

<u>NAME</u>	<u>STATION</u>
Ash Peak USFS ✓	1002
Gilabox Usnes ✓	1004
Guthrie USGS ✓	1005
Lorenzo ✓	1007
Omon ✓	1008
Target About 2 Miles East of Omon ✓	1013

**NAD 83 VALUES AVAILABLE**

JULY 1966  
 U. S. DEPARTMENT OF COMMERCE  
 ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION  
 COAST AND GEODETIC SURVEY  
 REVISED APRIL 1970

# HORIZONTAL CONTROL DATA

by the  
 Coast and Geodetic Survey  
 NORTH AMERICAN 1927 DATUM

112  
 QUAD 321091 STATION 1002  
 ARIZ-N MEX  
 LATITUDE 32°30' TO 33°00'  
 LONGITUDE 109°00' TO 109°30'  
 DIAGRAM NI 12-12 SILVER CITY

ASH PEAK (U.S.F.S.) (Greenlee County, Ariz., R.A.M., 1945)--The station is 9-1/2 miles (air line) W of Duncan, 22 miles (air line) ESE of Bolsonoville, and about 1 mile SSW of U.S. Highway 70. It is on a sharp cone-shaped peak locally known as Ash Peak.

To reach station from the post office in Bolsonoville, go E on U.S. Highway 70 for 2.0 miles to its junction with U.S. Highway 666. Continue on U.S. Highway 70, the right fork, for 20.6 miles to the line between Graham and Greenlee counties. Continue 0.7 mile to a concrete bridge with an Arizona Highway Department Bench Mark on its S side. This is the azimuth mark for this station. Continue 0.6 mile to a bladed road right at a shaft about 150 feet beyond a highway sign "Side Road". Take the right fork here and go 0.4 mile to a fork. Take the left fork and go 0.15 mile keeping to the right at three or four small forks. Here turn right cross country and go SW and S and SE up a ridge for 0.4 mile to the end of truck travel at the base of a steep W slope. From here pack S to the top of the rim rock and then continue S to the top of the mountain and the station.

Station mark is a U.S. Department of Agriculture Forest Service disk with a cross stamped in the center. There is no other stamping. The station is on the highest point of the mountain.

Reference mark 1 is a bronze reference disk set in bedrock projecting 10 inches above the surrounding surface and is stamped "ASH PEAK USFS NO 1 1945." It is on the edge of an 8-foot ledge and is about 26 inches below the station. The mark is SE of the station.

Reference mark 2 is a bronze reference disk set in a boulder projecting about 18 inches above the ground and is stamped "ASH PEAK USFS NO 2 1945." The mark is SW of the station and about 14 inches lower.

A cartridge is set in bedrock projecting about 14 inches above the surrounding surface and is about 16 inches below the station. It is S of the station.

A cartridge is set in bedrock projecting about 16 inches above the surrounding surface and is about 16 inches below the station. It is ESE of the station.

Azimuth mark is an Arizona Highway Department disk stamped "4192.12 33+21 1926." It is set in the S side of a concrete bridge, 10.8 feet from the center of U.S. Highway 70, and 11.2 feet from the W end of the bridge. The mark is W of the station.

OBJECT	DISTANCE	DIRECTION
PARKS	feet	0°00'00"0
R.M. 2 SW	4.015 meters 13.172 feet	50 31 47
Azimuth Mark W	1-1/2 miles	168 41 44.4
Cartridge N	3.012 9.880	183 44 32
Cartridge ESE	3.962 13.060	292 34 23
Water tank, silvered	8 miles	297 26 33
R.M. 1 SE	6.479 21.263	314 30 43
Height of light above station mark	- 1.0 meter.	
Height of instrument above station mark	- 1.6 meters.	

ASH PEAK USFS (Greenlee Co. Ariz., R.A.M., 1945; Army Map Serv., 1968)  
 ---Station is located approximately 9.5 air miles (WNW) of Duncan, Ariz. and 26 air miles (ESE) of Safford, Arizona.

To reach from intersection of US Hwy 70 and Arizona Hwy 75 in Duncan proceed (W) on US 70 for 10.8 miles to a dirt road left, turn left (S) on dirt road and go 1.5 mile to end of dirt road; proceed on foot (S) up the mountain to peak and station site. Station is on high point.

Station is marked by a USPS bronze disk set in rock protruding 17" above ground and stamped only with a cross in the center.

RM #1 is a USCGS bronze disk set in rock protruding 1.6 ft above ground stamped "Ash Peak NO 1 1945". From the station it is (SE) on a Mag Az of 127° at a distance of 21.19 ft and a DE of -2.68 feet.

RM #2 is a USCGS bronze disk set in rock protruding 1.4 ft above ground; stamped "Ash Peak #2 1934". From the station it is (SW) on a Mag Az of 225° at a distance of 13.13 ft and a DE of -1.35 feet.

Azimuth Mark was searched for but not recovered.

Condition of all marks is excellent and view is excellent in all directions.

## ADJUSTED HORIZONTAL CONTROL DATA

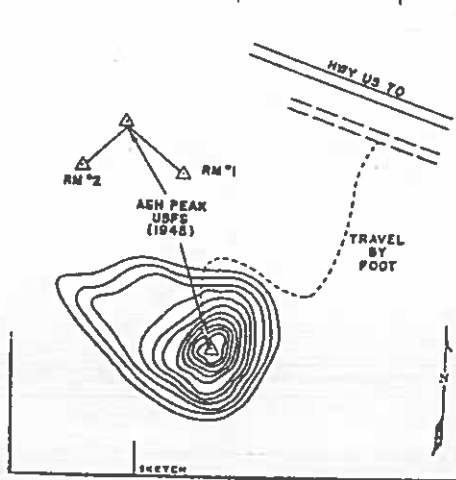
NAME OF STATION: ASH PEAK USFS YEAR 1945  
 STATE: Ariz LOCALITY: Safford to Willecox, Southeastern Arizona  
 First-Order Triangulation SOURCE: G-7961 FIELD SHEET: ARIZ 21

GRID DATA	COORDINATES (Foot)	PLANE AZIMUTH & CORRECT ANGLE	MARK
STATE: ARIZ ZONE: E CODE: 0201	X 778,315.26 Y 638,347.71	173°05'04" + 0 29 23	AZIMUTH MARK (BENCH MARK ARIZ HWY DEPT)
STATE: ZONE: CODE:	X Y		

GEODETIC DATA	POSITION		SECONDS IN METERS	ELEVATION
	LATITUDE: 32°45'05".967 LONGITUDE: 109 15 41.058	NORTH WEST		1,702.6 METERS 5,586 FEET

TO STATION	GEODETIC AZIMUTH (From south)	DISTANCE	
		LOGARITHM (Meters)	METERS
AZIMUTH MARK (BENCH MARK ARIZ HWY DEPT)	THIRD-ORDER 173°34'27".4		

NSF  
 183 D.L.L.



FILE COPY  
 Geodetic Control Unit  
 DO NOT REMOVE

# HORIZONTAL CONTROL DATA

by the  
 Coast and Geodetic Survey  
 NORTH AMERICAN 1927 DATUM

QUAD 321091 STATION 1004  
 ARIZ-N HEX  
 LATITUDE 32°30' TO 33°00'  
 LONGITUDE 109°00' TO 109°30'  
 DIAGRAM NI 12-12 SILVER CITY

111

GILABOX (U.S.S.I.S.) (Greenlee County, Ariz., R.A.M., 1945)--  
 The station is 15-1/2 miles (air line) NE of Solomonsville and  
 10-1/2 miles (air line) SW of Clifton. It is on a small rocky  
 knoll projecting from the high mesa about 1-1/2 miles S of the  
 junction of the Gila River and Eagle Creek.

To reach station from the post office in Solomonsville, go E  
 on U.S. Highway 70 for 8.0 miles to its junction with U.S. Highway  
 666. Following the sign "Clifton" turn left on U.S. Highway 666  
 and go 7.9 miles to the end of the pavement. Continue for 8.7  
 miles to a point about 0.1 mile past the highest point on the  
 road. Here turn back sharp left on a trail road passing corrals  
 and a dirt tank and go down the canyon for 2.2 miles. A telephone  
 line runs down this canyon. Here leave the wash and go up the side  
 of the canyon for 1.0 mile to a fork on some high flat land. Take  
 the left fork and go 0.2 mile to a dirt tank on the right. Con-  
 tinue 0.3 mile to a small hill and the azimuth mark on the high-  
 est point to the right. Continue 0.5 mile and then turn left  
 across country for 0.5 mile to the top of a rocky knoll and the  
 station about 100 feet beyond the end of truck travel.

Station mark is a standard U.S. Soil Erosion Service disk set  
 in bedrock projecting 4 inches above the surrounding surface and  
 is about 6 feet ESE of the highest point of the knoll. It is  
 stamped "GILABOX 1935."

Reference mark 1 is a bronze reference disk set in bedrock  
 projecting about 14 inches above the surrounding surface and is  
 about 8 inches above the station. The mark is E of the station.  
 It is stamped "GILABOX USSES NO 1 1945."

Reference mark 2 is a bronze reference disk set in bedrock  
 projecting about 2 inches above the surrounding surface and is  
 about 18 inches below the station. The mark is S of the station.  
 It is stamped "GILABOX USSES NO 2 1945."

Azimuth mark is a bronze azimuth disk set in bedrock project-  
 ing 6 inches above the surrounding surface and is stamped "GILABOX  
 USSES 1945." It is 6 feet NNE of the witness post and 59 paces E  
 of the road to station. The mark is SE of the station.

OBJECT	DISTANCE	DIRECTION
	meters feet	
Chimney in Clifton		0°00'00"0
R.M. 1	5.040 16.537	11 00 53
Azimuth Mark SE	1 mile	87 07 03
R.M. 2	7.072 23.198	129 34 51.0
Height of light above station mark - 1.0 meter.		161 37 35

Height of instrument above station mark - 1.6 meters.

## ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: GILABOX USSES YEAR: 1945  
 STATE: ARIZ. LOCALITY: Globe to Clifton, Southeastern Arizona,  
 Second-Order Triangulation SOURCE: G-7961 FIELD SKETCH: ARIZ 20

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH # FOR ANGLE	MARK
STATE: ARIZ ZONE: E CODE: 0201	x 734,652.90 y 704,994.90	319°19'22" + 0 24 57	AZIMUTH MARK
STATE: ZONE: CODE:			

GEODETIC DATA	POSITION		SECONDS IN METERS	ELEVATION
	LATITUDE: 32°56'08"818 LONGITUDE: 109 24 06.631	NORTH WEST		1,415.6 4,644 METERS FEET

TO STATION	GEODETIC AZIMUTH (From mark)	DISTANCE	
		LOGARITHM (Meters)	METERS
AZIMUTH MARK	THIRD-ORDER 319°44'18"9		

OK  
 '83 D.L.L.

FILE COPY  
 Geodetic Control Unit  
 DO NOT REMOVE

# HORIZONTAL CONTROL DATA

by the  
 Coast and Geodetic Survey  
 NORTH AMERICAN 1927 DATUM

112  
 QUAD 321091 STATION 1005  
 ARIZ-N MEX  
 LATITUDE 32°30' TO 33°00'  
 LONGITUDE 109°00' TO 109°30'  
 DIAGRAM NI 12-12 SILVER CITY

## ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: GUTHRIE USGS  
 STATE: ARIZ LOCALITY: Lordsburg, New Mexico to Grand Junction, Colorado  
 First-order Triangulation source: G-2142  
 YEAR: 1934  
 FIELD SKETCH: SP 219-19

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH #100' ANG. ANGLE	MARK
STATE: ARIZ ZONE: E CODE: 0201	x 761,826.60 y 687,518.38	105°08'49" + 0 27 47	AZIMUTH MARK 1945
STATE: ZONE: CODE:			

GEODETIC DATA	POSITION		SECONDS IN METERS	ELEVATION
	LATITUDE	LONGITUDE		
	32°53'13"836 NORTH	109°18'49.468 WEST		2,003.4 METERS 6,573 FEET

TO STATION	GEODETIC AZIMUTH (From mark)	DISTANCE	
		LOGARITHM (Meters)	METERS
AZIMUTH MARK 1945	THIRD-ORDER 105°36'36"2		

*Sta m.k. & R.M. 2  
 recovered in good condition  
 9-11-65 O.L.H.*

*VA elev. 6572' (USGS 1958)* **FILE COPY**  
 Geodetic Control Unit  
**DO NOT REMOVE**

**GUTHRIE (U.S.G.S.)** (Greenlee County, Ariz., L.C.J., 1934)--Station is located on a pointed hill, the highest in the vicinity, 14 miles NW of Dunoan and 20 miles E of Safford. It is in Sec. 25, T. 6 S., R. 30 E.

Station reached from Dunoan by going N on U.S. Highway 160 27 miles, or by going E from Safford 16 miles on U.S. Highway 160 to junction of U.S. Highway 160 and State Highway 71. Go E on State Highway 71 for 13.8 miles. This point is at a canyon where road makes a left turn and a dirt road goes up canyon. Take road up canyon to its end about 0.3 mile. Station is on the pointed peak to the SE. Best ascent by going up canyon, taking right fork to saddle and following ridge to the S and station. 1-1/2-hour pack. A standard U.S.C. & G.S. disk was used to replace U.S.G.S. location.

Station and reference marks are bronze disks set in drill holes in boulders.

OBJECT	DISTANCE	DIRECTION	
SUNSET (U.S.G.S.)	meters	feet	0°00'00"0
R.M. 1 NE	8.610	28.25	19 50 41.9
R.M. 2 N	18.212	59.75	321 49 54.5

*SNF -*

(R.A.M., 1945)--Station is located on a high pointed hill, by approximate air line distances: 23 miles E of Safford, 17 miles NW of Dunoan, 12 miles S of Clifton, and 2 miles SE of U.S. Highway 666. It is at the highest point in the vicinity.

To reach the station from the post office in Solomonsville, go E on U.S. Highway 70 for 2.1 miles to its junction with U.S. Highway 666, then take left fork on paved U.S. Highway 666 (Clifton road) for 7.9 miles to the end of the pavement. Continue on gravel road towards Clifton for 10.0 miles to the Greenlee-Graham county line, then continue for 4.4 miles to a left switch-back turn in the highway at a square concrete water tank about 2 feet high on the left and a track road going to the right up the canyon. Turn right on the trail road up the canyon for 0.3 mile to the end of the road at a small shack on the left, about 150 yards before reaching a stone and dirt water reservoir. From here pack up the right side of the canyon for about 1/4 mile to canyon forks; then cross over to the left side of canyon but continue up the right hand canyon along a trail to the saddle at the head of the canyon; then turn right up steep ridge to highest point and station.

Station mark is a bronze station disk set in a drill hole in a boulder which projects about 2 inches above the ground and is stamped "GUTHRIE USGS 1934." It is located on the highest part of the hill and partly surrounded with a rock wall about 3 feet high.

Reference mark 1 is a bronze reference disk set in a drill hole in a boulder which projects about 10 inches above the ground and is stamped "GUTHRIE NO 1 1934 USGS." It is NE of the station on about the same level.

