**ORIGINAL** 

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FIELD NOTES

OF THE

DEPENDENT RESURVEY OF A PORTION OF

THE SOUTH BOUNDARY AND

THE SUBDIVISIONAL LINES

AND

THE METES-AND-BOUNDS SURVEYS OF

THE BARRY M. GOLDWATER RANGE BOUNDARY AND

THE ADMINISTRATIVE BOUNDARY BETWEEN MARINE CORPS AIR STATION, YUMA

AND LUKE AIR FORCE BASE,

TOWNSHIP 8 SOUTH, RANGE 14 WEST,

OF THE GILA AND SALT RIVER MERIDIAN,

IN THE STATE OF ARIZONA.

### **EXECUTED BY**

# Daniel L. Maxey, Cadastral Surveyor

Under Special Instructions dated September 28, 2006, approved September 28, 2006, which provided for the surveys included under Group No. 996, and assignment instructions dated September 28, 2006.

Survey commenced October 24, 2006

Survey completed August 14, 2007

# INDEX DIAGRAM

# TOWNSHIP 8 SOUTH RANGE 14 WEST GILA AND SALT RIVER MERIDIAN, ARIZONA

6	5	4	3	2	1
7	8	9	10	11	12
<b>18</b>	<b>17</b> 6	<b>16</b> 5	15 4	14	13
7 19	<b>20</b>	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36 4

Metes-and-Bounds Survey of the Barry M. Goldwater Range Boundary ...... Pages 8-17

Metes-and-Bounds Survey of the Administrative Boundary between MCASY and LAFB. ..... Pages 17-21

# T. 8 S., R. 14 W., Gila and Salt River Meridian, Arizona

CHAINS

The following field notes describe the dependent resurvey of a portion of the south boundary and the subdivisional lines and the metes-and-bounds surveys of the Barry M. Goldwater Range boundary and the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base, Township 8 South, Range 14 West, Gila and Salt River Meridian, Arizona.

The history of surveys pertaining to this survey is as follows:

Theodore F. White surveyed the north boundary in 1877. Lewis Wolfley resurveyed the north boundary and surveyed portions of the south boundary, east boundary and the subdivisional lines in 1893. Francis E. Joy surveyed portions of the south boundary, resurveyed and surveyed portions of the subdivisional lines; and resurveyed the west boundary in 1930. Francis E. Joy resurveyed a portion of the west boundary in 1934. Roger F. Wilson resurveyed a portion of the south boundary in 1936. Records at the Yuma Area Office of the Bureau of Reclamation indicate the U. S. Reclamation Service, performed substantial resurveys and corner perpetuations in the course of their projects between 1912 and 1915. These surveys are the source of some of the redwood posts recovered during the course of this survey.

The survey was executed in accordance with the specifications as set forth in the  $\underline{\text{Manual of Instructions for the Survey of the Public Lands of the United States, 1973, and the Special Instructions dated September 28, 2006, for Group No. 996, Arizona.$ 

The true meridian direction and length of all lines were determined by real time kinematic global positioning system observations using Trimble Navigation 5800 model receivers.

Preliminary to the resurvey, the lines of the prior surveys were retraced and search was made for all corners and other calls of record. Identified corners were remonumented in their original positions. Lost corners were reestablished and remonumented at proportionate positions based on the official record. The retracement data were thoroughly verified and only the true line field notes are given herein.

Geodetic control was derived from Global Positioning System (GPS) static observations post processed by National Geodetic Survey, Online Positioning User Service (OPUS), utilizing Continuously Operating Reference Stations (CORS) AZBK MCDOT BUCKEYE CORS ARP, AZMO MARICOPA CORS ARP and SRP1 SALT RIVER PROJEC CORS ARP. The NAD 83 (CORS96) (EPOCH:2002), geographic position of the 1/4 section corner of sections 1 and 36, Townships 8 and 9 South, Range 14 West, is as follows:

Latitude: 32°40'59.17" N. Longitude: 113°40'09.44" W.

# T. 8 S., R. 14 W., Gila and Salt River Meridian, Arizona

CHAINS

6.08

40.11

The mean magnetic declination is  $11 \ 3/4^{\circ}$  E.

Dependent Resurvey of a Portion of the South Boundary, T. 8 S., R. 14 W., Gila and Salt River Meridian, Arizona

Restoring the resurvey executed by Roger F. Wilson, in 1936

Beginning at the 1/4 sec. cor. of secs. 1 and 36, Tps. 8 and 9 S., R. 14 W., monumented with an iron post, 1 in. diam., firmly set, projecting 16 ins. above ground, in a supporting mound of stone, 3 ft. base, to top, with brass cap mkd. 1/4 S36 S1 1936, with a cedar post, 4 x 2 ins., 3 ft. high, set alongside. Add the marks T8S R14W T9S 2006 to the brass cap.

