



ASPEN FAMILIARIZATION

Here is where your presentation begins

PLEASE NOTE

Information covered in this slideshow is to only be used as a quick reference and to help controllers better understand the complexity of the Aspen Airport. All controllers are required to be familiar with the ASE SOP before getting onto a position covering the Aspen airport.



TABLE OF CONTENTS

01 ASPEN CLEARANCE

Covers basics for clearances out of Aspen

02 ASPEN GROUND

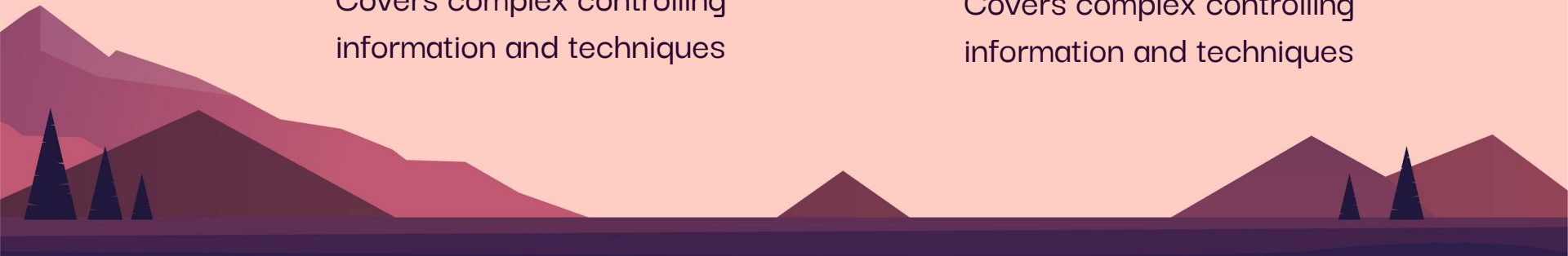
Covers proper technique for taxiing inbound and outbound aircraft

03 ASPEN LOCAL

Covers complex controlling information and techniques

04 ASPEN APPROACH

Covers complex controlling information and techniques



ASPEN FACT!

The background of the slide is a stylized illustration of a mountain range. The mountains are rendered in various shades of purple and pink, with some peaks having a jagged, crystalline appearance. In the foreground, several dark blue evergreen trees are scattered across the landscape. In the upper right portion of the sky, a group of five birds is shown in flight, moving from left to right. The overall color palette is soft and monochromatic, using shades of purple, pink, and blue.

Due to challenging terrain surrounding the airport, the LOC DME Rwy 15 approach brings planes down to 1,043 feet above the touchdown zone, which is significantly higher than instrument approaches.

ASPEN CLEARANCE

“Oh actually this isn’t so bad.”

ASPEN CLEARANCE

- The preferred routing out of Aspen is the LINDZ9 departure. If aircraft are unable the PITKN4 is also available.
- Clearance for the LINDZ9 shall be given as,

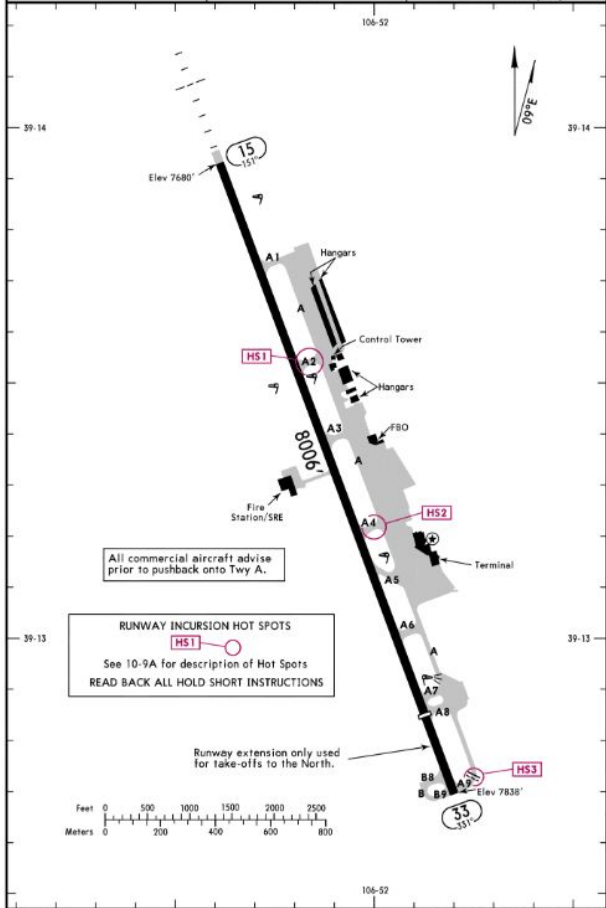
”CLEARED TO (destination airport) LINDZ# DEPARTURE TO LINDZ, (route/direct fix/airway, as appropriate), THEN AS FILED. MAINTAIN 16,000.“