Reference mark 2 is a bronze reference disk set in a drill hole in a boulder which projects about 6 inches above the ground and is stamped "GUTHRIE NO 2 1934 USGS." It is NNW of the station on about the same level.

Azimuth mark is a bronze azimuth disk set in a drill hole in the top of an outcropping ledge of bedrock which projects about 3 feet above the ground and is stamped "GUTHRIE USGS 1945." It is located about 1/3 mile WNW of the station about halfway up the E slope of the first rise along the ridge W of the station. It is about 5 feet E of a 3-foot rock cairn.

OBJECT	DISTANCE	DIRECTION	
SOL	meters	feet	0°00'00"0
Azimuth Mark WNW	1/3 mile		39 41 24.9
R.M. 2 NNW	18.159	59.561	93 12 13
Smokestack in Morenci (N)	14 miles		106 22 15
Smokestack in Clifton (N)	12 miles		118 54 16
R.M. 1 NE	8.567	28.112	151 15 08

# HORIZONTAL CONTROL DATA

by the  
Coast and Geodetic Survey  
NORTH AMERICAN 1927 DATUM

QUAD 321091 STATION 1008  
ARIZ-N MEX  
LATITUDE 32°30' TO 33°00'  
LONGITUDE 109°00' TO 109°30'  
DIAGRAM NO 12-12 SILVER CITY

GUTHRIE USGS (Continued)

GUTHRIE USGS (Greenlee Co., L.C.J., 1934; Army Map Service, 1957)---

Station Guthrie is located approximately 11.5 miles (SSM) of Clifton and 10.0 miles (SM) of Duncan, Arizona.

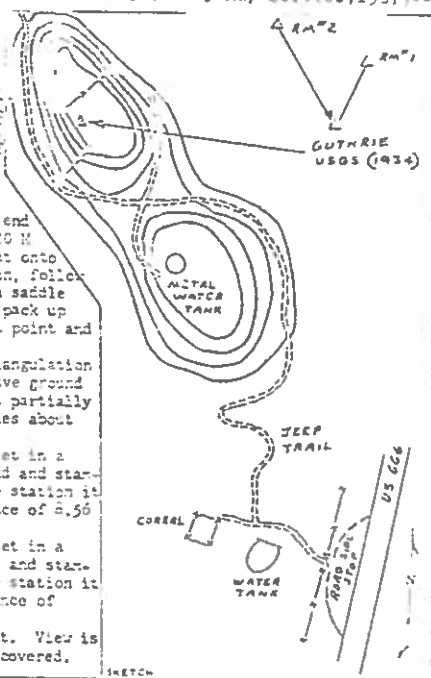
To reach station from the town of Clifton go (S) on Park Ave 0.5 mi. At intersection of Park Ave and US 666, go left (S) on US 666 for 9.2 MI to intersection of US 79 & 75 and US 666, go right (W) on US 666 for 7.9 MI to a rest stop on right side of Hwy, enter field through gate on right and go (W) 0.3 MI to the end of this road at a feeding pen, about 200 M before reaching feeding pen take a right onto a jeep trail leading up through a canyon, follow this road for approximately 1.0 MI to a saddle at the head of a canyon, park here and pack up the ridge line going (W) to the highest point and the station.

The station is a bronze USCAGS triangulation disk set in a boulder protruding 2" above ground and stamped "Guthrie 1934 USGS". It is partially surrounded by a rock wall which protrudes about 2 ft above ground.

RM 41 is a bronze USCAGS RM disk set in a boulder which protrudes 12" above ground and stamped "Guthrie No 1 1934 USGS". From the station it is (NWD) on a Mag Az of 22° at a distance of 2.56 M and a BB of +0.44M.

RM 42 is a bronze USCAGS RM disk set in a boulder which protrudes 8" above ground and stamped "Guthrie No 2 1934 USGS". From the station it is (NWD) on a Mag Az of 32° at a distance of 3.18M and a BB of +0.13M.

Condition of all marks is excellent. View is good in all directions. Az Mark not recovered.



FILE COPY  
Geometric Control Unit  
DO NOT REMOVE

# HORIZONTAL CONTROL DATA

by the  
 Coast and Geodetic Survey  
 NORTH AMERICAN 1927 DATUM

ARIZONA 112

QUAD 321091 STATION 1007  
 ARIZ-N HEX  
 LATITUDE 32°30' TO 33°00'  
 LONGITUDE 109°00' TO 109°30'  
 DIAGRAM NI 12-12 SILVER CITY

LORENZO (Graham County, Ariz., R.A.M., 1945)--Station is about 19 miles (air line) SW of Guthrie and 6 miles ESE of Solomonsville at the junction of U.S. Highway 70 and the 111 Ranch road.

To reach the station from the post office in Solomonsville, go ESE on U.S. Highway 70 for 8.4 miles to the 111 Ranch road turning off to the right. Station is 82 feet E of this road on the S side of U.S. Highway 70.

Station is 180 feet SSW of the center line of U.S. Highway 70, 62 feet E of the graded dirt road, 25-3/4 feet ENE of a 4 inch square white witness post set along the fence line, and 20-1/2 feet NNE of the right-of-way fence. It is a bronze station disk set in a square concrete post which projects 2 inches above the ground and is stamped "LORENZO 1945." Underground mark is a bronze station disk set in concrete 24 inches below the surface of the ground.

Reference mark 1 is NNE of the station and at about the same level. It is a bronze reference disk set in the top of a square concrete post which projects 3 inches above the ground. It is stamped "LORENZO NO 1 1945."

Reference mark 2 is SE of the station and at about the same level. It is 0.9 foot NNE of the right-of-way fence. It is a bronze reference disk set in the top of a concrete cylinder which projects 3 inches above the ground. It is stamped "LORENZO NO 2 1945."

Azimuth mark is 0.25 mile E of the station, 18-1/4 feet SSW of the center line of U.S. Highway 70, and 1/2 foot above the pavement. It is an Arizona Highway Department bench-mark disk set in the center of S headwall of a concrete culvert on U.S. Highway 70. The mark is stamped "3360.33 352+90."

OBJECT		DISTANCE		DIRECTION
SOL		meters	feet	0°00'00"0
R.M. 1	NNE	16.229	53.240	48 13 20
Azimuth Mark	E	0.25	mile	120 31 11.8
R.M. 2	SE	15.019	49.275	150 09 51

Height of instrument above station mark - 1.6 meters.

## ADJUSTED HORIZONTAL CONTROL DATA

32°45'  
 109°15'

NAME OF STATION: LORENZO YEAR: 1945  
 STATE: Ariz LOCALITY: Safford to Willcox, Southeastern Arizona  
 Second-ORDER Triangulation SOURCE: G-7961 FIELD SKETCH: ARIZ 21

GRID DATA	COORDINATES (Foot)	PLANE AZIMUTH & (OR) ANGLE	MARK
STATE: Ariz ZONE: E CODE: 0201	x 705,243.30 y 645,923.55	277°38'29" + 0 21 41	AZIMUTH MARK (BENCH MARK ARIZ HWY DEPT)
STATE: ZONE: CODE:	x y		

GEODETIC DATA	POSITION		SECONDS IN METERS	ELEVATION
	LATITUDE:	LONGITUDE:	NORTH WEST	METERS FEET
	32°45'26".299	109 29 56.078		1,018.7 3,342

TO STATION	GEODETIC AZIMUTH (From south)	DISTANCE	
		LOGARITHM (Meters)	METERS
AZIMUTH MARK (BENCH MARK ARIZ HWY DEPT)	278°00'10"1		

OK '83  
 D.L.L.

U.A. ELEV. 3341 FT (ASG-S 1965)

FILE COPY

OCT 1970

112

JULY 1966

# ARIZONA

U.S. DEPARTMENT OF COMMERCE  
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION  
COAST AND GEODETIC SURVEY

REVISED APRIL 1970

## HORIZONTAL CONTROL DATA

by the  
Coast and Geodetic Survey  
NORTH AMERICAN 1927 DATUM

QUAD 321091 STATION 1008  
ARIZ-N MEX  
LATITUDE 32°30' TO 33°00'  
LONGITUDE 109°00' TO 109°30'  
DIAGRAM NI 12-12 SILVER CITY

320 45'  
1090 15'

OMON (Graham County, Ariz., R.A.M., 1945)--Station is located on the top of the first rounded knob about 250 yards NE of the SW end of a low rocky ridge which extends into the valley from the higher mountains to the E. It is about 17 miles (air line) SSW of Clifton, 12 miles E of Solomonville, and 1/4 mile SE of U.S. Highway 666.

To reach station from the post office in Solomonville, go E on U.S. Highways 70 and 666 for 2.1 miles to a fork. Turn left on U.S. Highway 666 for 7.9 miles to the end of the pavement. Continue on the highway for 1.8 miles to the azimuth mark on the left. Continue for 0.7 mile to a trail road forking to the right. Turn right and go 0.2 mile to the corrals at the W base of a rocky ridge. From here pack to top of ridge and then E along the top for about 200 yards to the station. A 15-minute pack.

Station mark is a bronze station disk set 1 inch below the surface of a boulder which projects 3/4 foot above the ground. It is stamped "OMON 1945."

Reference mark 1 is SW of the station and about 1/2 foot higher. It is a bronze reference disk set in a boulder which projects 2 feet above the ground and is stamped "OMON NO 1 1945."

Reference mark 2 is NNW of the station and about 1 foot higher. It is a bronze reference disk set in a boulder which projects 1 foot above the ground and is stamped "OMON NO 2 1945."

Azimuth mark is 1 mile W of the station. It is 38 feet NW of the center of U.S. Highway 666, 30-1/4 feet SW of wooden telephone post #21, and 5-1/2 feet SSW of a 4 inch square white witness post. It is a bronze bench-mark disk set in a square concrete post which projects 9 inches above the ground and is stamped "T 40 1934."

OBJECT		DISTANCE		DIRECTION
		meters	feet	0°00'00"0
Azimuth Mark (B.M. T 40)	W	1 mile		9 27 04.1
R.M. 2	NNW	10.256	33.650	78 03 33
R.M. 1	SW	5.957	19.540	341 01 44

Height of instrument above station mark - 1.7 meters.

OMON (Graham Co., R.A.M., 1945; Army Map Service, 1967)--- Station OMON USC&GS 1945 is located approx 16.6 Air Miles (ESE) of Safford Arizona; and 11.8 Air Miles (ESE) of San Jose, Arizona.

To reach from Safford, Arizona go East on US 70 to junction of US 70 and US 666. Go North on US 666 for 8.4 miles to intersection of old highway. Make a right (SE) and go thru gate. Go on this road for 0.5 miles to a fork. Go left (NE) at fork for 0.1 Mi to a gate on the left, go through gate and station is directly in front. Go around hill to the right (NE) for approximately 0.2 Mi and climb hill. 10 minute pack.

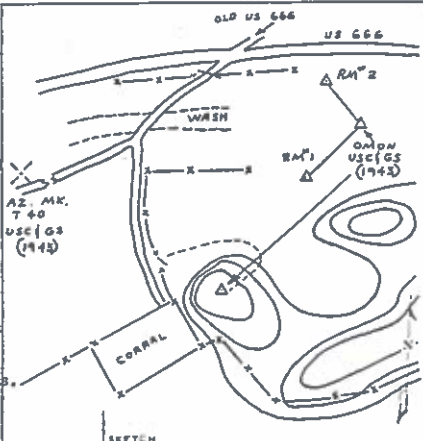
Station is a USC&GS bronze triangulation station disk set in a large boulder which protrudes 0.5 ft above ground and is stamped "Omon 1945".

RM #1 is a standard USC&GS bronze RM disk set in a boulder which protrudes 1.4 ft above ground and is stamped "Omon No 1 1945". From the station it is (SW) on a Mag Az of 225° at a distance of 33.711 ft and a DE of +1.64 ft.

RM #2 is a standard USC&GS bronze RM disk set in a boulder which protrudes 0.7 ft above ground and stamped "Omon No 2 1945". From the station it is (NW) on a Mag Az of 321° at a distance of 19.603 ft and a DE of +2.48 feet.

Azimuth Mark is a USC&GS bronze BM disk set in a 10" x 10" concrete post which protrudes 3" above the ground and stamped "T40 1934". From the station it is located 1 Mi (W) on US 666 (old). The BM is 38.058 ft (W) of the E of the old road, 30.184 ft from a telephone pole and 6.463 ft from a 4" x 4" witness post.

Condition of all markers is excellent. View is good in all directions.



### ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: OMON YEAR: 1945  
STATE: Ariz LOCALITY: Globe to Clifton, Southeastern Arizona  
Second-Order Triangulation SOURCE: G-7961 FIELD SKETCH: ARIZ 20

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH @ 100.0cm ANGLE	MARK
STATE: Ariz ZONE: E CODE: 0201	X 727,786.49 Y 667,438.12	82°59'58" + 0 24 08	AZIMUTH MARK (BENCH MARK T 40)
STATE: ZONE: CODE:	X Y		

GEODETIC DATA	POSITION		SECONDS IN METERS	ELEVATION
	LATITUDE:	NORTH WEST		METERS FEET
	32°49'57".695			1,211.1
	109 25 30.291			3,973

TO STATION	GEODETIC AZIMUTH (From omon)	DISTANCE	
		LOGARITHM (Meters)	METERS
AZIMUTH MARK (BENCH MARK T 40)	THIRD-ORDER 83°24'05".4		

OK 183  
D.L.L.

V.A. ELEV. 3341 FT (USC-1965)

FILE COPY

OCT 1970

JULY 1965  
 PUBLISHED AND PRINTED BY:  
 U.S. DEPARTMENT OF COMMERCE  
 COAST AND GEODETIC SURVEY  
 WASHINGTON D.C.

112

# HORIZONTAL CONTROL DATA

by the  
 Coast and Geodetic Survey  
 NORTH AMERICAN 1927 DATUM

QUAD 321091 STATIONS 1013, 1014  
 ARIZ-N MEX  
 LATITUDE 32°30' TO 33°00'  
 LONGITUDE 109°00' TO 109°30'  
 DIAGRAM NI 12-12 SILVER CITY

## ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: TARGET ABOUT 2 MILES EAST OF OMON YEAR 1945  
 STATE: Ariz LOCALITY: Globe to Clifton, Southeastern Arizona  
 Third-Order Triangulation SOURCE: G-7961 FIELD SKETCH: ARIZ 20

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH & 100-300 ANGLE	NAME
STATE: Ariz ZONE: E CODE: 0201	X 737,245.35 Y 664,561.53	+ 0 25 07	
STATE: ZONE: CODE:			

GEODETIC DATA	POSITION		SECONDS IN METERS	ELEVATION		
	LATITUDE	LONGITUDE		NORTH	WEST	METERS
	32° 09' 55.2	109 23 39.5-2			1, -77.3	
					1, 8-7	

TO STATION	GEODETIC AZIMUTH (Four figure)	DISTANCE	
		LOGARITHM	METERS

Computed from stations OMON, SONIT  
 (No description available)

NSF  
 83 O.L.L.