S. 89°54' W., bet. secs. 1 and 36, on the S. bdy. of the Tp.

Point for Mile Post 4 + 3.75, at intersection with the Marine Corps Air Station, Yuma, administrative boundary of the Barry M. Goldwater Range, hereinafter described.

The cor. of secs. 1, 2, 35 and 36, Tps. 8 and 9 S., R. 14 W., monumented with an iron post, 2 ins. diam., firmly set, projecting 8 ins. above ground, with brass cap mkd. T8S R14W S35 S36 S2 S1 T9S 1936. Add the marks 2006 to the brass cap.

Dependent Resurvey of a Portion of the Subdivisional Lines, T. 8 S., R. 14 W., Gila and Salt River Meridian, Arizona

Restoring the survey executed by Lewis Wolfley, in 1893 and the resurvey and survey executed by Francis E. Joy, in 1930

From the cor. of secs. 14, 15, 22 and 23, monumented with an iron post, 2 ins. diam., firmly set, projecting 10 ins. above ground, with brass cap mkd. T8S R14W S15 S14 S22 S23 1930. Add the marks 2006 to the brass cap.

N. 0°08' W., bet. secs. 14 and 15.

Point for the 1/4 sec. cor. of secs. 14 and 15, at proportionate dist., there is no remaining evidence of the orig. cor. Not monumented.

From this cor. point, an iron rod, 3/4 in. diam., projecting 1 in. above the ground, with an attached brass wafer, 1 5/8 ins. diam., mkd. RLS 22285, bears S. 8°42' W., 17 lks. dist.

40.07

# Dependent Resurvey of a Portion of the Subdivisional Lines, T. 8 S., R. 14 W., Gila and Salt River Meridian, Arizona

CHAINS	
56.41	Point for AP 3, sec. 15, identical with AP 1, sec. 14, at intersection with the Barry M. Goldwater Range boundary on the S. right-of-way of the Southern Pacific Company Railroad, hereinafter described.
80.14	The cor. of secs. 10, 11, 14 and 15, monumented with an iron post, 2 ins. diam., projecting 13 ins. above ground, with a standard, Bureau of Reclamation, brass cap mkd. T8S R14W S10 S11 S15 S14 1941, with a decomposing redwood post, 3 x 3 ins., projecting 38 ins. above ground, to the S., as described in the Department of Interior, Bureau of Reclamation, engineer transit book L-89, page 14, dated August 16, 1941, on file with the Bureau of Reclamation, Yuma Area Office, 7301 Calle Agua Salada, Yuma Arizona, 85364. This is accepted as the best available evidence of the orig. cor. position.  Cor. is located in a fence cor., with fences extending N., E. and S.
	From the cor. of secs. 15, 16, 21 and 22, monumented with an iron post, 2 ins. diam., firmly set, projecting 10 ins. above ground, in a scattered mound of stone, with brass cap mkd. T8S R14W S16 S15 S21 S22 1930. Add the marks 2006 to the brass cap.
	N. 0°01' E., bet. secs. 15 and 16.
19.61	Point for AP 3, sec. 16, identical with AP 1, sec. 15, at intersection with the Barry M. Goldwater Range boundary on the S. right-of-way of the Southern Pacific Company Railroad, hereinafter described.
39.99	Point for the 1/4 sec. cor. of secs. 15 and 16, at proportionate dist., there is no remaining evidence of the orig. cor. Not monumented.
	From this cor. point, a galvanized iron post, 1 1/2 ins. diam., projecting 4 ins. above the ground, with an attached steel wafer, mkd. RLS 22285, bears N. $45^{\circ}26^{\circ}$ E., 16 lks. dist., with a deteriorated wood post, 3 1/2 x 2 ins., projecting 26 ins. above ground, 0.5 lk. E. of iron post.
79.98	The cor. of secs. 9, 10, 15 and 16, monumented with an iron post, 2 ins. diam., projecting 8 ins. above ground, with a standard, Bureau of Reclamation, brass cap mkd. T8S R14W S9 S10 S16 S15 1941, as described in the Department of Interior, Bureau of Reclamation, engineer transit book L-89, page 7, dated August 18, 1941, on file with the Bureau of Reclamation, Yuma Area Office, 7301 Calle Agua Salada, Yuma Arizona, 85364. This is accepted as the best available evidence of the orig. cor. position.

