

NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety

Washington, DC 20594

DCA01MA034

Air Traffic Group Factual Report of Investigation

Attachment 4 – Aspen ATCT Orders, 73 pages

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION AIRPORT TRAFFIC CONTROL TOWER Aspen-Pitkin County Airport Aspen, Colorado 81611

SUBJ: ASPEN RADAR/TOWER TEAM RESPONSIBILITIES AND PROCEDURES (SOP)

- 1. <u>PURPOSE</u>. This order establishes Administrative and operational procedures, including jurisdictional boundaries for each operational position, in order to maintain a safe and efficient facility.
- 2. <u>DISTRIBUTION</u>. All Aspen Tower personnel and DEN HUB.
- 3. CANCELLATION. ASE Order 7110.2F dated 12-23-96, is cancelled.
- 4. <u>BACKGROUND</u>. This consolidated document provides quick reference to position responsibilities and procedures relating to the radar/tower environment. General administrative procedures for day to day facility operation are combined in the document's body, where appropriate, or in referenced appendices.
- 5. <u>EXPLANATION OF CHANGES</u>. Significant changes are marked with a solid bar to the right, and are as follows:
 - General document formatting
 - List of references for duty familiarization
 - Radar display altitude limits
 - Placement of ATIS code and VFR indication in strip marking guide
 - Strip marking abbreviations
 - Coordination and transfer of control between TC and LC
 - Weather requirements for VITOS
 - Weather observer resources
 - Integration of ASOS procedures
 - ATIS procedures
 - Guidance for coordinating VFR aircraft Letween GC and LC
 - Utilization of the RID
 - Additior of holding instructions at DOWNY and LINDZ
 - Use of the charted instrument ε proach
 - Definition of CIC duties
 - Use of Flex-time on schedules in light of new facility hours
 - Clarification of prime time bidding procedures
 - Addition of Flow Procedures
- 5. <u>STANDARD OPERATING PROCEDURES</u>. Aspen ATCT Standard Operating Procedures follow. Chapter 1 contains information applicable to all positions of operation. Chapters 2 through 5 contain individual position SOPs.

Distribution: ASE, DEN HUB

Initiated by: ASE ATM

AJ ALO (

TABLE OF CONTENTS

80W ●	WAS PART @ CENTRE	ĄĘŸŊĨĸŎĸŴſĸŶŢſŎŊŢ₩₽ŸijĊÆĸĔĸŸŗŎĠŶŶŢŶŎŖĬŢŶŎŊĸ°♥ ■
	CHAPIRE TORREST	A D. TIN HOURINGS FILEN APPLIEC ACREE HOLD A 121. POINT INCOM

Paragraph	Page
1-1. Position Duties and Responsibilities	1-1
1-2. Position Information	1-1
1-3. Strip Marking	
1-4. Basic Radar Service	1-7
1-5. VITOS (LC automatic release)	
1-6. Emergencies	1-9
Table 1-1 Local Area Airports	
CHAPTER 2. FLIGHT DATA	
2-1. Flight Data Procedures	2-1
CHAPTER 3. GROUND CONTROL/CLEARANCE DELIVERY	
3-1. Ground Control/Clearance Delivery Procedures	3-1
CHAPTER 4. LOCAL CONTROL	
4-1. Local Control Procedures	4-1
CHAPTER 5. TERMINAL CONTROL/HANDOFF	
5-1. Terminal Control/Handoff Procedures	5-1
CHAPTER 6. OPERATIONS SUPERVISOR/CONTROLLER IN CHARGE	;
6-1. Operations Supervisor/Controller In Charge Procedures	6-1

TABLE OF CONTENTS

APPENDICIES

Paragraph	Page
Appendix 1. Tower Checklists	A1-1
Appendix 2. Equipment Outage Checklists	A2-1
Apperdix 3. Assignments, Operating Initials, Sign On/Off Procedures	A3-1
Appendix 4. Bidding, Annual Leave, Overtime; As Negotiated With ASE NATCA	A4-1
Appendix 5. Flow Procedures	A5-1
Appendix 6. Bird Strike/Bird Hazard Procedures	A6-1
Appendix 7. Invalid Mode-C Reporting	A7-1
Appendix 8. Controlled Area Intrusions	A8-1
Appendix 9. Aspen Tower Smoking Policy	A9-1
Appendix 10. CENRAP Procedures	
Appendix 11. Significant Outage Reporting	A11-1
Appendix 12. Radar Map	A12-1
Appendix 13. Error Prevention Program	A13-1

CHAPTER 1. GENERAL INFORMATION APPLICABLE TO ALL POSITIONS

1-1. POSITION DUTIES AND RESPONSIBILITIES.

- a. Ensure separation.
- b. Initiate control instructions.
- c. Monitor and operate radios.
- d. Operate interphones.
- e. Perform interfacility/intrafacility coordination.
- f. Scan airport environment.
- g. Manage and correlate flight plan information and flight data strips.
- h. Ensure computer entries are completed.
- i. Ensure strip marking is complete and correct.
- j. All personnel and positions in the facility/TRACAB require duty familiarization by using the read and initial (R&I) binder, facility log, status of information area, position checklist, and this order.

1-2. POSITION INFORMATION

- a. Frequency Information. All control positions are equipped with main and standby transmitters and receivers. If mains and standbys both fail, use the Wulfsberg transceiver.
 - b. Equipment.
 - (1) DBRITE
 - (a) Display correct time and altimeter in systems area.
 - (b) Select codes 0100, 0200, 0300, 1200, and 4700 in system area.
 - (c) Set altitude limits at no less than 076/180 on LC and 076/230 on TC.
- (d) All RCU inhibit switches shall be in the select position, except TAB may be inhibited when it interferes with tracked targets. Set all other RCU switches and controls to provide a usable display.
 - (e) Leader lines shall not be eliminated.

- (f) TC and LC shall quick-look each other.
- (g) Set code select box as follows:

```
Channel 1 -- 0100 Channel 6 -- 1400
```

Channel 2 -- 0200 Channel 7 -- 4300

Channel 3 -- 0300 Channel 8 -- 5100

Channel 4 -- 4700 Channel 9 -- 5500

Channel 5 -- 1200 Channel 10 - Optional

- (h) The display control panel shall be set with Raw Video off and Common System on C/S.
- (i) Data display areas shall not be inhibited. Their location shall be at the controller's discretion.
 - (j) Local scratch-pad designators shall be used:

E – Enroute

R - Runway 33

V – VFR

P - Practice Inst. Approach

H – Heavy

T - TCAS Equipped

B - Heavy and TCAS Equipped

- (k) When ARTS is OTS, set ch.1-4 and 7-9 on ID.
- (1) If digital map fails, use analog mapper.
- (m) Maps. Five selectable with the DBRITE and five on the analog mapper.
- Map 1, a 60 mile map, depicts the Aspen Approach Control airspace from the surface to FL210. The airspace under the Eagle Shelf, from the surface to 15000 FT MSL, belongs to Denver ARTCC VOR GPS-C and GPS RY-15 approaches are on the mapper. All approaches are omitted on the DBRITE.
- Map 2 is the 20 mile Local map. It depicts prominent mountains, towns, rivers, DBL, and the airport. On the analog mapper it is the MVA map (see c below).
- Map 3 is the 60 mile MVA map (max radar range). It also depicts the LOC DME A approach arc to RIL, RIL GPS 25 approach, and RIL departures (RIL holding pattern). On the analog mapper it is the Local map (see b above).
- Map 4 on the analog mapper control (not in the DBRITE processor due to memory limits), is a 60 mile EOVM map depicting mountain elevations, prominent obstructions, the 10,000 ft contour line, airports and rivers (emergency use only). The DBRITE depicts the VOR and GPS RY 15 approaches.

- Map 5 is like map 1, with the addition of the VOR, and GPS approaches on the DBRITE. The mapper has the VOR and GPS approaches.
- (2) Integrated Communications Switching System, (ICSS- type I). The ICSS may be used for both inter-facility and intrafacility communication.
 - (a) ZDV1=Shout line to sectors 6, 11, 12, and 26
 - (b) ZDV2=Shout line to EGE tower and backup to sectors 6, 11, and 12
- (c) FSS= Accesses line to other facilities. After insuring it is not in use, dial desired number (see chart at GC for dial codes), or use speed-dial buttons.
 - (d) FLOW= Speed-dial to ZDV metering position after accessing FSS line.
 - (e) SEC 6, 11, 12, and 26= Speed-dial to sector after accessing FSS line.
 - (f) DEN FSS= Speed-dial to DEN AFSS after accessing FSS line.
 - (g) ATIS monitors the ATIS recording.
 - (h) COM1- In-house (TELRAD) telephone system.
 - (i) FD- Override to Flight Data position.
 - (j) GC- Override to GC position.
 - (k) LC- Override to LC position.
 - (1) HO- Override to Handoff position.
 - (m)AC- Override to TC position.
 - (n) MON AC- Monitors the TC position.
 - (o) BRIEF (Blank)-Enable recorder (hot mike).
 - (p) CHIME C/O- Disables ringer.
- (q) CALL FWD- Directs call to another position. After pressing, dial the code (see IA, below) for the position where you want to send calls.
 - (r) RING- Not active at Aspen.
 - (s) CA- Answers a call forwarded.

- (t) HSLS- All communications over speaker.
- (u) OVR HSLS- Only override call on speaker
- (v) IA- Accesses intrafacility override lines by dialing 01-LC, 02-GC, 03-FD, 04-HO, 05-RC. By dialing 99 before the number, it rings at the desired position, rather than overriding other communications.
- (3) Airport Lighting. Operate in accordance with FAA order 7110.65. *Exception*: Step 3 on Runway End Identifiers Lights (REIL) *shall* only be used when requested by the pilot.

1-3 STRIP MARKING. A strip shall be processed for all aircraft that are IFR, SVFR, or VFR requesting flight following. The boxes are numbered as below.

1	_	5	8	9	10	11	12
2/3	2a	6			13	14	15
4		7		9a	16	17	18

a. IFR Arrivals

Box 1	Aircraft identification	
		

Box 2A Red line, when $WX \downarrow 6000/3$ and/or current ATIS code

Box 3 Type aircraft and equipment suffix

Box 4 CID

Box 5 Beacon code

Box 6 Previous fix

Box 7 Coordination fix

Box 8 ETA at coordination fix or destination airport

Box 9 Altitude

Box 9A Destination, if other than ASE

Box 12 Reason for delay

Box 15 Time entering hold

Box 17 Time of missed approach

Box 18 Time exiting hold

b. IFR Departures

Box 1	Aircraft identification
Box 2A	Current ATIS code
Box 3	Type aircraft and equipment suffix

Box 5 Beacon code

Box 6 Proposed departure time

Box 7 Requested altitude

Box 8 Pilot requests

Box 9 Flight plan info, including destination, route of flight, and

departure procedure

F	
Box 9A	Assigned altitude if below 160
Box 10	Check mark indicating issuance and receipt of clearance
Box 12	Reason for delay
Box 13	Engine start time

Box 15 Requested taxi time, if other than proposed time

Box 16 TMU release time

Box 18 Departure time, if necessary for delay time computation

c. IFR Overflights

Box 1	Aircraft identification
Box 3	Type aircraft and equipment suffix
Box 5	Beacon code
Box 6	Coordination fix
Box 7	Overflight coordination indicator (identifies facility to which flight
plan data forwarded)	
Box 5-7	"V" (Denoting overflight)
Box 8	ETA at coordination fix
Box 9	Altitude and route of flight through terminal area

d. VFR Arrivals With Flight Following

Box 1	Aircraft identification
Box 2	ATIS Code
Box 3	Aircraft type
Box 5	Beacon code
Box 6	"A" to denote arrival
Box 8	Time
Box 9	Altitude, route, VFR to denote the aircraft is VFR.

e. VFR Departures With Flight Following:

Box 1	Aircraft identification
Box 2	ATIS Code
Box 3	Aircraft type
Box 5	Beacon code
Box 7	Requested altitude, if known
Box 8	Time
Box 9	Route information and VFR to denote the aircraft is VFR.
	Note: Solicit route information when not offered by the pilot.

f. VFR Overflights

Box 1 Aircraft identification

Box 3 Aircraft type

Box 5 Beacon code

Box 5-7 "V" to denote overflight

Box 8 Time

Box 9 Altitude, route, and **VFR** to denote the aircraft is VFR.

g. Other information may be placed in unused boxes or unused portions of box 9A, if needed. Strips are required on VFR aircraft only if they are receiving radar services. The following abbreviations may be used:

VA - Visual approach
A2 - Aspen 2 departure
C3 - G2 departure
G1 - G1 departure
C3 - Lindz 3 departure
C4 - VR - VOR approach

LN - Lindz intersection IF - ASE Instrument Departure

GL - Gleno intersection RF - Roaring Fork

CT - Contact Approach
GR- GPS 26 approach (RIL)
GP -GPS rwy 15 Approach
GC- GPS "C" Approach

LO - LOC App.at RIL or EGE

1-4 BASIC RADAR SERVICE

- a. Unless otherwise coordinated TC shall assign aircraft one of the following pattern entries to runway 15, runway 33 shall be coordinated verbally or with an "R" in the scratch pad:
 - (1) Straight in from Basalt or the ridge
 - (2) Left downwind from city of Aspen
 - (3) Midfield crossover West and Southwest
 - b. TC shall sequence all arrivals entering the pattern from the same direction.
- c. TC shall transfer communications with arriving aircraft to LC no less than 10 flying miles from the Runway.
 - d. TC shall coordinate non-radar traffic prior to entering the class D surface area.
- e. LC shall Advise all transponder equipped aircraft that check in outside of 10 miles to contact TC.
 - f. LC shall establish landing sequence by mixing the three arrival flows.
 - g. LC and TC shall coordinate any procedure or aircraft request that differs from the above.

h. Advise the OS/CIC of any aircraft with an invalid altitude readout. The OS/CIC shall log the time, ACID, reported altitude and readout altitude on the 7230-4. The OS will compile the data per FAA 7210.3 for the weekly report.

