# LAS VEGAS TRACON STANDARD OPERATING PROCEDURES



VIRTUAL AIR TRAFFIC SIMULATION NETWORK LOS ANGELES ARTCC

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#### VIRTUAL AIR TRAFFIC SIMULATION NETWORK LOS ANGELES ARTCC LAS VEGAS TRACON

#### **SUBJ**: Standard Operating Procedures

This Order establishes Standard Operating Procedures (SOP) for Las Vegas Terminal Radar Approach Control (L30). These standards provide reference data for positions of operation at L30 and are supplemental to other ZLA SOPs and Letters of Agreement.

All L30 CPCs are required to familiarize themselves with all sections of this SOP. Specific procedures within each sector should be adhered to during position splits within the facility.

The information contained within this SOP is intended for use on the VATSIM network and is not intended for or authorized for use in a real world setting. Nickolas Christopher Air Traffic Manager Los Angeles ARTCC

Version	Date	Explanation of Changes	
7.00	25FEB21	Metroplex Overhaul. New SID, STAR, Approaches all airports. Formatting changes, SOP rewrite. Version Control added.	
7.10	6OCT22	Maps updated. Small changes to various configurations for coordination, handoffs, and P-ACP. Lake, Canyon, and Granite frequencies updated.	
7.20	17SEP23	Position table change updates. Video map updates.	
7.30	23JUN24	Updated ZLA Sectors. Adjusted formatting. Fixed typos.	
7.31	7OCT24	Updated CFG3 DAG Map	

## List of Changes

#### Section 1: General Information

## 1. General

## a. Purpose

This Standard Operating Procedure (SOP) outlines the procedures to be used by controllers working the Las Vegas TRACON (L30) to ensure that flows are handled in as efficient and timely a manner as possible.

## b. Roles And Responsibilities

The Office of Primary Responsibility (OPR) for this SOP is the ZLA Senior Staff. This SOP was originally signed by David Hendleman, LAX TRACON Lead, on 9/29/01. This SOP shall be maintained, revised, updated or canceled by the Senior Staff. Any suggestions for modification/amendment to this SOP should be sent to the Staff for review.

#### c. Distribution

This SOP is intended for use by controllers staffing the Las Vegas TRACON (L30)

d. Background

This SOP will be the primary outline of Las Vegas TRACON procedures

## 2. Pre-Arranged Coordination Procedures (P-ACP)

- a. FAAO 7110.65 and FAAO 7210.3, utilization of P-ACP allows aircraft under one controller's jurisdiction to penetrate or transit another controller's airspace in a manner that assures standard separation without individual coordination for each aircraft.
- b. Requirements:
  - i. Data blocks, at a minimum, include position symbol and altitude readout
  - ii. Controllers who penetrate another controller's airspace using P-ACP shall determine whether the lead aircraft is a heavy or B757 when separating aircraft operating directly behind or directly behind and less than 1,000 feet.

## 3. Transfer of Control

 The receiving controller assumes jurisdiction for descent, except in instances that are prohibited in this SOP, and/or vector within 30 degrees either side of the observed track. The receiving controller shall ensure aircraft remain within the transferring controller's airspace until established within the area of jurisdiction of the receiving controller.

#### 4. Arrival Standard Procedures

- a. Visual approaches to Runways 26L/R and 1L/R should join final at an altitude compatible with the corresponding instrument approach to that runway.
- b. Non RNAV aircraft should, to the extent practical, mirror RNAV/Published procedures.

## 5. Speed and Flow Control Restrictions

a. Unless specified elsewhere, all arrival traffic must enter the receiving controller's airspace at 210 KTS or less.

#### 6. Combined TRACON Operations

- a. The primary sector and position staffed when L30 is combined shall be Final.
- b. The primary sector split shall be Dagget for Departure and Final for Approach

#### 7. Sector Airspace Integrity

- a. The sector overlying another sector, separated by 1,000 feet, will be responsible for controlling VFR traffic 500 feet or less below the floor of the delegated airspace.
- b. The sector overlying another sector, separated by less than 1,000 feet will ensure that B757 and heavy jet aircraft maintain a minimum of 1,000 feet vertical separation above underlying airspace.

