

**PHOENIX TOWER AND HELICOPTERS
OPERATING IN THE PHOENIX CLASS B AIRSPACE**

LETTER OF AGREEMENT

EFFECTIVE DATE: May 15, 2007

SUBJECT: Class B Service to Helicopters

1. **PURPOSE.** This agreement specifies responsibilities, defines terms, and establishes procedures to be used between Phoenix Tower and signatory operators for the control and operation of VFR and Special VFR helicopters within the Phoenix Class B Airspace.
2. **SCOPE.** The provisions of this agreement shall apply to all helicopters operating under the jurisdiction of the signatory authorities.
3. **CANCELLATION.** Phoenix Tower and Helicopters Operating in the Phoenix Class B Airspace Letter of Agreement, SUBJECT; Class B Service to Helicopters, dated August 23, 2004 is canceled.
4. **PROCEDURES.**
 - a. **Definition of Applicable Terms:**
 - (1) “*PHOENIX BRAVO AIRSPACE*” – Shall be used by Phoenix Tower and pilots in reference to the Phoenix Class B Airspace.
 - (2) “*PHOENIX BRAVO TRANSITION AREA*” – Shall be used by Phoenix Tower and pilots to delineate a zone of uncontrolled airspace (bounded by 67th Avenue on the west, Glendale Avenue on the north, Country Club Drive on the east, and Warner Road on the south) surrounding the Phoenix Bravo Airspace. This area shall be used to expedite the timely request and receipt of Sharp Echo clearances, frequency changes and beacon codes. No Bravo Airspace separation services are provided in the Phoenix Bravo Transition Area.
 - (3) “*SHARP ECHO*” – Shall be used by pilots on initial contact with Phoenix Tower to indicate their understanding of and participation in this program. The pilot must state that they have the current ATIS code (e.g. “I have information Bravo”) or the numbers.
 - (4) “*SPECIAL VFR – SHARP ECHO*” – Shall be used by pilots on initial contact with Phoenix Tower to indicate the request of a Special VFR Clearance, their

understanding of and participation in the Special VFR – Sharp Echo program, and that the pilot shall maintain visual reference to the surface while operating under a Special VFR Clearance. The pilot must state that they have the current ATIS code (e.g. “I have information Bravo”) or the numbers.

- (5) “*CLEARED FOR TAKEOFF*” - Shall be used by Phoenix Tower to approve departure from a specified Movement Area (any runway, taxiway, helipad or helistop; **see Annex 1**) on the Phoenix Sky Harbor International Airport. It may be used with other instructions and/or clearance items.
- (6) “*CLEARED TO LAND*” – Shall be used by Phoenix Tower to approve a landing on a specified Movement Area (any runway, taxiway, helipad, or helistop; **see Annex 1**) on the Phoenix Sky Harbor International Airport. It may be used with other instructions and/or clearance items.
- (7) “*EAST TRANSITION*” - Shall be used by Phoenix Tower and pilots to issue or request the Sharp Echo East Transition (**See Annex 2**) when arriving, departing, or transiting through the Phoenix Bravo Airspace. It may be used with other instructions and/or clearance items.
- (8) “*WEST TRANSITION*” - Shall be used by Phoenix Tower and pilots to issue or request the Sharp Echo West Transition (**See Annex 3**) when arriving, departing, or transiting through the Phoenix Bravo Airspace. It may be used with other instructions and/or clearance items.
- (9) “*PROCEED VIA SHARP ECHO*”
 - (a) Shall be used by Phoenix Tower to approve departure or landing at a location:
 - 1 Not visible from the Tower.
 - 2 Not certified for helicopter use.
 - 3 Unlighted at night.
 - 4 Off the Phoenix Sky Harbor International Airport.
 - (b) Shall mean the departure or landing will be conducted at the pilot’s own risk, and may be used with other instructions and/or clearance items.
 - (c) Shall be used by Phoenix Tower as clearance into the Phoenix Class B airspace and/or the pilot’s requested routing. It shall mean the helicopter is cleared into the Class B airspace and/or may proceed in accordance with the requested routing. It may be used with other instructions and/or clearance items.

