

ORIGINAL

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

FIELD NOTES

OF THE

DEPENDENT RESURVEY OF A PORTION OF THE
SECOND STANDARD PARALLEL SOUTH (SOUTH BOUNDARY)

AND

THE METES-AND-BOUNDS SURVEY OF
THE ADMINISTRATIVE BOUNDARY BETWEEN
MARINE CORPS AIR STATION, YUMA
AND LUKE AIR FORCE BASE,
TOWNSHIP 9 SOUTH, RANGE 13 WEST,
OF THE GILA AND SALT RIVER MERIDIAN,
IN THE STATE OF ARIZONA.

EXECUTED BY

Daniel L. Maxey, Cadastral Surveyor

Under Special Instructions dated November 2, 2006, approved November 2, 2006, which provided for the surveys included under Group No. 1002, and assignment instructions dated November 2, 2006.

Survey commenced November 16, 2006

Survey completed November 19, 2006

INDEX DIAGRAM

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GILA AND SALT RIVER MERIDIAN, ARIZONA

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T. 9 S., R. 13 W., Gila and Salt River Meridian, Arizona

CHAINS

The following field notes describe the dependent resurvey of a portion of the Second Standard Parallel South (south boundary) and the metes-and-bounds survey of the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base, Township 9 South, Range 13 West, Gila and Salt River Meridian, Arizona.

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

Lewis Wolfley surveyed the north boundary, a portion of the 2nd Standard Parallel South (south boundary), the Third Guide Meridian West (east boundary), a portion of the west boundary and a portion of the subdivisional lines in 1893. Roger F. Wilson resurveyed a portion of the Second Standard Parallel South (south boundary), a portion of the west boundary and a portion of the subdivisional lines and surveyed a portion of the Second Standard Parallel South (south boundary) and a portion of the subdivisional lines in 1936.

The survey was executed in accordance with the specifications as set forth in the Manual of Instructions for the Survey of the Public Lands of the United States, 1973, and the Special Instructions dated November 2, 2006, for Group No. 1002, 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 standard corner of sections 31 and 32, Township 9 South, Range 13 West, is as follows:

Latitude: 32°35'44.73" N. Longitude: 113°38'36.12" W.

The mean magnetic declination is 11 3/4° E.

**Dependent Resurvey of a Portion of the
Second Standard Parallel South, (South Boundary),
T. 9 S., R. 13 W., Gila and Salt River Meridian, Arizona**

CHAINS	
	<p>Restoring the survey executed by Roger F. Wilson, in 1936</p> <hr/>
	<p>Beginning at the stan. cor. of secs. 31 and 32, T. 9 S., R. 13 W., monumented with an iron post, 2 ins. diam., firmly set, projecting 25 ins. above ground, in a supporting mound of stone, 5 ft. base, to top, with brass cap mkd. SC T9S R13W S31 S32 1936.</p>
	<p>Add the marks 2006 to the brass cap.</p>
	<p>Cor. is located on a steep, east facing canyon wall, bears N. and S.</p>
	<p>N. 89°52' W., on the S. bdy. of the Tp., over rugged ridges of the Mohawk Mountain range.</p>
15.04	<p>Point for Mile Post 10 + 18.07, at intersection with the Marine Corps Air Station, Yuma, administrative boundary of the Barry M. Goldwater Range, hereinafter described.</p>
35.02	<p>The witness cor. to the stan. 1/4 sec. cor. of sec. 31, on the S. bdy. of the Tp., monumented with an iron post, 1 in. diam., firmly set, projecting 16 ins. above ground, in a supporting mound of stone, 2 1/2 ft. base, to top, with brass cap mkd. SC WC 1/4 S31 1936.</p>
	<p>Add the marks T9S R13W 2006 to the brass cap.</p> <hr/>
	<p>Metes-and-Bounds Survey of the Administrative Boundary between Marine Corps Air Station, Yuma and Luke Air Force Base, T. 9 S., R. 13 W., Gila and Salt River Meridian, Arizona</p> <hr/>
	<p>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 the latter point actually falls 15.85 chains south of the southerly right-of-way of the existing Southern Pacific Company Railroad.</p>

**Metes-and-Bounds Survey of the Administrative Boundary between
Marine Corps Air Station, Yuma and Luke Air Force Base,
T. 9 S., R. 13 W., Gila and Salt River Meridian, Arizona**

CHAINS

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 MP 6 + 45.08, on the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base, at intersection with the W. bdy. of the Tp., monumented with an alum. post, 2 1/2 ins. diam., projecting 6 ins. above the ground, with alum. cap mkd. T9S R14W R13W S13 S18 MP6+45.08 2006.

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

From this cor. point, the 1/4 sec. cor. of secs. 13 and 18, Tps. 9 S., Rs. 13 and 14 W., bears South, 5.59 chs. dist., monumented with a stainless steel post, 2 1/2 ins. diam., projecting 6 ins. above the ground, with brass cap mkd. T9S R14W R13W 1/4 S13 S18 2006.

From this same cor. point, the cor. of secs. 12 and 13 only, T. 9 S., R. 14 W., on the W. bdy. of the Tp., bears North, 34.38 chs. dist., monumented with an iron post, 2 ins. diam., firmly set, projecting 18 ins. above ground, in a supporting mound of stone, 4 ft. base, to top, with brass cap mkd. T9S R14W R13W S12 S18 S13 2006 1936.