# Dependent Resurvey of a Portion of the Subdivisional Lines, T. 8 S., R. 14 W., Gila and Salt River Meridian, Arizona

CHAINS	
	From the 1/4 sec. cor. of secs. 20 and 21, monumented with an iron post, 1 in. diam., firmly set, projecting 11 ins. above ground, with brass cap mkd. 1/4 S20 S21 1930, with an accessory mound of stone, 3 ft. base, 2 ft. high, to the W. Add the marks T8S R14W 2006 to the brass cap.
	N. 0°15' W., bet. secs. 20 and 21.
35.66	Point for AP 7, sec. 20, identical with AP 1, sec. 21, at intersection with the Barry M. Goldwater Range boundary on the S. right-of-way of the Southern Pacific Company Railroad, hereinafter described.
40.04	The cor. of secs. 17 and 20 only, monumented with an iron post, 2 ins. diam., firmly set, projecting 9 ins. above ground, with brass cap mkd. T8S R14W S17 S20 S21 1930. Add the marks 2006 to the brass cap.
	N. 0°07' W., bet. secs. 17 and 21.
0.87	The orig. closing cor. of secs. 17 and 21, monumented with an iron post, 2 ins. diam., firmly set, projecting 7 ins. above ground, with brass cap mkd. S16 CC S17 S21 T8S R14W 1930.
0.88	Point for the closing cor. of secs. 17 and 21, at intersection with the S. line of sec. 16, not monumented.
	From the 1/4 sec. cor. of sec. 16 only, monumented with an iron post, 1 in. diam., firmly set, projecting 8 ins. above ground, with brass cap mkd. 1/4 S16 1930. Add the marks T8S R14W 2006 to the brass cap.
	S. 89°59' W., bet. secs. 16 and 21.
8.76	Point for AP 5, sec. 21, identical with AP 1, sec. 16, at intersection with the Barry M. Goldwater Range boundary on the S. right-of-way of the Southern Pacific Company Railroad, hereinafter described.
39.37	Point for the closing cor. of secs. 17 and 21, hereinbefore described.
40.17	The cor. of sec. 16 only, monumented with an iron post, 2 ins. diam., firmly set, projecting 10 ins. above ground, with brass cap mkd. T8S R14W S16 S17 1930.
	From the cor. of secs. 17 and 20 only.
·	S. 89°51' W., bet. secs. 17 and 20.

# Dependent Resurvey of a Portion of the Subdivisional Lines, T. 8 S., R. 14 W., Gila and Salt River Meridian, Arizona

CHAINS			
37.29	Point for AP 4, Sec. 20, at intersection with the southwesterly right-of-way of the old grade of the realigned Southern Pacific Company Railroad, hereinafter described.		
40.01	The 1/4 sec. cor. of secs. 17 and 20, monumented with an post, 1 in. diam., firmly set, projecting 5 ins. above grain a collar of stone, with brass cap mkd. 1/4 S17 S20 1930.		
	Add the marks T8S R14W 2006 to the brass cap.		
	S. 89°53' W., beginning new measurement.		
6.03	Point for AP 3, sec. 20, at intersection with the S. right-of-way, Interstate Highway No. 8, hereinafter described.		
39.98	Point for the cor. of secs. 17, 18, 19 and 20, determined at proportionate dist., there is no remaining evidence of the original cor., not remonumented.		
	From this cor. point, the witness cor. to the 1/4 sec. cor. of secs. 17 and 18, bears N. 0°15' W., 40.22 chs. dist., monumented with an iron post, 1 in. diam., firmly set, projecting 13 ins. above ground, with brass cap mkd. 1/4 S18 S17 WC 1930. Add the marks T8S R14W 2006 to the brass cap. Raise a supporting mound of stone, 2 1/2 ft. base, to top.		
	From the 1/4 sec. cor. of secs. 19 and 20, monumented with an iron post, 1 in. diam., projecting 33 ins. above ground, in a supporting mound of stone, 4 ft. base, 2 ft. high, with brass cap mkd. 1/4 S19 S20 1930.		
	N. 0°17' W., bet. secs. 19 and 20.		
33.61	Point for AP 2, sec. 19, identical with AP 1, sec. 20, at intersection with the S. right-of-way, Interstate Highway No. 8, hereinafter described.		
40.05	The point for the cor. of secs. 17, 18, 19 and 20.		
	S. 88°56' W., bet. secs. 18 and 19.		
0.64	Point for the cor. of secs. 18 and 19 only, on the W. bdy. of the Tp., determined at proportionate dist., there is no evidence of the orig. cor., not remonumented.		
	From this cor. point, the angle point bet. secs. 13 and 18, on the W. bdy. of the Tp., bears N. 0°55' W., 23.04 chs. dist., monumented with the rusted remains of a concrete core iron post, 1 in. diam., buried 20 ins. below the surface of graded road, 30 ft. wide, bears S. 72° E. and N. 72° W., with a detached brass cap mkd. AP T8S S13 S18 R15W R14W 1934 buried alongside.		

## Dependent Resurvey of a Portion of the Subdivisional Lines, T. 8 S., R. 14 W., Gila and Salt River Meridian, Arizona

CHAINS

At the corner point

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam. 6 ins. below the surface of the road, with brass cap mkd.