- Runway 33 is the primary departure runway. Aircraft may request runway 15 for departure if either VFR or IFR and requesting a VFR climb. If unable VFR climb ask if ”Are you able to maintain your own terrain and obstruction clearance until 16,000“

ASPEN GROUND

Because even ground at aspen is hard.

ATIS (ASOS when Twr inop) 120.4	*ASPEN Clearance 123.75	*Ground 121.9	*Tower CTAF 118.85
UNICOM 122.95	*ASPEN Departure (R) 123.8		DENVER Center (R) 119.85 when Dep inop.



ASPEN GROUND

- Aspen ground controls one primary taxiway, taxiway A in the movement area. The movement area starts from intersection A4 down to A9. Making everything north of A4 and into the ramp a non-movement area.
- Airliners parked at the terminal must request to pushback onto the taxiway.
- Aircraft requesting taxi from North of A4 may be instructed to hold short of taxiway A4 for arriving aircraft vacating at A4. This allows arrival aircraft to enter the ramp at A4 which is the most common runway exit point and ramp entry point.

Chart linked to Navgraph account: WorngDiamond (lman@unet@gmail.com)

ASPEN TOWER

“That can’t be legal... Is it?”

ASPEN TOWER

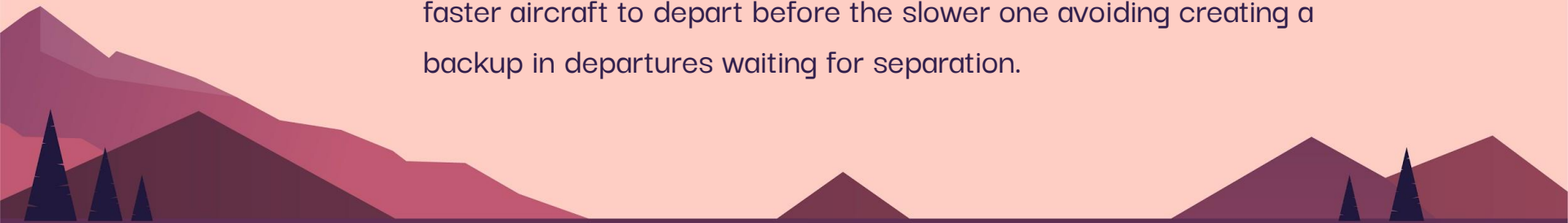
- Aspen tower is seen to be one of the most difficult tower airspaces to work in the ZDV airspace due to its high mountainous terrain surrounding the airport, difficult approaches and opposite direction departures.
- Certain procedures like the "WRAP" and "Westbound In Front Of" make Aspen not only difficult as a controller but also pilots, with regards to legality.
- Controllers are requested to have a full understanding of controlling Aspen Tower before logging onto the network while Aspen is under high volume.