(10) “*CLEARED FOR SPECIAL VFR – SHARP ECHO*”

(a) Can be used with either of the following modifiers:

1 “*FOR A DEPARTURE OUT OF THE BRAVO AIRSPACE*”: It shall mean the pilot is cleared out of the Bravo Airspace (direction/requested or assigned routing) and shall maintain Special VFR Conditions at or below (assigned altitude).

2 “*FOR ARRIVAL INTO THE BRAVO AIRSPACE*”: It shall mean the pilot is cleared to enter the Bravo Airspace (direction/requested or assigned routing) of Sky Harbor Airport and shall maintain Special VFR Conditions at or below (assigned altitude).

(b) Shall be used during IFR conditions.

(c) Shall mean the departure or landing will be conducted at the pilot’s own risk, and may be used with other instructions and/or clearance items.

(d) Shall be used by Phoenix Tower to approve departure from or landing at a location:

1 Not visible from the Tower.

2 Not certified for helicopter use.

3 Unlighted at night.

4 Off the Phoenix Sky Harbor International Airport.

(11) “*LANDING ASSURED*” – Shall be used by pilots to inform Phoenix Tower that descent for landing has started at locations other than the Phoenix Sky Harbor International Airport. It shall mean the helicopter is below 1600 feet MSL, and the landing will be completed without delay. When this phrase is stated:

(a) Radar services are terminated.

(b) Frequency change is approved.

(c) Transponder shall be set to OFF or STANDBY.

(12) **“LEAVING THE PHOENIX BRAVO AIRSPACE”** – Shall be used by Phoenix Tower or pilots to indicate the helicopter has left the Phoenix Class B Airspace and, unless otherwise stated, the pilot is requesting no further service in the outer area. When the phrase is stated:

- (a) Radar Services are terminated.
- (b) Frequency change is approved.
- (c) Transponder shall be set to 1200.
- (d) Pilots shall resume appropriate VFR altitudes, and remain clear of the lower limits of the Phoenix Class B airspace unless radio contact has been established with Phoenix Approach Control.

b. **Departure.** Helicopters intending to depart locations within the Class B airspace or Bravo Airspace shall:

(1) Contact Phoenix Tower when ready for departure and state:

- (a) **“CALL SIGN”** (with current ATIS code)
- (b) **“SHARP ECHO”** or if requesting a special VFR clearance, **SPECIAL VFR – SHARP ECHO”**.
- (c) **“LOCATION”**.
- (d) **“REQUESTED DIRECTION OF DEPARTURE, ROUTE OF FLIGHT, AND/OR TRANSITION”** as appropriate.
- (e) **“DESTINATION OR INTENTIONS”**.

NOTE: Pilots may, if necessary to establish two-way radio communications with Phoenix Tower, climb to an altitude not to exceed 300 feet AGL and maneuver within a 1/2 mile radius of the point of departure for the purpose of obtaining an ATC clearance during VFR conditions only.

(2) Set transponder to 0400.

(3) When Departure Has Been Authorized:

- (a) Proceed as requested and/or comply with other instructions/clearances issued.

- (b) Report landing assured at destinations within the Class B airspace other than the Phoenix Sky Harbor International Airport.
- (c) Report when “*LEAVING THE PHOENIX BRAVO AIRSPACE OR PHOENIX BRAVO AIRSPACE*”.

NOTE: Helicopters intending to depart from a runway or taxiway on the Phoenix Sky Harbor International Airport shall first contact Ground Control for clearance to the intended departure point.