- c. When a descent or climb into another sector's airspace is specified by this SOP, the clearance to climb/descend will not be issued until the hand-off has been accepted by the receiving controller.
- d. Airspace delegation is defined throughout this SOP. Airspace delegated to LAST, HNDT, and VGTT supersedes airspace delegated to L30.

## 8. Satellite Airport Operations

- a. Unless specified elsewhere:
  - i. The controlling authority is responsible for operations in and out of the airport. These responsibilities include:
    - 1. Coordination with adjacent facilities/sectors
    - 2. Sequence arrivals
    - 3. Release departures
  - ii. The sector providing initial services to aircraft landing at satellite airports is responsible for coordination with the controlling authority.

#### 9. LAS Local Services

a. If L30 is split and LAST is not staffed, the controller manning Daggett Departure will be responsible for local services at LAS.

#### 10. VGT/HND Class D Airspace

a. Class Delta airspace is in effect during HNDT/VGTT operating hours from the surface, up to, but not including 4,500 feet MSL (VGT) or 4,000 feet MSL (HND). The controlling authority at the airport is responsible for tower operations when the tower position is not staffed. Tower services must be provided, at a minimum, during the published operating hours of the ATCT. Outside of the normal operating hours, it is the discretion of the controlling authority whether or not to simulate the closure of the ATCT.

#### 11. Delegation of NATCF Airspace

a. During times when the Nellis Air Traffic Control Facility is not staffed, the VGT controlling authority shall be responsible for NATCF airspace.

## Section 2: Sectors, Frequencies, Position Symbols

#### L30 Sectors

SECTOR	FREQUENCY	POSITION ID	INTERPHONE
Daggett	125.900	D	Dagget
Mead	133.950	М	Mead
Canyon	125.475	Y	Canyon
Granite	125.025	G	Granite
Lake	119.775	L	Lake
Final	135.000	F	Final
Satellite	119.400	Т	Satellite
Keno	120.450	К	Keno

The primary combined position shall be Final 135.000 The primary Departure/Arrival split shall be: Dagget 125.900 for Departures Final 135.000 for Approach Section 3: Configuration #1



## 1. Airspace and Runways Utilized

- a. Landing Runways 26L and 19R. Runways 19L and 26R may be used after coordination.
- b. Departing Runways 26R and 19L/R.
- c. When weather or other circumstances warrant, a straight Runway 19 operation will be conducted utilizing Configuration #1 airspace and procedures.

Daggett Departure (DAG)



- a. Route aircraft via the NIITZ, HOOVR, RASLR, JOHKR, RADYR, MCCRN procedures.
- b. LAS:
  - i. Route go-arounds to a left downwind for RWY 26L, 170 KIAS and handoff to FNL.
  - ii. Vector aircraft on the HOOVR.GIDGT or HOOVR.RATPK towards BLD, climbing to FL190, 250 KIAS, handoff to MED.
- c. HND:
  - i. Route arrivals on the GAMES STAR or on a vector in the vicinity of PIGOW, descending to 9,000 feet. Handoff to CYN.
- d. VGT:
  - i. VFR aircraft landing VGT may be routed west of LAS, handoff to MED, T359.DICSA.T337 or on a vector towards Jean, handoff to CYN
- e. P-ACP: DAG is authorized to utilize P-ACP through GNT, CYN and LAK airspace as depicted below:



P-ACP Map for DAG Configuration 1

## Mead Departure (MED)



- a. Route aircraft via the GIDGT, RATPK, NOTWN, BLD, V394, LOHLA and 290° prop departure procedures
- b. LAS:
  - i. Point out LOHLA departures to GNT.
- c. VGT:
  - i. MED is the controlling authority.
  - ii. IFR Q-type aircraft routed via V538 will be vectored over the numbers of RWY 26R at or climbing to 7,000 feet. Handoff to CYN
- d. LSV:
  - i. IFR aircraft landing LSV will be cleared to the LSV TACAN descending to 11,000 feet. Handoff to NATCF
- e. P-ACP: MED is authorized to utilize P-ACP through DAG, GNT and LAK airspace as depicted:



#### Canyon (CYN)



- a. Route aircraft via the V538, V237, CRESO, V21, V514, T359, T357, NTNDO, OYODA, SCAMR, BLD 080R and BLD 125R procedures and prop departures heading 175° within airspace depicted
- b. LAS:
  - Sequence aircraft to a left downwind for RWY 19R/L on T357 or east of the approach end of RWY 26R. Assign IFR aircraft at or above 5,500 feet and VFR aircraft at or above 5,000 feet, 170 KIAS or less. Handoff to SAT.
- c. VGT
  - i. Sequence aircraft on T357 or east of the approach end of RWY 26R. Assign IFR aircraft at or above 5,500 feet and VFR aircraft at or above 5,000 feet, 170 KIAS or less. Handoff to SAT.
- d. HND
  - i. CYN is the controlling authority.
  - ii. APREQ RWY 35L/R departures with LAS-ATCT and FNL and provides SID, aircraft ID, and type.
  - iii. Point out all arriving IFR aircraft to LAS-ATCT and FNL, except for visual approaches to RWY 35R/L. Point out aircraft conducting the RNAV (GPS)-B approach to FNL prior to the final approach fix (FAF).
  - iv. When conducting VOR-C approaches to HND, initiate a CFR with LAS-ATCT prior to aircraft reaching BLD and point out to FNL.
  - v. When clearing an aircraft for a visual approach to RWY 17L/R issue a speed restriction of 170 KIAS or less and an instruction to turn base leg within 2 miles of the airport
  - vi. CYN Airspace Split: DAG assumes CYN airspace when it is not staffed.
  - vii. P-ACP: CYN is authorized P-ACP through DAG airspace as depicted below:



Granite Arrival (GNT)



- a. Route aircraft via the PUMLE, GRNMA, RNDRZ, COKTL, GAMES, JAYSN and BLD256R procedures within airspace depicted
- b. LAS:
  - i. Sequence arrivals to a left downwind for RWY 26L/R descending to 8000. Handoff to FNL.
  - Route prop arrivals via the GAMES STAR or on a vector towards TOROO handoff to DAG, or on a vector to a left downwind for RWY 26L/R descending to 8000 handoff to FNL
  - iii. Right Base 19L/R Operations:
    - 1. If traffic permits right base operations, APREQ with LAS-ATCT and adjacent sectors.
    - 2. Coordinate with all affected sectors and facilities.
    - 3. When traffic permits, issue the approach clearance to the aircraft.
    - 4. Handoff to SAT.
- c. HND:
  - i. Route arrivals via the GAMES STAR or on a vector towards TOROO handoff to DAG
- d. LSV:
  - i. IFR aircraft landing LSV will be cleared to the LSV TACAN descending to 13,000 feet, handoff to MED

Lake Arrival (LAK)



- a. Route aircraft via the CHOWW, BLAID, RKSTR, ISSHE, BOEGY, WYLND, V21, V562, T338, T361, and T363 procedures within airspace depicted.
- b. LAS:
  - i. Sequence RWY 26L/R arrivals to intercept the localizer at or east of PRINO, descending to 8000 feet. Hand off to FNL.
  - ii. Sequence arrivals descending via the RKSTR and CHOWW STARs for a left base for RWY 19L/R or on a heading towards PPENN descending to 8,000 feet. Handoff to SAT. Enter +NAV for aircraft expecting the RNAV Visual Approach. Enter +RNP for aircraft expecting the RNP approach (secondary scratch pad)..
- c. VGT:
  - i. Route arrivals via the WYLND STAR, T338 or on a vector through the Nellis East Gate at 9,000 feet handoff to NATCF
- d. HND:
  - i. Route arrivals via the BOEGY STAR, T361, or a vector in the vicinity PUTTT descending to 8,000 feet. Handoff to CYN.
- e. LSV: IFR aircraft landing LSV will be cleared to the LSV TACAN descending to 13,000 feet, handoff to MED.

## Final (FNL)



- a. Sequence arrivals to RWY 26L/R within depicted airspace.
- b. LAS:
  - i. Based on SAT traffic, sequence RWY 19 R/L or VGT arrivals at or above 6,000 feet at 170 KIAS. Handoff to SAT.
- c. HND:
  - i. CYN will APREQ all HND IFR RWY 35R/L departures with SID, ACID, type.