AP T 8 S R 15 W | R 14 W S 13 | S 18

2006

from which

- A rebar, 3/4 in. diam., projecting 4 ins. above ground, bears N.  $64^{\circ}21'$  E., 42.40 ft. dist.
- A rebar, 3/4 in. diam., projecting 3 ins. above ground, bears N. 26°00' W., 42.40 ft. dist.

Deposit a magnet, in a white plastic case, at the base of the stainless steel post.

Bury the remains of the concrete core iron post and the detached brass cap alongside the stainless steel post.

From this same cor. point, the angle point bet. secs. 19 and 24, on the W. bdy. of the Tp., bears S. 0°55' E., 18.09 chs. dist., monumented with an iron post, 2 ins. diam., firmly set, projecting 14 ins. above a supporting mound of stone, 5 ft. base, 3 ft. high, with a brass cap mkd. AP T8S T8S R14W S24 S19 R15W 1934 2006. A redwood post, 3 1/2 ins. square, firmly set, projecting 19 ins. above the supporting mound of stone, mkd. R14W on the E. face and T8S on the N. face, is set alongside.

Metes-and-Bounds Survey of the Barry M. Goldwater Range Bdy., T. 8 S., R. 14 W., Gila and Salt River Meridian, Arizona

In Sec. 19

From AP 1, sec. 19, on the W. bdy. of the Tp., monumented with an alum. post., 2 1/2 ins. diam., firmly set, projecting 18 ins. above ground, in a supporting mound of stone, 10 ft. x 5 ft. base, to top, with brass cap mkd. T8S R15W R14W S13 S19 AP1 2006.

#### CHAINS

Cor. is located at the top of a road cut, in a small wash, 6 ft. deep, 9 ft. wide, drains N.  $25^{\circ}$  E., above the E. bound lanes of Interstate Highway No. 8, beneath the barbed wire right-of-way fence, bears S.  $89^{\circ}$  E. and N.  $89^{\circ}$  W., with a Bureau of Land Management standard sign S-201 attached to fence.

From this cor. point, the point for the cor. of secs. 18 and 19 only, on the W. bdy. of the Tp., bears N.  $0^{\circ}55'$  W., 6.41 chs. dist., hereinbefore described.

From this same cor. point, the angle point bet. secs. 19 and 24, on the W. bdy. of the Tp., bears S. 0°55' E., 11.68 chs. dist., hereinbefore described.

From this same cor. point, a station on the S. right-of-way of Interstate Highway No. 8, bears N.  $88^{\circ}33^{\circ}$  W., 3.45 chs. dist., monumented with a bronze disk, 2 1/2 ins. diam., firmly set in a concrete cylinder, flush with the ground, with disk mkd. 2918+24.73, with a 4 in. angle iron guard post alongside, located in a barbed wire right-of-way fence, bears S.  $89^{\circ}$  E. and N.  $89^{\circ}$  W.

S. 88°33' E., along the S. right-of-way of Interstate Highway No. 8.

0.57

Point for AP 2, sec. 19, identical with AP 1, sec. 20, at intersection with the line bet. secs. 19 and 20, not monumented.

#### In sec. 20

S.  $88^{\circ}33'$  E., along the S. right-of-way of Interstate Highway No. 8.

1.91

Point for AP 2, sec. 20, determined at a point on the S. right-of-way of Interstate Highway No. 8, monumented with a bronze disk, 2 1/2 ins. diam., firmly set flush in a concrete collar, 6 ins. diam., projecting 7 ins. above ground, with disk mkd. 2921+93.15 1966, with a 4 in. angle iron guard post alongside, located in a barbed wire right-of-way fence, bears S. 89° E. and N. 89° W.

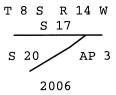
Thence along a circular curve to the left, having a central angle of  $26^{\circ}20'$ , a radius of 4733.66 ft., along the S. right-of-way of Interstate Highway No. 8., the chord of said arc bears N.  $78^{\circ}25'$  E., 32.68 chs. dist.

32.97

Point for AP 3, sec. 20, at intersection with the line between secs. 17 and 20, located in a barbed wire right-of-way fence, bears N.  $63^{\circ}$  E. and N.  $78^{\circ}$  W.

CHAINS

Set an alum. post, 30 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.



Deposit a magnet, in a white plastic case, at the base of the alum. post.

Set a steel fence post with an attached, Bureau of Land Management, standard sign, S-201, S. of cor.

From this cor. point, a point on the S. right-of-way of Interstate Highway No. 8, bears N. 62°49' E., 6.10 chs. dist., monumented with a bronze disk, 3 ins. diam., firmly set flush in a concrete collar, 6 ins. diam., projecting 4 ins. above ground, with disk mkd. 2946+89.86 1966, located in a cor. of a barbed wire right-of-way fence, with fences extending S. 30° E. and S. 63° W.