ASPEN TOWER CON'T

GENERAL CONTROL

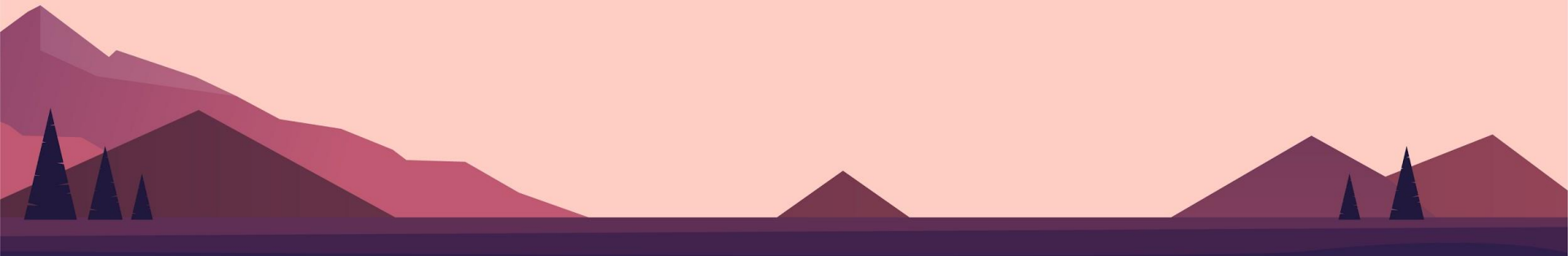
- All IFR aircraft are automatically released **IF** the aircraft is on the LINDZ# Departure taking off from runway 33 **OR** for aircraft doing VFR climbs to 16,000 tracking the LINDZ# ground track departing runway 33.
- If not operating the WRAP or Westbound In Front Of aircraft may just be cleared for takeoff with no special instructions.
- If a slower aircraft is in sequence before a faster aircraft in line short runway 33, the slower aircraft may be instructed to "taxi on runway 33, left B8 and hold short runway 33 at B9". This allows the faster aircraft to depart before the slower one avoiding creating a backup in departures waiting for separation.



ASPEN TOWER CON'T

GENERAL CONTROL

- If no arrival traffic exists, aircraft should have at least 2 miles increasing to 3 miles in trail. For similar types aircraft and LUAW is being used, one aircraft can be departed once the prior reaches 9000 ft and 1 ½ miles off the departure end of the runway. Otherwise you will receive 3 miles by using standard SRS and not using LUAW.
- Props behind jets can be launched with runway separation.
- Jets behind props must wait until the jet reaches the 5 mile range ring before being cleared for takeoff.



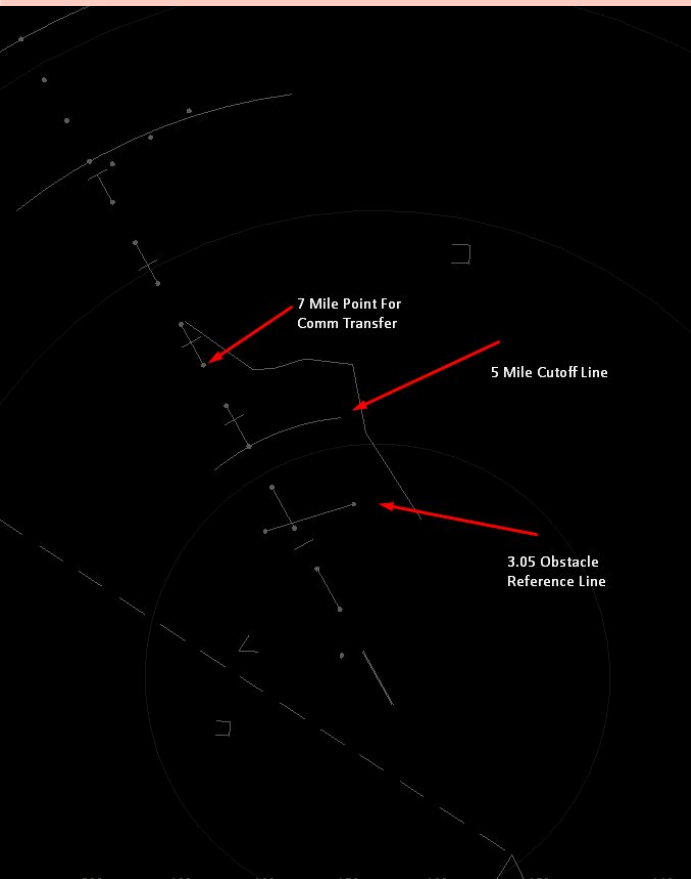
ASPEN TOWER CON'T

GO-AROUNDS

- Go-arounds must be coordinated with APP before transfer of communication.
- Go around before MAP must be instructed to "EXECUTE MISSED APPROACH".
- Aircraft performing a go-around after the MAP or below the MVA reference table below.