## ADJUSTED HORIZONTAL CONTROL DATA

88

NAME OF STATION: TARGET ABOUT 4 MILES NE OF SEEL YEAR 1945  
 STATE: Ariz LOCALITY: Safford to Willcox, Southeastern Arizona  
 Third-Order Triangulation SOURCE: G-7961 FIELD SKETCH: ARIZ 21

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH & 100-300 ANGLE	NAME
STATE: Ariz ZONE: E CODE: 0201	X 771,789.56 Y 615,402.60	+ 0 28 28	
STATE: ZONE: CODE:			

GEODETIC DATA	POSITION		SECONDS IN METERS	ELEVATION		
	LATITUDE	LONGITUDE		NORTH	WEST	METERS
	32° 41' 19.482	109 16 59.702			1, 475.3	
					4, 343	

TO STATION	GEODETIC AZIMUTH (Four figure)	DISTANCE	
		LOGARITHM	METERS

Computed from stations PARKS, SEEL ASH PEAK USFS  
 (No description available)

FILE COPY  
 Geodetic Control Unit  
 DO NOT REMOVE



ARIZONA 112

32°45'  
109°15'

Index

<u>Station</u>	<u>Project</u>
Ash Peak (USFS) ✓	-- (m)
BM "10 KK" <i>a</i>	-- (m)
F 1 <i>a</i>	-- (m)
G 20 <i>a</i>	-- (m)
G 22 <i>a</i>	-- (m)
G 23 <i>a</i>	-- (m)
Gilabox (USSES) ✓	-- (m)
Guthrie (USGS) ✓	-- (m)
Lorenzo (C&GS) ✓	-- (m)
Omon (C&GS) ✓	-- (m)
Red (USSES) ✓	-- (m)
Sec Cor 1/8S/28E <i>a</i>	-- (m)
Smuggler ✓	-- (m)
1-13 A <i>a</i>	-- --

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

THIRD-ORDER TRIANGULATION  
North American Datum of 1927

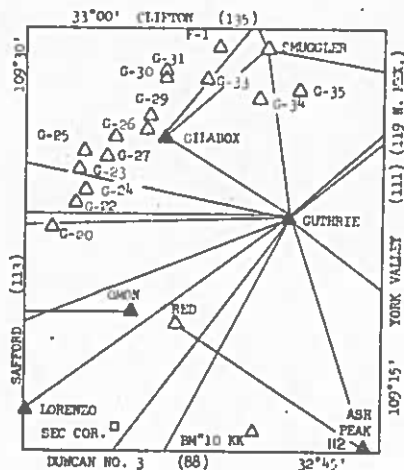
GUTHRIE QUADRANGLE  
ARIZONA 112  
11245-410915/15

GRAHAM & GREENLEE COUNTIES

Edition of 2/4/66

USCAGS 32 109 1

Positions determined by USCAGS



GILOBOX (USSES) ✓

Greenlee County ARIZONA

USSES, 1935  
USCAGS, 1945  
G. R. McLaughlin, 1958

Described in U.S. Coast and Geodetic Survey Description List No. 882, page 12. 32 1091 - 1004

ARIZONA ZONE EAST V.A. Elevation: 4644 ft.  
X=734,652.90 Y=704,994.90

\*Latitude 32°56'08.818" Longitude 109°24'06.631"

To Station	Azimuth	Back Azimuth	Feet
Bryce (USGS)	110°21'05.70"	290°12'16.65	88,273.16
Highest Peak	136 07 17.02	316 03 36.53	49,747.53
Renci (C&GS)	190 09 27.89	10 10 24.96	50,557.07
Sunset (C&GS)	218 16 36.84	38 22 20.53	86,574.47
Smuggler (USSES)	229 05 05.53	49 07 26.03	29,107.64
Gillard (C&GS)	235 27 59.34	55 31 46.52	43,153.75
Guthrie (USGS)	303 09 44.30	123 12 36.63	32,309.44

\* = Values by USCAGS

GUTHRIE (USGS) ✓

Graham County ARIZONA

R.B. Robertson, 1901-02  
USFB, 1934  
USCAGS, 1934, 1945  
S.H. Schroeder, 1958

Described in U.S. Coast and Geodetic Survey Description List No. 882, pages 11 and 12. C&GS set own tablet replacing USGS tablet in same location. Two reference marks were also set by C&GS in 1934.

ARIZONA ZONE EAST V.A. Elevation: 6572 ft.  
X=761,826.60 Y=687,518.38

\*Latitude 32°53'13.836" Longitude 109°18'49.468"

To Station	Azimuth	Back Azimuth	Feet
Giabox (USSES)	123°12'36.63"	303°09'44.30"	32,309.44
Highest Pk.	131 04 20.44	310 57 47.53	81,556.56
Renci (C&GS)	164 59 59.08	344 58 03.46	69,833.02
Smuggler (USSES)	172 13 10.26	352 12 38.22	37,093.03
Gillard (C&GS)	191 27 39.72	11 28 34.26	42,989.93
Junction (USSES)	227 21 20.66	47 24 47.01	43,968.76
Bide (C&GS)	230 43 46.97	50 46 39.37	34,922.71

\* = Values by USCAGS

LORENZO (C&GS) ✓

Graham County ARIZONA

USCAGS, 1945  
L.B. Mansfield, 1958  
W.B. Cook, 1965

Described in U.S. Coast and Geodetic Survey Description List No. 882, page 12. 32 1091 - 1007

ARIZONA ZONE EAST V.A. Elevation: 3341 ft.  
X=705,243.30 Y=645,923.55

$\Delta\alpha = +0°21'41"$

\*Latitude 32°46'26.299" Longitude 109°29'56.078"

To Station	Azimuth	Back Azimuth	Feet
Sec Cor 36/TS/27E	87°35'24.05"	267°35'28.35"	8,796.33
Sol (C&GS)	157 28 58.63	337 28 23.78	14,340.10
Seth (C&GS)	287 56 53.60	109 00 01.53	31,180.50
Dry Mtn. (USFS)	345 38 18.95	165 39 09.59	32,263.60

\* = Values by USCAGS

OMON (C&GS) ✓

Graham County ARIZONA

USCAGS, 1945  
E.L. Skjete, 1958

Described in U.S. Coast and Geodetic Survey Description List No. 882, page 12. 32 1091 - 1008

ARIZONA ZONE EAST V.A. Elevation: 3972 ft.  
X=727,786.49 Y=667,438.12

\*Latitude: 32°49'57.695" Longitude: 109°25'30.291"

\* = Values by USCAGS

ASH PEAK (USFB) ✓

Graham County ARIZONA

USCAGS, 1945  
G.R. McLaughlin, 1958  
B.S. Bennett, 1964

Described in U.S. Coast and Geodetic Survey Bulletin 882, page 12. 32 1091 - 1002

Note by B.S.B., 1964: The stamping on the station mark could not be read. Needs to be re-stamped.

ARIZONA ZONE EAST V.A. Elevation: 5586 ft.  
X=778,315.26 Y=638,347.71

$\Delta\alpha = +0°29'43"$

\*Latitude 32°45'05.967" Longitude 109°15'41.058"

To Station	Azimuth	Back Azimuth	Feet
*Parke (C&GS)	4°52'44.84"	184°51'59.55"	84,546.30
*Seely (USSES)	16 21 57.43	196 21 14.92	23,855.97
*Seel Reset	31 33 23.94	211 31 02.58	42,749.70
*Java (C&GS)	33 39 41.25	213 35 21.01	74,433.10
*Dry Mtn. (USFS)	70 28 24.86	250 21 33.31	69,044.10
*Weary	87 06 16.41	267 00 26.02	55,398.08
*Seth (C&GS)	88 03 10.14	267 58 35.47	43,390.50

\* = Values by USCAGS

EM 10 KK

Graham County ARIZONA

B.S. Bennett, 1964

Described in level line by K.R. Keller, 1963; PV 486, as follows:

"Junction of U.S. Highways 70 and 666, 11.7 mi. E. of, on Highway 70 to a rd. fork left (NW.), 146 ft. NW. of and 3.5 ft. lower than rd. fork, 43 ft. W. of track rd. at gate, 7 ft. S. of E.-S. fence, in concrete post; standard tablet stamped '10 KK 1963 4061'."

located about 22 mi. E. of Safford and about 14 mi. W. of Duncan on the N. side of U.S. Highway 70.

ARIZONA ZONE EAST Elevation: 4060.647 ft.  
X=749,21.1 (Spirit leveling by K.R. Keller, 1963)  
Y=638,666.8

$\Delta\alpha = +0°26'21"$

\*Latitude: 32°45'11.434" Longitude: 109°21'18.165"

To Station	Azimuth	Back Azimuth	Feet
Dry Mtn. (USFS)	56°51'35.12"	236°47'45.78"	43,305.65
Seth (C&GS)	81 58 57.86	261 57 25.56	14,716.40
Seely (USSES)	316 41 33.68	136 43 53.39	32,205.01

FILE COPY

MAY 30 1975

FILE COPY

AZ 112

RED (USSES) ✓ Graham County ARIZONA

USSES, 1935  
USCMGS, 1945 (n)  
E.L. Sajeis, 1958

To reach go E. 4.2 mi. on Highway 180 beyond the Junction of Highway 71 to a point where the highway tops a small grade and turns down to the E.; turn left (N.) up a low ridge to the summit 0.45 mi.; then turn down the opposite side 0.55 mi. (NE.) to the end of truck travel. Cross the canyon and climb the Red Butte (N-NE.) to the station, about 0.5 mi. From the fence the tablet lies on a black butte (E.) over a forbidding route.

Station mark: Standard USSES brass plate set in concrete.

NOTE: USCMGS intersected this station and named it "TARGET", about 2 mi. E. of "MON 1945". (n.d.)

ARIZONA ZONE EAST V.A. Elevation: 4835 ft.  
X=737,249  
Y=664,662

Latitude: 32°49'29.56" Longitude: 109°23'39.63"

\*\* = Values by USSES  
(n) = Not occupied

SBC COR 1/BS/PBE N Graham County ARIZONA

B.S. Bennett, 1965

Located about 17.6 mi. E. of Safford and 9.3 mi. NW. of Hackberry Ranch.

To reach from Safford, proceed E. on U.S. Highway 70 for 18.2 mi. to dirt rd. to the N. running parallel to a N.-S. fence. Station is about 200 ft. N. of paved rd. at this point in the fence line.

Station mark: An iron pipe with a brass cap stamped "TBS R28E R29E 1 12 7 1914" projecting one ft. above ground.

Note: This station was computed from checked triangles. Station should be symbolized with triangle symbol.

ARIZONA ZONE EAST V.A. Elevation: 3634 ft.  
X=727,721.2  
Y=640,391.4

Δα = +0°24'03"

Latitude: 32°45'30.080" Longitude: 109°25'33.276"

To Station	Azimuth	Back Azimuth	Feet
Dry Mtn. (USFS)	29°28'41.76"	209°27'10.32"	29,379.52
Weary	41 55 24.04	221 54 54.00	7,098.99
Beth (C&GS)	298 37 41.68	118 38 27.40	8,222.00

SMUGGLER Greenlee County ARIZONA

USSES, 1935  
B. H. Schroeder, 1958  
R. C. Nixon, 1961

To reach from Solomonville, go E. 9.55 mi. on Highway 180 to the Junction of Highway 71; continue E. 22.5 mi. to the overpass over the A. & N.M. Ry.; continue E. 0.65 mi. on Highway 71 to the Junction of the Smuggler Placer Mining Rd.; turn W. on the Smuggler Rd. 1 mi. to a grade crossing of the A. & N.M. Ry. (caution); cross over and go 1.3 mi. to a rd. forks; take left fork and go 0.6 mi. to Morenci Southern Rd. bed; turn right up the RR. bed 0.25 mi. to the point where the rd. climbs the hill to the left; turn left, uphill (W.) on the Smuggler Rd. 0.55 mi. to point where rd. turns right (N.) down a hogback; continue going W. (up the ridge) 0.1 mi. to the end of truck travel. The station lies on a low peak near the fork of the Gila and the San Francisco Rivers.

Station mark: Standard USSES brass plate set in concrete.

ARIZONA ZONE EAST V.A. Elevation: 4051 ft.  
X=756,509.2  
Y=724,217.4

Latitude: 32°59'17.367" Longitude: 109°19'48.404"

To Station	Azimuth	Back Azimuth	Feet
Gilaboa (USSES)	49°07'26.03"	229°05'05.53"	29,107.64
Highest Peak	104 35 59.82	286 29 58.49	58,921.94
Morenci 2	156 47 15.26	336 45 28.57	42,235.57
Renci (C&GS)	156 57 45.73	336 56 23.09	33,371.03
SC 1/4-3/4/29E	197 21 27.40	16 21 58.37	17,186.49
Sunset (USFS)	212 56 17.88	32 59 40.97	58,239.50
Mulligan (USSES)	211 05 12.78	33,07.20.19	36,436.68
Gillard (C&GS)	248 18 47.43	68 20 14.15	14,594.58
Male (USCFS)	251 12 09.50	71 19 49.81	75,950.39
BC 10/58/10E	257 17 33.66	77 20 35.76	29,158.62
Junction (USSES)	280 32 10.67	100 36 09.38	38,004.36
Outhrie (USFS)	352 12 38.22	172 13 10.26	37,083.03

The following stations were established by the U. S. Soil Erosion Service and conform to specifications of at least third order accuracy.

11 Greenlee County ARIZONA

Soil Conservation, 1935

From Solomonville go 9.9 mi. on Highway 180 to Highway 71; take Highway 71 for 19.4 mi. to Gila River Bridge; continue on 3.25 mi. to Smuggler Rd.; turn left and go 0.9 mi. to RR. grade crossing; continue on 1.8 mi. to old RR. grade; turn right and go 0.25 mi.; turn left and go uphill 0.55 mi. to a point under triangulation station "SMUGGLER"; turn right down grade 0.25 mi. to a wash; turn right and follow old rd. 1.1 mi. to bench above the San Francisco River across from the Smuggler Gold Mine; cross over river on cable car and hike downstream 1.5 mi. passing the Weaver Goat Ranch. The station is on the W. bank of the river at this point. The station is in the center of a large "v" in the river's course where it changes direction from W. to S. The station is about 200 ft. from the centerline of the river and about 60 ft. above the river bed. High pinacles of conglomerate rock are about 200 ft. NW. of the station. The station is about 1 mi. above where the Gila River meets the San Francisco River.

Station mark: Standard brass plate set in concrete pedestal on a conglomerate ridge.

ARIZONA ZONE EAST Elevation: 3359 ft.  
X=745,582  
Y=724,809

Latitude: 32°59'24.06" Longitude: 109°21'56.63"

G20 Graham County ARIZONA

Soil Conservation 1935

Go 9.4 mi. east from Solomonville, on highway 180, to a road bearing NE. by N. (This point lies 0.4 mi. W. of Highway 71. The 3rd pole west of a galvanized GUY guard & and pole is stenciled 901). Turn left (NE.) over a meandering road to the summit. Turn down a steep grade and into Rail N Wash (a burned Cadillac lies alongside this wash, some distance down). Park near the ferry and call for Mr. Baker if the car is on the farther side. Follow the trail to the station.

