Denver Metroplex Implementation Plan

Industry Update Briefing

March 18, 2020

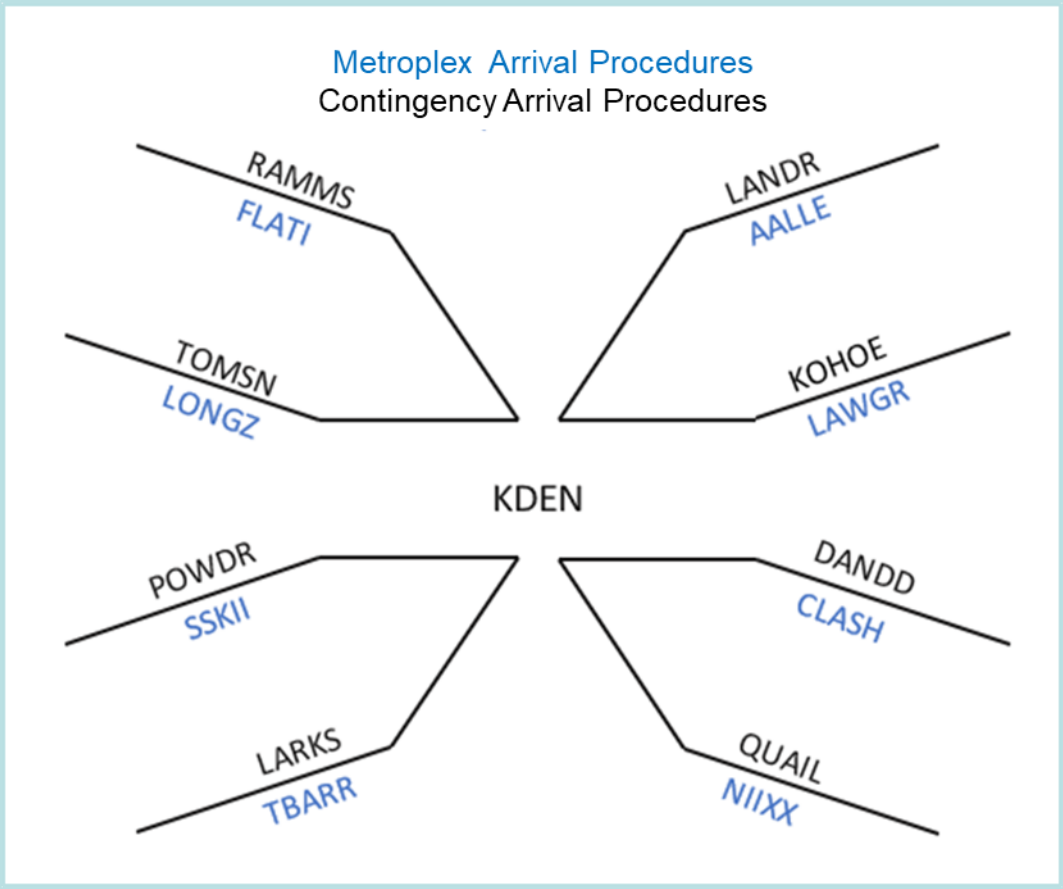
Denver Co-Leads:
John Connolly
Mark Ostronic