- c. **Arrival.** Helicopters intending to enter the Class B Airspace or Bravo Airspace, shall:
 - (1) Contact Phoenix Tower upon entering the PHOENIX BRAVO TRANSITION AREA and:
 - (a) Set transponder to 0400.
 - (b) State “*CALL SIGN*” (*with current ATIS code*)
 - (c) State “*SHARP ECHO*” or if requesting a special VFR clearance, state “*SPECIAL VFR – SHARP ECHO*”.
 - (d) State “*POSITION AND ALTITUDE*”.
 - (e) State “*DESTINATION, INTENTIONS, AND/OR TRANSITION*” as appropriate.
 - (2) When Entry Has Been Authorized:
 - (a) Proceed as requested and/or comply with other instruction/clearances issued.
 - (b) Report “*LANDING ASSURED*” at destinations within the Class B airspace other than the Phoenix Sky Harbor International Airport.
 - (c) Report when “*LEAVING THE PHOENIX BRAVO AIRSPACE OR PHOENIX BRAVO AIRSPACE*”
- d. **Altitude Assignments.** Helicopters shall operate between 2000 feet MSL and 2500 feet MSL north of Thomas Road, and between 1600 feet MSL and 2500 feet MSL south of Thomas Road, while in the Class B Airspace, unless otherwise required (**See Annex 2, Section 5 and Annex 3, Section 5.**) Between the hours of 11:00 p.m. and 5:00 a.m., helicopters shall maintain 2500 feet MSL while in the Class B Airspace. Requests to deviate from these altitudes shall be approved on a

traffic-permitting basis. Tower may also assign 1600 feet MSL for traffic while in the Class B Airspace south of Thomas Road.

- e. **Frequencies.** Helicopters shall contact Phoenix Tower on 118.7 when north of and on 120.9 when south of an imaginary line extending to the east and west parallel with and between the runways at Phoenix Sky Harbor International Airport. Ground Control is 132.55 unless otherwise advertised on the ATIS.

Sharp Echo Signatories

Federal Aviation Administration

Gregory F. Smith
Air Traffic Manager, Phoenix ATCT

Helicopter Operator

Should any of the following information change, the undersigned agrees to notify Phoenix Tower within 30 days of the date of change.

Signature: _____

Name (Print): _____

Call-Sign: _____

Organization: _____

Address: _____

Telephone: _____

Fax: _____

Email: _____

Date: _____

ANNEX 1

TERMINAL 3 (T-3) HELISTOP PROCEDURES AND LAYOUT

Location (see Map 1)

Center of Sky Harbor International Airport (PHX)
250° radial, 2.0 nautical miles from PXR VORTAC (115.6 MHz).
Atop 6th floor auto parking structure adjacent to Terminal 3.
300 yards east of the old FAA Control Tower.

AUTHORIZED USAGE

Open 24 hours.
No solo student operations.
No extended helicopter parking allowed. Pilots should remain in the vicinity of the helicopter when shutdown and a brief stopping period is required.
Passenger access is available via Terminal 3 parking structure elevators.
Auto access via Sky Harbor Boulevard, Terminal 3 parking structure and drive up to level 6.
No fuel will be available at the helistop.
Maximum Gross Weight: **NOT TO EXCEED** 12,000 lbs. (e.g. nothing larger than a Sikorsky S-76 or a Bell 412).

SPECIFICATION

Dimensions: 60 feet x 60 feet
Coordinates: N33° 26.153' latitude
 W112° 00.438' longitude
Elevation: 1205 feet MSL

PROCEDURES (see Map 2)

Arrivals

ATC Frequency: PHX Tower (arrivals from the north) 118.7MHz.
(arrivals from the south) 120.9MHz.

The following will be the standard arrival procedure unless otherwise directed by ATC.

All approaches into the helistop shall be made from the north.

Arrivals from the south: After receiving clearance to cross the south complex, proceed northbound, east of the helistop, turn westbound prior to the north runway and then southbound into the helistop (see attached map).

Arrival from the north: After receiving clearance to cross the north runway, shall proceed directly into the helistop from the north (see attached map).

Departures

ATC Frequency: PHX Tower (departures to the north) 118.7 MHz.
(departures to the south) 120.9 MHz.

The following will be the standard departure procedures unless otherwise directed by ATC.

All exiting from the helistop must be made to the north.

Departures to the south: Exit the helistop to the north, remaining south of the north runway, proceed eastbound and then turn southbound. Hold short of the south complex, until cleared to cross the south complex and further instructions are issued.

Departures to the north: Exit the helistop to the north, remaining south of the north runway. Hold short of the north runway, until cleared to cross the north runway and further instructions are issued.