1-5. VITOS (LC automatic release)

- a. In order for VITOS procedures to be in effect the following conditions must apply:
 - The Local controller (LC) shall have completed RTF or the equivalent.
 - Ceiling and visibility must allow LC to provide Visual separation between arrivals and departures or adequate RADAR separation shall be applied.
 - The departure Corridor is defined as "The airspace from the Aspen Airport to Basalt Mountain to Sopris Mountain to the Aspen Airport, at and below 16,000ft (see appendix 12)."
 - The Arrival Corridor is defined as "The airspace east of a line from the Aspen Airport to Basalt Mountain clockwise to a line from the Aspen Airport to Sopris Mountain (see appendix 12)."

b. LC Responsibilities:

- (1) When VITOs are in effect, LC has automatic releases for departing IFR traffic on the LINDZ3, STANDARD IFR PROCEDURE, WISCO, G1, and G2 departure procedures. LC shall pass the departure strip to TC before issuing takeoff clearance to departing aircraft.
- (2) LC is responsible for the separation between arriving IFR aircraft established on a *VOR/GPS C*, or a *VISUAL/ROARING FORK VISUAL* approach in the arrival corridor and departing IFR aircraft. LC is also responsible for the separation between successive IFR departures.
- (3) When TC coordinates using the GPS RWY 15 Approach, LC shall separate all subsequent departures from the aircraft on this approach. LC shall advise TC at the time of the coordination of any departures cleared for take off but not yet on radar.

c. TC Responsibilities:

(1) TC shall have all arrivals sequenced, on a VISUAL/ROARING FORK VISUAL, or VOR/GPS C approach. TC may issue the GPS RWY 15 approach but shall coordinate the

use of that approach prior to the aircraft reaching SITWO for aircraft from the Northeast or Mt. Sopris from the Southwest.

- (2) TC maintains IFR separation responsibilities for successive arrivals.
- (3) TC shall be responsible for separation between IFR arrivals and IFR departures when arrival aircraft are in the departure corridor.

1-6. EMERGENCIES

- a. Emergency information may be received on any control frequency, including 121.5, from the pilot, aircraft owner/operator, airport manager, or vehicle operator. It may also be received verbally from the supervisor/controller-in-charge, another cab position, or landline (interphone/telephone). Emergencies may also be observed visually in movement areas, the traffic pattern or the vicinity of the airport.
- b. During aircraft and vehicle emergencies follow the accident notification procedures in "Tower Cab Red Binder."
 - c. For a bomb threat:
 - (1) Notify supervisor/controller-in-charge.
 - (2) For a telephone threat complete FAA form 1600.53 (Bomb threat card) posted near each phone.
 - (3) If appropriate, taxi the aircraft to a remote location on the airport, usually the run-up area.
 - (4) When a hijack is in progress:
 - (a) Notify supervisor/controller-in-charge.
 - (b) Comply with pilot's request to the extent possible.
- (5) Aspen tower will receive SCATANA instructions implemented by 26th NORAD Region from Denver Center. Upon instruction to implement SCATANA plan, take the following actions:
 - (a) Notify facility personnel.
 - (b) Shutdown Navaids: None required.
- (c) Broadcast SCATANA instructions exactly as received from Denver Center, 3 times at two-minute intervals on all available frequencies. Rebroadcast once each hour thereafter

use of that approach prior to the aircraft reaching SITWO for aircraft from the Northeast or Mt. Sopris from the Southwest.

- (2) TC maintains IFR separation responsibilities for successive arrivals.
- (3) TC shall be responsible for separation between IFR arrivals and IFR departures when arrival aircraft are in the departure corridor.

1-6. EMERGENCIES

- a. Emergency information may be received on any control frequency, including 121.5, from the pilot, aircraft owner/operator, airport manager, or vehicle operator. It may also be received verbally from the supervisor/controller-in-charge, another cab position, or landline (interphone/telephone). Emergencies may also be observed visually in movement areas, the traffic pattern or the vicinity of the airport.
- b. During aircraft and vehicle emergencies follow the accident notification procedures in "Tower Cab Red Binder."
 - c. For a bomb threat:
 - (1) Notify supervisor/controller-in-charge.
 - (2) For a telephone threat complete FAA form 1600.53 (Bomb threat card) posted near each phone.
 - (3) If appropriate, taxi the aircraft to a remote location on the airport, usually the run-up area.
 - (4) When a hijack is in progress:
 - (a) Notify supervisor/controller-in-charge.
 - (b) Comply with pilot's request to the extent possible.
- (5) Aspen tower will receive SCATANA instructions implemented by 26th NORAD Region from Denver Center. Upon instruction to implement SCATANA plan, take the following actions:
 - (a) Notify facility personnel.
 - (b) Shutdown Navaids: None required.
- (c) Broadcast SCATANA instructions exactly as received from Denver Center, 3 times at two-minute intervals on all available frequencies. Rebroadcast once each hour thereafter

until instructed otherwise: "ATTENTION, ATTENTION ALL AIRCRAFT, SPECIAL AIR DEFENSE INSTRUCTIONS. IN ACCORDANCE WITH FEDERAL AVIATION REGULATION 99, SPECIAL SECURITY INSTRUCTIONS ARE IN EFFECT FOR ALL OPERATIONS WITHIN (defined area). (SCATANA instructions pertaining to aircraft operations verbatim as received from Denver Center). AIRCRAFT ON IFR FLIGHT PLANS REMAIN ON THIS FREQUENCY FOR ADDITIONAL INSTRUCTIONS AND/OR NEW CLEARANCES."

(d) No immediate action required for SCATANA tests. Complete SCATANA Test Report, FAA Form 7610-3 and forward to the appropriate office.

LOCAL AREA AIRPORTS Table 1-1

1. Eagle County (EGE) 25 mi. N
a. Private Tower 118.2 AWOS 135.575 @ 970-524-7386)
'b. Runway 07-25, 8000x150 ft., asph., MIRL
c. Elev. 6535
2. Kremmling (Mc Elroy Airfield) (20V) 56 mi NE
a. Unicom 122.8
b. Runway 09-27, 5540x75ft., asph., MIRL
c. Elev. 7411
3. Leadville (Lake County) (LXV) 26 mi. E
a. Unicom 122.8
b. Runway 16-34, 6400x75 ft., asph., MIRL
c. Elev. 9927
4. Buena Vista Muni (7V1) 42 mi. SE
a. Unicom 122.8
b. Runway 15-33, 8300x75 ft., asph., MIRL
c. Elev. 7946
5. Salida (Harriet Alexander Fld) (0V2) 56 mi SE
a. Unicom 122.7
b. Runway 06-24, 7350x75ft., asph., MIRL
c. Elev. 7489
6. Gunnison County (GUC) 41 mi. S
a. Unicom 122.7 AWOS-3 135.075 @ 970-641-3240
b. Runway 06-24, 9402x150 ft., asph., MIRL
c. Elev. 7673
7. Montrose Regional (MTJ) 54 mi. SW
a. Unicom 122.8 ASOS 135.225 @ 970-249-1534
b. Runway 13-31, 8497x100 ft., asph/pfc., MIRL
c. Runway 17-35, 10000x150 ft., asph., HIRL
d. Elev. 5759
8. Paonia (North Fork Valley) (7V2) 43 mi. SW
a. Unicom 122.7
b. Runway 05-23, 4500x60 ft., asph., LIRL
c. Elev. 5798
9. Delta (Blake Fld) (1V9) 62 mi SW
a. Unicom 122.8
b. Runway 03-21, 5600x75ft., asph., MIRL
c. Elev. 5193

10. Rifle (Garfield County) (RIL) 43 mi. NW

- a. Unicom 122.8 AWOS 135.275 @ 970-625-2206
- b Runway 08-26, 7000x100 ft., asph., MIRL
- c. Elev. 5544

11. Glenwood Springs Muni (GWS) 27 mi. NW

- 'a. Unicom 122.8
- b. Runway 14-32, 3305x50 ft., asph., NO LIGHTS
- c. Elev. 5916

12. Grand Junction (Walker Field) (GJT) 78 mi. WSW

- a. twr 118.1 Unicom 122.95
- b. Runway 11-29 10501x150, asph-pfc HIRLS
- c. Elev. 4858

1 10

CHAPTER 2. FLIGHT DATA

2-1. FLIGHT DATA PROCEDURES

- a. Receive weather information from:
 - (1) ASOS
 - (2) DASI (altimeter)
- (3) DEN AFSS has reports and forecasts from the NWS available via landline. Copy verbatim, using standard abbreviations when possible.
 - (4) Other positions, such as GC, LC, TC, or ZDV controller's for PIREPS.
 - b. Disseminate Weather Information.
 - (1) ASE TRACAB is a Limited Aviation Weather Reporting Station (LAWRS).
- (a) Edit and augment ASOS observation in accordance with NWS requirements.
- (b) When ASOS is out of service, record observation on MF1-10C and disseminate weather to DEN AFSS.
 - c. Automatic Terminal Information Service (ATIS), Prepare, Record, and Monitor.
- (1) The ATIS shall always contain the statement "MSAW not available due to mountainous terrain" and "Primary radar not available, radar services and advisories available to transponder aircraft only."
- (2) Include Airport/Field conditions and any vehicle breaking action reports given by Airport Management.
- (3) Place ATIS control "off line" while recording, and during initial monitoring, verify the "off-line" indicator light is illuminated.
- (4) When finished recording and monitoring, place ATIS control "on line". Occasionally monitor via the Wulfsburg receiver.
- (5) Disseminate new ATIS code to all positions verbally, and post on Status Information Areas, (SIA).
- d. Status Information Areas (SIA): Ensure required and pertinent information is accurately entered, monitored, and updated on the SIA and all positions are notified of any change. This includes:

- (1) Current ATIS code
- (2) NOTAMs/SIGMETS
- (3) Equipment outages
- (4) Special activities (Flow Control), Density Altitude, LLWS, Alerts, etc...
- (5) Airport conditions, also current runway conditions, PIREPS on braking action
- e. Field Condition Report (FCR) Processing.
- (1) A FCR may be received via OPS line or verbally through ground or local control frequency.
- (2) Distribute FCR to all positions affected, including ZDV ARTCC, if it could affect flow control.
 - (3) Record New ATIS.
 - f. Flight Plan Information Processing.
- (1) When necessary, input or amend flight plan information via the FDIO or landline to the appropriate facility.
 - (2) Disseminate flight plan information:
- (a) Arrival and Overflight strips shall be stuffed into strip holders and placed at the top of the strip bay to be sequenced by TC/HO.
- (b) Departure strips shall be given to ground control position, unless active. Active strips will be given to either local or radar, whichever is appropriate.
- (c) Transmit a departure message on IFR aircraft when the RDP/ARTS interface is not operational.
 - g. Traffic Management Message Processing.
 - (1) Traffic management messages involving DEN airport will affect our operation.
 - (2) TMU messages should be posted in the "Special Activities" portion of SIA.
 - h. Operate Equipment.
 - (1) Update time and altimeter in ARTS system data area as necessary.
 - (2) Answer telephone and FSS line.