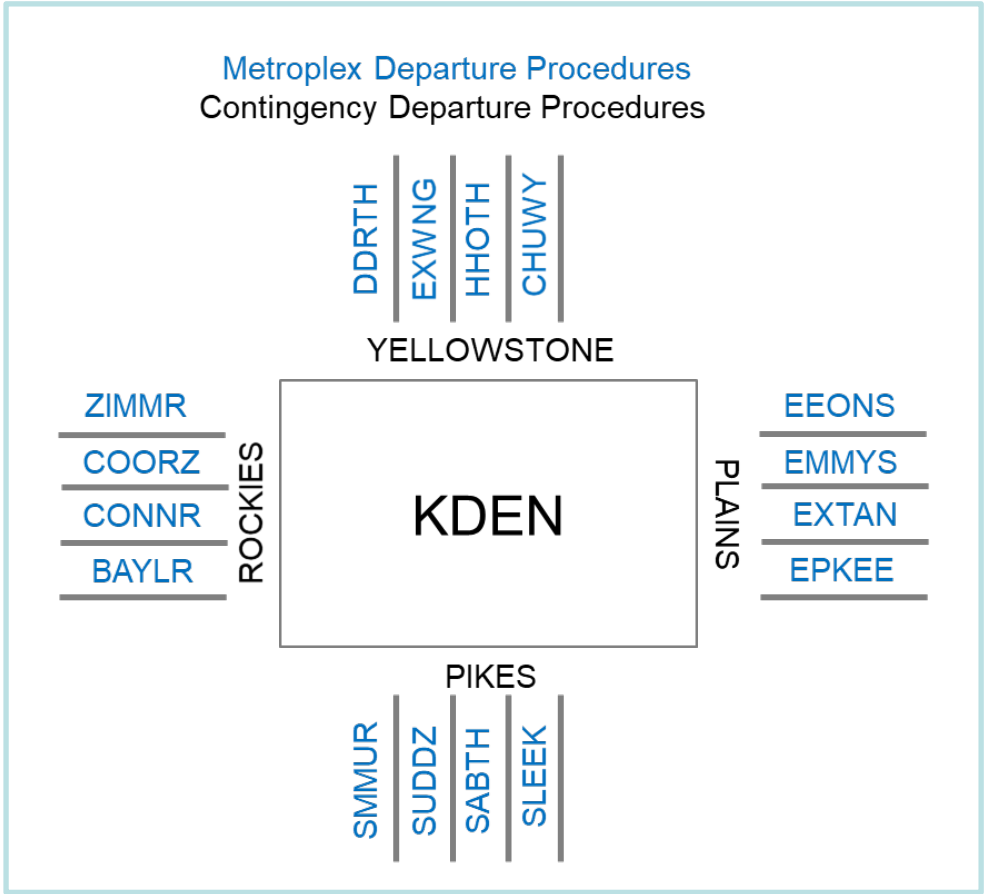
Federal Aviation Administration

Metroplex Open Bridge and Telcons

- Open Bridge 6:00 AM MDT To 10:00 PM MDT 3/26 to 3/30
- 1-888-335-6670, participant passcode 415177
- Daily Telcons/ZOOM meetings at 1230 and 1830 MDT on March 26-27(invitations to be sent)

Metroplex and Contingency Procedures





DEN Departures

Old Procedure	New Procedure	Contingency Procedure	Direction	New Procedure Type	Flow	Aircraft Type	Airport (s)	New En Route Transitions
YAMMI	DDRTH	YELLOWSTONE	N	RNAV SID	ALL	Turbojets	DEN	DDRTH
RIKKK	EXWNG	YELLOWSTONE	N	RNAV SID	ALL	Turbojets	DEN	EXWNG
BRYCC	HHOTH	YELLOWSTONE	N	RNAV SID	ALL	Turbojets	DEN	SAABR, JOBBA
YOKES	CHUWY	YELLOWSTONE	N	RNAV SID	ALL	Turbojets	DEN	CHUWY
FOOOT	ZIMMR	ROCKIES	W	RNAV SID	ALL	Turbojets	DEN	CHNGY
COORZ	COORZ	ROCKIES	W	RNAV SID	ALL	Turbojets	DEN	VOAXA
CONNR	CONNR	ROCKIES	W	RNAV SID	ALL	Turbojets	DEN	WERNR
BAYLR	BAYLR	ROCKIES	W	RNAV SID	ALL	Turbojets	DEN	TEHRU, HBU
SOLAR	SMMUR	PIKES	S	RNAV SID	ALL	Turbojets	DEN	RAITT, DAAYE
SPAZZ	SUDDZ	PIKES	S	RNAV SID	ALL	Turbojets	DEN	SUDDZ
	SABTH	PIKES	S	RNAV SID	ALL	Turbojets	DEN	JOPLN, VRONI
STAKR	SLEEK	PIKES	S	RNAV SID	ALL	Turbojets	DEN	SLEEK
EPKEE	EPKEE	PLAINS	E	RNAV SID	ALL	Turbojets	DEN	DUUZE, GAETR
EXTAN	No Change	PLAINS	E	RNAV SID	ALL	Turbojets	DEN	SHAYK
EMMYS	No Change	PLAINS	E	RNAV SID	ALL	Turbojets	DEN	ZIRKL
EEONS	No Change	PLAINS	E	RNAV SID	ALL	Turbojets	DEN	WYNDM