Station mark: Standard brass marker set in concrete.

ARIZONA ZONE EAST: Elevation: 3135 ft.  
X = 710,740.  
Y = 686,035.

Latitude: 32°53'02.85" Longitude: 109°28'48.65"

G22 Graham County ARIZONA

Soil Conservation 1935

From the mouth of "Rail N" wash go upstream (N) across a meadow wash. Climb a stock trail just over the station to the top and on down the far side. Cross over an arroyo to the bench just above the river. Pass around the end of the next ridge and climb the next to a point about 3/8 mi. above (E.) the river. The mouth of Bonita Creek lies A. 256" and this point lies about 1-1/2 mi. upstream from "Rail N" wash.

Station mark: Standard brass plate, is set in concrete.

ARIZONA ZONE EAST:  
X = 715,665.  
Y = 690,411.

Latitude: 32°53'45.82" Longitude: 109°27'50.55"

G21 Graham County ARIZONA

Soil Conservation 1935

From the W. W. Hayward Ranch, at the mouth of Bonita Creek, cross the Bonita at its mouth and climb the N. wall over an old goat trail. Go (NNE.) across the bench, over a stock trail, about 1/4 mi. to an arroyo; climb out and up onto the mesa, over a horse trail, about 1-3/4 mi. (NE. by N.) keeping to the highground and avoid the arroyos to the point of the mesa overlooking the river.

Station mark: Standard brass plate is set in concrete.

ARIZONA ZONE EAST:  
X = 715,586.  
Y = 698,114.

Latitude: 32°55'00.38" Longitude: 109°27'39.15"

ARIZ. 112-2

FILE COPY  
MAY 30 1975

G24 Graham County ARIZONA

Soil Conservation 1935

(River) From G-22 continue to the top of the ridge and follow same to the left, keeping to the high ground...

Station mark: Standard brass plate, is set in concrete.

ARIZONA ZONE EAST: X = 717,570 Y = 703,431. Elev.: 3148. ft. Latitude: 32°54'15.58" Longitude: 109°27'27.98"

G 28 Graham County ARIZONA

Soil Conservation 1935

Pass around the right side of the triangulation station Gilbox crest and follow down the Ridge to the point of the cliff...

Station mark: Standard brass plate set in concrete.

ARIZONA ZONE EAST: X = 731,186. Y = 706,936. Latitude: 32°56'28.27" Longitude: 109°24'47.15"

G25 Graham County ARIZONA

Soil Conservation 1935

From the W.W. Hayward ranch, at the mouth of Bonita Creek, go up the Bonita about 1 1/2 mi. to the Morenci trail.

Station mark: Standard brass plate, is set in concrete.

ARIZONA ZONE EAST: X = 717,211. Y = 701,514. Elev.: 3186. ft. Latitude: 32°55'35.58" Longitude: 109°27'31.50"

G 29 Graham County ARIZONA

Soil Conservation 1935

Triangulation station G-29 is located on the north bank of the Gila river about 1 1/2 miles below its junction with Eagle Creek.

Go east from Solomonville 9.9 mi. on Hwy. 180 to the junction of Hwy. 71. Go east on Hwy. 71 for a distance of 8.3 mi. to where the Old Hot Springs road turns off to the north.

Station mark: Standard brass marker, is set in concrete on top of a firm boulder.

ARIZONA ZONE EAST: X = 730,836. Y = 709,972. Latitude: 32°55'58.34" Longitude: 109°24'51.00"

G 26 Graham County ARIZONA

Soil Conservation 1935

Go east from Solomonville 9.9 mi. on Hwy. 80 to a point. (This point lies W. from the junction of Hwy. 71). An old road turns left and bears NE. 4.25 mi. to the summit.

Station mark: Standard brass marker set in concrete on solid rock.

ARIZONA ZONE EAST: X = 724,027. Y = 704,906. Latitude: 32°56'08.68" Longitude: 109°26'11.31"

G 30 Greenlee County ARIZONA

Soil Conservation 1935

Triangulation station G-30 is located on the N. bank of the Gila River about 1 mi. above its junction with the Eagle Creek. Go E. from Solomonville 9.9 mi. on Hwy. 180 to the junction of Hwy. 71.

Station mark: Standard brass marker, is set in concrete.

ARIZONA ZONE EAST: X = 734,671. Y = 717,659. Elev.: 3417. ft. Latitude: 32°58'14.12" Longitude: 109°24'05.34"

G 27 Graham County ARIZONA

Soil Conservation 1935

Go east from Solomonville 9.9 mi., on Hwy. 180. Turn left (E. by F.) on Hwy. 71 8.3 mi. Turn left (N.) on the old Hot Springs Road 2.2 mi. down a rocky canyon; follow this road 0.95 mi. on upon the mesa; continue 0.4 mi. on this old road; turn left (NW.) 0.2 mi. to a saddle and the end of truck travel.

Station mark: Standard brass plate cemented in a boulder.

ARIZONA ZONE EAST: X = 702,834. Y = 703,108. Latitude: 32°55'31.73" Longitude: 109°26'32.66"

G 31 Greenlee County ARIZONA

Soil Conservation 1935

Triangulation station G-31 is located on the W. end of the first high mesa between the Gila River and Eagle Creek. Go E. from Solomonville 9.9 miles on Hwy. 180 to the junction of Hwy. 71.

Station mark: Standard brass plate set in concrete.

ARIZONA ZONE EAST: X = 734,441. Y = 719,368. Latitude: 32°58'31.02" Longitude: 109°24'07.89"

FILE COPY

MAY 30 1975

## GILA COBYA

G 33

Greenlee County

ARIZONA

## Soil Conservation 1935

From top of dugway, on the old Hot Springs road, follow the Hot Springs road (N. by E.) about 2 mi. to a point just past a low knoll and opposite a rocky crest. Turn left (NW.) around the head of a canyon heading just N. of this knoll. Follow this ridge 1.3 mi. almost due N. but winding out among the crests. This point is in a rocky saddle with a decided slope to the right (E.). From the truck: Pick up a water trail circling to the left but crossing the next knoll in A.30". Then bear about N. to the rocky crests overlooking the Gila and Prisco Rivers at their junction. The trail was flagged from the truck to the station.

Station mark: Standard brass plate set in concrete.

## ARIZONA ZONE EAST:

X = 743,648.  
Y = 717,426.

Latitude: 32°58'11.16" Longitude: 109°22'19.99"

G 34

Greenlee County

ARIZONA

## Soil Conservation 1935

At the bridge across the Gila River, on Hwy. 71: Go 3.3 mi. NE. on Hwy. 71 to the Smuggler Placer mining road. Note: Turn left (toward triangulation station Smuggler) 1.0 mi. to a R.R. Grade crossing; continue 1.3 mi. to a road fork. Take the left fork and go 0.5 mi. to an old R.R. grade; cross over and go 0.5 mi. to a road fork in a wash. Turn right and go 0.3 mi. to a road fork; turn left and go 1.75 mi. to a loop on the bluff overlooking the Gila River and to the end of truck travel. The station lies about 1/2 mi. in azimuth 224°; on a ridge in the slope about 100 yds. WNW. from a huge arch in the cliff to the left. Follow down the trail to the Gila River; cross over and pass over the low saddle straight ahead; then, follow down the left bank of the Gila to a point directly under the station.

Station mark: Standard brass plate set in concrete.

## ARIZONA ZONE EAST:

X = 754,626.  
Y = 713,836.

Latitude: 32°57'34.80" Longitude: 109°20'11.47"

G 35

Greenlee County

ARIZONA

## Soil Conservation 1935

Lies about 36 ft. NE. from the NE. corner of the bridge across the Gila River on Hwy. 71 and is best reached by going E. on Hwy. 180 and branching off on Hwy. 71 (Clifton road) to the station.

Station mark: Standard brass plate, is set in concrete.

## ARIZONA ZONE EAST:

X = 763,277.  
Y = 716,022.

Latitude: 32°57'55.74" Longitude: 109°18'29.74"

ARIZ. 112-4

FILE COPY

MAY 30 1975

Arizona (112)

Graham County

1-13 A

1927 N.A.D. (Unadj.)

B.S. Bennett, 1965

Book: PH 1094

Located about 13.6 mi. SE. of Safford; 12 mi. NW. of the Hackberry Ranch; on the S. edge of a dirt rd. about 15 ft. from the centerline of the rd.

Station mark: A 1 x 2 wooden stake driven into the ground and projecting about 6 inches.

Signal: A white flag over a fluorescent cross-target on a 2 x 3 pole centered over station mark.

Signal data:	TWF	11.0 ft.
	BWF	8.0
	TFXT	7.0
	BFXT	4.0

Photo No.: Panded

ARIZONA ZONE EAST

V.A. Elevation: 3392 ft.

X=709,243

Y=638,170

$\Delta \alpha = +0^{\circ}22'06''$

	LAT. 32° 45' 9.325"	LONG. 109° 29' 9.822"		
STATION	AZIMUTH	BACK AZIMUTH	DISTANCE	
<del>Dry Mtn. (USFS)</del>	350° 12' 47.782"	170° 13' 13.399"	23828.33	
Sec. Cor. 36/8S/27E	27° 57' 48.482"	207° 56' 27.543"	27293.99	
Sec. Cor. 36/7S/27E	120° 12' 12.048"	300° 10' 51.331"	14736.69	
Lorenzo (CFS)	153° 5' 1.128"	333° 4' 36.097"	8724.74	
Sol (CFS)	155° 49' 24.402"	335° 48' 24.522"	23048.93	
Seth (CFS)	274° 4' 35.504"	94° 7' 18.361"	25777.60	
Sec. Cor. 25/8S/28E	315° 49' 5.813"	135° 51' 2.814"	26536.13	

NAD 83 VALUES AVAILABLE

FILE COPY

3/31/65 dc *seth*

North American Datum Conversion  
 NAD 27 to NAD 83  
 NADCON Program Version 1.01

AZ 112.007

=====  
 Transformation #: 1 Region: Conus

Station name: BM 10 KK

	Latitude	Longitude
NAD 27 datum values:	32 45 11.434	109 21 18.165
NAD 83 datum values:	32 45 11.677	109 21 20.414
NAD 83 - NAD 27 shift values:	.243	2.249(secs.)
	7.479	58.540(meters)
Magnitude of total shift:		59.016(meters)

Transformation #: 2 Region: Conus

Station name: F1

	Latitude	Longitude
NAD 27 datum values:	32 59 24.060	109 21 59.630
NAD 83 datum values:	32 59 24.287	109 22 1.891
NAD 83 - NAD 27 shift values:	.227	2.261(secs.)
	6.986	58.704(meters)
Magnitude of total shift:		59.118(meters)

Transformation #: 3 Region: Conus

Station name: G20

	Latitude	Longitude
NAD 27 datum values:	32 53 2.850	109 28 48.650
NAD 83 datum values:	32 53 3.080	109 28 50.918
NAD 83 - NAD 27 shift values:	.230	2.268(secs.)
	7.072	58.945(meters)
Magnitude of total shift:		59.368(meters)

Transformation #: 4 Region: Conus

Station name: G22

	Latitude	Longitude
NAD 27 datum values:	32 53 45.820	109 27 50.560
NAD 83 datum values:	32 53 46.049	109 27 52.827
NAD 83 - NAD 27 shift values:	.229	2.267(secs.)
	7.063	58.909(meters)
Magnitude of total shift:		59.331(meters)

Transformation #: 5 Region: Conus

Station name: G23

	Latitude	Longitude
NAD 27 datum values:	32 55 2.380	109 27 39.150
NAD 83 datum values:	32 55 2.608	109 27 41.417
NAD 83 - NAD 27 shift values:	.228	2.267(secs.)
	7.020	58.913(meters)
Magnitude of total shift:		59.329(meters)

Transformation #: 6 Region: Conus

Station name: SEC COR 1/8S/28E

	Latitude	Longitude
NAD 27 datum values:	32 45 30.080	109 25 33.276
NAD 83 datum values:	32 45 30.320	109 25 35.532
NAD 83 - NAD 27 shift values:	.240	2.256(secs.)
	7.405	58.731(meters)
Magnitude of total shift:		59.196(meters)

Transformation #: 7 Region: Conus

Station name: SMUGGLER

	Latitude	Longitude
NAD 27 datum values:	32 59 17.367	109 19 48.404
NAD 83 datum values:	32 59 17.596	109 19 50.661
NAD 83 - NAD 27 shift values:	.229	2.257(secs.)
	7.039	58.607(meters)
Magnitude of total shift:		59.028(meters)

Transformation #: 8 Region: Conus

Station name: 1-13 A

	Latitude	Longitude
NAD 27 datum values:	32 45 9.325	109 29 9.822
NAD 83 datum values:	32 45 9.564	109 29 12.084
NAD 83 - NAD 27 shift values:	.239	2.262(secs.)
	7.364	58.888(meters)
Magnitude of total shift:		59.346(meters)

Transformation #: 9 Region: Conus

Station name: G24

	Latitude	Longitude
NAD 27 datum values:	32 54 15.580	109 27 27.980
NAD 83 datum values:	32 54 15.809	109 27 30.246
NAD 83 - NAD 27 shift values:	.229	2.266(secs.)
	7.052	58.897(meters)
Magnitude of total shift:		59.318(meters)



Transformation #: 10 Region: Conus

Station name: G25

	Latitude	Longitude
NAD 27 datum values:	32 55 35.580	109 27 31.500
NAD 83 datum values:	32 55 35.807	109 27 33.768
NAD 83 - NAD 27 shift values:	.227	2.268(secs.)
	7.002	58.912(meters)
Magnitude of total shift:		59.327(meters)

Transformation #: 11 Region: Conus

Station name: G26

	Latitude	Longitude
NAD 27 datum values:	32 56 8.680	109 26 11.310
NAD 83 datum values:	32 56 8.908	109 26 13.576
NAD 83 - NAD 27 shift values:	.228	2.266(secs.)
	7.009	58.858(meters)
Magnitude of total shift:		59.274(meters)

Transformation #: 12 Region: Conus

Station name: G27

	Latitude	Longitude
NAD 27 datum values:	32 55 31.230	109 26 32.660
NAD 83 datum values:	32 55 31.458	109 26 34.926
NAD 83 - NAD 27 shift values:	.228	2.266(secs.)
	7.025	58.868(meters)
Magnitude of total shift:		59.286(meters)

Transformation #: 13 Region: Conus

Station name: G28

	Latitude	Longitude
NAD 27 datum values:	32 56 28.270	109 24 47.150
NAD 83 datum values:	32 56 28.498	109 24 49.414
NAD 83 - NAD 27 shift values:	.228	2.264(secs.)
	7.027	58.800(meters)
Magnitude of total shift:		59.218(meters)