From this same cor. point, the 1/4 sec. cor. of secs. 17 and 20, bears N.  $89^{\circ}53'$  E., 6.03 chs. dist., hereinbefore described.

From AP 4, sec. 20, determined at intersection with the line bet. secs. 17 and 20 and the southwesterly right-of-way of the old grade of the realigned Southern Pacific Company Railroad.

Set an alum. post, 30 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.

Deposit a magnet, in a white plastic case, at the base of the alum. post.

Set a steel fence post with an attached, Bureau of Land Management, standard sign, S-201, S. of cor.

From this cor. point, the 1/4 sec. cor. of secs. 17 and 20, bears S.  $89^{\circ}51'$  W., 2.72 chs. dist., hereinbefore described.

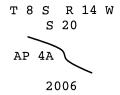
#### CHAINS

Thence along a circular curve to the right, having a central angle of  $2^{\circ}19^{\circ}$ , a radius of 1037.35 ft., along the southwesterly right-of-way of the old grade of the realigned Southern Pacific Company Railroad, the chord of said arc bears S.  $21^{\circ}37^{\circ}$  E., 0.64 chs. dist.

0.64

Point for AP 4A, sec. 20, monumented with a redwood post,  $4 \times 3 \ 1/2 \ \text{ins.}$ , firmly set, projecting 5 ins. above ground, located on the southwesterly right-of-way of the old grade of the realigned Southern Pacific Company Railroad.

Set an alum. post, 30 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, with alum. cap mkd.



Deposit a magnet, in a white plastic case, at the base of the alum. post.

Set a steel fence post with an attached, Bureau of Land Management, standard sign, S-201, S. of cor.

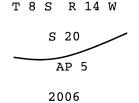
Bury the redwood post, 30 ins. long, alongside the alum. post.

Thence along a circular curve to the left, having a central angle of  $99^{\circ}42^{\circ}$ , a radius of 959.60 ft., along the south right-of-way of the old grade of the realigned Southern Pacific Company Railroad, the chord of said arc bears S.  $65^{\circ}56^{\circ}$  E., 22.23 chs. dist.

25.30

Point for AP 5, sec. 20, on the south right-of-way of the old grade of the realigned Southern Pacific Company Railroad.

Set an alum. post, 30 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.



Deposit a magnet, in a white plastic case, at the base of the alum. post.

#### CHAINS

Set a steel fence post with an attached, Bureau of Land Management, standard sign, S-201, S. of cor.

From this cor. point, a redwood post, 4 x 3 1/2 ins., firmly set, projecting 4 ft. above ground, mkd. RR PROPERTY LINE, bears S.  $64^{\circ}17'$  W., 0.03 chs. dist.

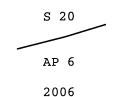
N. 72°17' E., along the south right-of-way of the old grade of the realigned Southern Pacific Company Railroad, transitioning to the south right-of-way of the existing Southern Pacific Company Railroad.

15.35

Point for AP 6, sec. 20, on the south right-of-way of the existing Southern Pacific Company Railroad.

Set an alum. post, 30 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.

T 8 S R 14 W



Deposit a magnet, in a white plastic case, at the base of the alum. post.

Set a steel fence post with an attached, Bureau of Land Management, standard sign, S-201, S. of cor.

From this cor. point, a redwood post,  $4 \times 3 \cdot 1/2$  ins., firmly set, projecting 4 ft. above ground, mkd. RR PROPERTY LINE, bears S.  $72^{\circ}17'$  W., 0.03 chs. dist.

N.  $72^{\circ}11'$  E., along the south right-of-way of the existing Southern Pacific Company Railroad.

2.27

Point for AP 7, sec. 20, identical with AP 1, sec. 21, on the south right-of-way of the existing Southern Pacific Company Railroad, at intersection with the line bet. secs. 20 and 21, not monumented.

From this point, the cor. of secs. 17 and 20 only, hereinbefore described, bears N.  $0^{\circ}15'$  W., 4.38 chs. dist.