CHAPTER 3. GROUND CONTROL/CLEARANCE DELIVERY

3-1. GROUND CONTROL/CLEARANCE DELIVERY PROCEDURES

- a. Departure procedure/Standard Instrument Departure (SID):
- (1) Assign the Standard IFR, WISCO, or LINDZ3 departure, as per the 7110.65 or appropriate Letter of Agreement; or ASPEN2 with TC approval.
 - (2) Clear RY 15 departures as filed or via DBL then the PDR.
 - (3) When aircraft is taxiing, forward departure strip to LC position.
 - (4) Put VFR flight following departures in the TC tab list.
- (5) Communicate with LC to decide if coordinating non-flight following, VFR aircraft is needed.
 - (6) Departure frequency is VHF 123.8/UHF 288.3.
 - b. Use gate hold procedures as described in Appendix 5.
 - c. Outside Environment.
 - (1) Limited visibility areas exist behind ABO buildings in the South ramp.
 - (2) Aircraft in the run-up area may not be visible from the tower.
 - (3) There is limited room on North and South ramps for taxi.
 - d. Coordinate with LC and/or TC as appropriate:
 - (1) any departure on runway 15.
 - (2) non-transponder aircraft.
 - (3) Aircraft exiting the runway will enter the taxiway unless otherwise coordinated.
- (4) coordinate with Local Control for approval before taxing an aircraft for intersection departure.
 - e. Ground movement procedures.
 - (1) VHF 121.9 is GC frequency.

- (2) Ground control is responsible for all surface movement areas except the runway stubs and runway 15/33.
- (3) Advise LC of route 699 (ARFF) has chosen to use while responding to emergencies.
- (4) Runway 33 is the primary departure runway, and should be used at all times, unless pilot requests runway 15 for operational reasons.
 - (5) Use south run-up area for hazardous materials, bomb threats, etc.
 - f. Expect Departure Clearance Time.
 - (1) Have aircraft taxi to depart as per the 7110.65.
 - (2) When flow control is in effect for DEN:
- (a) Before engine start, if able, call DEN flow and get release time for DEN arrival traffic.
 - (b) Mark the strip and tell pilot release time.
- (c) Taxi aircraft to depart at flow time, (+/- 3 min). Coordinate if this time cannot be met.
 - g. Vehicle Identification.
 - (1) Airport Admin. 1, 2, 3, 4 (airport management)
 - (2) 699 (County designator for ARFF fire truck)
 - (3) Snow Plow 1, 2, 3
 - (4) County Grader 1, 2
 - (5) County Mower
 - (6) Airport Ops 1, 2, 3 (Airport Operations)
 - (7) Blower 1

CHAPTER 4. LOCAL CONTROL

4-1. LOCAL CONTROL PROCEDURES

- a. Outside environment.
- (1) LC has jurisdiction over the Class Delta Surface Area, runway and intersecting taxiways west of the parallel taxiway.
 - (2) Aircraft in run up area may not be visible from the tower.
 - (3) Visibility and radio communications in the area are limited by terrain.
 - b. Inside environment.
 - (1) Strips, pad, and facility developed forms.
 - (a) Forward flight progress strips to TC prior to departure.
 - (b) Retain 5x8 pads until close of each day.
 - (2) Digital Brite Radar Indicator Tower Equipment (DBRITE).
- (a) Use the LC DBRITE display for any terminal radar function, provided the ability to satisfy Air Traffic Control responsibilities regarding aircraft operating on the runways or within the airport traffic area is not impaired.
- (b) Use the quick-look function of the DBRITE to receive inbound notification and information from the TC position. If the quick-look function becomes unusable advise HO/RC to hand-off arrival data blocks to LC position prior to frequency change.
- (c) LC shall ensure all IFR departures are on the correct beacon code, within 1 mile from the end of the runway. LC shall ensure all IFR departures have acquired before five miles, unless coordination has been accomplished with TC. Departure strip shall be forwarded to the radar controller before requesting IFR release. Transfer control to TC within five miles from end of runway when VITOS are in effect or as per the 7110.65 when VITOS are not in effect.
 - (3) VHF 118.85 is the assigned LC frequency.
 - c. Local Control Coordination.
- (1) VITOS Automatic release procedure will always be in effect unless coordinated by LC or TC. Coordinate runway 15 departures and non transponder aircraft prior to release request.

- (2) Aircraft exiting the runway will enter the taxiway unless otherwise coordinated.
- (3) The Runway Incursion Device (RID) shall be activated before allowing a vehicle to occupy or cross the runway. In addition, it shall be utilized when the active runway is not available for more than 30 seconds.
 - d. Local Control Separation Standards.
 - (1) LC is responsible for providing/ensuring separation within its delegated airspace between:
 - (a) Successive departures.
- (b) Arrivals and departures including, actual or possible missed approaches. NOTE: When requesting a departure release from TC, the TC controller is not required to mention inbound traffic if separation will be the responsibility of the local controller. In other words, if separation is not a problem until inside the LC delegated airspace. If there is any question as to when separation will be required, TC will say "Released reference (traffic)." In addition to traffic specified by TC, LC will separate departures from all IFR/SVFR arrivals in the arrival corridor.
- (2) LC is authorized to approve a visual/contact approach without coordination if the aircraft is inside the initial approach fix and separation is insured between:
- (a) The visual/contact approach aircraft and any preceding or following IFR/SVFR aircraft.
 - (b) The visual/contact approach aircraft and IFR departure aircraft.
 - e. Runway Use Program.
- (1) Land runway 15, depart runway 33, except local traffic pattern lands and departs runway 33. Upon pilot request or when conditions warrant, aircraft may be cleared to land on runway 33. Upon pilot request, aircraft may be cleared to depart runway 15 for operational need.
- (2) Avoid having aircraft execute 180 degree turns on the runway, especially at temperatures above 60° as it damages the porous friction coating (PFC) on the asphalt.

CHAPTER 5. TERMINAL CONTROL/HANDOFF

5-1. TERMINAL CONTROL/HANDOFF PROCEDURES

- a. Jurisdictional Boundaries: Terminal Control, TC, and Handoff, HO, have control of the airspace depicted in Appendix 12, except that airspace delegated to Local Control, LC.
 - b. Frequency Information.
 - (1) Aspen Approach and Departure control frequencies are 123.8 and 288.3.
- (2) Denver Center sector frequencies: 6= 128.65/282.2, 11=134.5/327.8, 12= 125.35/354.05, 26= 119.85/256.9.
 - c. Position Specific Equipment.
- (1) Monitor I-PKN Localizer-type Directional Aid and upon alarm or suspected failure of the I-PKN LDA:
- (a) Notify aircraft on VOR GPS-C approach and LINDZ3 departure of failure (use EOVM, VFR climb, etc... to gain altitude)
 - (b) Stop VOR approaches, LINDZ3, ASPEN2, and Standard IFR departures.
 - (c) Notify Sup/CIC and log on FAA Form 7230-4.
- (d) If LDA does not reset itself automatically during the one minute or five minute cycle notify DEN MCC.
 - (e) If LDA does reset and appears normal:
 - Advise aircraft and resume normal operations.
 - Advise DEN MCC of outage and return.
 - d. Arrival Procedures.
- (1) Aspen approach control has control of all inbounds from ZDV as stated in the ASE, ZDV Letter of Agreement.
- (2) TC shall be responsible for the separation of successive IFR/SVFR arrivals until the time LC can provide visual separation.
 - (3) TC may vector for visual approaches if the weather is 6000/5 or better.

(4) Charted visual approaches should be utilized when conditions permit unless operational need dictates otherwise.

e. Departure Procedures.

- (1) TC has control of IFR/SVFR departures leaving 10,000 FT MSL, unless otherwise coordinated.
- (2) Ensure automatic acquisition is on an "R" tag for all departures. If initial acquisition is with a "C" tag, coordinate with the appropriate ZDV sector.

f. Holding

- (1) North of DBL on 344 radial 14000 or above.
- (2) East of DOWNY intersection, on the RIL Localizer, coordinate with Sector 11.
- (3) At LINDZ intersection at TC's discretion.

g. Special Procedures.

If unscheduled radar outage, use CENRAP or resolve all potential conflicts, coordinate with ZDV. Approach airspace reverts to Sector 12, when accepted, Aspen is a VFR ATCT.

h. Coordination Procedures.

- (1) Coordinate arrivals, departures, and overflights with ZDV and intrafacility positions. Initiate/accept automated/non-automated handoffs. Advise RIL approaches to cancel IFR with ASE or ZDV for cancellation or missed approach.
- (2) When ARTS is not in service coordinate and provide inbound notification at least 15 nautical miles from touchdown to LC on IFR, and SVFR, arrivals
 - (3) Coordinate and relay departure times to ZDV when FDIO is inoperative.
- (4) Coordinate IFR/SVFR arrival aircraft that do not have operating transponders with LC at least five minutes before their airport estimate.
- (5) IFR clearances for Glenwood Springs departures may be relayed through DEN FSS.
 - i. Process Flight Plan Information.

- (1) Flight plan information may be obtained from the pilot, the aircraft owner/operator, Denver AFSS, or the FSS through which the flight plan was filed.
- (2) Coordinate with Flight Data, FD, to enter flight plan information into FDIO in accordance with standard FDIO formats. When FDIO is inoperative, record information on flight progress strips in the same format as computer strips.
- (3) Departure strips shall be delivered to TC without strip holders and placed directly on the console. Arrival strips shall be delivered to TC in strip holders and placed at the top of the strip bay for proper sequencing.
- (4) Forward amended flight plan data to appropriate ZDV sector/s via landline or via the FDIO.
 - j. Process Miscellaneous PIREP and Weather Data.
- (1) Copy PIREP information on PIREP form 7110-2, Distribute PIREPS to Flight Data for proper distribution and dissemination.
- (2) Advise ZDV immediately of any pilot-reported conditions that would significantly affect their operation.
 - (3) Retain a copy of the PIREP at TC.
- (4) Hazardous Weather: Broadcast once on all frequencies "Attention all aircraft. Hazardous weather information for (geo-graphical area) available from Flight Watch or Flight Service."
 - k. Status Information Area.
 - (1) Post flight data information in the SIA.
 - (2) Post significant equipment outages in SIA

CHAPTER 6. OPERATIONS SUPERVISOR/CONTROLLER IN CHARGE

6-1. OPERATIONS SUPERVISOR/CONTROLLER IN CHARGE PROCEDURES

- a. When the Operations Supervisor, OS, or Controller in Charge, CIC, in charge of the watch (individual signing on the 7230-4) is in the cab, that individual shall sign on the 7230-10, OT log. When that person leaves the cab, TC should assume the CIC duties (sign on 7230-10, OT log).
- b. If the TC cannot assume the duties, e.g., not qualified, training, etc.., another qualified controller in the cab shall (sign 7230-10).

c. OS/ CIC duties include:

- (1) Direct and monitor the TRACAB operation, anticipate traffic flow and implement procedures for effective traffic management (ref. Appendix 5, when VITOS need to be cancelled etc...).
 - (2) Ensure the operation functions in accordance with established procedures.
 - (3) Coordinate with OJT instructors and allow for OJT.
- (4) Combine/decombine positions of operation as staffing and training conditions warrant.
 - (5) Perform the Watch Checklist (Appendix 2).
- (6) Inhibit MSAW alert by entering "MSAW A ♥ "; enable MSAW by entering "MSAW A ↑ " on the FD keyboard when conditions warrant.
- (7) Perform controller duties, coordinate inter/intra-facility activities, and assist controllers, as necessary, particularly during unusual or emergency situations.
- (8) Ensure appropriate personnel are notified concerning runway closures, hazardous conditions, equipment malfunctions, or other safety related items.
- (9) Assign specialists to positions of operation, taking into account their capabilities and qualifications, and maintain awareness of air traffic activity.
- (10) Rotate specialists through positions of operation and provide breaks for all personnel.
- (11) Ensure any restrictions, that have been implemented, are removed when no longer necessary.