Transformation #: 14 Region: Conus

Station name: G29

	Latitude	Longitude
NAD 27 datum values:	32 56 58.340	109 24 51.000
NAD 83 datum values:	32 56 58.567	109 24 53.264
NAD 83 - NAD 27 shift values:	.227	2.264(secs.)
	7.008	58.807(meters)
Magnitude of total shift:		59.223(meters)

Transformation #: 15 Region: Conus

Station name: G30

	Latitude	Longitude
NAD 27 datum values:	32 58 14.120	109 24 5.340
NAD 83 datum values:	32 58 14.347	109 24 7.604
NAD 83 - NAD 27 shift values:	.227	2.264(secs.)
	6.980	58.785(meters)
Magnitude of total shift:		59.198(meters)

Transformation #: 16 Region: Conus

Station name: G31

	Latitude	Longitude
NAD 27 datum values:	32 58 31.050	109 24 7.890
NAD 83 datum values:	32 58 31.276	109 24 10.154
NAD 83 - NAD 27 shift values:	.226	2.264(secs.)
	6.969	58.790(meters)
Magnitude of total shift:		59.201(meters)

Transformation #: 17 Region: Conus

Station name: G33

	Latitude	Longitude
NAD 27 datum values:	32 58 11.160	109 22 19.990
NAD 83 datum values:	32 58 11.388	109 22 22.251
NAD 83 - NAD 27 shift values:	.228	2.261(secs.)
	7.020	58.708(meters)
Magnitude of total shift:		59.126(meters)

Transformation #: 18 Region: Conus

Station name: G34

	Latitude	Longitude
NAD 27 datum values:	32 57 34.800	109 20 11.470
NAD 83 datum values:	32 57 35.030	109 20 13.727
NAD 83 - NAD 27 shift values:	.230	2.257(secs.)
	7.087	58.608(meters)
Magnitude of total shift:		59.035(meters)

Transformation #: 19 Region: Conus

Station name: G35

	Latitude	Longitude
NAD 27 datum values:	32 57 55.740	109 18 29.740
NAD 83 datum values:	32 57 55.971	109 18 31.994
NAD 83 - NAD 27 shift values:	.231	2.254(secs.)
	7.113	58.537(meters)
Magnitude of total shift:		58.967(meters)

Transformation #: 20

Region: Conus

Station name: CO LINE MK AT ASH PEAD GGBS

	Latitude		Longitude	
NAD 27 datum values:	32 45	5.968	109 15	41.055
NAD 83 datum values:	32 45	6.214	109 15	43.294
NAD 83 - NAD 27 shift values:		.246		2.239(secs.)
		7.565		58.291(meters)
Magnitude of total shift:				58.780(meters)



UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY  
 MULTIPLE STATION LISTING

PROCESS DATE OF

STATION NUMBER	LAT- I- TUDE	LONG- I- TUDE	SEQ. NO.	LOCAL IDENT- I- FLER	AGENCY CODE	STATE	DTG- TRCT	COUNTY	SITE
09442000	112	32 57 57	109 18 35	00	GILA RIVER NEAR CLIFTON	USGS	04	04	011 SW
09462200	114	32 50 08	109 59 37	00	AGRICUL RESCH SER SAFFOR	USGS	04	04	009 SW
09451900	113	32 50 27	109 31 17	00	AGRICUL RESRCH SERV SAFF	USGS	04	04	009 SW
09447800	113	32 57 20	109 31 50	00	RONITA CREEK NEAR MORENC	USGS	04	04	009 SW
09460200	114	32 50 00	109 45 39	00	FRYE CREEK AT THATCHER,	USGS	04	04	009 SW
09448500	113	32 52 06	109 30 38	00	GILA R AT HEAD OF SAFFOR	USGS	04	04	009 S.
09451000	113	32 52 00	109 31 00	00	GILA R NR SOJUMON ARTZ	USGS	04	04	009 SW
09458500	113	32 50 50	109 42 55	00	GILA RIVER AT SAFFORD, A	USGS	04	04	009 SW
525858109215801	112	32 58 58	109 21 58	01	SAN FRANCISCO R ABV GILA	USGS	04	04	011 SW
09457000	113	32 48 06	109 38 19	00	SAN SIMON RIVER NEAR SOL	USGS	04	04	009 SW
09451800	112	32 51 00	109 20 15	00	TULLGATE WASH TRIB NEAR	USGS	04	04	009 SW

FILE COPY  
 Geodetic Control Unit  
 DO NOT REMOVE

28 JUN 1992

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY  
 MULTIPLE STATION LISTING

PROCESS DATE 06/10

STATION NUMBER	GEO-LOGIC UNIT	DRAIN-AGE AREA (SQ. MI.)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	DEPTH OF WELL, TOTAL (FEET)
09442000	--	4010	5336.36	--
09462200	--	1.07	--	--
09451900	--	.81	--	--
09447800	--	302	--	--
09460200	--	24.3	--	--
09448500	--	7900	5064.84	--
09451000	--	7950	--	--
09458500	--	10500	2860.07	--
325858109215201	--	--	--	--
09457000	--	2190	2060.15	--
09451800	--	.12	--	--

FILE COPY  
 Geodetic Control Unit  
 DO NOT REMOVE


28 JUN 1982

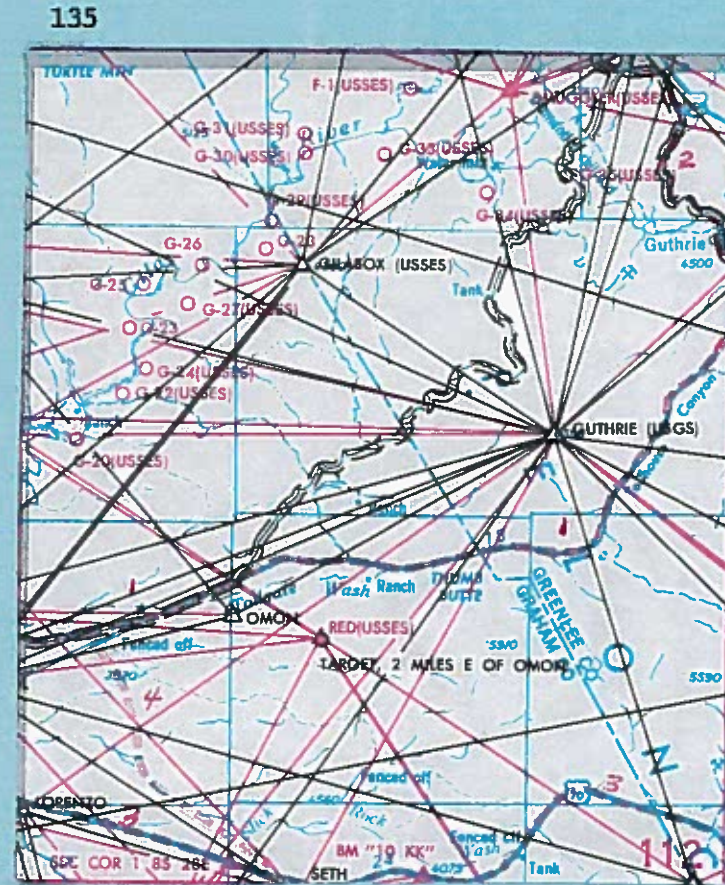
GUTHRIE

Lat. 32°45'  
Long. 109 15

ARIZONA 14.2

C&GS 32 109 1

(1)	J. T. Stewart	1900	8517
(2)	"	"	"
(3)	"	"	"
(4)	"	"	-
	 K. N. Keller	1963	PV 486



88

FILE COPY

321 45  
101 15

ARIZONA (112)

Greenlee County

F1

1927 N.A.D.

Soil Conservation

From Solomonville go 9.9 mi. on Hwy. 180 to Hwy. 71. Take Hwy. 71 for 19.4 mi. to Gila River Bridge. Continue on 3.25 mi. to Smuggler Road. Turn left and go 0.9 mi. to R.R. grade crossing. Continue on 1.8 mi. to old R.R. grade. Turn right and go 0.25 mi. Turn left and go uphill 0.55 mi. to a point under triangulation station Smuggler. Turn right down grade 0.25 mi. to a wash. Turn right and follow old road 1.1 mi. to bench above the San Francisco River across from the Smuggler Gold Mine. Cross over river on cable car and hike downstream  $1\frac{1}{2}$  mi. passing the Weaver Goat ranch. The station is on the west bank of the river at this point. The station is in the center of a large V in the rivers course where it changes direction from west to south. The station is about 200 feet from the centerline of the river and about 60' above the river bed. High pinnacles of conglomerate rock are about 200' N.W. of the station, a standard brass marker, is set in a concrete pedestal on a conglomerate ridge. The station is about 1 mi. above where the Gila River meets the San Francisco River.

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE

ARIZONA ZONE EAST:

X = 745,582.

Y = 724,809.

Elevation: 3359. ft.

Latitude: 32°59'24.06"

Longitude: 109°21'56.63"

NAD 83 VALUES AVAILABLE

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE



52 (2) 45  
109 13

ARIZONA (112)

Graham County

G20

1927 N.A.D.

Soil Conservation

Go 9.4 mi. east from Solomonville, on highway 180, to a road bearing NE. by N. (This point lies 0.4 mi. W. of Highway 71. The 3rd pole west of a galvanized GUY guard & and pole is stenciled 901). Turn left (NE.) over a meandering road to the summit. Turn down a steep grade and into Rail N Wash (a burned Cadillac lies alongside this wash, some distance down). Park near the ferry and call for Mr. Baker if the car is on the farther side. Follow the trail to the station. The station is a standard brass marker set in concrete.

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE

ARIZONA ZONE EAST:

X = 710,740.

Elev: 3135. ft.

Y = 686,035.

Latitude: 32°53'02.85"

Longitude: 109°28'48.65"

NAD 83 VALUES AVAILABLE

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE

32 45  
109 15

ARIZONA (112)

Graham County

G22

1927 N.A.D.

Soil Conservation

From the mouth of "Rail N" wash go upstream (N.) across a malpais wash. Climb a stock trail just over the gauging station to the top and on down the far side. Cross over an arroya to the bench just above the river. Pass around the end of the next ridge and climb the next to a point about 3/8 mi. above (E.) the river. The mouth of Bonita Creek lies A. 256° and this point lies about 1-1/2 mi. upstream from "Rail N" wash. The station, a standard brass plate, is set in concrete.

ARIZONA ZONE EAST:  
X = 715,665.  
Y = 690,411.

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE

Latitude: 32°53'45.82"

Longitude: 109°27'50.56"

NAD 83 VALUES AVAILABLE

FILE COPY

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE

ARIZONA (112)

Graham County

G23

1927 N.A.D.

Soil Conservation

From the W. W. Hayward Ranch, at the mouth of Bonita Creek, cross the Bonita at its mouth and climb the N. wall over an old goat trail. Go (NNE.) across the bench, over a stock trail, about 1/4 mi. to an arroya; climb out and up onto the mesa, over a horse trail, about 1-3/4 mi. (NE. by N.) keeping to the highground and avoid the arroyas to the point of the mesa overlooking the river. The station, a standard brass plate, is set in concrete.

32-15-15  
107 15

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE

ARIZONA ZONE EAST:

X = 716,586.

Y = 698,154.

Latitude: 32°55'02.38"

Longitude: 109°27'39.15"

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE

ARIZONA (112)

Graham County

G24

1927 N.A.D.

Soil Conservation

(River) From G-22 continue to the top of the ridge and follow same to the left, keeping to the high ground shedding toward the river, about 1-1/2 mi. to a point opposite the south end of the stratified cliff across the river. Bear down the ridge, toward the river, to a bluff and an coatilla wrapped with Muslin; then down the arroya to the river. The station, a standard brass plate, is set in concrete.

32° 54' 15"  
109° 27' 15"

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE

ARIZONA ZONE EAST:

X = 717,570.

Elev.: 3148. ft.

Y = 693,431.

Latitude: 32° 54' 15.58"

Longitude: 109° 27' 27.98"

NAD 83 VALUES AVAILABLE

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE

32 45 (71)  
109 15

ARIZONA (112)

Graham County

G25

1927 N.A.D.

Soil Conservation

From the W.W. Hayward ranch, at the mouth of Bonita Creek, go up the Bonita about 1/2 mi. to the Morenci trail. Top out on your right (E.) and follow the Morenci trail about 3 mi. to a point, in a saddle, where a butte (the first) lies ahead to your left and a canyon drops off to your right (SE.). A stock trail goes down the canyon to the river; faint near the top. Go down this trail about 1-1/2 mi. to the river. The station, a standard brass plate, is set in concrete.

**FILE COPY**

Geodetic Control Unit

**DO NOT REMOVE**

ARIZONA ZONE EAST:

X = 717,215.

Y = 701,514.

Elev.: 3186. ft.

Latitude: 32°55'36.68"

Longitude: 109°27'31.50"

**NAD 83 VALUES AVAILABLE**

FILE COPY

**FILE COPY**

Geodetic Control Unit

**DO NOT REMOVE**

10-16-57 mm

FILE COPY

32  
109

3  
45  
15

ARIZONA (112)

Graham County

G26

1927 N.A.D.

Soil Conservation

Go east from Solomonville 9.9 mi. on Hwy. 80 to a point. (This point lies \_\_\_\_\_ mi. W. from the junction of Hwy. 71). An old road turns left and bears NE. 4.25 mi. to the summit. Then turn down steep grade into Rail N Wash; continue on down this road 1.8 mi. to the Gila River to a point opposite the Gold Spot placer mine. This is the end of truck travel. Cross the Gila River on a cable trolley. Go NW. about 150' (just over the ore bin) to an old road bearing N. by NW. across a bench just above the river for about 7/8 mi. to Mr. W.W. Hayward's Ranch on Bonita Creek. Go N. from Hayward Ranch following the Bonita Creek for about 1/2 mi. Take the Morenci trail out of the east side of wash at this point and follow in a N. by NE. direction for about 3 mi. to a rocky bluff just to the left of trail. Continue on to the top of the first hill then turn E. leaving the trail and follow ridge for 1/4 mi. to a saddle. Take trail to the east down Bill's Canyon at this point and follow past window rock to the bottom. At the bottom turn E. and climb out along trail to first saddle. At saddle pass through cattle gate and continue E. down into McArthur's Canyon. At bottom turn S. down canyon for about 300' to a spring. Turn E. from spring and follow trail out of canyon and follow upstream around mountain opposite Camelsback Dam site and past Mexican camp to where the trail ends at the Gila River. Turn N. from this point across a sandy flat for 1/4 mi. to station which is located on top of a large igneous boulder about 16 ft. high right at the streams edge. The Gila River at this point reverses direction from W. to SE. The station, a standard brass marker set in concrete on solid rock.

ARIZONA ZONE EAST:

X = 724,027.

Y = 704,906.