## Satellite (SAT)



- a. Sequence RWY 19R/L arrivals and VGT arrivals within depicted airspace.
- b. VGT:
  - i. If online, point out IFR arrivals to NATCF.

## Keno (KNO)



- a. Route aircraft via T338 and CORTEZ procedures within airspace depicted
- b. Sequence RWY 19R/L arrivals to a left base at or below 7,000 feet. Handoff to SAT
- c. VGT:
  - i. Route arrivals via T338 or on a vector through the Nellis East Gate, Handoff to NATCF
  - ii. Arrivals may be routed towards the Stratosphere. Handoff to SAT
- d. KNO Airspace Split:
  - i. SAT assumes KNO airspace.

Section 4: Configuration #2



## 1. Airspace and Runways Utilized

- a. Landing Runways 1L/R. Runway 8R may be utilized after verbal coordination has been accomplished.
- b. Departing Runways 8L/R and 1L/R.

Daggett Departure (DAG)



- a. Route aircraft via the RADYR, JOHKR, LOHLA and MCCRN procedures within airspace
- b. LSV:
  - i. IFR aircraft landing LSV will be cleared to the LSV TACAN descending to 11,000 feet, handoff to NATCF.
- c. P-ACP: DAG is authorized to utilize P-ACP through MED, GNT, CYN and LAK airspace as depicted below:



Mead Departure (MED)



- a. Route aircraft via the GIDGT, RATPK, NIITZ, RASLR, HOOVR, WYLND, BOGEY, T361, T338, T363, V21 and V562 procedures within airspace
- b. LAS:

i. Route V21 and V562 arrivals north of LAS descending to 8,000 feet, handoff to SAT.

- c. VGT:
  - i. Route arrivals via the WYLND STAR, T338 or a vector through the Nellis East Gate at 9,000ft. handoff to NATCF.
- d. HND:
  - i. Route arrivals via the BOEGY STAR, T361, V21 or a vector towards PUTTT descending to 7,000 feet, point out to LAK, handoff to CYN.
- e. LSV:
  - i. IFR aircraft landing LSV will be cleared to the LSV TACAN descending to 11,000 feet, handoff to NATCF.
- f. P-ACP: MED is authorized to utilize P-ACP through LAK, SAT and KNO airspace as depicted:



#### Canyon (CYN)



- a. Route aircraft via the V538, V237, V514, T337, NTNDO, OYODA, SCAMR, BLD 080R and BLD 125R procedures. and prop departures heading 120° procedures within airspace
- b. LAS:
  - i. Route prop aircraft from the east to a right base RWY 1L/R at or below 7,000 feet. Handoff to FNL.
- c. VGT
  - i. Route arrival aircraft over HND on a heading west of LAS, IFR at or above 7,000 feet, VFR at or above 6500 feet, 170 KIAS or less. Point out to FNL, handoff to SAT.
- d. HND:
  - i. CYN is the controlling authority.
  - ii. Point out all arriving IFR aircraft to LAS-ATCT, except for visual approaches to RWY 35L/R. Point out aircraft conducting the GPS (B) approach to DAG prior to the FAF.
  - iii. APREQ RWY 35L/R departures with LAS-ATCT and DAG and provide SID, aircraft ID, and type.
  - iv. When conducting VOR-C approaches to HND, initiate a CFR with LAS-ATCT prior to aircraft reaching BLD and point out to DAG and MED.
  - v. When clearing an aircraft for a visual approach to RWY 17L/R issue a speed restriction of 170 KIAS or less and an instruction to turn base leg within 2 miles of the airport.
- e. Provide initial service and Class B clearance to Boulder City skydive aircraft.
- f. P-ACP: CYN is authorized to use P-ACP through MED airspace for LAS departures heading 120:



Granite Arrival (GNT)



- a. Route aircraft via the COKTL, RNDRZ, GAMES, LARKK, JAYSN, PUMLE, CRESO,
- b. V21, T359 and BLD256R procedures.
- C.
- d. LAS:
  - i. Sequence arrivals descending via the RNDRZ and COKTL STARs or in the vicinity of ROAMN to intercept the localizer for RWY 01L, descending to 8,000 feet at 210 KIAS, handoff to FNL.
  - ii.
- e. VGT:
  - i. Route arrivals on a vector towards NTNDO descending to 9,000 feet, handoff to CYN.
- f. HND:
  - i. Route arrivals via the GAMES STAR or a vector towards NTNDO descending to 9,000 feet, handoff to CYN.
- g. LSV:
  - i. IFR aircraft landing LSV will be cleared to the LSV TACAN descending to 13,000 feet, handoff to DAG.