- (12) Ensure transition checklists are completed when necessary. Checklists are located in following appendices and the position binders.
- (13) Notify DEN MCC of any equipment outage/problem, make corresponding 7230.4 log entry. E.g. (E 1405 123.8 MAIN OTS, MCC/FB NOTIFIED.)
- (14) Ensure all equipment RTS is acceptable and a corresponding log entry is made to the 7230.4 log. E.g. (E 1430 123.8 MAIN RCVR RTS, AF/CH.)
 - (15) Ensure FD accurately updates the status information areas.
 - (16) Perform other duties as assigned/needed.

Operations Supervisor/Controller-in-Charge Opening Tower Checklist, ensure the following:

- 1. Conduct recorder checks, and MSAW aural alarm check.
- 2. Compare DASI to the ASOS altimeter. Note any difference on the daily log and post correction factor at each DASI. If difference is greater than .05, log DASI out of service and notify MCC.
- 3. Check radar displays, ARTS, CENRAP, maps, tab, MSAW, etc., for proper operation and status. Change beacon channels.
- 4. Check FDIO equipment on third floor to insure it is on line.
- 5. Assume control of airport lighting, verify PAPIS lights on, and runway lights, as needed.
- 6. Check on terminal area forecast and current NOTAMS.
- 7. Record and transmit ATIS.
- 8. Check light gun.
- 9. Check primary and standby receivers and transmitters on all control frequencies.
- 10. Initiate daily log Form 7230-4, check carryovers from previous log.
- 11. Check runway visually. Obtain RCR from Airport Management, if necessary. Post in SIA.
- 12. Ensure all equipment in tower is operational or logged OTS.
- 13. Advise ZDV of opening:
 - a. NAVAID status.
 - b. Airport conditions and activities
 - c. Special activities (CENRAP)
 - d. Existing NOTAMS.

14. Call ZDV TMU with current/expected flow rate.

- 15. Broadcast opening at 0700 LCL on all control frequencies. "Attention all aircraft, Aspen Tower and Approach Control are now in operation, Aspen Delta airspace is now in effect."
- 16. **EACH DAY.** At 0700 conduct emergency phone line check.
- 17. THURSDAY ONLY. Obtain ground to air check on 121.5. Log on 7230-4.
- 18. THURSDAY ONLY. Check battery Transceiver. Log on 7230-4.
- 19. On the 1st day of each month: conduct Cellular phone check by placing a quick call to 925-9267. Log on 7230-4

Afternoon Watch Checklist, ensure the following:

- 1. Review SIAs.
- 2. Receive verbal briefing from previous CIC.
- 3. Check entries on 7230-4 log, and sign on.
- 4. Check MSAW aural alarm

Close of Business Checklist, ensure the following:

- 1. Complete delay report, if necessary, and enter in OPSNET by 10:00pm.
- 2. Initiate 7230-10 forms. Carryover to next day's 7230-4 any outstanding items.
- 3. Complete and check current 7230-4 and 7230-10 forms.
- Dispose of used 5x8 traffic sheets.
- 5. Count, bundle, and log flight-progress strips.
- 6. Log traffic count, clear counter.
- 7. Check with DEN AFSS for NOTAMS, and overdue inbound VFR aircraft.
- 8. Set airport lighting switches: (Ry. lights-off-Control-Term, REIL-off-A/G, PAPIS-off-A/G, Beacon-auto,) check proper operation.
- 9. Set air conditioner/heater controls.
- 10. Record and verify transmission of overnight ASOS.
- 11. Advise ZDV of closing:
 - a. Current altimeter
 - b. NAVAID status
 - c. Airport conditions and activities
 - d. Any special activities
 - e. Existing NOTAMS
 - f. Traffic.
- 12. Make announcement on all control frequencies at close of business, "Attention all aircraft, Aspen tower and Approach Control are now closed. Aspen Delta Airspace is no longer in effect."
- 13. Turn off all unnecessary lights (leave stairwell on) and check to ensure that all appliances are off.
- 14. Staple logs together and place on SUP'S desk.
- 15. Verify building is locked upon leaving.

EQUIPMENT OUTAGE CHECKLISTS

Transition RADAR to CENRAP

- a) Supervisor/controller-in-charge:
 - 1. Notify ZDV SE to turn on CENRAP data
 - 2. Move panel switch from LIVE to CENRAP
 - 3. Make SUP keyboard entry- Multifunc. 6 C E Enter
 - 4. Notify ZDV Area Manager
 - 5. Notify DEN MCC.
 - 6. Ensure ATIS is updated.
 - 7. Document status on FAA Form 7230-4.
 - 8. Indicate status on SIA board.
 - 9. Is Significant outage report needed??
- b) Flight Data:
 - 1. Update the ATIS. "Conflict alert and low altitude advisories not provided."
- c) Local Control:
 - 1. Coordinate with Radar Position.
 - 2. Turn down beacon video gain control
 - 3. Notify Sup/CIC.
- d) Radar Control:
 - 1. Deconflict all traffic
 - 2. Turn down beacon video gain control
 - 3. Coordinate with Local Control and ZDV sectors
 - 4. Revert to CENRAP procedures.
 - 5. Check north mark/map alignment
 - 6. Verify ARTS data is accurate
 - 7. Notify Sup/CIC.

Transition CENRAP to RADAR

- a) Supervisor/controller-in-charge:
 - 1. Move panel switch from CENRAP to Live
 - 2. Make SUP keyboard entry- Multifunc. 6 C I Enter
 - 3. Verify ARTS/RADAR data is accurate
 - 4. Notify ZDV Area Manager
 - 5. Notify DEN MCC.
 - 6. Notify ZDV SE to turn off CENRAP data
 - 7. Ensure ATIS is updated.
 - 8. Document status on Form 7230-4.
 - 9. Indicate status on SIA board.

EQUIPMENT OUTAGE CHECKLISTS

- b) Flight Data:
 - 1. Update the ATIS.
- c) Local Control:
 - 1. Turn up beacon video gain control
 - 2. Coordinate with Radar Position
 - 3. Notify SUP/CIC
- d) Radar Control:
 - 1. Turn up beacon video gain control
 - 2. Check map alignment
 - 3. Verify ARTS/RADAR data is accurate
 - 4. Coordinate with Local Control and ZDV sectors
 - 5. Revert to normal procedures
 - 6. Notify Sup/CIC.

Transition Radar to Non-radar

- a) Supervisor/controller-in-charge:
 - 1. Initiate CENRAP if possible.
 - 2. Notify DEN MCC.
 - 3. Notify ZDV Area Manager.
 - 4. Ensure ATIS is updated.
 - 5. Document status on FAA Form 7230-4.
 - 6. Indicate status on SIA board.
 - 7. Is Significant Outage Report needed??
- b) Flight Data:
- 1. Update the ATIS, "Aspen Radar OTS, contact ZDV on 125.35 for Radar Advisories and Services."
 - c) Local Control:
 - 1. Coordinate with Radar Position.
 - 2. Notify Sup/CIC.

EQUIPMENT OUTAGE CHECKLISTS

- d) Radar Control:
 - 1. Deconflict all traffic.
 - 2. Turn up video gain controls- verify beacon loss
 - 3. Coordinate with Local Control and ZDV sector 12.
 - 4. Revert to non-radar procedures.
 - 5. Notify Sup/CIC.

Transition Non-radar to Radar

- a) Supervisor/controller-in-charge:
 - 1. Ensure suitability of radar.
 - 2. Notify DEN MCC.
 - 3. Notify ZDV Area Manager.
 - 4. Ensure ATIS is updated.
 - 5. Document status on Form 7230-4.
 - 6. Indicate status on SIA board.
- b) Flight Data:
 - 1. Update the ATIS.
- c) Local Control:
 - 1. Ensure suitability of radar.
 - 2. Exercise the "ALL" filter switch.
- d) Radar Control:
 - 1. Ensure suitability of radar.
 - 2. Exercise the "ALL" filter switch.
 - 3. Coordinate with ZDV sector 12 for airspace return.
 - 4. Resume normal radar procedures.

Transition ARTS to Non-ARTS

- a) Supervisor/controller-in-charge:
 - 1. Notify automation specialist.
 - 2. Notify DEN MCC/SE.
 - 3. Ensure termination of interface.
 - 4. Notify ZDV Area Manager (extended outage).
 - 5. Ensure code select box is set.

EQUIPMENT OUTAGE CHECKLISTS

- 6. Staff hand-off position, if necessary.
- 7. Document status on FAA Form 7230-4.
- 8. Indicate status on SIA board.
- 9. Is Significant Outage Report needed?

b) Local Control:

- 1. Coordinate with Radar position.
- 2. Set display control panel.
- 3. Ensure proper beacon video-levels.
- 4. Ensure DM message for all IFR departures.
- 5. Notify Sup/CIC.

c) Radar Control:

- 1. Coordinate with Local Control, ensure inbound notification at least 15 flying miles from the airport.
 - 2. Notify ZDV sector/s of outage, manually hand-off all departures.
 - 3. Set code-select box.
 - 4. Set display control panel.
 - 5. Change aircraft to proper codes.
 - 6. Notify Sup/CIC.
 - 7. Ensure proper beacon video-levels.

d) Flight Data:

1. Update ATIS, "Collision avoidance system and low altitude alert system not available."

Transition Non-ARTS to ARTS

- a) Supervisor/Controller-in-charge:
 - 1. Notify automation specialist.
 - 2. Notify DEN MCC/SE.
 - 3. Notify ZDV Area Manager.
 - 4. Ensure system data area is updated.
 - 5. Ensure interface is activated.
 - 6. Ensure restoration of ARTS data base.
 - 7. Ensure proper program configuration.
 - 8. Verify proper MSAW status.
 - 9. Staff Flight Data position, as necessary.
 - 10. Document status on FAA Form 7230-4.
 - 11. Update SIA board.

EQUIPMENT OUTAGE CHECKLISTS

b) Flight Data:

- 1. Update systems area and ATIS.
- 2. If ARTS/RDP interface is operational, restore data base on FDIO.
- 3. If ARTS/RDP interface is non-operational, enter all flight plans into ARTS.

c) Ground Control:

1. Ensure all departure flight plans are entered into ARTS.

d) Local Control:

- 1. Exercise the "ALL" filter switch.
- 2. Coordinate with Radar position.
- 3. Ensure all departure flight plans are entered into ARTS.
- 4. Notify Sup/CIC.
- 5. Update system data area.
- 6. Adjust alphanumeric gain to proper level.

e) Radar Control:

- 1. Exercise the "ALL" filter switch.
- 2. Coordinate with Local Control.
- 3. Initiate data blocks as appropriate.
- 4. Ensure all active flight plans are entered into ARTS.
- 5. Notify Sup/CIC.
- 6. Notify ZDV sector/s.
- 7. Update the system data area.
- 8. Adjust alphanumeric gain to proper level.

Transition FDIO to Non-FDIO

- a) Supervisor/CIC:
 - 1. Notify control positions.
 - 2. Staff handoff position, if necessary.
 - 3. Notify MCC.
 - 4. Notify ZDV Area Manager.
 - 5. Advise FSS to forward SIGMETS.
 - 6. Document status on FAA Form 7230-4.
 - 7. Indicate status on SIA board.
 - 8. Is Significant Outage Report needed?

EQUIPMENT OUTAGE CHECKLISTS

- b) Flight Data:
 - 1. Notify Sup/CIC.
- 2. Change all inactive flight plan codes in ASE system to local beacon codes and enter into ARTS.
 - c) Ground Control:
 - 1. Ensure all departures are assigned local beacon codes.
 - d) Local Control:
 - 1. Ensure all aircraft are assigned local beacon codes.
 - e) Radar Control:
 - 1. Ensure all aircraft and strips are assigned local beacon codes.
 - 2. Coordinate departure times to ZDV when FDIO is inoperative.