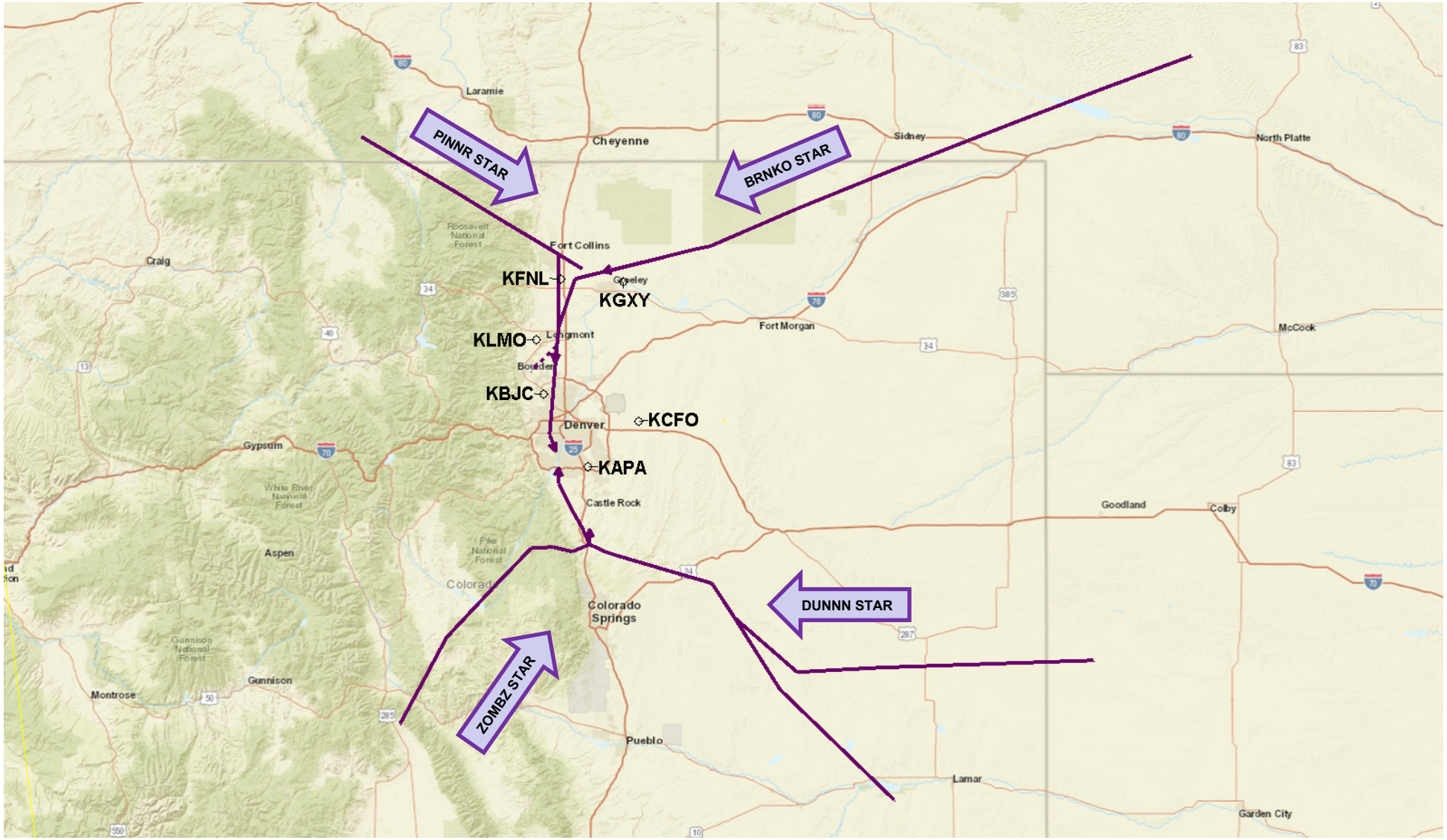
DEN Arrivals

Old Procedure	New Procedure	Contingency Procedure	Direction	New Procedure Type	Flow	Aircraft Type	Airport (s)	New En Route Transitions
ANCHR KIPPR	AALLE	LANDR	NE	RNAV STAR	ALL	Turbojets	DEN	NYTRO, PORDR
KOHOE WAHUU	LAWGR	KOHOE *ATC Assigned Only: DO NOT FILE*	NE	RNAV STAR	ALL	Turbojets	DEN	BRWRY
PURRL JAGGR	CLASH	DANDD	SE	RNAV STAR	ALL	Turbojets	DEN	OATHE, KIISS
BOSSS ZPLYN	NIIXX	QUAIL	SE	RNAV STAR	ALL	Turbojets	DEN	NARNO, ZIGEE, HALEN
TELLR CREDE	SSKII	POWDR	SW	RNAV STAR	ALL	Turbojets	DEN	BOWLL, BUMMP, HAQHY, JNETT, TAACO, WUNZE *TAACO N/A on 3/26/20*
LDORA PEEKK	TBARR	LARKS	SW	RNAV STAR	ALL	Turbojets	DEN	GNDLA, NVVER, SHNPS, WUNZE
MOLTN TSHNR	FLATI	RAMMS	NW	RNAV STAR	ALL	Turbojets	DEN	FOLSM, MJANE, TOFUU
FRNCH KAILE	LONGZ	TOMSN	NW	RNAV STAR	ALL	Turbojets	DEN	BYYKE, KAMPR, LBERT