	Aircraft does not want to remain in the pattern	Aircraft wants to circle/remain in the pattern
Visual Approach	"GO AROUND, ENTER LEFT DOWNWIND, CLIMB AND MAINTAIN 14,000" Assign heading once above MVAs	Issue pattern entry instructions Ensure appropriate separation from other aircraft.
Instrument approach	"LOW ALTITUDE ALERT, MVA IS [MVA], RAPIDLY RISING TERRAIN TO THE SOUTH, ADVISE YOU MAKE A CLIMBING LEFT TURN NORTHWEST-BOUND TO REJOIN THE PUBLISHED MISSED APP"	If possible and aircraft requests the aircraft may be approved to circle.

ASPEN TOWER WRAP PROCEDURE



- WRAP procedure is when a 33 departure takes off and offsets to the east of final to then climb above and then behind an 15 arrival IFR/VFR aircraft on a 5 or less mile final.
- Required vStars video maps 1, 2, 4, and 9
- Tower applied visual Separation must be used if using tower view otherwise target resolution if not using tower view.
- Requirements:
 - Arrival aircraft must be displaying a ground speed of 230 kts or less
 - Both aircraft must be on TWR freq with arrival aircraft being on freq prior to a 7nm final.
 - Line Up and Wait is mandatory when utilizing "Wrap" procedure.
 - Traffic advisories must be issued to both aircraft.
 - If the arrival aircraft is not established on freq, tower is responsible for having the departure aircraft taxi off the runway for resequence.
 - Arrival aircraft shall be no closer than on a 5 mile final before the departure aircraft starts their roll.

ASPEN TOWER CON'T

WRAP CON'T

Example video of a proper WRAP



<https://youtu.be/AweWYD8eOBM?t=1710>

How to Execute the WRAP Procedure

1. If at least the departure is on freq the departure aircraft may be instructed to line up and wait. Ensure the departure aircraft is on the LINDZ# and give traffic advisory for the aircraft on final.
2. Once the arrival aircraft is on frequency before the 7 mile mark. Instruct the arrival aircraft to continue and give traffic advisory for the holding traffic. **IF** the arrival aircraft is not on frequency by the 7 mile mark. The Aircraft on the runway must be instructed to exit the runway and taxi back.
3. Clear the departure aircraft when the arrival aircraft is around a 6 mile final but no later than a 5 mile final, takeoff using the phraseology, "(Wind if applicable), runway 33 cleared for takeoff, traffic advisory". If the departure aircraft is expected to climb quickly and reach 9100' and turn in front of the arrival aircraft, additional instructions may be given as per sop, "FLY HEADING 343 VECTOR FOR TRAFFIC, EXPECT TO RESUME THE LINDZ# DEPARTURE."
4. Then, the arrival aircraft may be cleared to land with no special instruction but including another traffic advisory.
5. Once the departure is airborne, insure both aircraft have each other insight if not already.
6. If the departure aircraft was given a heading and once they reach 9100' and able to turn instruct the aircraft to, "TURN LEFT HEADING 273, INTERCEPT THE I-PKN, RESUME THE LINDZ# DEPARTURE."
7. Once established on a 273 heading the departure aircraft can be switched to departure.

ASPEN TOWER

WESTBOUND IN FRONT OF PROCEDURE

- The Westbound in front of is when a departure aircraft departs and then climbs and turns in front of a arrival aircraft. Often just after conducting a WRAP procedure but not required.
- Arrival aircraft must be no closer than a 15 mile final when the departure aircraft starts their departure roll. (Not applicable to first arrival aircraft if the first aircraft is performing WRAP).
- For this procedure to work all arrival aircraft shall be sequenced with at least 10 miles in trail on final. Tower has authority to send aircraft around if two aircraft on final do not have 10 miles and there are multiple departure aircraft ready for departure.
- This procedure starts once an aircraft is cleared for takeoff but instructions and traffic advisories for the departure aircraft are not required until the departure aircraft is clear of conflict with any possible WRAP.
- Traffic advisories for the departure aircraft are as simple as giving an opposite direction traffic call for any possible aircraft and including the phrase "you'll be westbound in front of".
- Instructions to arrival aircraft are not required as they will not be on frequency for most instances.