Transition Non-FDIO to FDIO

- a) Supervisor/CIC:
 - 1. Notify control positions.
 - 2. If ZDV computer flop occurs, ensure restoration of ARTS.
 - 3. Is Flight Data position, necessary?
 - 4. Notify DEN MCC.
 - 5. Notify ZDV Area Manager.
 - 6. Advise FSS not to forward SIGMETS.
 - 7. Document status on FAA Form 7230-4.
 - 8. Indicate status on SIA board.
- b) Flight Data:
 - 1. Resume normal operation.
- 2. Replace manual strips with FDIO generated strips and enter flight plans into ARTS. Restore ARTS data base.
 - c) Ground Control:
- 1. If ZDV computer flop occurs, ensure all departures are assigned new beacon codes, issued new strips, and entered into ARTS.

EQUIPMENT OUTAGE CHECKLISTS

d) Radar Position:

1. Ensure all flight plans are assigned new beacon codes, issued new strips, and entered into ARTS.

NAVAID Outage Procedures (DBL VOR and/or IPKN LDA)

Supervisor / CIC responsibilities:

- 1. Notify DEN MCC.
- 2. Notify ZDV Area Manager.
- 3. Notify Flow Control.
- 4. Notify Airport Operations
- 5. Notify ABO/Aspen Aviation
- 4. Ensure ATIS is updated.
- 5. Document status on FAA form 7230.4.
- 6. Indicate status on SIA board.
- 7. Clear General Aviation aircraft as follows, "Via DBL and or Via first filed fix on route, insuring they exit out the appropriate gate.
- 8. DBL ots, GPS-C is the only General Aviation instrument approach, if IPKN LDA ots there is no GA instrument approach.
 - 9. Is Significant Outage Report needed?

NOTE: The Lat.-long. for:

IPKN LDA site 39'09'14.169"N / 106'49'16.072"W

LINDZ 39'23'32"N / 107'09'49"W

GLENO 39'20'51.82"N / 107'22'08.05"W

ASSIGNMENTS, OPERATING INITIALS, SIGN ON/OFF PROCEDURES

1. Personnel listing, operating initials and supervisor assignments: Unless a signature is requested, use operating initials for all records.

,			
Claire Mileca	(MC)	Ron Durbin	(BW)
Clarrisa Hendircks	(CH)	Scott Phipps	(PP)
Alex Mikhalek	(AM)	Jeremy Noble	(NO)
Ginger Golden	(GG)	Toye Flaherty	(TL)
Dwayne Thornton	(TN)	Gentri Gemar	(LG)
Kevin Steltzlen	(KS)	Darryl DellaRossa	(DD)

2. Sign on/off and log maintenance procedures:

(RJ)

RJ Houser

- a. The Area Supervisor/CIC shall ensure that Specialists complete FAA Form 7230-4 (Daily Record of Facility Operation), and 7230-10 (Position Log) when signing on and off duty and/or position.
- b. Provide FAA Form 7230-4 and ASE 7230-4A, (-4) for a daily facility Log and (-4A) for signing on/off.
- c. Personnel shall sign in at the beginning of their watch and log the time out (with initials) at the end of their watch. The OJTI shall log their total OJT time for that day in the remarks column associated with their name.
- d. The AS/CIC shall prepare 7230-4 and 7230-10 headers for the next day.
- e. The AS/CIC shall certify hours of work on the bottom of the sign-on log (ASE 7230-4A).
- f. The following two letter codes shall be used on FAA Form 7230-10 to indicate position type:

LC - Local Control	FD - Flight Data
GC - Ground Control	HO - Hand Off
TC – Terminal Control	OT - Other Duties (CIC)

BIDDING BASIC WATCH SCHEDULE, ANNUAL LEAVE, OVERTIME/CALLBACK; AS NEGOTIATED WITH ASE NATCA

- 1. Basic watch schedule. (local time)
 - a. Standard Work Schedule

1st day back 1400-2200

2nd day back 1400-2200,1200-2000,1000-1800

3rd day back 1400-2200,1200-2000,1000-1800,0900-1700,0700-1500

4th day back 1200-2000,1000-1800,0900-1700,0700-1500

5th day back 0700-1500

b. Alternative Work Schedule

1st day back 1300-2200

2nd day back 1300-2200, 1100-2000, 0900-1800, 0700-1600

3rd day back 1300-2200, 1100-2000, 0900-1800, 0700-1600

4th day back 1100-2000, 0900-1800, 0700-1600

5th day back 0700-1600

- c. These shifts may be adjusted with employee consent.
- d. 1400-2200 and 1200-2000 shifts may be changed to a 1300-2100, as needed, due to staffing.
- e. Employees are allowed to flex up to one half hour early on a shift beginning at 0700. Employees may arrive up to one half-hour after the start time of any shift except a 0700 or a shift ending at 2200.
- 2. Selecting regular days off, requesting prime time and other annual leave.
 - a. Days Off/Alternate Work Schedule (AWS) -- General Rules.
 - (1) Only FPLs may voluntarily participate in AWS. Developmentals shall be assigned a schedule to enhance training. Newly certified FPLs will be assigned RDOs by management.
 - (2) The AWS/compressed work schedule must be worked within a pay period consisting of nine work days, with eight nine hour days and one eight hour day.
 - (3) Employees on compressed work schedules are not eligible to earn credit hours. Unless coordinated with management, the additional day off generated by the AWS shall be taken during the 1st or 2nd week of the pay period, but

prime time leave on the second round. A week is defined as 1 to 5 consecutive working days off.

- (4) All leave requests will be approved or disapproved by the supervisor and posted on the 12 month calendar in the Sups office. Approved leave will be indicated by a number in front of the employees initials. Disapproved leave will be posted with the letter "R" in front of the employees initials indicating that the leave has been disapproved, but on request.
- 3. Procedure for assignment/call back for overtime/Comp-Time
 - a. Use the following priority, by groups, reference the overtime log.
 - (1) Controllers (Volunteers for O/T). Lowest total 1st.
 - (2) Controllers (Non-volunteers). Lowest total 1st.
 - b. Regardless of the reasons, all personnel contacted that accept or refuse the assignment, will be charged the amount of offered O/T hours for recording and future priority purposes. The only exceptions would be if the requestor does not directly speak to the worker or the worker is requested to work on an RDO adjacent to approved A/L. The individual actually working the hours may request payment in O/T money or Comp. Time.
 - c. The "first" worker contacted will be assigned to work the O/T. This worker may ask the requestor to try to get someone else and will stand by the telephone until released from the assignment. In the event, a replacement cannot be found, the "first" worker shall be responsible to work the O/T assignment.
 - d. New personnel or personnel newly certified on Local Control shall be given a Facility average of accumulated hours.
 - e. Changing priority groups shall be approved in January. Changing from non-volunteer to volunteer, paragraph "d" applies.
 - f. The FAA/NATCA Labor Agreement shall apply for basic guidelines.

must be in conjunction/adjacent to the other RDOs. The eight hour work day, in the AWS schedule requested, may fall on any day during the pay period and the standard work schedule will be followed. Approved requests for RDOs and eight hour days cannot be changed permanently, except by mutual agreement of the employee and management, until the next bidding cycle.

- (4) Each bidding cycle shall extend for 12 months. New watch schedule rotations shall be effective the first pay period after May 1. Personnel shall bid on the next RDO cycle Feb. 1. Supervisors shall be responsible for this process. NATCA and Management shall negotiate RDO changes at other than the normal bidding cycle.
- (5) Management has the option to change an employee's schedule from AWS to non-AWS in accordance with the NATCA/FAA Agreement.
- (6) Seniority will be determined by NATCA and shall be used for selecting RDO's and prime time leave. FPLs and developmentals projected to be FPL within the present bidding cycle will pick from a list of available days off provided by Management.
- (7) The number of AWS slots may change before each bidding period, depending on staffing. All changes in AWS slots shall be negotiated with the Union before the bidding period.
- (8) When needed, vacancies in the watch schedule are to be filled by seniority bidding. In the event of insufficient bidders, Management shall reassign RDOs using reverse seniority selection.

b. Annual Leave.

- (1) Prime time leave is defined as a 12 month period starting May 1st and ending April 30th.
- (2) Non-prime time leave (Other Leave) shall be granted on a "first come" basis determined by the date on the SF-71 (application for leave) submitted by the employee.
- (3) Management will assign each controller a two day period from March 1st to March 31st for the purpose of selecting annual leave during the next prime time period. Management will specify how many personnel may be off at one time. Each employee is entitled to a maximum of two consecutive or non-consecutive weeks of prime time priority leave on the first round of bidding. Each employee will be offered the opportunity to bid an additional week of

FLOW PROCEDURES

ASE Delay Monitoring

The purpose of the ASE delay monitoring procedure is to gather delay information and pass it to Denver Center. Reportable delays are of 15 minutes or more, experienced by IFR aircraft, which result from the ATC system. (Ref. FAA 7210.55AA)

- 1. Monitoring for potential delays shall begin when any segment of the air traffic system is lost or degraded to the point of reducing the air traffic capacity at the Aspen Airport. This includes, but is not limited to; equipment outages; closed runway, taxiways, or ramp; or weather conditions at or less than 6000-foot ceilings or 3 miles visibility. Note: Do not log delays for aircraft that will not accept approach or departure when available.
- 2. For inbound or en-route aircraft in ASE airspace Terminal Control or Handoff shall record the time an aircraft enters hold in block 15 of the flight progress strip. Only if the delay is greater than 15 minutes; when the aircraft diverts or is allowed to proceed to Aspen, enter the time in block 18 of the flight progress strip.
- 3. For outbound aircraft, Ground Control shall record the request for taxi or engine start time, plus five minutes to account for taxi time, in block 15 of the flight progress strip. When the aircraft is cleared for takeoff, Local Control shall place the time in block 18 of the strip.
- 4. In all cases, the reasons for the delays shall be coordinated with the Evening CIC, either verbally or written in the "remarks" section of each flight progress strip.

ASE Gate Hold Procedure

The purpose of the ASE gate hold procedure is to restrict departure delays to 15 minutes or less after engine start and taxi time. Institute the gate hold procedure when anticipated departure delays reach or exceed 15 minutes.

- 1. Include the message on the ATIS, "Gate hold procedures are in effect. Contact Ground Control before engine start. Monitor Ground Control for updated start and taxi times."
- 2. When a pilot contacts ground, issue an expected engine start or taxi time, as appropriate. The sequence of departure will correspond with initial call up time unless flow control restrictions dictate otherwise.
- 3. Advise Denver Flow that ASE is using gate hold procedures.

FLOW PROCEDURES

ASE Traffic Management Procedure

The purpose of the ASE Traffic Management Procedure is to provide guidance for effective, traffic management rates of inbound and outbound aircraft. The Supervisor or CIC shall consider weather conditions and traffic demand when setting the flow rate.

- 1. Before coordinating with Denver Flow Control, consider expected demand (ABO), current weather, and forecast weather (AFSS).
- 2. Only under ideal conditions can ASE accept 20 inbound aircraft per hour. This involves only straight-in approaches, and applying visual separation to launch departures. Note: Allowing 20 inbound aircraft per hour may limit departures. Do so, only when there is low departure demand.
- 3. When anticipating a large number of departures, the acceptance rate should be set at 16 or 12 aircraft per hour. This corresponds to approximately 45 or 30 miles in trail at each gate.
- 4. Anytime circling approaches are being executed; the acceptance rate must be only six aircraft per hour. This corresponds to approximately 60 miles in trail at each gate.
- 5. Coordinate with Denver Flow, as early as possible, any anticipated busy periods.

 Aspen Base Operations may indicate a period of heavy departures. It is appropriate to limit the inbound acceptance rate during these times, especially when ramp space is a concern.
- 6. Note that airport management can close the airport to whomever they like. For example, if the ramp becomes congested, airport management may issue a NOTAM to close the airport to inbound GA aircraft. If this occurs, the Supervisor or CIC shall log the time and who gave the closure instruction. Only airport management may close the airport, NOT Aspen Base Operations.
- 7. Although weather delays are not reportable, Denver Center Flow needs to be aware of weather delays that reach or exceed 15 minutes. This allows Flow to regulate the aircraft arrival rate. Coordinate with flow as soon as aircraft cease to accomplish the approach or refuse to accept approach clearance due to weather. Update with Flow as delay times increase in 15 minute increments, i.e., 15 minute delays, 30 minutes, 45 minutes...
- 8. Coordinate with Denver Flow and use the tools they have to best manage Aspen's traffic. However, do not let Flow force Aspen to resolve inbound problems at the expense of departing aircraft. There must be an equitable use of airspace between inbound and outbound aircraft. When necessary, hold the appropriate number of aircraft at Red Table VOR then stop taking handoffs, to maintain an adequate departure flow.