Satellite STARs

- Airports Served: APA, BJC, FNL, CFO, GXY and LMO
  - PINNR: Arriving from North/Northwest
  - BRNKO: Arriving from Northeast
  - ZOMBZ: Arriving from the Southwest
  - DUNNN: Arriving from the East/Southeast
  - PUFFR is being cancelled

Satellite STARs



APA ILS/LOC 35R Status Update

- **Centennial Airport (APA) ILS RWY 35R will temporarily lose the existing connectivity to the new RNAV STARs on March 26.**
  - RNAV/GPS RWY 35R connectivity to the new RNAV STARs is not impacted.
  - ATC will issue radar vectors to join the ILS RWY 35R as needed.
  - The revised ILS RWY 35R with re-established connectivity will be published on May 21, 2020.

Satellite SIDs

- Airports Served: APA, BJC, FNL, CFO, GXY and LMO
  - WNGSS: Departing West
  - ECHOO: Departing East
  - MRSHH: Departing North
  - SKYEE: Departing South

Denver Metroplex Related TM Initiatives

- Daily GDP for arrivals between 1230-0600Z or as needed
  - Day 1-5: 80-86 AAR
  - Day 6-10: 86-96 AAR
  - MIT implemented initially and evaluated with TBFM in background
- All TMIs will be continuously evaluated
- TMIs will be lowered or removed when there is confidence that the procedures, airspace, and automation are working as designed and the controller workforce has had appropriate familiarization with the new procedures.

Pref Routes and Fix Balancing

- Pertinent playbook routings
  - Currently available from east coast to KDEN: used tactically as necessary
  - West coast to KDEN volume will be reviewed and tactical measures utilized on an as needed basis to adjust or balance traffic flow
  - Coordination will take place with stakeholders and 1st Tier facilities
  - ATCSCC route advisory published daily (as needed)
- Preferential routes/Stitching document:
  - Revised/updated for current requirements
  - Flight planners updated February 5, and March 4, 2020 to provide fix balancing into KDEN

Flight Dispatchers Stitching Document Example

Departing Airport	ZDV Preferred STAR	Preferred Route Status	New Arrival Routing
KAIA	AALLE1	No Pref Route	KAIA./.NYTRO.AALLE1.KDEN
KATW	AALLE1	No Pref Route	KATW./.PORDR.AALLE1.KDEN
KATY	AALLE1	No Pref Route	KATY./.PORDR.AALLE1.KDEN
KBDL	AALLE1	Has Current Pref Route	KBDL./.ONL..PORDR.AALLE1.KDEN
KBFF	AALLE1	No Pref Route	KBFF./.NYTRO.AALLE1.KDEN
KBIS	AALLE1	No Pref Route	KBIS./.NYTRO.AALLE1.KDEN
KBOS	AALLE1	Has Current Pref Route	KBOS./.ONL..PORDR.AALLE1.KDEN
KCID	AALLE1	No Pref Route	KCID./.PORDR.AALLE1.KDEN
KDIK	AALLE1	No Pref Route	KDIK./.NYTRO.AALLE1.KDEN
KDTW	AALLE1	Has Current Pref Route	KDTW./.MAASI..PORDR.AALLE1.KDEN
KDVL	AALLE1	No Pref Route	KDVL./.NYTRO.AALLE1.KDEN
KFAR	AALLE1	No Pref Route	KFAR./.NYTRO.AALLE1.KDEN
KFSD	AALLE1	No Pref Route	KFSD./.PORDR.AALLE1.KDEN
KGRB	AALLE1	No Pref Route	KGRB./.PORDR.AALLE1.KDEN
KGRR	AALLE1	Has Current Pref Route	KGRR./.MAASI..PORDR.AALLE1.KDEN
KISN	AALLE1	No Pref Route	KISN./.NYTRO.AALLE1.KDEN
KJMS	AALLE1	No Pref Route	KJMS./.NYTRO.AALLE1.KDEN
KMHT	AALLE1	Has Current Pref Route	KMHT./.ONL..PORDR.AALLE1.KDEN
KMKE	AALLE1	Has Current Pref Route	KMKE./.ONL..PORDR.AALLE1.KDEN
KMOT	AALLE1	No Pref Route	KMOT./.NYTRO.AALLE1.KDEN
KMSN	AALLE1	Has Current Pref Route	KMSN./.ONL..PORDR.AALLE1.KDEN
KMSP	AALLE1	Has Current Pref Route	KMSP./.ONL..PORDR.AALLE1.KDEN
KPIR	AALLE1	No Pref Route	KPIR./.NYTRO.AALLE1.KDEN
KPVD	AALLE1	Has Current Pref Route	KPVD./.ONL..PORDR.AALLE1.KDEN
KRAP	AALLE1	No Pref Route	KRAP./.NYTRO.AALLE1.KDEN
KSTP	AALLE1	No Pref Route	KSTP./.PORDR.AALLE1.KDEN
KTVC	AALLE1	No Pref Route	KTVC./.PORDR.AALLE1.KDEN
KATL	CLASH1	Has Current Pref Route	KATL./.KIISS.CLASH1.KDEN
KAVL	CLASH1	No Pref Route	KAVL./.KIISS.CLASH1.KDEN
KBBG	CLASH1	No Pref Route	KBBG./.KIISS.CLASH1.KDEN
KBFM	CLASH1	No Pref Route	KBFM./.KIISS.CLASH1.KDEN