From this same cor. point, the point determined at latitude 32°44'15" N., longitude 113°41'08" W. (NAD 83), bears N. 13°05' W., 509.23 chs. dist., not monumented.

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

34.92

Point for MP 7, on the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base.

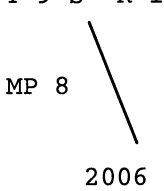
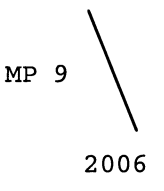
Set an alum. post, 30 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, with alum. cap mkd.

T 9 S R 13 W

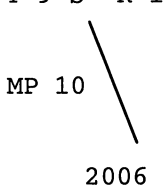
MP 7

2006

**Metes-and-Bounds Survey of the Administrative Boundary between
Marine Corps Air Station, Yuma and Luke Air Force Base,
T. 9 S., R. 13 W., Gila and Salt River Meridian, Arizona**

CHAINS	
	<p>Deposit a magnet, in a white plastic case, at the base of the alum. post.</p> <p>Set a steel fence post with an attached, Bureau of Land Management, standard sign, S-201, W. of cor.</p> <hr/> <p>S. 13°05' E., along the administrative boundary bet. Marine Corps Air Station, Yuma and Luke Air Force Base.</p> <p>80.00 Point for MP 8, on the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base.</p> <p>Set an alum. post, 30 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.</p> <div style="text-align: center;"> <p>T 9 S R 13 W</p>  <p>MP 8</p> <p>2006</p> </div> <p>Deposit a magnet, in a white plastic case, at the base of the alum. post.</p> <p>Set a steel fence post with an attached, Bureau of Land Management, standard sign, S-201, W. of cor.</p> <hr/> <p>S. 13°05' E., along the administrative boundary bet. Marine Corps Air Station, Yuma and Luke Air Force Base.</p>
80.00	<p>Point for MP 9, on the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base.</p> <p>Set an alum. post, 30 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, with alum. cap mkd.</p> <div style="text-align: center;"> <p>T 9 S R 13 W</p>  <p>MP 9</p> <p>2006</p> </div> <p>Deposit a magnet, in a white plastic case, at the base of the alum. post.</p>

**Metes-and-Bounds Survey of the Administrative Boundary between
Marine Corps Air Station, Yuma and Luke Air Force Base,
T. 9 S., R. 13 W., Gila and Salt River Meridian, Arizona**

CHAINS	
80.00	<p>Set a steel fence post with an attached, Bureau of Land Management, standard sign, S-201, W. of cor.</p> <hr/> <p>S. 13°05' E., along the administrative boundary bet. Marine Corps Air Station, Yuma and Luke Air Force Base.</p> <p>Point for MP 10, on the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base.</p> <p>Set an alum. post, 30 ins. long, 2 1/2 ins. diam., 16 ins. in the ground, in a supporting mound of stone, 5 ft. base., to top, with alum. cap mkd.</p> <div style="text-align: center;"> <p>T 9 S R 13 W</p>  </div> <p>Deposit a magnet, in a white plastic case, at the base of the alum. post.</p> <p>Set a steel fence post with an attached, Bureau of Land Management, standard sign, S-201, W. of cor.</p> <hr/>
18.07	<p>S. 13°05' E., along the administrative boundary bet. Marine Corps Air Station, Yuma and Luke Air Force Base.</p> <p>Point for MP 10 + 18.07, on the Marine Corps Air Station, Yuma, administrative boundary of the Barry M. Goldwater Range, at intersection with the Second Standard Parallel South, (S. bdy. of the Tp.), falls at the top of an inaccessible rugged cliff, not monumented.</p> <p>From this point, the stan. cor. of secs. 31 and 32, T. 9 S., R. 13 W., bears S. 89°52' E., 15.04 chs. dist., hereinbefore described.</p> <p>From this same point, the point determined at the intersection of the United States-Mexico Border and longitude 113°30'33" W. (NAD 83), bears S. 13°05' E., 2839.46 chs. dist.</p> <p>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.</p>

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CHAINS

From this same point, International Boundary Monument No. 181, bears N. 69°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 Township 8 south, Range 14 West.

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 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° 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.

CERTIFICATE OF SURVEY

I, Daniel L. Maxey, Cadastral Surveyor, HEREBY CERTIFY upon honor, that in pursuance of special instructions bearing date of the 2nd day of November, 2006, I have dependently resurveyed a portion of the Second Standard Parallel South (south boundary) and performed the metes-and-bounds survey of the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base, Township 9 South, Range 13 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
(Date)

Daniel L. Maxey
(Cadastral Surveyor)

CERTIFICATE OF APPROVAL

BUREAU OF LAND MANAGEMENT
Phoenix, Arizona

The foregoing field notes of the dependent resurvey of a portion of the Second Standard Parallel South (south boundary) and the metes-and-bounds survey of the administrative boundary between Marine Corps Air Station, Yuma and Luke Air Force Base, Township 9 South, Range 13 West, Gila and Salt River Meridian, Arizona, executed by Daniel L. Maxey, Cadastral Surveyor, having been critically examined and found correct, are hereby approved.

9/13/07
(Date)

Stephen H. Hansen
(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. 9 S., R. 13 W., Gila and Salt River Meridian, Arizona, is a true copy of the original field notes.~~

~~_____
(Date)~~

~~_____
(Chief Cadastral Surveyor of Arizona)~~