BIRD STRIKE/BIRD HAZARD PROCEDURES

- 1. Bird Strike to aircraft.
 - a. Complete FAA Form 5200-7 (Bird Strike/Incident Report) located in the Tower Cab emergency binder, whenever a pilot reports a bird strike.
 - b. Notify airport management and Region Operations Center (ROC).
 - c. Log incident on Daily Log Form 7230-4.
- 2. Bird Hazard. The Facility Air Traffic Manager shall report to the Denver Flight Standards District Office Bird Hazard Control Coordinator or Airport Certification Safety Inspector and ANM-530 any trend toward an increase in bird activity near the airport.

INVALID MODE-C REPORTING

- 1. All positions shall advise the Supervisor or Controller In Charge immediately after advising a pilot to "stop altitude squawk" because of invalid mode-C.
- 2. Supervisor or Controller In Charge shall log time, aircraft identification, and amount of altitude deviation on the 7230-4.
- 3. Air Traffic Manager shall report the above information to the regional FSDO in a weekly report.

CONTROLLED AREA INTRUSIONS

PROCEDURE:

- 1. When it appears an aircraft has entered the Aspen Class D Surface Area, without authorization, the Supervisor or CIC shall ensure tracking and identification action is taken.
- 2. If the aircraft is identified, comply with the provisions of Order 8020.11, paragraph 82.
- 3. If the aircraft cannot be identified, take the following action:
 - a. Observe to the extent possible the type, color, altitude, and last observed direction of flight.
 - b. Note date, time, and nature of violation on Facility Log.
 - c. Advise the Denver Center Area One Supervisor of all items noted above. If radar tracking is possible with the Aspen ATCRBS, attempt a handoff to ZDV to provide continuity of tracking and eventual identification.
 - d. Notify Air Traffic Manager.
 - e. Notify HUB Manger.

ASPEN TOWER SMOKING POLICY

The Aspen NATCA Facility Representative has negotiated with Aspen Tower and SFO management the following items to conform with the Department of Transportation bulletin implementing smoking restrictions in DOT controlled buildings.

- a. The entire base building including tower link and the entire tower structure is designated as a non-smoking area at all times.
- b. The tower catwalk, outside the "AF" equipment room door and outside the southeast facility entrance is designated smoking areas.
- c. Personnel smoking on the tower catwalk, outside the equipment room, or outside the southeast entrance shall keep the tower/building access doors closed.

CENRAP PROCEDURES

CENRAP: This program is used as a backup system when the terminal radar fails and/or is out-of-service. There are no primary radar targets available during CENRAP and only secondary radar targets are displayed. CENRAP requires that the ARTS processor be operational.

CENRAP procedures.

- A. Use the CENRAP Transition checklist in appendix 3
- B. Separation standards for IFR aircraft (center of virgule"/")
 - 1. 1000 feet vertical (can not use mode c readout)
 - 2. 5nm lateral
 - 3. Vertical passing/diverging IAW 7110.65(5-75b)
 - 4. Visual according to 7110.65 (7-10a)
 - 5. 2½ nm. from adjacent RADAR airspace
 - 6. 5 nm. from edge of display
 - 7. All appropriate wake turbulence criteria
- C. VFR aircraft receive normal sequencing and traffic alerts.
- D. Beacon gain shall be turned down to eliminate retrace/ring around and other clutter.
- E. An entry shall be made on the daily log, FAA 7230-4, as follows: CENRAP initiated for (RADAR failure, training, testing)
- F. ATIS-include "CA and Low Altitude advisories not provided"
- G. Ensure correct range/azimuth orientation of scope and ZDV data with the "north mark". A beacon data block (code 0377) sent by the host computer displayed by the ARTS on a 360-degree bearing and 40 nm. distance.
- H. Minimum altitudes targets can be tracked if different from our normal RADAR.
 - 1. 9200 in the valley north of the field to Triangle.
 - 2. 9300 in front of Triangle to 5 mi. northwest of Gerbaz.

SIGNIFICANT OUTAGE REPORTING

The following information is provided to assist you in preparing the Significant Outage Reporting Worksheet (attached). The intent of these requirements is to ensure that high level FAA officials have accurate and timely information regarding equipment issues that may be questioned. Because national and media focus changes, we are asked to use reasonable judgment in helping to determine what comprises a significant event/outage.

If the event/outage meets any of the following criteria, a significant outage report should be initiated. While the following examples are guidelines, there may be other events/outages which require a significant outage report. If you have any doubt, report the event/outage to the Air Traffic Manager or Air Traffic Control System Command Center (ATCSCC), if the ATM is unavailable, who will assist you in the determination of the level of significance.

Event/Outage Criteria:

- a. Evacuations of facilities which may be due to fire, smoke, bomb threat, weather, hazardous materials conditions, etc.
- b. Major power event/outages or major loss of communications, radar equipment, NAVAIDS, or automation systems including FDIO.
- c. Significant service interruptions contributing to user delays or impacting the National Airspace System, the users, and/ or the workforce, such as runway lights, PAPI lights, REILS, etc.

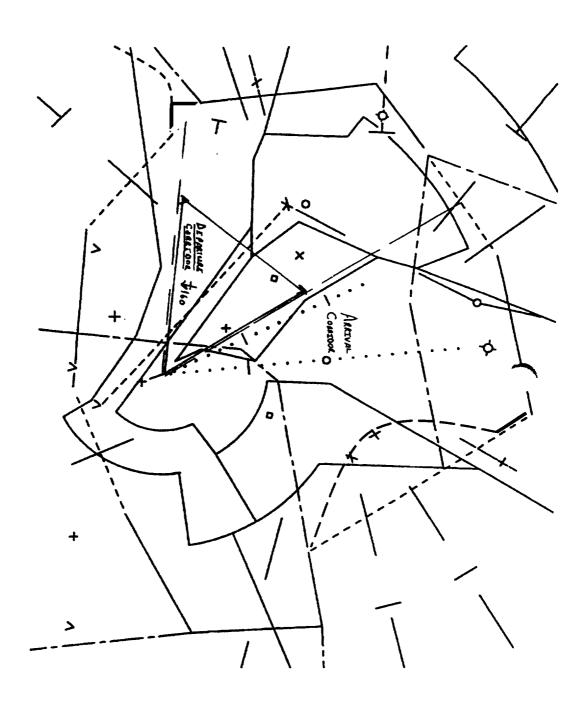
It is critical that the information provided represent a combined and agreed upon AT and AF position on the event/outage and the resultant impacts. While it is ultimately an Airway Facilities requirement to report equipment outages and to take the appropriate steps to repair equipment failures, it is also of interest to Air Traffic as it effects system users and facility operations. Therefore, it is expected that each discipline assist the other to compile and forward the report. There is joint responsibility, and accountability, to ensure that the appropriate information is forwarded.

SIGNIFICANT OUTAGE REPORTING WORKSHEET

Outage	Time	AS/CIC			
			cility management port format is on th	. Together you and the Moe MCC computer.	CC will
Completed b	y Ti	me			
questions. a. Location b. Time of c. What ha	n of the event/outage the event/outage ppened.	tage.	notify the ATCSCO	C (703-904-4525). Answe	r these
d. What ba Completed by	ckup is in use.	me			
office via ANI them a copy of	M-530 at 206-22 f the Significant	27-2530. Brief th Outage Report w	em on the situation	otify the Air Traffic Division and tell them that the MCd. After hours, request the perations Br. Mgr.	CC will fax
Completed by	y Tiı	ne			
report, being s 4459 and ANN a. Addition b. How wel c. What is t d. What AT	ture to answer the M-530, 206-227- al details on whe all did the transition the current situate of restrictions were the current situate.	e questions belove 1534. at happened. on to backup proc	v. Ask MCC to fax ceed? ?	ion with the MCC comple the report to the ATCSC	te the outage C, 703-904-
Completed by	Tir	ne			
The AS/CIC ar	nd the MCC must Division Manag	st jointly ensure t		RIOR TO 6AM EASTER Significant Outage Report and ASE ATCT.	
S. AS THEY	OCCUR. Provi	de copies of any	additional written i	eports to the Air Traffic D	Division

- 6. AS THEY OCCUR. Provide copies of any additional written reports to the Air Traffic Division Manager, fax #206-227-1534, and the ATCSCC, fax #703-904-4459.
- 7. **WHEN COMPLETE.** Place a copy of the Significant Outage Report and this worksheet in the ASE ATM's mail slot.

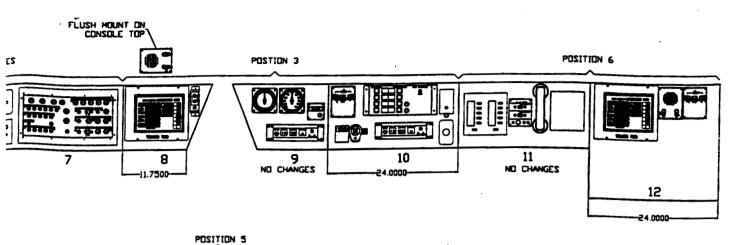
ASE Form 7110.2

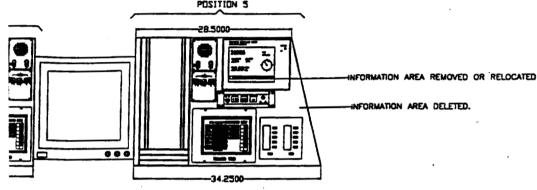


ERROR PREVENTION PROGRAM

Bach April and October a committee, including management and controllers, shall meet to analyze causal factors of past errors system wide for trends and hazard potential for our facility. The committee shall develop safety objectives for implementation in the facility training program which will be tracked and measured quarterly by the OS. The committee shall choose controllers to provide an evaluation, from their point of view, on airspace and procedures, and emergency checklists and training.

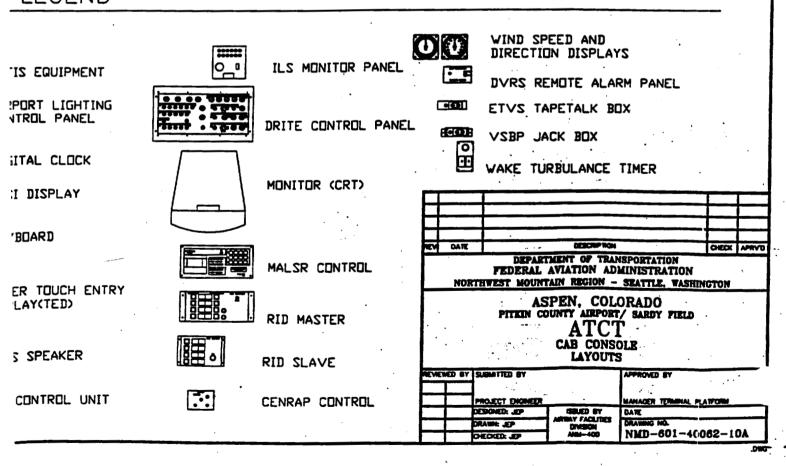
.





14

LEGEND



Memora

U.S. Department of Transportation Federal Aviation Administration **ASPEN ATCT**

Subject: ACTION: Renewal Of Waiver 89-T-022

Date: 4 May 2000

From: Manager, Aspen ATCT

Reply to

Attn. of: 970-925-3703

To:

ANM-500

Aspen ATCT has been successfully operating under waiver 89-T-022 for approximately eleven years. We request that this waiver be renewed.

Barbara J. Du Brul

P.02/04 202 267 5304

MAY

001-500

8 2000

Subject:

INFORMATION: Renewal of Waiver for Aspen (ASE) Terminal Radar Approach Control in Tower

Cab (TRACAB)

From: Program Director for Air Traffic Planning and Procedures, ATP-1

Reply to Altn. of:

Date:

Manager, Air Traffic Division, ANM-500

This memorandum grants approval for renewal of a waiver to Order 7110.65, Air Traffic Control, Chapter 5, Section 1, General. This waiver permits ASE TRACAB to provide beacon-only instrument flight rules and visual flight rules terminal radar services to transponder equipped aircraft.