OBSTACLES

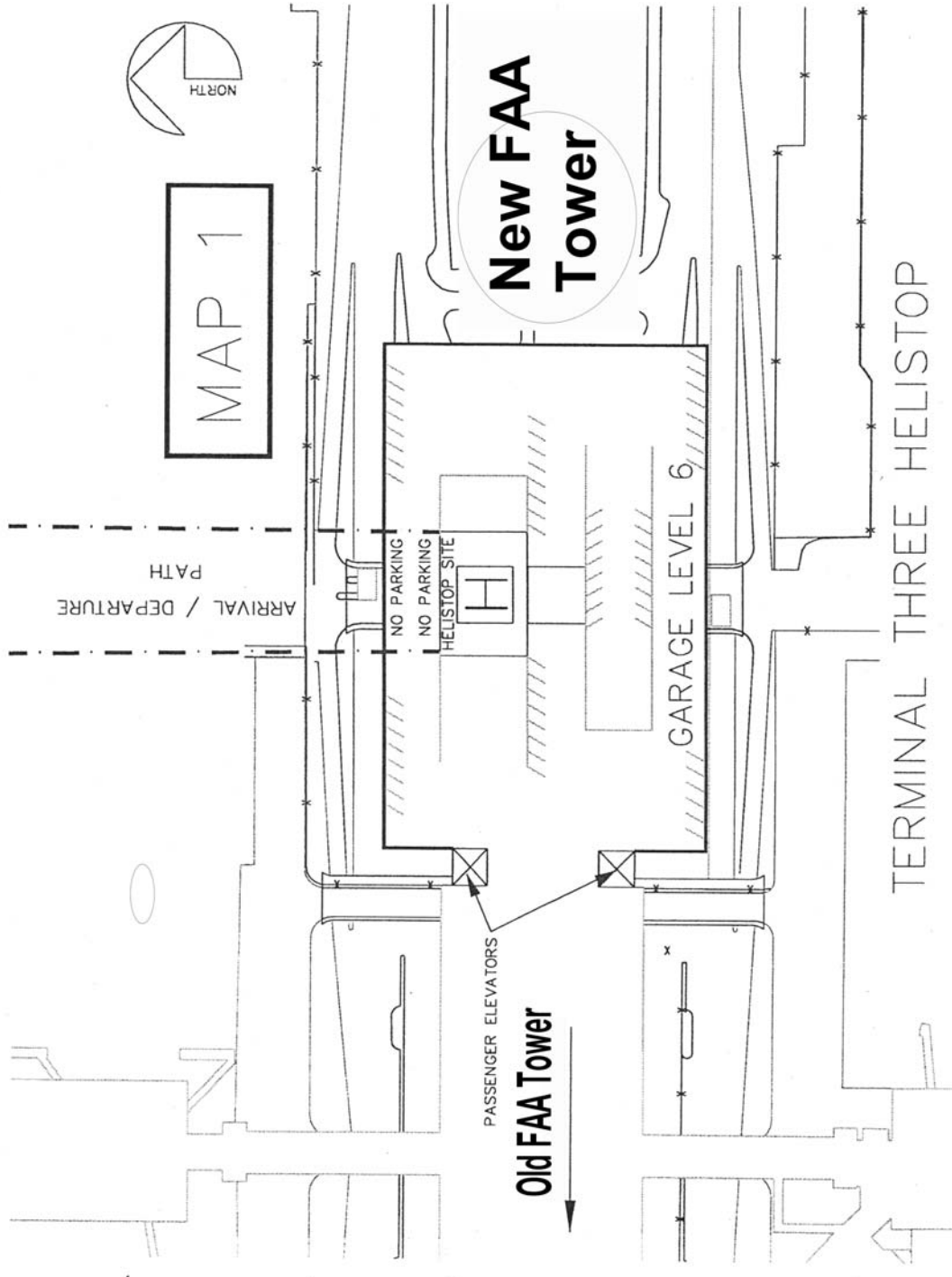
There are vertical obstacles east, south and west of the Helistop.

Lighting: Deck mounted flood lights, on from dusk to dawn.

Wind Sock: Lighted wind cone on 8 foot pole on east side parking lot perimeter wall.

EMERGENCY

Emergency phone number: 273-3311.