Lake Arrival (LAK)



- a. Route aircraft via the RKSTR, CHOWW, PEHTY, BLAID and V237 procedures within airspace
- b. LAS:
  - i. Sequence arrivals descending via the RKSTR and CHOWW STARs or in the vicinity of BUHLL descending to 7,000 feet. Handoff to FNL.
- c. VGT:

i.

- Route arrivals on a vector towards HND, descending to 8,000 feet, handoff to CYN.
- d. HND:
  - i. Route arrivals on a vector towards HND, descending to 8,000 feet, handoff to CYN.
- e. LSV:
  - i. IFR aircraft landing LSV will be cleared to the LSV TACAN descending to 13,000 feet, handoff to MED.



a. Sequence arrivals to RWYs 1L/R.



- a. Route aircraft via NOTWN, BLD, RWY 01 departures and prop departures off RWY 08 issued 050° heading within airspace depicted
- b. LAS:
  - i. Provide departure control services for all RWY 1L/R departures and go-arounds.
  - ii. Route aircraft for a left downwind RWY 1L at 170 KIAS and handoff to FNL.
- c. VGT:
  - i. SAT is controlling authority.

## Keno (KNO)



- a. Route aircraft via the T338 and CORTEZ procedures within airspace depicted
- b. LAS:
  - i. Route arrivals east of the Hoover Dam and south of BVU in the vicinity of PUTTT, at or below 7,000 feet. Handoff to CYN.
  - ii. Route arrivals towards the Stratosphere at 7,000 feet. Handoff to SAT.
- c. VGT:
  - i. Route arrivals via T338 or on a vector through the Nellis East Gate.
- d. KNO airspace split: SAT assumes KNO airspace.

Section 5: Configuration #3



## 1. Airspace and Runways Utilized

- a. Landing Runways 26L and 1L. Runway 1R may be used after verbal coordination with LAS-ATCT.
- b. Departing Runways 1L/R.

Daggett Departure (DAG)



- a. Route aircraft via the JOHKR, RADYR, MCCRN, NOTWN, BLD, LOHLA and prop departures heading 240° procedures within airspace depicted.
- b. LAS:
  - i. Route go-arounds to a left downwind for RWY 1R/L, 170 KIAS and handoff to SAT.
  - ii. Handoff RWY 26L downwind arrivals to FNL at or descending to 8,000 feet, point out to CYN.
- c. VGT:
  - i. DAG is the controlling authority.
  - ii. Point out IFR arrivals to LC2 no later than 10 miles south of LAS, or East Gate arrivals at or east of the Nellis runways.
  - iii. Issue approach clearance based on traffic landing RWY 26L.
  - iv. Instruct aircraft to remain west of I-15 when executing the approach.
- d. LSV:
  - i. IFR aircraft landing LSV will be cleared to the LSV TACAN descending to 11,000 feet, handoff to NATCF.
- e. P-ACP: DAG is authorized to utilize P-ACP through GNT airspace as depicted below:



Mead Departure (MED)



- a. Route aircraft via the RATPK, GIDGT, NIITZ, RASLR, HOOVR, V394 and V237 departures heading 050° procedures within airspace depicted
- b. When providing initial departure control services to RADYR, JOHKR and MCCRN departures, handoff to DAG, heading 190, climbing to FL190 (or lower requested altitude)
- c. LAS:
  - i. Route alternate go-arounds to a right downwind for RWY 26L, 170 KIAS and hand to FNL
- d. VGT:
  - i. Route arrivals via the WYLND STAR, T338 or on a vector through the Nellis East Gate at 9,000 feet handoff to NATCF.
- e. LSV:
  - i. IFR aircraft landing LSV will be cleared to the LSV TACAN descending to 11,000 feet, handoff to NATCF.
- f. P-ACP- MED is authorized to utilize P-ACP through DAG and LAK airspace as depicted below:





- a. Route aircraft via the OYODA, SCAMR, NTNDO, V514, V237, T357, BLD 080R and BLD 125R procedures within airspace depicted
- b. LAS:
  - i. Route aircraft from the east to a right base RWY 1R/L. Handoff to SAT.
- c. VGT:
  - i. Route IFR arrivals in the vicinity of Henderson to a point at or south of the McCarran runway intersections, at 7,000 feet and 170 KIAS or less. Handoff to DAG, point out to SAT.
- d. HND:
  - i. CYN is the controlling authority.
  - ii. Point out all arriving IFR aircraft to LAS-ATCT, except for visual approaches to RWY 35L/R. Point out aircraft conducting the GPS (B) approach to FNL prior to the FAF.
  - iii. APREQ RWY 35L/R departures with LAS-ATCT and FNL and provide SID, aircraft ID, and type.
  - iv. When conducting VOR-C approach point out to SAT.
  - v. When clearing an aircraft for a visual approach to RWY 17L/R issue a speed restriction of 170 KIAS or less and an instruction to turn base leg within 2 miles of the airport.
- e. CYN airspace split:
  - i. SAT, GNT, LAK and MED assume airspace depicted below



**Granite Arrival (GNT)** 



- a. Route aircraft via the COKTL, RNDRZ, JAYSN, GAMES, GRNMA, PUMLE, CRESO, V21, BLD256R and T359 procedures within airspace depicted
- b. LAS:
  - i. Sequence arrivals descending via the RNDRZ and COKTL STARs or in the vicinity of ROAMN to intercept the runway 1L localizer, descending to 8,000 feet. Handoff to SAT.
  - ii. Offload COKTL/PUMLE arrivals to a left downwind for RWY 26L descending to 13,000 feet. Handoff to DAG.
- c. VGT:
  - i. Route arrivals on a vector towards NTNDO descending to 9,000 feet, handoff to CYN.
- d. HND:
  - i. Route arrivals via the GAMES STAR or on a vector towards NTNDO descending to 9,000 feet, handoff to CYN.
- e. LSV:
  - i. IFR aircraft landing LSV will be cleared to the LSV TACAN descending to 13,000 feet, handoff to DAG:
- f. P-ACP: GNT is authorized to utilize P-ACP through DAG airspace as depicted below:



Lake Arrival (LAK)



- a. Route aircraft via the CHOWW, RKSTR, BOEGY, WYLND, BLAID, ISHEE, V21 and V562 procedures within airspace depicted
- b. LAS:
  - i. Sequence RWY 26L arrivals to intercept the localizer at or east of PRINO, descending to 8,000 feet. Handoff to FNL.
  - ii. Offload arrivals to RWY 1L, descending via the RKSTR STAR or on a vector towards TUUTH descending to 11,000 250 KIAS. Handoff to GNT.
- c. VGT:
  - i. Route IFR arrivals on the WYLND STAR or on a vector toward the Nellis East Gate at 9,000 feet. Handoff to MED point out to DAG.
- d. HND:
  - i. Route IFR arrivals on the BOGEY STAR or on a heading towards PUTTT descending to 8,000 feet, handoff to CYN.
- e. LSV:
  - i. IFR aircraft landing LSV will be cleared to the LSV TACAN descending to 13,000 feet, handoff to MED



- a. LAS:
  - i. Sequence arrivals to RWY 26L within depicted airspace.

Satellite (SAT)



- a. LAS:
  - i. Sequence arrivals to RWY 1L/R within depicted airspace.



- a. Route aircraft via the T338 procedure within airspace depicted
- b. VGT:
  - i. Route arrivals via T338 or on a vector through the Nellis East Gate.
- c. HND:
  - i. Route arrivals east of the Hoover Dam and south of BVU in the vicinity of PUTTT, at or below 7,000 feet. Handoff to LAK.
- d. KNO airspace split: MED and LAK assume KNO airspace as depicted below:



Section 6: Configuration #4



## 1. Airspace and Runways Utilized

- a. Landing Runways 19L/R and 8R.
- b. Departing Runway 8L.