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE

Latitude: 32°56'08.68"

Longitude: 109°26'11.31"

NAD 83 VALUES AVAILABLE

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE

10-16-57 mm

ARIZONA (112)

Graham County

32 45  
109 15  
G27

1927 N.A.D.

Soil Conservation

Go east from Solomonville 9.9 mi., on Hwy. 180. Turn left (E. by E.) on Hwy. 71 8.3 mi. Turn left (N.) on the old Hot Springs Road 2.2 mi. down a rocky canyon; follow this road 0.95 mi. on upon the mesa; continue 0.4 mi. on this old road; turn left (NNW.) 0.2 mi. to a saddle and the end of truck travel. Pick up the stock trail, from the nearby tank, and go about 3/8 mi. SW. to a saddle. Turn right (W.) on this trail down the right rim of the canyon (the same canyon the old road follows from Hwy. 71) about 1-3/8 mi. to the N. slope of a low oval-shaped knoll (this takes one around the head of a forked arroya running NW.). Follow around the right side of this knoll going to the left about 3/8 mi. to a point directly W. from the knoll and just around the head of the second canyon. Turn right (NW.) down the ridge about 1-1/2 mi. to the station. The trail dies out before reaching a rocky crest and a new trail soon develops leading to the Gila River. The station, a standard brass plate cemented into a first boulder overlooks the Gila River just above the Camel Back Dam site.

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE

ARIZONA ZONE EAST:

X = 722,234.

Y = 701,108.

Latitude: 32°55'31.28"

Longitude: 109°26'32.66"

FILE COPY

NAD 83 VALUES AVAILABLE

ARIZONA (112)

Graham County

32  
109  
G28

1927 N.A.D.

Soil Conservation

Pass around the right side of the triangulation station Gilabox crest and follow down the Ridge to the point of the cliff which lies about 0.7 mi. NW. from Gilabox triangulation station. The station lies about 50 yds. W. on a point overlooking the Gila River; it is a standard brass plate set in concrete.

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE

ARIZONA ZONE EAST:  
X = 731,186.  
Y = 706,936.

Latitude: 32°56'28.27"

Longitude: 109°24'47.15"

FILE COPY

NAD 83 VALUES AVAILABLE



ARIZONA (112)

Graham County

G29

1927 N.A.D.

Soil Conservation

Triangulation station G-29 is located on the north bank of the Gila river about  $1\frac{1}{2}$  miles below its junction with Eagle Creek.

Go east from Solomonville 9.9 mi. on Hwy. 180 to the junction of Hwy. 71. Go east on Hwy. 71 for a distance of 8.3 mi. to where the Old Hot Springs road turns off to the north. Follow this road down a rocky canyon 2.2 mi. Continue on for 9.5 mi. up on a mesa. Turn left from this old road for 0.3 mi. to a stock tank belonging to Mr. Geo. Hill. Go north from this tank  $1/2$  mi. to a grey low hill; continue NW. across country 0.8 mi., then turn east for 0.2 mi., then north 0.5 mi., then NE. for 0.7 mi. This is the furthest point that can be reached by car. Take a trail at this point leading N. and to the head of a narrow canyon directly W. of a long "hog-back". Follow this trail for about 1 mi. down the canyon coming to the Gila River at a Mexican goat ranch. This ranch is about 1 mi. above the junction of the Gila River with Eagle Creek. Follow the river downstream about 2 mi. to a goat ranch on the N. bank of river. The station G-29 lies at the S. tip of a ridge directly W. of this ranch about  $1/4$  mi.

The station, a standard brass marker, is set in concrete on top of a firm boulder.

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE

ARIZONA ZONE EAST:

X = 730,836.

Y = 709,972.

Latitude:  $32^{\circ}56'58.34''$

Longitude:  $109^{\circ}24'51.00''$

NAD 83 VALUES AVAILABLE

10-15-57 mm

ARIZONA (112)

Greenlee County

G30

32 45  
109 15  
7

1927 N.A.D.

Soil Conservation

Triangulation station G-30 is located on the N. bank of the Gila River about 1 mi. above its junction with the Eagle Creek. Go E. from Solomonville 9.9 mi. on hwy. 180 to the junction of Hwy. 71. Go E. on Hwy. 71 for a distance of 8.3 mi. to the old Hot Springs road. Follow this road down a rocky canyon for a distance of 2.2 mi.; continue on this road 0.95 mi. up on a mesa; turn left from this old road for a distance of 0.3 mi. to a stock tank belonging to Mr. Geo. Hill; go N. from this point a half mi. to a round grey hill. Continue NW. across country for 0.8 mi.; turn E. for 0.2 mi. and N. for 0.5 mi.; then NE. for 0.7 mi. This is the furthest point that can be reached by car. Take a trail at this point leading to the N. and to the head of a narrow canyon directly W. of a long "hog-back". Follow this trail for about 1 mi. down the canyon coming to the river at a Mexican goat ranch. Ford the river N. of goat ranch and above small rapids. The station is N. from this point about 300' from the end of stream and 69' higher than the bed of river. It is at the edge of a bank and about 100' upstream from where an arroya cuts the bank. The station, a standard brass marker, is set in concrete.

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE

ARIZONA ZONE EAST:

X = 734,671.

Y = 717,659.

Elev.: 3417. ft.

Latitude: 32°58'14.12"

Longitude: 109°24'05.34"

FILE COPY

NAD 83 VALUES AVAILABLE

ARIZONA (112)

Greenlee County

32 45  
109 15  
31  
G31

1927 N.A.D.

Soil Conservation

Triangulation station G-31 is located on the W. end of the first high mesa between the Gila River and Eagle Creek. Go E. from Solomonville 9.9 miles on Hwy. 180 to the junction of Hwy. 71. Go E. on Hwy. 71 for a distance of 8.3 mi. to where the Old Hot Springs road turns off to the N., follow this road down a rocky canyon 2.2 mi.; continue on for 0.95 mi. up on a mesa; turn left from this old road for 0.3 mi. to a stock tank belonging to Mr. Geo. Hill; go N. from this tank 1/2 mi. to a grey low hill; continue NW. across country 0.8 mi., then turn E. for 0.2 mi., then N. for 0.5 mi. and then NE. for 0.7 mi. This is the furthest point that can be reached by car. Take a trail at this point leading N. and to the head of a narrow canyon directly W. of a long "hog-back". Follow this trail for about 1 mi. down the canyon coming to the river at a Mexican goat ranch. Ford the River N. of the goat ranch and above small rapids. Take a trail leading from river N. of rapids and continue 1/2 mi. up to saddle lying between high mesa and pinnacle. Pass through saddle and climb to mesa from the north side. The station, a standard brass marker- set in concrete, is at the W. end of the mesa where it narrows to a ridge.

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE

ARIZONA ZONE EAST:

X = 734,441.

Y = 719,368.

Latitude: 32° 58' 31.05"

Longitude: 109° 24' 07.89"

FILE COPY

NAD 83 VALUES AVAILABLE

32 45  
109 15  
(19)

ARIZONA (112)

Greenlee County

G33

1927 N.A.D.

Soil Conservation

From top of dugway, on the old Hot Springs road, follow the Hot Springs road (N. by E.) about 2 mi. to a point just past a low knoll and opposite a rocky crest. Turn left (NW.) around the head of a canyon heading just N. of this knoll. Follow this ridge 1.3 mi. almost due N. but winding out among the crests. This point is in a rocky saddle with a decided slope to the right (E.). From the truck: Pick up a water trail circling to the left but crossing the next knoll in A.30°. Then bear about N. to the rocky crests overlooking the Gila and Frisco rivers at their junction. The trail was flagged from the truck to the station, a standard brass plate set in concrete.

**FILE COPY**  
Geodetic Control Unit  
**DO NOT REMOVE**

ARIZONA ZONE EAST:  
X = 743,648.  
Y = 717,426.

Latitude: 32°58'11.16"

Longitude: 109°22'19.99"

**NAD 83 VALUES AVAILABLE**

32 45  
109 15  
(15)

ARIZONA (112)

Greenlee County

634

1927 N.A.D.

Soil Conservation

At the bridge across the Gila River, on Hwy. 71: Go 3.3 mi. NE. on Hwy. 71 to the Smuggler Placer mining road. Note: Turn left (toward triangulation station Smuggler) 1.0 mi. to a R.R. Grade crossing; continue 1.3 mi. to a road fork. Take the left fork and go 0.6 mi. to an old R.R. grade; cross over and go 0.5 mi. to a road fork in a wash. Turn right and go 0.3 mi. to a road fork; turn left and go 1.75 mi. to a loop on the bluff overlooking the Gila River and to the end of truck travel. The station lies about 1/2 mi. in azimuth 224°; on a ridge in the slope about 100 yds. WINW. from a huge arch in the cliff to the left. Follow down the trail to the Gila River; cross over and pass over the low saddle straight ahead; then, follow down the left bank of the Gila to a point directly under the station, a standard brass plate set in concrete.

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE

ARIZONA ZONE EAST:  
X = 754,626.  
Y = 713,836.

Latitude: 32°57'34.80"

Longitude: 109°20'11.47"

FILE COPY

NAD 83 VALUES AVAILABLE

ARIZONA (112)

Greenlee County

635

32 45  
109 15  
(14)

1927 N.A.D.

Soil Conservation

Lies about 36 ft. NE. from the NE. corner of the bridge across the Gila River on Hwy. 71 and is best reached by going E. on Hwy. 180 and branching off on Hwy. 71 (Clifton road) to the station. The station, a standard brass plate, is set in concrete.

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE

ARIZONA ZONE EAST:

X = 763,277.

Y = 716,022.