Denver District Overall TM Initiatives

- DEN departures:
  - Evaluated and managed tactically to accommodate overlapping departure and arrival demand and manage sector capacity.
- DEN GDP set for days 1 and 2 and them evaluated on as needed basis to day 10
- Nightly telcon with ATCSCC and Industry to discuss next day's operations and planning at 1730L MDT or as coordinated
- End of Shift Summary utilized for lessons learned
- 6:00 AM MDT to 10:00 PM MDT Metroplex Open Bridge March 26 to March 30

Go Team Composition

DEN Tower Go Team

First Name	Last Name	Role/Position	3/26	3/27	3/28	3/29	3/30
Facility Staff							
Adam	Behrent	DEN Tower Mgmt POC	0400L	0600L	-	0200L	-
Scott	Phipps	DEN Tower NATCA POC	1000L	0800L	0800L	1400L	1400L

D01 TRACON Go Team

First Name	Last Name	Role/Position	3/26	3/27	3/28	3/29	3/30
Facility Staff							
Steve	Martin	D01 TRACON Mgmt POC	0745L	0745L	-	-	-
Adam	Kuklin	D01 TRACON NATCA POC	0200L	0615L	1315L	-	0615L

ZDV ARTCC Go Team

First Name	Last Name	Role/Position	3/26	3/27	3/28	3/29	3/30
John	Connolly	Metroplex Mgmt Lead	0300L	1000L	1200L	1200L	1200L
Mark	Ostronic	Metroplex NATCA Lead	0500L	0600L	0600L	0600L	0600L
Brad	Mayhugh	Metroplex Mgmt	1400L	1400L	-	-	-
Dave	Adams	ATAC	0600L	0600L	0600L	0600L	0600L
Jeff	Davis	MITRE	0500L	0600L	0600L	0600L	0600L
Facility Staff							
Missy	Booth	ZDV ARTCC Mgmt POC	0200L	0500L	0500L	0500L	0500L
Dave	Boerner	ZDV ARTCC NATCA POC	0200L	1500L	1500L	1500L	1500L

NOTE: If outside presence is not permitted at any of the facilities, then the Go Team will consist of the following personnel:

- Facility POCs
- Airspace Office
- Automation Support (3/26 & 3/27; then on call as needed)
- TMU (3/26 & 3/27; then on call as needed)
- All other support will be remote

Implementation Telcon Schedule

Open Conference Bridge: Begins March 26, 2020 @ 6:00 a.m. – 10:00 p.m. MDT

(888)335-6670

Passcode: 415177

Industry Telcons:

- **March 26, 2020 1230L MDT**
- **March 26, 2020 1830L MDT**
- **March 27, 2020 1230L MDT**
- **March 27, 2020 1830L MDT**

Questions?

John Connolly: john.e.connolly@faa.gov

Mark Ostronic: mark.r.ostronic@faa.gov