	T. 8 S., R. 14 W., Gila and Salt River Meridian, Arizona			
CHAINS				
	In Sec. 21			
	N. 72°11' E., along the south right-of-way of the existing Southern Pacific Company Railroad, beginning new measurement.			
7.07	Point for AP 2, sec. 21, on the south right-of-way of the existing Southern Pacific Company Railroad.			
	Set an alum. post, 30 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.			
	T 8 S R 14 W			
	S 21			
	AP 2			
	2006			
	Deposit a magnet, in a white plastic case, at the base of the alum. post.			
	Set a steel fence post with an attached, Bureau of Land Management, standard sign, S-201, S. of cor.			
	Cor. falls in a wash, at the toe of S. bank, 3 ft. high., bears E. and W.			
	Thence along a circular curve to the right, having a central angle of 16°30', a radius of 2885.17 ft., along the south right-of-way of the existing Southern Pacific Company Railroad, the chord of said arc bears N. 79°39' E., 12.54 chs. dist.			
12.58	Point for AP 3, sec. 21, on the south right-of-way of the existing Southern Pacific Company Railroad.			
	Set an alum. post, 30 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.			
	T 8 S R 14 W			
	S 21			
	AP 3			
	2006			
	Deposit a magnet, in a white plastic case, at the base of the alum. post.			

#### CHAINS

Set a steel fence post with an attached, Bureau of Land Management, standard sign, S-201, S. of cor.

From this cor. point, a redwood post, 4 x 3 1/2 ins., firmly set, projecting 4 ft. above ground, mkd. RR PROPERTY LINE, bears S.  $87^{\circ}24'$  W., 0.03 chs. dist.

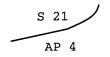
N. 86°45' E., along the south right-of-way of the existing Southern Pacific Company Railroad.

7.40

Point for AP 4, sec. 21, on the south right-of-way of the existing Southern Pacific Company Railroad.

Set an alum. post, 30 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.

T 8 S R 14 W



2006

Deposit a magnet, in a white plastic case, at the base of the alum. post.

Set a steel fence post with an attached, Bureau of Land Management, standard sign, S-201, S. of cor.

From this cor. point, a redwood post, 4 x 3 1/2 ins., firmly set, projecting 4 ft. above ground, mkd. RR PROPERTY LINE, bears S.  $86^{\circ}45'$  W., 0.03 chs. dist.

Thence along a circular curve to the left, having a central angle of  $3^{\circ}58'$ , a radius of 3960.51 ft., along the south right-of-way of the existing Southern Pacific Company Railroad, the chord of said arc bears N.  $83^{\circ}55'$  E., 4.15 chs. dist.

4.15

Point for AP 5, sec. 21, identical with AP 1, sec. 16, on the south right-of-way of the existing Southern Pacific Company Railroad, at intersection with the line bet. secs. 16 and 21, not monumented.

From this point, the 1/4 sec. cor. of sec. 16 only, bears N.  $89^{\circ}59'$  E., 8.76 chs. dist., hereinbefore described.

In Sec. 16

#### CHAINS

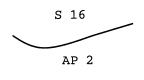
Thence continuing along a circular curve to the left, having a central angle of  $18^{\circ}37'$ , a radius of 3960.51 ft., along the south right-of-way of the existing Southern Pacific Company Railroad, the chord of said arc bears N.  $72^{\circ}38'$  E., 19.40 chs. dist.

19.49

Point for AP 2, sec. 16, on the south right-of-way of the existing Southern Pacific Company Railroad.

Set an alum. post, 30 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.

T 8 S R 14 W



2006

Deposit a magnet, in a white plastic case, at the base of the alum. post.

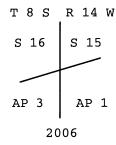
Set a steel fence post with an attached, Bureau of Land Management, standard sign, S-201, S. of cor.

N. 65°46' E., along the south right-of-way of the existing Southern Pacific Company Railroad.

33.71

Point for AP 3, sec. 16, identical with AP 1, sec. 15, at intersection with the line bet. secs. 15 and 16.

Set an alum. post, 30 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.



Deposit a magnet, in a white plastic case, at the base of the alum. post.

Set a steel fence post with an attached, Bureau of Land Management, standard sign, S-201, S. of cor.

#### CHAINS

From this cor. point, the cor. of secs. 15, 16, 21 and 22, bears S. 0°01' W., 19.61 chs. dist., hereinbefore described.

#### In Sec. 15

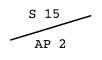
N.  $65^{\circ}43'$  E., along the south right-of-way of the existing Southern Pacific Company Railroad.

45.00

Point for AP 2, sec. 15, on the south right-of-way of the existing Southern Pacific Company Railroad.

Set an alum. post, 30 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.

#### T 8 S R 14 W



2006

Deposit a magnet, in a white plastic case, at the base of the alum. post.

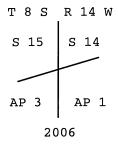
Set a steel fence post with an attached, Bureau of Land Management, standard sign, S-201, S. of cor.

N.  $65^{\circ}43'$  E., along the south right-of-way of the existing Southern Pacific Company Railroad.

43.08

Point for AP 3, sec. 15, identical with AP 1, sec. 14, at intersection with the line bet. secs. 14 and 15.

Set an alum. post, 30 ins. long,  $2\ 1/2$  ins. diam., 24 ins. in the ground, with alum. cap mkd.