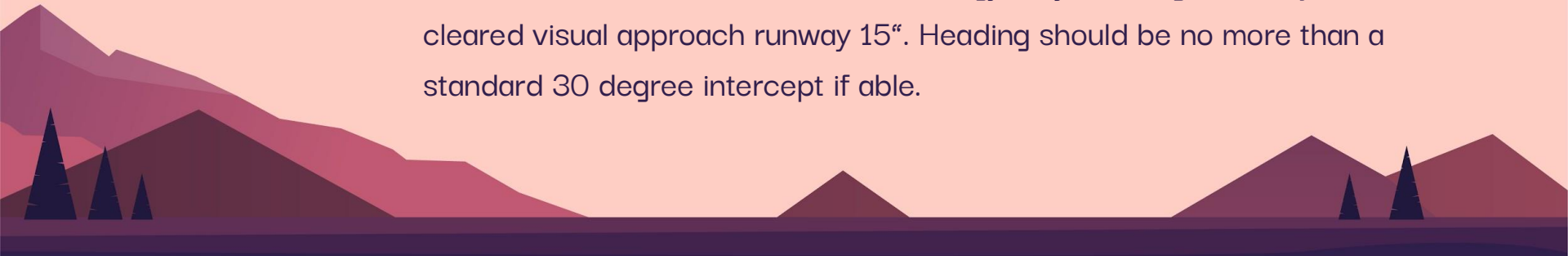
ASPEN APPROACH

The Toilet Bowl

ASPEN APPROACH

GENERAL

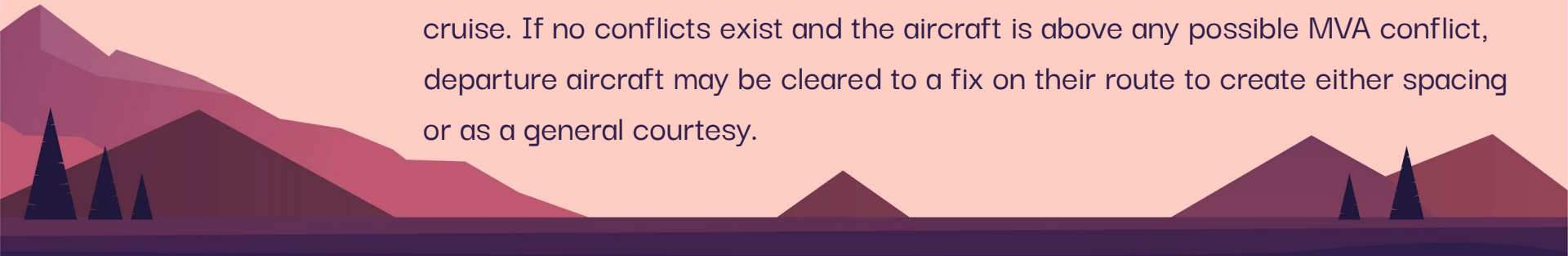
- Aspen approach is responsible for providing a spacious flow of traffic into aspen while also maintaining an appropriate but difficult spacing for tower to be able to use WRAP and Westbound in front of procedures legally and correctly.
- Unless otherwise coordinated approach is required to provide at least a 10 mile and increasing for aircraft on final.
- Approach must switch aircraft to tower freq no later than a 10 mile final.
- If using visual approaches, instructions to join and track final are required unless otherwise coordinated. Phraseology, "Fly heading XXX to join final, cleared visual approach runway 15". Heading should be no more than a standard 30 degree intercept if able.