Latitude:  $32^{\circ}57'55.74''$

Longitude:  $109^{\circ}18'29.74''$

FILE COPY

NAD 83 VALUES AVAILABLE

USGS Quad  
112

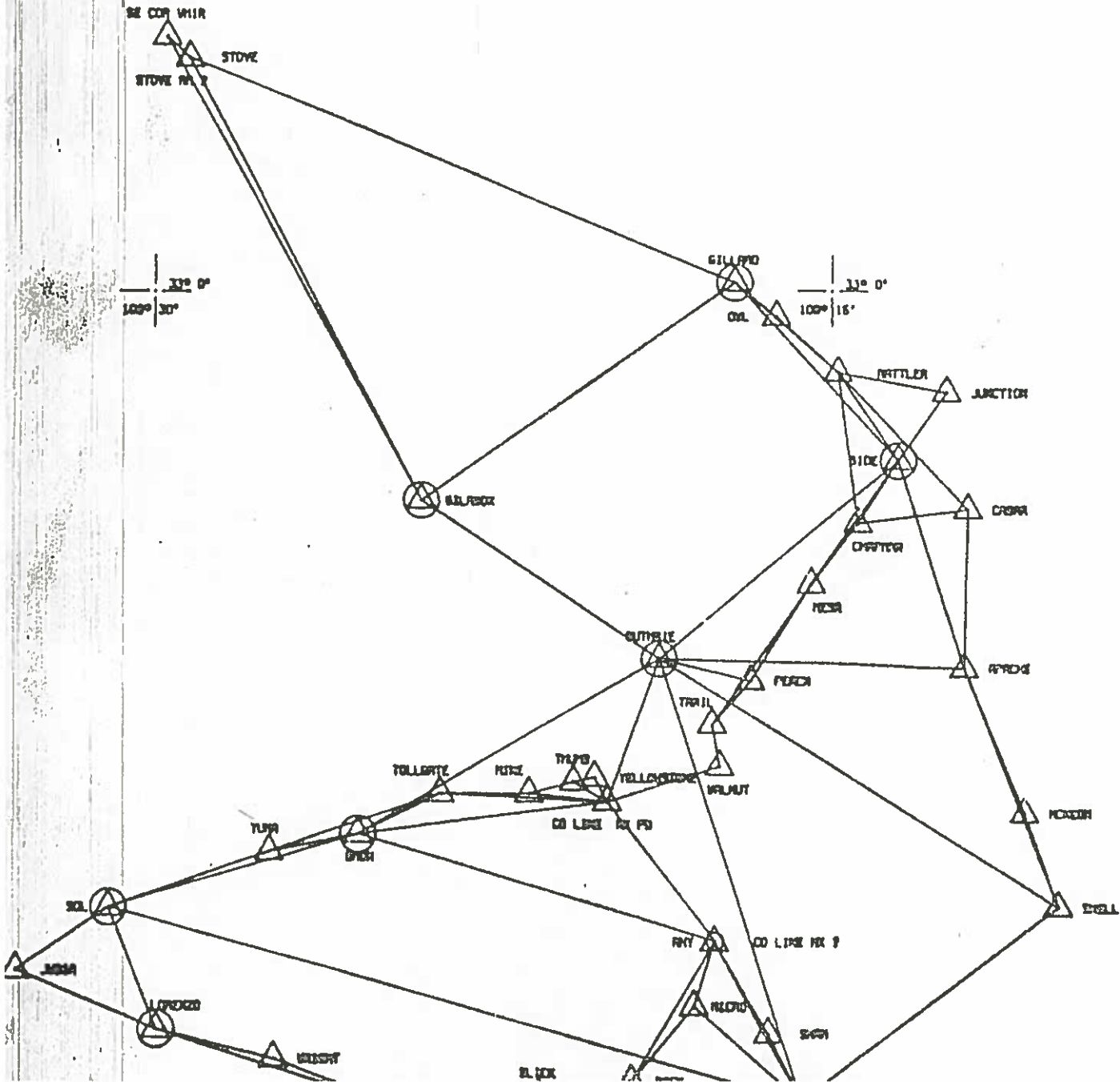
SECOND ORDER TRAVERSE CLASS I

PROJECT N-900-229  
JOB NO. 1400  
TD NO. 321091

STAGE ONE  
OF  
SAFFORD - CLIFTON TRAVERSE  
GREENLEE COUNTY, ARIZONA



FEET  
PHOTOGRAMMETRY & MAPPING SERVICES  
JAN 1977



GNOM	STATION NAME	LATITUDE	LONGITUDE	X	Y	ZONE	CONVERGENCE	SCALE FACTOR
111 15931	APACHE AZDT 1976	32 53 3.47112	109 12 5.34176	796297.600	686767.810	AZ E	+0 31 26.67	1.0000005354
112 15931	ASH PEAK USFS 1945 RM 1 ✓	32 45 5.80740	109 15 40.89601	778329.220	638331.700	AZ E	+0 29 23.27	0.9999827141
111 15931	CABAR AZDT 1976 ✓	32 55 58.54825	109 12 0.62075	796558.021	764465.347	AZ E	+0 31 31.72	1.0000006976
111 15931	CHAPMAN AZDT 1976 ✓	32 55 42.55768	109 14 25.29395	784221.671	702736.545	AZ E	+0 30 12.83	0.9999925066
112 15931	CO LINE AT RHY GGBS ✓	32 47 59.78586	109 17 35.17367	768424.378	655931.962	AZ E	+0 28 23.67	0.9999825113
112 15931	CO LINE MK AT ASH PEAK GGBS ✓	32 45 5.96643	109 15 41.85472	778315.527	638347.358	AZ E	+0 29 23.19	0.9999827054
112 15931	CO LINE MK FD AZDT 1976 ✓	32 50 33.74631	109 19 58.38507	756077.502	671292.591	AZ E	+0 27 07.56	0.9999750947
111 15931	JUNCTION USSES 1976 ✓	32 58 8.39819	109 12 29.85662	793926.655	717565.708	AZ E	+0 31 17.64	0.9999989311
111 15931	MCREON AZDT 1976 ✓	32 50 20.92028	109 18 45.26236	803280.194	670403.174	AZ E	+0 32 07.81	1.00000053307
112 15931	MESA AZDT 1976 ✓	32 54 35.22123	109 15 27.19624	779013.191	695867.476	AZ E	+0 29 38.34	0.9999391476
112 15931	MICRO AZDT 1976 ✓	32 46 49.86237	109 16 3.61214	766654.793	646745.546	AZ E	+0 28 07.37	0.9999810615
112 15931	MIKE AZDT 1976 ✓	32 50 42.56559	109 21 42.26659	747206.389	672115.114	AZ E	+0 26 11.71	0.9999699819
112 15931	ORL AZDT 1976 ✓	32 59 32.27338	109 16 14.60981	774706.685	725873.767	AZ E	+0 29 16.41	0.9999884154
112 15931	PEACH AZDT 1976 ✓	32 52 48.70087	109 16 43.43311	772169.012	685083.264	AZ E	+0 28 52.75	0.9999848282
111 15931	RATTLER AZDT 1976 ✓	32 52 30.36991	109 14 52.11776	781787.406	719676.137	AZ E	+0 30 00.51	0.9999909279
112 15931	RHY AZDT 1976 ✓	32 47 58.62203	109 17 36.84896	768292.368	658713.154	AZ E	+0 28 22.75	0.9999324242
112 15931	ROCK AZDT 1976 ✓	32 45 27.50255	109 19 26.39920	759927.461	649365.842	AZ E	+0 27 21.36	0.9999768263
112 15931	SHAW AZDT 1976 ✓	32 46 19.60466	109 16 25.16088	774464.234	645757.534	AZ E	+0 29 00.23	0.9999862796
111 15931	SHELL AZDT 1976 ✓	32 48 34.52337	109 10 8.99950	807158.445	659635.982	AZ E	+0 32 30.25	1.00000080425
112 15931	SLICK AZDT 1976 ✓	32 45 11.25203	109 21 29.90194	748518.654	638645.754	AZ E	+0 26 14.50	0.9999707284
112 15931	THURS AZDT 1976 ✓	32 50 55.02016	109 23 43.59053	752221.195	673412.460	AZ E	+0 26 43.01	0.9999728499
112 15931	TOLLGATE AZDT 1976 ✓	32 50 42.96388	109 23 41.90784	756996.564	672079.577	AZ E	+0 26 06.80	0.99996643207
112 15931	TRAIL AZDT 1976 ✓	32 51 59.89434	109 17 35.49925	767655.511	680013.658	AZ E	+0 28 24.39	0.9999821610
112 15931	WALNUT AZDT 1976 ✓	32 51 12.25325	109 17 25.61020	768738.215	675288.517	AZ E	+0 23 29.15	0.9998827036
112 15931	WRIGHT AZDT 1976 ✓	32 45 53.28642	109 27 21.29451	716482.007	642673.420	AZ E	+0 23 04.91	0.9999545845
112 15931	YELLOWSTONE AZDT 1976 ✓	32 51 0.45719	109 23 15.46804	754599.637	675980.544	AZ E	+0 24 59.02	0.9999742303
112 15931	YUMA AZDT 1976 ✓	32 49 38.10545	109 27 26.18160	717740.815	665809.372	AZ E	+0 23 03.41	0.9999548935
113 15931	JUDIA AZDT 1976	32 47 29.12049	109 33 1.88586	689367.739	652176.855	AZ E	+0 20 01.49	0.9999410661
135 15931	SEC COR XNIA GLO 1976	33 4 40.13729	109 29 42.24493	765720.022	756474.738	AZ E	+0 21 59.60	0.9999484616
135 15931	STOVE AZDT 1976	33 4 17.26386	109 29 12.48291	708267.407	754179.382	AZ E	+0 22 15.62	0.9999495693
135 15931	STOVE AZDT 1976 RM 2	33 4 17.13178	109 29 12.94733	708227.976	754165.778	AZ E	+0 22 15.36	0.9999496885

**NAD 83 VALUES AVAILABLE**

SEE SILVER CITY

ADJUSTED  
DATA

Silver City  
Clifton

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE



G-1593.1

FIELD GEOGRAPHIC POSITIONS

CLASS 1

LOCALITY SAFFORD - CLIFTON TRAVERSE NORTH AMERICAN 1927 DATUM 2nd - ORDER TRIANGULATION. STATE ARIZONA

STATION	LATITUDE AND LONGITUDE			AZIMUTH			BACK AZIMUTH			TO STATION	DISTANCE	
											METERS	
SE COR WMIR GLO.	d.m.	33	04	40.1472	312	23	17.60	132	23	33.84	STOVE ADOT.	1,045.207
		109	29	42.2365	331	01	47.88	151	04	50.69	GILABOX.	18,000.214
STOVE ADOT.	d.m.	33	04	17.2722	291	58	40.08	112	05	14.42	GILLARD.	20,247.862
		109	29	12.4780	332	09	33.28	152	12	19.87	GILABOX.	17,013.149
STOVE RM 2 ADOT.	d.m.	33	04	17.1404	133	00	25.80	313	00	09.81	SE COR WMIR GLO	1,039.129
		109	29	12.9408	251	20	12.71	71	20	12.96	STOVE ADOT.	12.709
GILABOX.	d.r.	32	56	08.8248	235	28	00.19	55	31	47.37	GILLARD.	13,154.913
		109	24	06.6324	303	09	46.11	123	12	38.44	GUTHRIE.	9,848.050
GILLARD.	d.r.	33	00	10.7072	317	17	41.26	137	19	39.35	SIDE.	8,309.086
		109	17	09.1660	310	58	03.86	130	59	18.48	RATTLER ADOT.	4,713.293
OWL ADOT.	d.m.	32	59	32.2796	129	53	29.46	309	52	59.75	GILLARD.	1,845.972
		109	16	14.6049	311	40	25.47	131	41	10.38	RATTLER ADOT.	2,867.832
RATTLER ADOT.	d.m.	32	58	30.3745	316	23	03.52	136	24	36.81	CABAR ADOT	6,458.752
		109	14	52.1114	325	28	15.99	145	28	59.46	SIDE. ADOT.	3,661.549
JUNCTION ADOT.	d.m.	32	58	08.4015	100	23	37.21	280	22	19.79	RATTLER ADOT.	3,755.700
		109	12	29.8514	34	41	41.17	214	41	07.24	SIDE.	2,845.669
SIDE.	d.r.	32	56	52.4463	50	46	40.07	230	43	47.66	GUTHRIE.	10,644.661
		109	13	32.2100	342	14	51.22	162	15	38.43	APACHE.	7,406.039
GUTHRIE.	d.r.	32	53	13.836	341	55	27.06	161	57	09.18	ASH PEAK.	15,807.911
		109	18	49.468	19	58	22.42	199	57	45.02	CO LINE MK FD.	5,247.071
CABAR ADOT	d.m.	32	55	58.5506	1	18	15.23	181	18	12.66	APACHE ADOT.	5,394.771
		109	12	00.6155	82	32	40.93	262	31	22.28	CHAPMAN.	3,790.741

UNADJUSTED FIELD DATA

FILE COPY

Geodetic Control Unit

No check on this position.

Abbreviations used: d.=described; m.=marked; n.=not; r.=recovered; l.=lost; p.=probably.

DO NOT REMOVE

FIELD GEOGRAPHIC POSITIONS

2

CLASS 1

LOCALITY SAFFORD - CLIFTON TRAVERSE NORTH AMERICAN 1927 DATUM 2<sup>nd</sup> ORDER TRIANGULATION STATE ARIZONA

STATION	LATITUDE AND LONGITUDE	AZIMUTH	BACK AZIMUTH	TO STATION	DISTANCE
					METERS
CHAPMAN ADOT.	32 55 42.5608.	212 38 04.27.	32 38 33.13.	SIDE.	2,556.567
d.m. 109 14 25.2880.		172 19 35.57.	352 19 20.98.	RATTLER ADOT.	5,216.334.
MESA ADOT.	32 54 35.2227.	215 12 52.47.	35 13 54.92.	SIDE.	5,174.664
d.m. 109 15 27.0864.		217 44 18.58.	37 44 52.16.	CHAPMAN ADOT.	2,623.187.
PEACH ADOT.	32 52 48.7002.	212 47 15.54.	32 47 59.72.	MESA ADOT.	3,903.585.
d.m. 109 16 48.4325.		40 59 13.47.	220 58 45.75.	TRAIL ADOT.	2,024.255.
RAIL ADOT.	32 51 59.0942.	215 34 38.95.	35 35 50.85.	MESA ADOT.	5,914.186.
d.m. 109 17 39.4988.		349 53 48.86.	169 53 54.23.	WALNUT ADOT.	1,465.701.
WALNUT ADOT.	32 51 12.2521.	72 58 00.05.	252 56 39.35.	CO LINE MK FD.	4,046.621.
d.m. 109 17 29.6108.					
CO LINE MK FD. ADOT.	32 50 33.7445.	322 22 37.87.	142 23 54.59.	RHY ADOT.	6,032.476.
d.r. 109 19 58.3863.		95 44 59.38.	275 44 03.03.	MIKE ADOT.	2,715.613.
YELLOWSTONE ADOT.	32 51 00.4555.	331 38 50.02.	151 38 59.28.	CO LINE MK FD.	934.984.
d.m. 109 20 15.4603.		77 01 00.02.	257 00 44.87.	THUMB ADOT.	745.371.
THUMB ADOT.	32 50 55.0186.	299 14 39.29.	119 15 03.70.	CO LINE MK FD.	1,341.303.
d.m. 109 20 43.3910.		75 56 28.70.	255 55 56.75.	MIKE ADOT.	1,578.889.
MIKE ADOT.	32 50 42.5642.	90 14 18.79.	270 13 13.89.	TOLLGATE ADOT.	3,112.098.
d.m. 109 21 42.2874.					
TOLLGATE ADOT.	32 50 42.9693.	272 46 52.72.	92 48 53.98.	CO LINE MK FD.	5,821.06.
d.m. 109 23 41.9601.		63 40 22.02.	243 39 23.28.	OMON.	3,143.730.

\*No check on this position.

Abbreviations used: d.=described; m.=marked; n.=not; r.=recovered; l.=lost; p.=probably.  
(Examples: n.d.=not described; p.l.=probably lost.)

FIELD GEOGRAPHIC POSITIONS

CLASS 1

LOCALITY SAFFORD - CLIFTON TRAVERSE NORTH AMERICAN 1927 DATUM 2nd ORDER TRIANGULATION. STATE ARIZONA

STATION		LATITUDE AND LONGITUDE			AZIMUTH			BACK AZIMUTH			TO STATION	DISTANCE
												METERS
OMON.		32	49	57.6953	239	51	58.30	59	55	35.78	GUTHRIE.	12,046.635
	d.r.	109	25	30.2948	73	57	00.41	253	54	01.47	SOL.	8,936.735
YUMA ADOT.		32	49	38.1060	251	13	32.35	71	15	35.02	TOLLGATE ADOT.	6,213.620
	d.r.	109	27	28.1857	258	51	27.53	78	52	31.44	OMON.	3,125.099
SOL.		32	48	37.3668	251	15	46.31	71	17	41.34	YUMA ADOT.	5,829.345
	d.r.	109	31	00.4244	285	09	25.87	105	17	43.65	ASH PEAK.	24,795.888
JUDIA ADOT.		32	47	29.1198	236	17	29.88	56	18	35.52	SOL.	3,789.208
	d.m.	109	33	01.5890	291	49	51.98	111	51	32.42	LORENZO.	5,201.032
LORENZO.		32	46	26.2965	157	28	58.29	337	28	23.44	SOL.	4,371.036
	d.r.	109	29	56.0785								
WRIGHT ADOT.		32	45	53.2831	104	10	41.48	284	09	17.70	LORENZO.	4,155.230
	d.m.	109	27	21.2838	290	54	30.71	110	56	14.87	SETH.	5,364.864
SETH.		32	44	51.0888	267	58	35.98	88	03	10.64	ASH PEAK.	13,225.399
	d.r.	109	24	08.7780	108	00	01.74	287	56	53.80	LORENZO.	9,503.948
SLICK ADOT.		32	45	11.2474	81	28	24.84	261	26	58.89	SETH.	4,182.380
	d.m.	109	21	29.9010	261	07	09.82	81	08	16.48	ROCK ADOT.	3,245.9
ROCK ADOT.		32	45	27.4974	211	32	46.40	31	33	45.87	RHY ADOT.	5,462.945
	d.m.	109	19	26.6990	220	26	13.77	40	26	58.74	MICRO ADOT.	3,333.629
MICRO ADOT.		32	46	49.8566	198	11	53.08	18	12	07.57	RHY ADOT.	2,229.723
	d.m.	109	18	03.6112	310	46	09.43	130	47	26.58	ASH PEAK.	4,900.044
RHY ADOT		32	47	58.6173	230	33	33.13	50	33	34.04	CO. LINE MK GGBS?	55.430
	d.m.	109	17	36.8480	330	27	21.10	150	28	23.78	ASH PEAK.	6,113.053

FILE COPY

No check on this position. Abbreviations used: d.=described; m.=marked; n.=not; r.=recovered; l.=lost; p.=probably.

(f)=faded; (nd)=not described; (p.l.)=probably lost.

FIELD GEOGRAPHIC POSITIONS

3

CLASS 1

LOCALITY SAFFORD - CLIFTON TRAVERSE NORTH AMERICAN 1927 DATUM 2nd - ORDER TRIANGULATION. STATE ARIZONA

STATION	LATITUDE AND LONGITUDE			AZIMUTH			BACK AZIMUTH			TO STATION	DISTANCE
											METERS
CO LINE MK AT RHY <del>GGBS</del> <sup>ADOT</sup>	32 47 59.7806	109 17 35.1742	141 51 48.52	321 50 30.90	CO LINE MK FD GGBS	6,030.909					
SHAM ADOT. d.m.	32 46 19.5990	109 16 25.1780	148 33 45.73	328 33 06.92	RHY. ASH PEAK.	3,575.215					
ASH PEAK. (USFS) d.r.	32 45 05.9609	109 15 41.0547	233 59 43.59	54 02 47.70	SHELL ADOT. CO LINE MK GGBS.	10,935.725					
SHELL ADOT, d.m.	32 48 34.5212	109 10 00.9964	233 29 28.24	53 29 28.24	GUTHRIE.	0.095					
LEON ADOT. d.m.	32 48 34.5212	109 10 00.9964	122 05 27.89	302 00 41.24	SHELL ADOT. APACHE ADOT.	16,213.840					
APACHE ADOT d.m.	32 50 20.9182	109 10 45.2585	340 38 30.75	160 38 54.74	SHELL ADOT. GUTHRIE.	3,473.877					
APACHE ADOT d.m.	32 53 03.4715	109 12 05.3370	157 25 44.48	337 25 01.03	SHELL ADOT. GUTHRIE.	5,423.017					
CO LINE MK AT ASH PEAK. <del>GGBS</del> <sup>USFS</sup> d.r.	32 45 05.9627	109 15 41.0518	338 40 16.40	158 41 23.84	ASH PEAK.	8,893.629					
			91 46 17.59	271 42 38.16		10,509.515					
			53 29 28.24	233 29 28.24		0.095					

No check on this position.