Deposit a magnet, in a white plastic case, at the base of the alum. post.

#### CHAINS

Set a steel fence post with an attached, Bureau of Land Management, standard sign, S-201, S. of cor.

From this cor. point, the cor. of secs. 10, 11, 14 and 15, bears N. 0°08' W., 23.73 chs. dist., hereinbefore described.

#### In Sec. 14

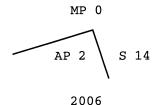
N.  $65^{\circ}55'$  E., along the south right-of-way of the existing Southern Pacific Company Railroad.

45.55

Point for AP 2, sec. 14, identical with MP 0, at intersection with the south right-of-way of the existing Southern Pacific Company Railroad and the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base.

Set an alum. post, 30 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.

T 8 S R 14 W



Deposit a magnet, in a white plastic case, at the base of the alum. post.

Set a steel fence post with an attached, Bureau of Land Management, standard sign, S-201, S. of cor.

Metes-and-Bounds Survey of the Administrative Boundary between Marine Corps Air Station, Yuma and Luke Air Force Base, T. 8 S., R. 14 W., Gila and Salt River Meridian, Arizona

Note. \_\_\_\_ The administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base on the Barry M. Goldwater Range is described as being along the eastern line of the Federal Aviation Administration (FAA), Special Use Airspace area, designated as R-2301W Ajo West, AZ. This line is controlled by a point determined at the intersection of the United States-Mexico Border and longitude 113°30'33" W. (NAD 83) and a point inaccurately described as being along the Southern Pacific Railroad and U.S. Highway at latitude 32°44'15" N., longitude 113°41'08" W. (NAD 83). The geographical position of

# Metes-and-Bounds Survey of the Administrative Boundary between Marine Corps Air Station, Yuma and Luke Air Force Base, T. 8 S., R. 14 W., Gila and Salt River Meridian, Arizona

#### CHAINS

the latter point actually falls 15.85 chains south of the southerly right-of-way of the existing Southern Pacific Company Railroad.

Therefore the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base on the Barry M. Goldwater Range is determined by extending a line from the point on the United States-Mexico Border thru a point determined at latitude 32°44'15" N., longitude 113°41'08" W. (NAD 83) to the intersection of the southerly right-of-way of the existing Southern Pacific Company Railroad.

From AP 2, sec. 14, identical with MP 0, at intersection with the south right-of-way of the existing Southern Pacific Company Railroad and the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base, hereinbefore described.

S.  $13^{\circ}05'$  E., along the administrative boundary bet. Marine Corps Air Station, Yuma and Luke Air Force Base.

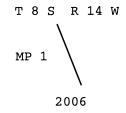
15.85

The point determined at latitude 32°44'15" N., longitude 113°41'08" W. (NAD 83), not monumented.

80.00

Point for MP 1, on the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base.

Set an alum. post, 30 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.



Deposit a magnet, in a white plastic case, at the base of the alum. post.

Set a steel fence post with an attached, Bureau of Land Management, standard sign, S-201, W. of cor.

S. 13°05' E., along the administrative boundary bet. Marine Corps Air Station, Yuma and Luke Air Force Base.

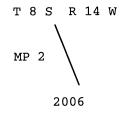
80.00

Point for MP 2, on the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base.

# Metes-and-Bounds Survey of the Administrative Boundary between Marine Corps Air Station, Yuma and Luke Air Force Base, T. 8 S., R. 14 W., Gila and Salt River Meridian, Arizona

#### CHAINS

Set an alum. post, 30 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.



Deposit a magnet, in a white plastic case, at the base of the alum. post.

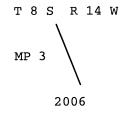
Set a steel fence post with an attached, Bureau of Land Management, standard sign, S-201, W. of cor.

S. 13°05' E., along the administrative boundary bet. Marine Corps Air Station, Yuma and Luke Air Force Base.

80.00

Point for MP 3, on the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base.

Set an alum. post, 30 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.



Deposit a magnet, in a white plastic case, at the base of the alum. post.

Set a steel fence post with an attached, Bureau of Land Management, standard sign, S-201, W. of cor.

S.  $13^{\circ}05'$  E., along the administrative boundary bet. Marine Corps Air Station, Yuma and Luke Air Force Base.

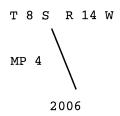
80.00

Point for MP 4, on the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base.

Set an alum. post, 30 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.

Metes-and-Bounds Survey of the Administrative Boundary between Marine Corps Air Station, Yuma and Luke Air Force Base, T. 8 S., R. 14 W., Gila and Salt River Meridian, Arizona

CHAINS



Deposit a magnet, in a white plastic case, at the base of the alum. post.

