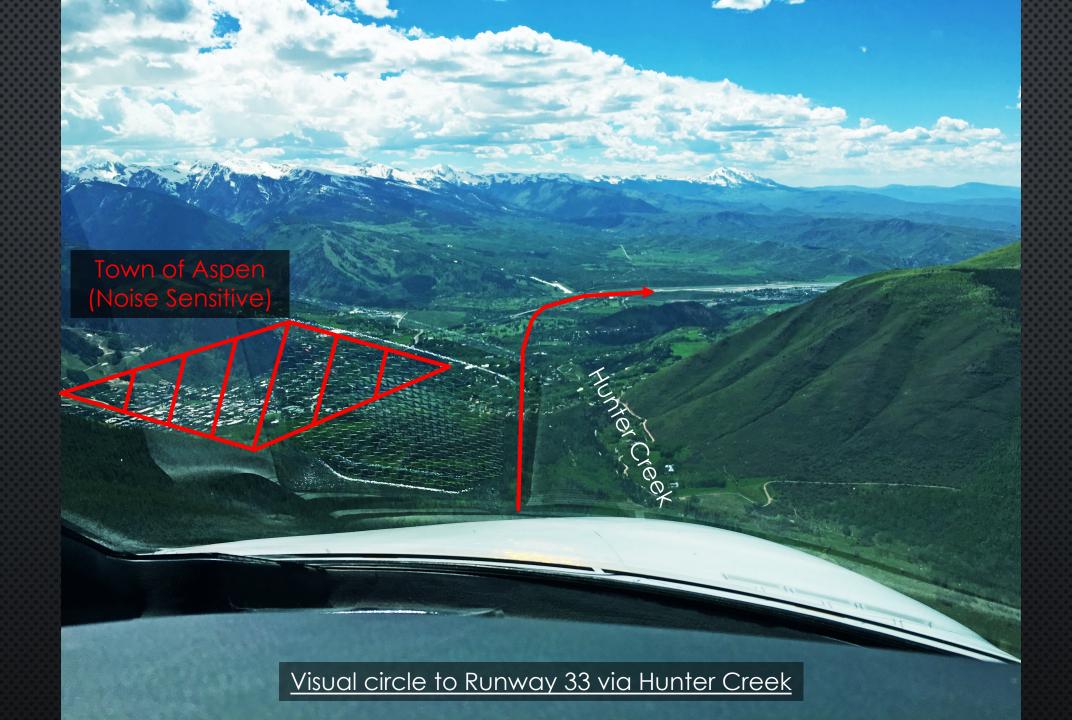


OPERATIONAL TECHNIQUES & CONSIDERATIONS AT ASPEN AIRPORT

VISUAL CIRCLE TO RUNWAY 33

- IF TAILWIND COMPONENT EXCEEDS 10 KNOTS FOR RUNWAY 15, RUNWAY 33 MAY BE CONSIDERED FOR LANDING (NOT RECOMMENDED IF UNFAMILIAR, CONSIDER DIVERTING TO AN ALTERNATE AIRPORT)
- IF FAMILIAR AND TRAINED, IN AN APPROPRIATE AIRCRAFT TYPE, THERE ARE GENERALLY TWO ACCEPTED METHODS OF CIRCLING TO RUNWAY 33 IN VFR CONDITIONS:
 - CLOSE-IN RIGHT DOWNWIND TO RUNWAY 33 AT APPROXIMATELY 9,500' – 10,000'
 - "HUNTER CREEK ARRIVAL" PROCEED SOUTHEAST OF DBL VOR OVER RUEDI RESERVOIR, THEN EAST OF BALD KNOB, TURN WESTBOUND, AND FINALLY DESCEND THROUGH HUNTER CREEK FOR A MODIFIED RIGHT BASE TO FINAL ENTRY FOR RUNWAY 33 (DEPICTED RIGHT)
 - Use caution for paraglider activity near aspen mountain when landing runway 33









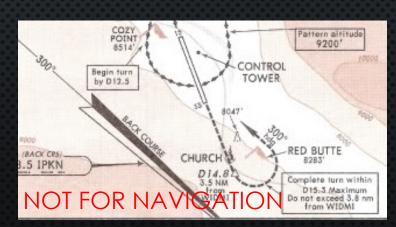
BALKED LANDING (EXTRACTION MANEUVER)

- OPERATORS SHOULD CONSIDER THE DEVELOPMENT AND POTENTIAL NEED TO USE A BALKED
 LANDING ("EXTRACTION MANEUVER") PROCEDURE FOR RUNWAY 15 DUE TO RAPIDLY RISING
 TERRAIN TO THE SOUTH OF THE AIRPORT, RESTRICTING A NORMAL GO-AROUND PROFILE
- THIS PROCEDURE IS USED IF A BALKED LANDING/GO-AROUND IS INITIATED PAST THE MISSED APPROACH POINT (CEYAG)
- Typically, a balked landing procedure at aspen will require a climb straight ahead over runway 15, then at a short distance past the runway, begin a climbing left turn to the northwest to join the missed approach I-PKN backcourse (exact procedure, airspeed, bank angle, and configuration will vary depending on aircraft type)
- FLIGHT CREWS SHOULD ADVISE ASE ATCT WHEN EXECUTING A BALKED LANDING AND INCLUDE A
 BRIEF DESCRIPTION OF THE FLIGHT PATH TO BE FLOWN TO FACILITATE TRAFFIC SEPARATION
 - "ASPEN TOWER, ABC123 EXECUTING A BALKED LANDING, PROCEEDING STRAIGHT AHEAD, THEN
 MAKING A CLIMBING LEFT TURN TO THE NORTHWEST ON HEADING 280"