## Daggett Departure (DAG)



- a. Route aircraft via the JOHKR, RADYR, RATPK, LOHLA and MCCRN procedures within airspace depicted
- b. LAS:
  - i. Route go-arounds off of RWY 08R to either RWY 19L/R, handoff to SAT; or RWY08R, handoff to CYN.
  - ii. Handoff RATPK departures climbing via the SID, handoff to MED.
- c. LSV:
  - i. IFR aircraft landing LSV will be cleared to the LSV TACAN descending to 11,000 feet, handoff to NATCF.
- d. P-ACP: DAG is authorized to utilize P-ACP through MED, LAK, CYN and GNT airspace as depicted below:





Mead Departure (MED)



- b. Route aircraft via the RASLR, NIITZ, GIDGT, HOOVR, BOEGY, WYLND, T338 and T361 procedures within airspace depicted
- c. VGT:
  - i. Route arrivals via the WYLND STAR, T338 or on a heading towards the Nellis East Gate descending to 9,000 feet. Handoff to LAK.
- d. HND:
  - i. Route arrivals via the BOEGY STAR, T361 or on a heading towards PUTTT descending to 8,000 feet. Handoff to CYN.
- e. LSV:
  - i. IFR aircraft landing LSV will be cleared to the LSV TACAN descending to 11,000 feet, point out to LAK, handoff to NATCF.
- f. P-ACP- MED is authorized to utilize P-ACP through LAK airspace as depicted below:



#### Canyon (CYN)



- a. Route aircraft via the OYODA, SCAMR, NTNDO, V538, V514, V237, T357, BLD 080R, BLD 125R and prop departures assigned 175° heading procedures within airspace depicted
- b. LAS:
  - i. Route aircraft to a right base or right downwind for RWY 8R at or below 7,000 feet handoff to FNL.
  - ii. Runway 19L/R Right Base Operations:
    - 1. If traffic permits right base operations, APREQ with the OS/CIC.
    - 2. Coordinate with all affected sectors and facilities.
    - 3. Route aircraft over HND, over the approach end of RWY 8L then on a heading towards Lone Mountain, IFR at or above 7000 feet, VFR at or above 6,500 feet, 170 KIAS or less.
    - 4. Handoff to SAT
- c. VGT:
  - i. Route arrival aircraft over HND, over the approach end of RWY 8L then on a heading towards Lone Mountain, IFR at or above 7,000 feet, VFR at or above 6,500 feet, 170 KIAS or less. Handoff to SAT.
- d. HND:
  - i. CYN is the controlling authority.
  - Point out all arriving IFR aircraft to LAS-ATCT, except for visual approaches to RWY 35L/R. Point out aircraft conducting the GPS (B) and VOR-C approach to DAG prior to the FAF.
  - iii. APREQ RWY 35L/R departures with LAS-ATCT and DAG and provide SID, aircraft ID, and type.
  - iv. When conducting VOR-C approaches to HND, initiate a CFR with LAS-ATCT prior to aircraft reaching BLD and point out to DAG and MED.
  - v. When clearing an aircraft for a visual approach to RWY 17L/R issue a speed restriction of 170 KIAS or less and an instruction to turn base leg within 2 miles of the airport.

Granite Arrival (GNT)



- a. Route aircraft via COKTL, RNDRZ, GAMES, PUMLE, GRNMA and JAYSN, CRESO, V21, BLD256R and T359 procedures within airspace depicted
- b. LAS:
  - i. Sequence arrivals descending via the COKTL and RNDRZ STARs or on a vector towards YAGGR descending to 8,000 feet. Handoff to FNL.
  - ii. Runway 19L/R Right Base Operations:
    - 1. If traffic permits right base operations, APREQ with the OS/CIC.
    - 2. Coordinate with all affected sectors and facilities.
    - 3. When traffic permits, issue the approach clearance to the aircraft
    - 4. Handoff to SAT.
- c. VGT:
  - i. Route arrivals on a vector towards NTNDO descending to 9,000 feet, handoff to CYN. D.
- d. HND:
  - i. Route arrivals via the GAMES STAR or on a vector towards NTNDO descending to 9,000 feet, handoff to CYN.
- e. LSV:
  - i. IFR aircraft landing LSV will be cleared to the LSV TACAN descending to 13,000 feet, handoff to DAG

Lake Arrival (LAK)