Set a steel fence post with an attached, Bureau of Land Management, standard sign, S-201, W. of cor.

S. 13°05' E., along the administrative boundary bet. Marine Corps Air Station, Yuma and Luke Air Force Base.

3.75

Point for MP 4+3.75, on the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base, at intersection with the S. bdy. of the Tp.

Set an alum. post, 30 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.

Deposit a magnet, in a white plastic case, at the base of the alum. post.

Set a steel fence post with an attached, Bureau of Land Management, standard sign, S-201, W. of cor.

From this cor. point, the 1/4 sec. cor. of secs. 1 and 36, on the S. bdy. of the Tp., bears N.  $89^{\circ}54'$  E., 6.08 chs. dist., hereinbefore described.

From this same cor. point, the point determined at the intersection of the United States-Mexico Border and longitude  $113^{\circ}30'33"$  W. (NAD 83), bears S.  $13^{\circ}05'$  E., 3333.74 chs. dist.

From this intersection point, International Boundary Monument No. 180, bears S. 69°46' E., 361.28 chs. dist., monumented with an iron obelisk, 6 1/2 ft. high, 1 ft. square base, bolted onto a concrete pad, 3 ft. square, mkd. 180.

Metes-and-Bounds Survey of the Administrative Boundary between Marine Corps Air Station, Yuma and Luke Air Force Base, T. 8 S., R. 14 W., Gila and Salt River Meridian, Arizona

CHAINS

From this same intersection point, International Boundary Monument No. 181, bears N.  $69^{\circ}46'$  W., 21.98 chs. dist., monumented with an iron obelisk,  $6\ 1/2$  ft. high, 1 ft. square base, bolted onto a concrete pad, 3 ft. square, mkd. 181.

#### GENERAL DESCRIPTION

The purpose of this survey is to identify the boundary of the Barry M. Goldwater Range, managed by the United States Marine Corps Air Station, Yuma. The general area is located south of Interstate 8 and the Southern Pacific Company Railroad, near the Mohawk Pass. Access south of the Interstate and Railroad is limited to access from an uncontrolled railroad crossing approximately 1 1/2 miles east of the east boundary of the Township.

Elevations for the area range between 350 ft. above sea level in the north portion of the township to the prominent Mohawk Mountains rising to approximately 2300 ft. in the southwest portion of the township. The terrain consists of gently rolling soft sand with scant vegetation, broken with many deep rocky washes, draining to the northeast from the base of the Mohawk Mountain range. Vegetation is primarily creosote, paloverde and other plants typical of the lower Sonoran Desert. The area is the habitat of the endangered flat tailed horned lizard, none of which were observed in the course of this survey.

The mean magnetic declination of 11  $3/4^{\circ}$  E. was derived from the National Geophysical Data Center's magnetic declination calculator, GEOMAG v6.0, utilizing the International Geomagnetic Reference Field model for years 2005 through 2010, for the dates of survey.

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

# FIELD ASSISTANTS

TIEDD TODIOTITIO					
NAMES	CAPACITY				
Paul L. Moss	Supervisory Land Surveyor				
Geoffery A. Graham	Land Surveyor				
Mark R. Searles	Surveying Technician				
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#### CERTIFICATE OF SURVEY

I, Daniel L. Maxey, Cadastral Surveyor, HEREBY CERTIFY upon honor, that in pursuance of special instructions bearing date of the 28th day of September, 2006, I have dependently resurveyed a portion of the south boundary and the subdivisional lines and performed the metes-and-bounds surveys of the Barry M. Goldwater Range boundary and the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base, Township 8 South, Range 14 West, Gila and Salt River Meridian, Arizona, which are represented in the foregoing field notes as having been executed by me and under my direction. Said survey has been made in strict conformity with said special instructions, the Manual of Instructions for the Survey of the Public Lands of the United States, and in specific manner described in the foregoing field notes.

9-4-07

Daniel L. Masley
(Cadastral Surveyor)

#### CERTIFICATE OF APPROVAL

# BUREAU OF LAND MANAGEMENT Phoenix, Arizona

The foregoing field notes of the dependent resurvey of a portion of the south boundary and the subdivisional lines and the metes-and-bounds surveys of the Barry M. Goldwater Range boundary and the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base, Township 8 South, Range 14 West, Gila and Salt River Meridian, Arizona, executed by Daniel L. Maxey, Cadastral Surveyor, having been critically examined and found correct, are hereby approved.

9/18/07

(Date)

Stepten K. Home

(Chief Cadastral Surveyor of Arizona)

CERTIFICATE OF TRANSCRIPT

I CERTIFY That the foregoing transcript of the field notes of the above described surveys in T. 8 S., R. 14 W., Gila and Salt River Meridian, Arizona, is a true copy of the original field notes.

(Chief Cadastral Surveyor of Arizona)