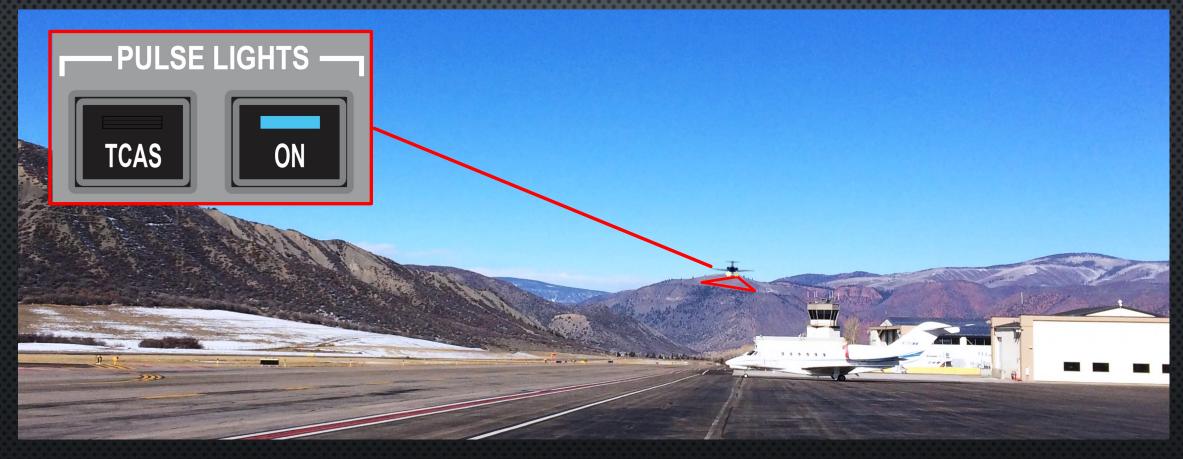
-- ASE - KASE -- LANDING PERFORMANCE -- ASE - KASE -- CESSNA CITATION CJ4 ASPEN, CO
ELEVATION 7837 FJ44-4A ENG ASPEN-PITKEN CO/SARDY
525CFM-05

BALKED LANDING PROCEDURE:

- INITIATE THE BALKED LANDING AT OR PRIOR TO 50 FT ABOVE LANDING THRESHOLD.

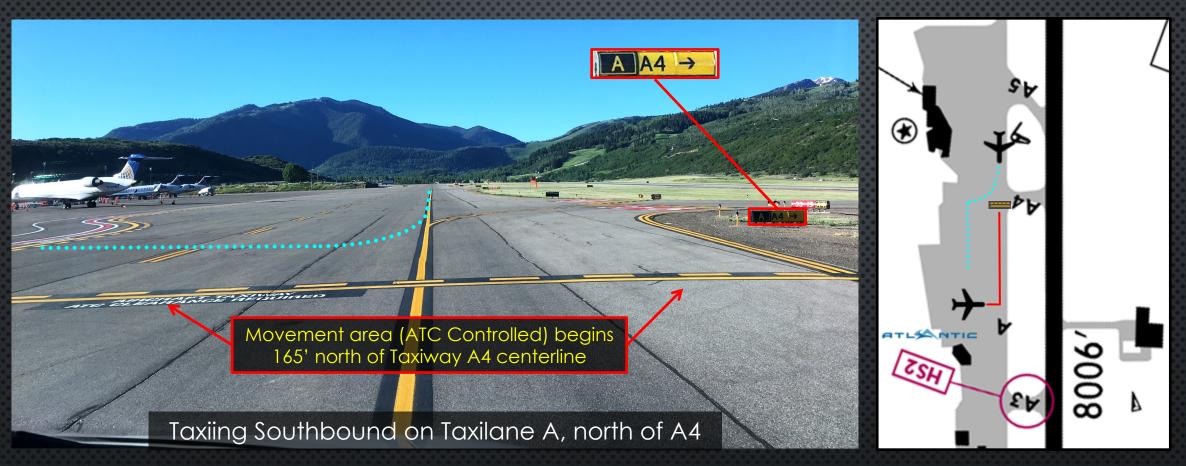


USE OF PULSE LIGHTS



Operators are encouraged to use **PULSE** lights, if equipped, until Triangle Mountain (approximately 5 NM final to Runway 15) to assist the Tower in visually acquiring arrival aircraft and the efficient separation of opposite direction departures/arrivals.

TAXIING TO RUNWAY 33



Aircraft are routinely cleared to taxi to Runway 33 via Alpha, to hold short of A4 taxiway. This allows inbound aircraft to clear the runway and taxi to the terminal or Atlantic Aviation ramp.

Taxiway A becomes <u>Taxi-lane</u> A (non-movement area) 165' north of the Taxiway A4 centerline. <u>Taxi-lane</u> A, A1, A2, A3, and all GA/SIDA ramps are not controlled by ASE ATCT. Use caution.

FUN FACTS

- THE I-ASE LOC/DME ANTENNA, LOCATED JUST SOUTH OF THE APPROACH END OF RUNWAY 33, IS ONE OF THE ONLY PAINTED FOREST GREEN INSTEAD OF AVIATION ORANGE TO BLEND IN WITH THE SURROUNDINGS
- THE I-PKN LOCALIZER BACKCOURSE, LOCATED ON TOP OF ASPEN MOUNTAIN, IS ALSO PAINTED THE SAME COLOR







FUN FACTS

• I-PKN LDA (BACKCOURSE) IS INSTALLED ON TOP OF ASPEN MOUNTAIN AND TRANSMITS ITS 303° COURSE FROM 11,188'