Additionally, this waiver allows ASE to inhibit MSAW processing in the facility's NAS operational program per the attached special provisions, conditions, and limitations.

This waiver, Number 89-T-22, is effective May 10, 2000, and is valid for 2 years. Any request for renewal, alteration, or extension of the waiver should be made at least 120 days prior to the expiration date of May 09, 2002.

If you have any questions, please have a member of your staff contact Catherine Shema, ATP-4, at (202) 267-9461.

ORIGINAL SIGNED BY JEFF GRIFFITH

Jeff Griffith

Attachment

ATP-4/ATP-100/ATP-120/AOS-400/D10 Tracon

File: 7101

WP: N:\ATP10\89 T 22 renewall.DOC ATP-4:CSHEMA:LLA:79461:05/03/2000

Waiver: 89-T-022 Date: 05/10/00

FEDERAL AVIATION ADMINISTRATION AIR TRAFFIC DIRECTIVES WAIVER/AUTHORIZATION

ISSUED TO:

Manager, Air Traffic Division, ANM-500, for Aspen (ASE) Terminal Radar Approach Control in Tower Cab (TRACAB).

AFFECTED DIRECTIVE(S):

Order 7110.65, Air Traffic Control, Chapter 5, Section 1, General.

OPERATION AUTHORIZED:

The ASE TRACAB is authorized to provide beacon-only instrument flight rules (IFR) and visual flight rules (VFR) terminal radar services to all transponder equipped aircraft in the ASE approach control area as specified in this waiver.

SPECIAL PROVISIONS. CONDITIONS. LIMITATIONS:

BEACON-ONLY TERMINAL RADAR SERVICES:

Beacon-only terminal service consists of the following for the purposes of this waiver:

- a. Radar sequencing of all transponder equipped aircraft to the primary airport.
- b. Standard IFR services to IFR aircraft.
- c. Radar separation, radar traffic advisories, and radar safety alerts between IFR and VFR transponder equipped aircraft only.

CERTIFICATION:

The ASE beacon-only radar shall be certified using permanently located transponder and real time quality control devices.

AIRPORT TERMINAL INFORMATION SERVICE/CONTROLLER PHRASEOLOGY:

All aircraft must be informed that primary radar is not available using the following phraseology. The automatic terminal information service (ATIS) may be used to satisfy this requirement.

"ASPEN PRIMARY RADAR NOT AVAILABLE. RADAR TRAFFIC ADVISORIES AND SERVICE AVAILABLE FOR TRANSPONDER EQUIPPED AIRCRAFT ONLY."

ALTITUDE ASSIGNMENTS:

- a. Assign altitudes that meet the minimum vectoring altitude, minimum safe altitude, or minimum IFR altitude criteria when necessary to assign altitudes to VFR aircraft.
- b. VFR aircraft assigned altitudes for separation purposes, which are contrary to FAR 91.159, shall be advised to resume altitudes appropriate for direction of flight when the altitude assignment is no longer required.

SERVICE AVAILABILITY:

Inform aircraft on initial contact whenever service cannot be provided because of a radar outage and then apply the provisions of Order 7110.65, Chapter 4, IFR, and Chapter 6, Non-Radar.

MSAW PROCESSING:

When system or technological changes to MSAW processing (NCP, ECP, STARS, etc.) are made available, a new evaluation must be done at ASE to assess the impact with the intent of eliminating this portion of waiver 89-T-022. The evaluation must take place within 120 days of receipt of the change at the facility. If this timeframe cannot be met, ATP-1 must be notified in writing of the reason(s) for the delay.

All evaluations must be documented and conducted by a team composed of Air Traffic and Airway Facilities/Operational Support personnel who understand the current and proposed changes and how these changes may affect the operational system.

ASE is required to continue noting in the Airport Facility Directory and on the ATIS broadcast that MSAW service is not available.

This waiver is effective May 10, 2000, and is valid for 2 years. A request for renewal of this waiver should be made a least 120 days prior to the expiration date of May 9, 2002.

ORIGINAL SIGNED BY JEFF GRIFFITH

Jeff Griffith
Program Director for
Air Traffic Planning and Procedures ATT 1

4-21-00 TA



DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION NORTHWEST MOUNTAIN REGION DENVER AIR ROUTE TRAFFIC CONTROL CENTER

REV 1

MAR 29 2000

SUBJ: Denver Center, Aspen Tower/TRACAB Letter of Agreement (LOA)

1. <u>PURPOSE</u>. This revision establishes standard procedures for handling air traffic between Denver Air Route Traffic Control Center (Center) and Aspen Airport Traffic Control Tower/TRACAB (TRACAB).

2. EXPLANATION OF CHANGES.

- a. Page 1 of 5, paragraph 3a(1), RRIVR intersection replaces NATTI intersection.
- b. Deletes NATTI intersection and adds RRIVR intersection on Attachments 2 and 3.
- 3. EFFECTIVE DATE. April 21, 2000.

PAGE CONTROL CHART

Remove Page	Dated	Insert Page	Dated
Page 1 of 5	01/09/00	Page 1 of 5	04/21/00
Attachment 2	01/09/00	Attachment 2	04/21/00
Attachment 3	01/09/00	Attachment 3	04/21/00

Paul Infanti

Acting Air Traffic Manager

Denver ARTCC

Barbara Du Brul

Air Traffic Manager

Aspen ATCT/TRACAB

Distribution: ANM-530, ZDV, ASE ATCT C/R Reading Binders, C/R Manual

Initiated By: DV-530:dr

Denver Center and Aspen Tower/TRACAB

LETTER OF AGREEMENT

Effective Date: January 9, 2000

SUBJECT: Coordination Procedures

- 1. PURPOSE: This letter of agreement establishes standard procedures for handling air traffic between Denver Air Route Traffic Control Center (Center) and Aspen Airport Traffic Control Tower/TRACAB (TRACAB).
- 2. CANCELLATION: This agreement cancels the letter of agreement between Denver Air Route Traffic Control Center and Aspen Airport Traffic Control Tower dated October 8, 1998.
- 3. PROCEDURES: The following shall apply unless otherwise coordinated:
 - a. Arrivals.
 - (1) Aircraft arriving the Aspen Terminal Area shall enter the appropriate arrival gates (as described in attachment 2) at or descending to the following altitudes or coordinated altitude if lower.

<u>GATE</u>	ALTITUDE
RRIVR/LAWSN	Regardless of type FL200/210 (When two aircraft are a factor)
GUILT	at or below FL190, descending to 17,000
PITMN	Turbojets descending to FL210, all other aircraft at 17,000
TRUEL	at or below FL190, descending to 17,000

(2) All aircraft shall be cleared to the Aspen Airport (ASE) via airways/routes, the DBL145R to DBL direct ASE, or direct DBL direct ASE within the appropriate arrival gate.

EXCEPTION: Aircraft departing the Denver Terminal Area may be cleared via the ROCKIES Standard Instrument Departure (SID), DBL Transition, direct ASE.

(3) Transfer of control (TCP) will occur 10NM prior to the lateral boundary of TRACAB airspace. Upon transfer of control, TRACAB shall have control for descent, speed adjustments, and turns of up to 30 degrees. The transfer of control does not include Eagle (EGE) shelf airspace. TRACAB shall coordinate any use of EGE shelf airspace with Center.

- (3) Transfer of control (TCP) will occur 10NM prior to the lateral boundary of TRACAB airspace. Upon transfer of control, TRACAB shall have control for descent, speed adjustments, and turns of up to 30 degrees. The transfer of control does not include Eagle (EGE) shelf airspace. TRACAB shall coordinate any use of EGE shelf airspace with Center.
- (4) Center shall APREQ inoperative/nontransponder-equipped aircraft with TRACAB 15 minutes before the aircraft reaches the Center/TRACAB boundary.
- (5) When Flight Data Input/Output (FDIO) is not operational, all information (aircraft I.D., type and equipment, clearance limit, fix estimate, altitude, route, and TCP) shall be verbally coordinated by Center.

b. Departures. TRACAB shall:

- (1) Issue departure clearance to aircraft for which they have flight plan data. All aircraft shall be cleared as filed, except aircraft requiring a preferential departure route (PDR) or full route clearance (FRC).
 - (2) Clear all Denver Terminal Area arrivals via the following routes:

<u>DESTINATION</u>	FILED ALTITUDE	ROUTE
DEN, BJC APA, FTG, BKF FNL, GXY FNL, GXY	000/999 000/999 000/219 220/999	POWDR ARRIVAL (DEST.) DBL093R LARKS ARRIVAL (DEST.) POWDR ARRIVAL (DEST.) SXW RLG RLG045R RAMMS ARRIVAL (DEST.)
		Mada in (Debi.)

(3) Clear all Denver Terminal Area overflights via the following routes, then if appropriate as filed:

<u>FIX</u>	FILED ALTITUDE	ROUTE
FQF	000/239	DBL093R FQF220R FQF/
DVV	000/239	DBL093R DVV222R DVV
FQF/DVV	240/999	SXW RLG FQF/DVV

(4) Ensure that all departures are established on the appropriate departure routing prior to exiting TRACAB airspace.

- (5) Verbally coordinate and terminate radar service if a radar handoff cannot be accomplished prior to the aircraft exiting TRACAB airspace.
 - (6) Clear departures to FL210 or filed altitude if lower.
 - EXCEPTION: Aircraft exiting the south departure gate filed at or above FL210 will be climbing to FL200 with Center control for climb.
- (7) Advise aircraft that exit TRACAB airspace not on a SID and that have not been cleared to final requested altitude to "Expect (filed altitude) one zero minutes after departure."
 - (8) Coordinate all departures with Center during hours FDIO is not operational.
- (9) Ensure that all Aspen departures enter Center airspace with at least 5NM separation constant or increasing.
- (10) Assign all aircraft departing TRACAB airspace the appropriate Center sector frequency (departure gates defined in attachment 2).

<u>DEPARTURE GATE</u>	<u>SECTOR</u>
SOUTHEAST	26
SOUTH	12
WEST	11
NORTH	6

c. Eagle County Airport (EGE).

- (1) When Center coordinates "APREQ EGE COTTONWOOD departure, (call sign)," the EGE departure will be cleared to the JESIE intersection via the Cottonwood departure procedure climbing to 15,000 feet MSL and TRACAB shall protect the affected airspace.
- (2) When Center coordinates "APREQ EGE FMS approach, (call sign)," the EGE arrival will be cleared to EGE via the LOC/DME (FMS) RWY 25 approach procedure and TRACAB shall protect the affected airspace (same as Cottonwood departure procedure.)

- d. En route. En route aircraft shall enter TRACAB airspace via an arrival gate and exit via a departure gate. Center shall APREQ inoperative/nontransponder-equipped aircraft with TRACAB 15 minutes before the aircraft reaches the Center/TRACAB boundary. Aircraft transitioning TRACAB airspace will be at the altitude indicated on the flight data progress strip and need not be coordinated, except for requirements for WAFDOF aircraft.
- e. <u>General</u>. TRACAB shall keep the Center Traffic Management Unit (TMU) informed of advance approach information, airport acceptance rate (AAR), runway conditions when applicable and when the Automatic Terminal Information Service (ATIS) is out of service.
 - f. Opening/Closing Status of Service.
 - (1) FDIO operation.
- (a) FDIO processing shall be inhibited by Center Flight Data Communications Specialists (FDCS) between the hours of 2200 and 0600 local.
- (b) TRACAB shall be responsible for coordinating requests for other hours with Center FDCS.
- (2) TRACAB normal operating hours are from 0700 to 2200 local. Prior to opening or closing TRACAB, the Center (Sector 12)/TRACAB shall provide the status of all information deemed appropriate for the safe and efficient control of IFR traffic. Transmitting and receiving controllers have equal responsibility for the exchange of necessary data; e.g., if the transmitting controller does not address all the items on the checklist, the receiving controller shall challenge the controller for a reply. The following checklist shall be used:
 - (a) Planned time of opening. (Only if different from published.)
 - (b) Planned time of closing. (Only if different from published.)
 - (c) NAVAID status.
 - (d) Existing NOTAM's.
 - (e) Airport conditions/activities.