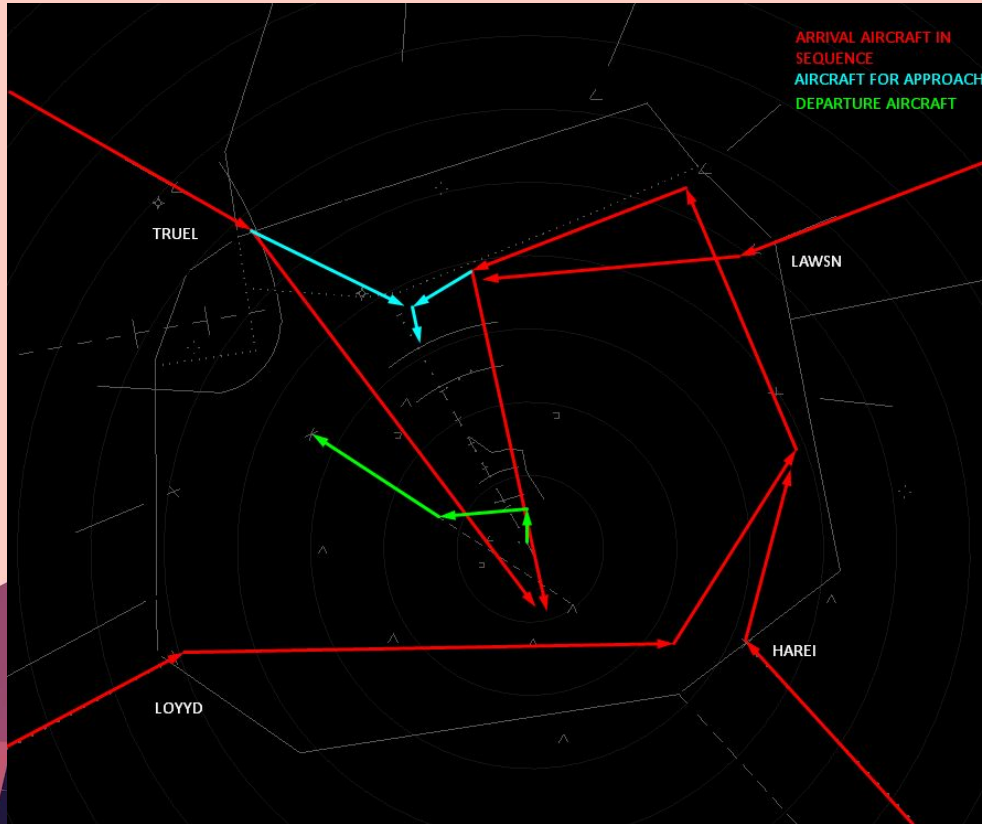
ASPEN APPROACH

FLOW OF TRAFFIC

- Upon Traffic entering the airspace. If able aircraft shall be instructed to maintain 210kts and descended to 16000 (1000ft stagger if any traffic may be a factor).
- Arrival traffic should be vectored upon entering the airspace. If traffic levels apply a standard "toilet bowl" theme of sequencing shall be applied. Where Traffic is vectored around the border of the airspace until their turn for an approach. (Picture for reference on next slide)
- Controllers can use the shelf over EGE owned by center with an appropriate point out.
- Departure aircraft are climbing to 16000 and may be climbed to FL210 or lower cruise. If no conflicts exist and the aircraft is above any possible MVA conflict, departure aircraft may be cleared to a fix on their route to create either spacing or as a general courtesy.



ASPEN TRACON FLOW



NOTES

- Aircraft from the LAWSN gate are not always first in sequence. If there is no room they are to be kept high and put in a full loop around the airspace. Same situation applies for aircraft from the TRUEL gate.
- Aircraft will be entering the airspace as per the ASE-ZDV LOA unless otherwise coordinated.
- Controllers are allowed and expected to use the airspace above EGE if the aircraft is above 16000 ft. Otherwise a point out may be coordinated with center for aircraft to be lower than 16000.

ASPEN TRACON EGE/RIL

RIL

- RIL is under ZDV control but portions of the approach to 26 are in the ASE tracon airspace. For approaches to RIL conducted in ASE airspace. Upon receiving a handoff from ZDV, a handoff should be sent right back to the appropriate sector covering RIL. If the HO is accepted that is center approving ASE for clearing the appropriate aircraft for an approach. If the HO is not accepted center shall coordinate their intentions. Otherwise approaches are no different than any other uncontrolled airport. Aircraft shall be instructed to terminate with the appropriate center sector.

EGE

- In almost all circumstances ASE Approach does not conduct IFR approaches into EGE. A Point-out from center will most often be coordinated..
- VFR aircraft may be terminated at the border and switched to EGE tower.

THANKS

Any questions regarding this slideshow may be directed towards the TA or any other training staff.

All controllers that intend on controlling aspen are also highly recommended to book a ASE FAMILIARIZATION session that can be booked on picktime under the visiting/transferring controller section although not restricted to visiting/transferring controllers. This session would cover TWR and APP fundamentals and putting what was just learned into practice.