- a. Route aircraft via the CHOWW, RKSTR, BLAIDE, WYLND, ISHEE, T361, T363, V21 and V562 procedures within airspace depicted
- b. LAS:
  - i. Sequence arrivals descending via the RKSTR and CHOWW STARs for a left base for RWY 19L/R. or on a heading towards PPENN descending to 8,000 feet. Handoff to SAT. Enter +NAV for aircraft expecting the RNAV Visual Approach. Enter +RNP for aircraft expecting the RNP approach (secondary scratch pad).
  - ii. Offload arrivals from the southeast to RWY 8R, descending via the RKSTR STAR or on a vector in the vicinity of TUUTH descending to 11,000. Handoff to GNT.
  - iii. Prop arrivals may be routed east of the Hoover Dam and south of BVU, at or below 7,000 feet. Handoff to CYN. Point out to MED.
  - iv. Offload CHOWW/BLAID arrivals direct to LAS, descending to 10,000 feet. Handoff to DAG.
- c. VGT:
  - i. Route arrivals on the WYLND STAR, T338 or on a heading through the Nellis East Gate at 9,000 feet.
- d. HND:
  - i. Route arrivals on a vector in the vicinity PUTTT descending to 8,000 feet. Point out to MED, handoff to CYN.
- e. LSV:
  - i. IFR aircraft landing LSV will be cleared to the LSV TACAN, handoff to MED.

## Final (FNL)



- a. Sequence arrivals to RWY 8R in airspace depicted
- b. Runway 19L/R Right Base Operations:
  - i. If traffic permits right base operations, APREQ with the OS/CIC.
  - ii. Coordinate with all affected sectors and facilities.
  - iii. When traffic permits, issue the approach clearance to the aircraft.
  - iv. Handoff to SAT

## Satellite (SAT)



- a. Route aircraft via the RTTRN, NOTWN, BLD, and EL CORTEZ procedures.
- b. LAS:
  - i. Sequence arrivals to RWY 19R/L.
- c. VGT:
  - i. SAT is the controlling authority.



- a. Route aircraft via the T338 procedure within airspace depicted
- b. LAS:
  - i. Route arrivals east of the Hoover Dam and south of BVU in the vicinity of PUTTT, at or below 7,000 feet. Handoff to MED.
- c. HND:
  - i. Route arrivals east of the Hoover Dam and south of BVU in the vicinity of PUTTT, at or below 7,000 feet, handoff to MED.
- d. VGT:
  - i. Route VFR arrivals through the Nellis East Gate at 6,500 feet, handoff to SAT.
- e. KNO airspace split:
  - i. Overlying sector assumes KNO airspace.



Appendix A - Airports, Waypoints, and Reporting Points

#### Appendix B - STARS Video Map List

If unable to see the full map list in vSTARS due to screen space constraints, this list contains all the maps available. Maps past #28 can be accessed by pressing CTRL+F2 and typing in the map number.

- 1. DPWP B1 - DEPARTURE WAYPOINTS, CONFIG 1
- 2. TROUTS - TANGO AIRWAYS
- 3. VAIRWAY
- VICTOR AIRWAYS LAS VEGAS CLASS B 4. CLASSB
- 5. FUS\_MVA - FUSION MVA
- EMERGENCY OBSTACLE VECTOR MAP CONFIG 1 CONFIG 2 6. EOVM
- 7. BM1M
- 8. BM2M
- 9. BM3M - CONFIG 3
- 10. BM4M - CONFIG 4
- 11. HND\_D HENDERSON DELTA
- 12. HLD PTN - HOLDING PATTERN PROTECTED AREAS
- 13. TOWERC1 - LAS TOWER CONFIG 1
- 14. TOWERC2 - LAS TOWER CONFIG 2
- 15. TOWERC3 - LAS TOWER CONFIG 4

- 15. TOWERSE
  16. NOISE\_B NOISE ABATEMENT
  17. NOISE\_A NOISE ABATEMENT
  18. ZLAC134 ZLA SECTORS, CONFIGS 1, 3, 4
  19. ZLA\_C2 ZLA SECTORS, CONFIG 2

- 21. QAS\_MVA- QAS RADAR MVA22. VGT-ILS- NORTH LAS VEGAS ILS
- 23. HND-VOR - HENDERSON VOR APPROACH

Appendix C - Nellis East Gate