- (f) Special activities.
- (g) Traffic.
- (3) TRACAB will provide Center with a current telephone list of personnel to contact in the event the tower is not opened on schedule. This list shall be kept current by the TRACAB Manager and attached to this letter by Center. The list will be in priority contact order and the first person contacted will take appropriate action to open the TRACAB as soon as possible.
- (4) Center will issue a NOTAM through the Denver AFSS in the event the TRACAB is not opened on schedule.
- 4. <u>AIRSPACE DELEGATED TO ASPEN TOWER/TRACAB</u>. Aspen Tower/TRACAB has jurisdiction of airspace from the surface to FL210.

EXCEPTIONS: The Eagle (EGE) shelf where Center has control of airspace from the surface to 15,000 feet MSL, and TRACAB has control from 16,000 feet MSL through FL210, except for the northeast arrival corridor where TRACAB has control from 16,000 feet MSL through FL190, and the east arrival corridor where TRACAB has control from the surface to FL190.

5. ATTACHMENTS.

- a. Attachment 1 (Airspace Delegation).
- b. Attachment 2 (Airspace Chart).
- c. Attachment 3 (TRACAB Radar Outage).
- d. Attachment 4 (Traffic Management Requirements).

6. <u>APPROVED</u>.

Donald R.Smith

Air Traffic Manager

Denver ARTCC

Joseph F.Saladino
Air Traffic Manager
Aspen ATCT/TRACAB

Page 5 of 5

Signed Copy on File

Attachment 1

AIRSPACE DELEGATED TO ASPEN TRACAB

AT FL190 TO 16,000 FEET MSL, from:

- B- 39°42'00"N/106°48'00"W to
- C- 39°37'40"N/106°44'30"W to
- D- 39°35'07"N/106°42'13"W to
- cc- 39°34'24"N/106°46'44"W to point of beginning.

AT FL190 AND BELOW from:

- D 39°35'07"N/106°42'13"W to
- E 39°32'00"N/106°39'30"W to
- F 39°26'53"N/106°35'29"W to
- HERLS 39°28'15"N/106°43'39"W to
- FISTR 39°30'05"N/106°46'02"W to
 - cc 39°34'24"N/106°46'44"W to point of beginning.

AT FL210 TO 16,000 Feet MSL from:

- A 39°44'47"N/106°49'43"W to
- B 39°42'00"N/106°48'00"W to
- cc 39°34'24"N/106°46'44"W to
- bb 39°32'24"N/106°59'18"W to
- aa 39°34'00"N/107°14'30"W to
- T 39°35'31"N/107°18'07"W to
- U 39°40'33"N/107°04'41"W to
- V 39°43'34"N/106°56'34"W to
 - point of beginning.

Attachment 1

AT FL210 AND BELOW from:

- F 39°26'53"N/106°35'29"W to
- G 39°26'26"N/106°32'47"W to
- H 39°26'00"N/106°26'30"W to
- 1 39°16'20"N/106°16'20"W to
- J 39°11'00"N/106°38'00"W to
- K- 39°09'10"N/106°44'00"W to
- L- 39°07'00"N/106°51'00"W to
- M- 39°07'20"N/106°56'30"W to
- N- 39°08'00"N/107°07'00"W to
- O- 39°11'20"N/107°12'10"W to
- P- 39°14'15"N/107°17'20"W to
- Q- 39°13'51"N/107°21'42"W to
- R- 39°18'28"N/107°24'10"W to
- S- 39°30'00"N/107°22'00"W to
- T- 39°35'31"N/107°18'07"W to
- aa- 39°34'00"N/107°14'30"W to
- bb- 39°32'24"N/106°59'18"W to
- cc- 39°34'24"N/106°46'44"W to
- FISTR- 39°30'05"N/106°46'02"W to
- HERLS- 39°28'15"N/106°43'39"W to point of beginning.

Denver Center/Aspen Tower/TRACAB - Letter of Agreement

Attachment 2

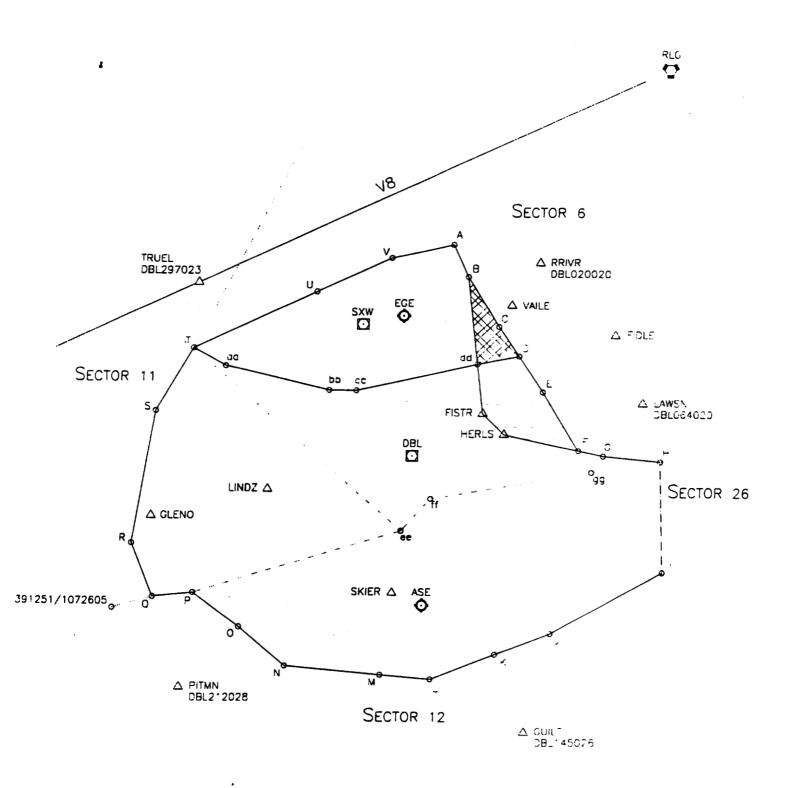
ARRIVAL GATES:

RRIVR/LAWSN	FROM 39°42'00"N/106°48'00"W TO 39°25'00"N/106°34'00"W	
GUILT	FROM 39°11'00"N/106°38'00"W TO 39°07'00"N/106°51'00"W	- Politica - Politica to Politica
PITMN	FROM 39°08'00"N/107°07'00"W TO 39°14'50"N/107°17'20"W	Caracata Police 1. Co Police 1
TRUEL	FROM 39°33'40"N/107°15'20"W TO 39°39'20"N/107°04'20"W	Clockwise from point T to point U

DEPARTURE GATES:

SOUTHEAST	FROM 39°26'00"N/106°26'30"W TO 39°16'20"N/106°26'00"W	
SOUTH	FROM 39°07'00"N/106°51'00"W TO 39°11'20"N/107°12'10"W	Frank Process
WEST	FROM 39°16'40"N/107°20'00"W TO 39°30'00"N/107°22'00"W	Clockwise from point P to point T
NORTH	FROM 39°39'20"N/107°04'20"W TO 39°42'00"N/106°48'00"W	Clockwise from point U to point B

Attachment 3



Attachment 3

- 1. ASPEN TRACAB RADAR OUTAGE. In the event of a radar outage:
- a. TRACAB shall notify the Center Area 1 Supervisor and TRACAB shall revert to a VFR tower.
 - b. Center Sector 12 shall assume responsibility for TRACAB airspace.
- c. Center shall verbally coordinate the type approach being executed and the airport estimate on arrivals.
 - d. TRACAB may clear arrivals at or below 14,000 feet MSL for a visual approach.
- e. TRACAB may issue the following clearances without coordination; however, all IFR departures must be coordinated with Center prior to release:
- (1) Unless otherwise coordinated, TRACAB shall clear all aircraft except Air Wisconsin as follows:

"(Aircraft I.D.), cleared to LINDZ intersection via the LINDZ3 departure procedure, no delay expected, maintain one-four-thousand, squawk (code)."

(2) Unless otherwise coordinated, TRACAB shall clear all Air Wisconsin aircraft as follows:

"(Aircraft I.D.), cleared to LINDZ intersection, via the WISCO departure procedure, no delay expected, maintain one-four-thousand, squawk (code)."

- f. Center may authorize TRACAB to apply visual separation as contained in paragraph 7-10c (Visual Separation) of Order 7110.65.
 - g. TRACAB shall assign all departures the Center Sector 12 frequency.

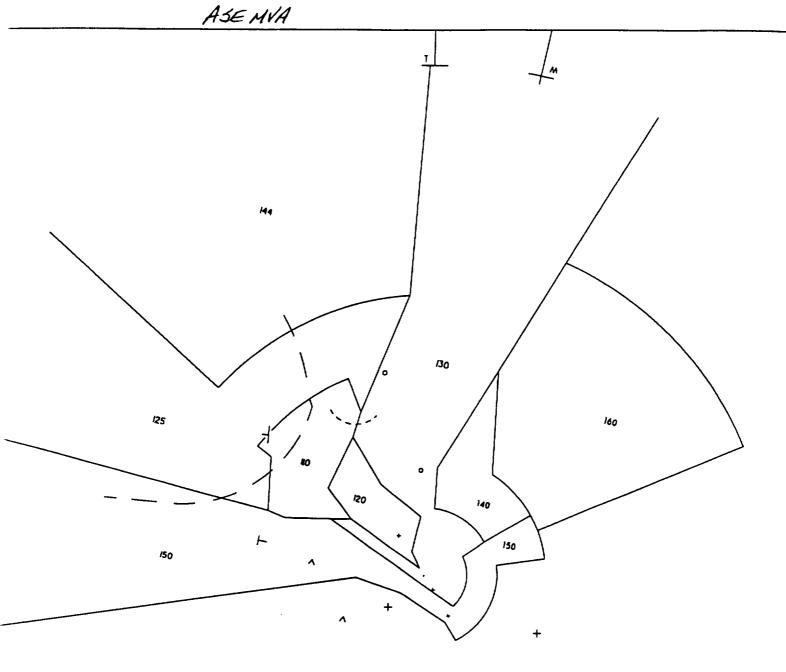
134.5*

Attachment 4

TRAFFIC MANAGEMENT ATTACHMENT

1. Delay Information.

- a. Aspen ATCT/TRACAB shall notify the Denver Center Traffic Management Unit (TMU), as soon as possible, when departure delays reach or are expected to reach 15 minutes. Report any change of delay time in increments of 15 minutes until the reported delays are less than 15 minutes.
- b. Aspen ATCT/TRACAB shall report total air traffic delays for each day to the Denver ARTCC TMU as specified in FAA Order 7210.55, Operational Data Reporting Requirements (ODRR), using the following procedures:
- (1) All reportable delays shall be forwarded to the Denver ARTCC TMU not later than 2100L daily. Delays may be reported via interphone (dial code 77) or commercial telephone (303) 651-4247 or toll free 1-800-972-1275.
 - (2) The following information shall be included when reporting delays:
 - (a) The aircraft call sign.
- (b) Start and end times of the delay period for each affected aircraft (minus normal taxi time).
 - (c) Destination airport.
- (d) Reason for the delay (e.g., airport or Center volume, weather, EDCT, APREQ, ground stop, etc.).
 - (3) A delay report not received by 2100L will be considered to be a negative report.
- 2. <u>Departure Release Times</u>. Aspen ATCT/TRACAB shall meet the Denver ARTCC TMU departure release times within plus or minus 3 minutes.



. 89 100. *85* . .97 35 . 108 🔊 .105 108 🖘 109 98. 101 137 1080 50 My Coly

	,
	ASPEN ATCT, ASPEN COLORADO
	Prepared by JOHN A. BAUERS
	CERTIFIED WEATHER OBSERVER
	Effective 10-25-89
	Observation point-Control Tower
Basalt Mtn-15	an Pk-9
Triangle-6½	Noname-7 Ridge NE-7
Dump Rdg-3½ V3 Six Mile Ranch-2 Shale, Bluffs-1½ V1 Radar/Coxy Pt-1 Cozy Rdg-2 Buttermilk-1 Buttermilk-1 Buttermilk-1	nite Stucke Rui Ring-2 pper Woody Creek Turn-2 Starwood Pk-2 Lone Pine-2 Lone

EL 8040 MSL ASPEN ASR SITE

39° 13' 53.6" N

106° 52' 59.0" W

12° E MAGNETIC VARIATION

ANN-505 3/30/01