ANNEX 2

EAST TRANSITION

1. **BOUNDARIES** (see **Annex 4**) The East Transition is bounded on the north by Van Buren Street, on the east by Rural Road, and on the south by Broadway Road.
2. **TRANSITION ENTRY**
 - a. Flights originating outside the transition boundaries may navigate at pilot's discretion so long as the chosen flight path remains outside the transition boundaries.
 - b. Flights originating inside the transition boundaries shall state the requested direction of flight to be used to reach the boundary.
3. **ARRIVALS**
 - a. Flights landing at Fixed Base Operators (FBOs) ramps located south of Runway 7R/25L, state request to land at specified FBO via the East transition. Example: "Phoenix Tower, Air Evac 5, information _____ (or "I have the numbers") request Sharp Echo, East Transition, landing at Swift." After receiving clearance, remain south of Broadway Road until directly south of intended landing site, then proceed direct to landing site.
 - b. Flights landing at FBOs and ramps located north of Runway 8/26, state request to land at specified FBO via the East transition. Example: "Phoenix Tower, Air Evac 5, (or "I have the numbers") request Sharp Echo, East Transition, landing at the northwest corner." After receiving clearance, remain north of Van Buren Street until directly north of intended landing site, then proceed direct to landing site.
4. **DEPARTURES**
 - a. Flights departing FBOs located south of Runway 7R/25L, state request to depart from specified FBO via the East transition. Example: "Phoenix Tower, Native 1, information _____ (or "I have the numbers") at Cutter, request Sharp Echo, East Transition to Scottsdale Osborne." After receiving clearance (and altitude permits), depart directly southbound until south of Broadway, then resume the East Transition.
 - b. Flights departing FBOs located north of Runway 8/26, state request to depart from specified FBO or ramp via the East transition. Example: "Phoenix Tower, Native 1, information _____ (or "I have the numbers") at the northwest corner, request Sharp Echo, East Transition to Firebird Lake." After receiving clearance (and

altitude permits), depart directly Northbound until north of Van Buren, then resume the East Transition.

5. **ALTITUDES** When operating between Washington Street and Lower Buckeye Road/University Drive, pilots shall maintain 1600 feet MSL.

ANNEX 3

WEST TRANSITION

1. **BOUNDARIES** (see **Annex 4**) The West Transition is bounded on the north by Van Buren Street, on the west by Central Avenue, and on the south by Broadway Road.
2. **TRANSITION ENTRY**
 - a. Flights originating outside the transition boundaries may navigate at pilot's discretion so long as the chosen flight path remains outside the transition boundaries.
 - b. Flights originating inside the transition boundaries shall state the requested direction of flight to be used to reach the boundary.
3. **ARRIVALS**
 - a. Flights landing at Fixed Base Operators (FBOs) ramps located south of Runway 7R/25L, state request to land at specified FBO via the West transition. Example: "Phoenix Tower, Air Evac 5, request Sharp Echo, West Transition, landing at Swift." Remain south of Broadway Road until directly south of intended landing site, then proceed direct to landing site.
 - b. Flights landing at FBOs and ramps located north of Runway 8/26, state request to land at specified FBO via the West transition. Example: "Phoenix Tower, Air Evac 5, request Sharp Echo, West Transition, landing at the northwest corner." Remain north of Van Buren Street until directly north of intended landing site, then proceed direct to landing site.
4. **DEPARTURES**
 - a. Flights departing FBOs located south of Runway 7R/25L, state request to depart from specified FBO via the West transition. Example: "Phoenix Tower, Native 1, at Cutter, request Sharp Echo, West Transition to MetroCenter." After receiving clearance (and altitude permits), depart directly southbound until south of Broadway, then resume the West Transition.
 - b. Flights departing FBOs located north of Runway 8/26, state request to depart from specified FBO or ramp via the West transition. Example: "Phoenix Tower, Native 1, at the northwest corner, request Sharp Echo, West Transition to South Mountain." After receiving clearance (and altitude permits), depart directly Northbound until north of Van Buren, then resume the West Transition.

5. **ALTITUDES** When operating between Washington Street and Lower Buckeye Road/University Drive, pilots shall maintain 1600 feet MSL.

ANNEX 4

EAST AND WEST TRANSITION MAP