Abbreviations used: d.=described; m.=marked; n.=not; r.=recovered; l.=lost; p.=probably.  
 (Examples: n.d.=not described; p.l.=probably lost.)

DESCRIPTION OF TRIANGULATION STATION  
CO LINE MK AT ASH

NAME OF STATION: PEAK USFS  
NEAREST TOWN: SAFFORD  
CHIEF OF PARTY: T. TAYLOR

STATE: ARIZONA COUNTY: GREENLEE  
QUADRANGLE NO.: 321091  
YEAR: 1976 DESCRIBED BY: M.P.

117

NOTE: HEIGHT OF TELESCOPE ABOVE STATION MARK 1.5 METERS. HEIGHT OF LIGHT ABOVE STATION MARK 1.5 METERS.

SURFACE-STATION MARK, UNDERGROUND-STATION MARK	DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION	DISTANCE		DIRECTION
		FEET	METERS	

Station is about 9.5 miles west of Duncan and 22 miles east southeast of Solomon on a prominent peak 1 mile south of U.S. Hwy. 70 and adjacent to station ASH PEAK.

The station is a chisled cross on a chisled line on a rock outcrop about 0.3 feet east of Ash Peak disk. Chisled line runs north and south and has GRAHAM chisled on west side of line and GREENLEE chisled on east side with 1912 marked on south end of line. A cartridge is cemented in rock east of and at north end of line. A 32 special cartridge is also cemented in rock east and at south end of line.

NSF  
183 D.L.J.

\*Refers to notes in manuals of triangulation and state publications of triangulation. †Direction-angle measured clockwise, referred to initial station.  
‡To nearest meter only, when no trigonometric leveling is being done.

DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: CO. LINE MK. FD. STATE: ARIZONA COUNTY: GRAHAM - GREENLEE  
 NEAREST TOWN: CLIFTON ADOT QUADRANGLE NO.: 321091  
 CHIEF OF PARTY: T. TAYLOR YEAR: 1976 DESCRIBED BY: M.P.

NOTE: HEIGHT OF TELESCOPE ABOVE STATION MARK 1.5 METERS. HEIGHT OF LIGHT ABOVE STATION MARK 1.5 METERS.

2	SURFACE-STATION MARK, UNDERGROUND-STATION MARK	DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION			
		OBJECT	BEARING	DISTANCE	
FEET	METERS			°	'
		TOLLGATE ADOT			00 00 00.00
desc.	RM 2	WNW	24.45	7.452	14 41 53.3
desc.	RM 1	ESE	30.06	9.162	188 58 59.4

The station is about 14.5 miles southwest of Clifton, 22 miles east of Safford and 0.5 mile south of U.S. Hwy. 666 on top of a butte called THUMB BUTTE.

The station is an ADOT Hwy. Division disk stamped CO. LINE MK. FD. 1976 and is epoxied in a drill hole in a large flat rock, marked by a witness sign 3 feet to the west which is epoxied to a rock. Station was set in a cross chisled in flat rock with GRAHAM and GREENLEE chisled on either side of cross.

Reference Mark 2 is an ADOT Hwy. Division disk stamped CO. LINE MK. FD. RM 2 1976 and is epoxied on the western edge of a large rock outcrop west of station.

Reference Mark 1 is an ADOT Hwy. Division disk stamped CO. LINE MK. FD. RM 1 1976 and is epoxied on easterly edge of a large rock outcrop east of station.

To reach the station from the junction of U.S. Hwy. 666 and 70, 10 miles east of Safford, travel on U.S. Hwy. 666 to Mile post 144.0. About 75 feet west of M.P. is a place to park vehicle. The station can be seen from here on top of Thumb Butte to the south. Climb through fence and up a ridge to south side of Butte where a manila hemp rope has been placed for a handhold. About a 50 minute pack with equipment.

N.S.F.  
83 DLL.

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE

DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: <sup>MK</sup> CO LINE AT RHY ADOT STATE: ARIZONA COUNTY: GREENLEE  
 NEAREST TOWN: SAFFORD QUADRANGLE NO.: 321091  
 CHIEF OF PARTY: T. TAYLOR YEAR: 1976 DESCRIBED BY: R.C.

112

NOTE: HEIGHT OF TELESCOPE ABOVE STATION MARK 1.5 METERS, † HEIGHT OF LIGHT ABOVE STATION MARK 1.5 METERS.

SURFACE-STATION MARK, UNDERGROUND-STATION MARK DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION

OBJECT	BEARING	DISTANCE		DIRECTION
		FEET	METERS	
NO R.M.'s				

The station is about 24.5 miles east-southeast of Safford, 17.5 miles south of Clifton, 1.25 miles north of U.S. Hwy. 70 on top of a ridge on Rhyolite Peak and about 225 feet north northeast of Station RHY ADOT.

The station is a small cross scratched on a rock and encircled by a 2 foot high ring of rocks. This station is a questionable county line mark.

NSF  
183 D.L.L.

\*Refers to notes in manuals of triangulation and state publications of triangulation. †Direction-angle measured clockwise, referred to initial station.  
 ‡To nearest meter only, when no trigonometric leveling is being done.

DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: MESA ADOT STATE: ARIZONA COUNTY: GREENLEE  
 NEAREST TOWN: SAFFORD QUADRANGLE NO.: 321091  
 CHIEF OF PARTY: T. TAYLOR YEAR: 1976 DESCRIBED BY: M.P.

112

NOTE: HEIGHT OF TELESCOPE ABOVE STATION MARK 1.5 METERS; HEIGHT OF LIGHT ABOVE STATION MARK 1.5 METERS.

1b 7a	SURFACE-STATION MARK, UNDERGROUND-STATION MARK	OBJECT	BEARING	DISTANCE		DIRECTION†
				FEET	METERS	
				PEACH ADOT /		
Desc RM 1 /	E /	37.93 /	11.561 /	204 02 29 -		
Desc RM 2 /	SW /	41.80 /	12.741 /	324 13 57 -		

Detailed description:

The station is about 27 miles east northeast of Safford, 10 miles east southeast of Clifton and 400 feet north of U.S. Hwy. 666.

The station is an ADOT Hwy. Division disk stamped MESA 1976 and is set in a 10 inch diameter concrete monument with a witness post and sign 3 feet northwest.

Reference Mark 1 is an ADOT Hwy. Division disk stamped MESA RM 1 1976 and is set in a 10 inch diameter concrete monument projecting 0.3 feet.

Reference Mark 2 is an ADOT Hwy. Division disk stamped MESA RM 2 and is set in a 10 inch diameter concrete monument projecting 0.3 feet.

To reach the station from the junction of U.S. Hwy. 666 & 70, 10 miles east of Safford, go east on U.S. 666 to mile post 151.02 and a metal gate on the left. Pass through gate, turn right and follow dim track for 0.25 mile to the station.

NSF  
83 D.L.L.

\* Refers to notes in manuals of triangulation and state publications of triangulation. † Direction-angle measured clockwise, referred to initial station.  
 ‡ To nearest meter only, when no trigonometric leveling is being done.



DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: MICRO ADOT  
NEAREST TOWN: SAFFORD  
CHIEF OF PARTY: T. TAYLOR

STATE: ARIZONA COUNTY: GRAHAM  
QUADRANGLE NO.: 321091  
YEAR: 1976 DESCRIBED BY: M.P.

112

NOTE: HEIGHT OF TELESCOPE ABOVE STATION MARK 1.5 METERS; HEIGHT OF LIGHT ABOVE STATION MARK 1.5 METERS.

OBJECT	BEARING	DISTANCE		DIRECTION		
		FEET	METERS	°	'	"
RHY ADOT ✓				00	00	00.0
RM 1 ✓	NE	42.52 ✓	12.960 ✓	64	52	20 ✓
RM 2 ✓	W	42.42 ✓	12.930 ✓	246	08	20 ✓

7b  
7a  
Desc  
Desc

The station is about 24 miles east southeast of Safford, 19 miles south of Clifton and about 800 feet north of U.S. Hwy. 70.

The station is an ADOT Hwy. Division disk stamped MICRO 1976 and is set in a 10 inch diameter concrete post projecting 5 inches and is marked with a witness post and sign 3 feet to south.

Reference Mark 1 is an ADOT Hwy. Division disk stamped MICRO RM 1 1976 and is set in a 10 inch diameter concrete monument projecting 3 inches above ground.

Reference Mark 2 is an ADOT Hwy. Division disk stamped MICRO RM 2 1976 and is set in a 10 inch diameter concrete monument projecting 5 inches.

To reach the station from the junction of U.S. Hwy. 70 and 666, 10 miles east of Safford, travel east southeast on Hwy. 70 to mile post 365.57. Turn left (north) on Micro Station road across a cattle guard and make a sharp left turn and follow fence line for 0.2 mile, turn right on dim track and continue up a ridge for 800 feet to station.

OK '83  
D.L.L.

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE

Refers to notes in manuals of triangulation and state publications of triangulation. Direction-angle measured clockwise, referred to initial station. To nearest meter only, when no trigonometric leveling is being done.

DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: MIKE ADOT STATE: ARIZONA COUNTY: GRAHAM  
 NEAREST TOWN: SAFFORD QUADRANGLE NO.: 321091  
 CHIEF OF PARTY: T. TAYLOR YEAR: 1976 DESCRIBED BY: M.P. 112

NOTE: HEIGHT OF TELESCOPE ABOVE STATION MARK 1.5 METERS; HEIGHT OF LIGHT ABOVE STATION MARK 1.5 METERS.

2	SURFACE-STATION MARK, UNDERGROUND-STATION MARK	DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION	DISTANCE		DIRECTION <sup>1</sup>		
			OBJECT	BEARING		FEET	METERS
						TOLLGATE ADOT /	
Desc RM 2 /		N /	49.05	14.951	72 08 47 /		
Desc RM 1 /		E /	58.65	17.876	160 35 41 /		

Detailed description:

The station is about 20.5 miles east of Safford and 15 miles southwest of Clifton in the north right-of-way U.S. Hwy. 666.

The station is an ADOT Hwy. Division disk stamped MIKE 1976 and is epoxied in a drill hole in a 4 X 4 X 3 foot boulder. The station is 89 feet north of Hwy. centerline and south of the north R/W fence marked by a witness post and sign 4.5 north.

Reference Mark 2 is an ADOT Hwy. Division disk stamped MIKE RM 2 1976 and is epoxied to a boulder 18 inches X 15 inches and 5 inches high, north of the north R/W fence.

Reference Mark 1 is an ADOT Hwy. Division disk stamped MIKE RM 1 1976 and is epoxied to a 18 X 18 inch rock. 18 inches south of north R/W fence.

To reach the station from the junction of U.S. Hwy. 666 & 70, 10 miles east of Safford, go east on U.S. 666 to Mile Post 142.62 and the station in the north R/W.

OK '83  
D.L.L.

<sup>1</sup>Refers to notes in manuals of triangulation and state publications of triangulation. <sup>2</sup>Direction-angle measured clockwise, referred to initial station.  
<sup>3</sup>To nearest meter only, when no trigonometric leveling is being done.

DESCRIPTION OF TRIANGULATION STATION

DEPARTMENT OF COMMERCE  
SURVEYING ADMINISTRATION  
NATIONAL GEODETIC SURVEY

NAME OF STATION: OWL ADOT  
NEAREST TOWN: CLIFTON  
CHIEF OF PARTY: T. TAYLOR

STATE: ARIZONA  
QUADRANGLE NO.: 321091  
YEAR: 1975

COUNTY: GREENLEE  
DESCRIBED BY: M.P. 112

NOTE: HEIGHT OF TELESCOPE ABOVE STATION MARK 1.5 METERS. HEIGHT OF LIGHT ABOVE STATION MARK 1.5 METERS.

1b 7a Desc Desc	SURFACE-STATION MARK, UNDERGROUND-STATION MARK	DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION				
		OBJECT	BEARING	DISTANCE		DIRECTION
				FEET	METERS	
		RATTLER ADOT				00 00 00
		RM 1	S	26.64	0.119	00 00 11
		RM 2	NE	18.58	5.649	218 34 02

The station is about 5 miles southeast of Clifton on the west side of U.S. Hwy. 666.  
 The station is an ADOT Hwy. Division disk stamped OWL 1976 and is set in a 10 inch diameter concrete monument. Station is 95 feet west of U.S. Hwy. 666 centerline on a Hwy. cutbank and marked by a witness post and sign 3 feet to the west.  
 Reference Mark 1 is a ADOT Hwy. Division disk stamped OWL RM 1 1976 and is set in a 10 inch diameter concrete monument.  
 Reference Mark 2 is an ADOT Hwy. Division disk stamped 1455-22A 1975 and is set in a 10 inch diameter concrete monument.  
 To reach the station from a 3 way junction, U.S. Hwy. 666 and State Route 75 & 78, south of Clifton, travel north on U.S. Hwy. 666 to Mile Post 158.70 and station on the left (west) on cutbank above the highway.

**FILE COPY**  
Geodetic Control Unit  
**DO NOT REMOVE**

Refers to notes in manuals of triangulation and state publications of triangulation. † Direction-angle measured clockwise, referred to initial station. To nearest meter only, when no trigonometric leveling is being done.

DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: PEACH ADOT STATE: ARIZONA COUNTY: GREENLEE  
 NEAREST TOWN: CLIFTON QUADRANGLE NO.: 321091  
 CHIEF OF PARTY: T. TAYLOR YEAR: 1976 DESCRIBED BY: M.P. 112

NOTE: HEIGHT OF TELESCOPE ABOVE STATION MARK 1.5 METERS; HEIGHT OF LIGHT ABOVE STATION MARK 1.5 METERS.

2	SURFACE-STATION MARK, UNDERGROUND-STATION MARK	DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION	DISTANCE		DIRECTION
			FEET	METERS	
	OBJECT	BEARING			
	TRALE ADOT ✓				00 00 00
Desc	RM 2 ✓	W	80.71 ✓	24.600 ✓	07 55 05 ✓
Desc	RM 1 ✓	N	37.64 ✓	11.473 ✓	93 10 12 ✓

Detailed description:

The station is about 25.5 miles east northeast of Safford and 11.5 miles east southeast of Clifton and on the north side of U.S. Hwy. 666 on a cutbank at a curve in Hwy.

The station is an ADOT Hwy. Division disk stamped PEACH 1976 and is epoxied in a drill hole in a Malapai boulder flush with ground. Station is 94 feet north of Hwy. centerline on a cutbank at a curve and is marked with a witness post and sign 2.6 feet north.

Reference Mark 2 is an ADOT Hwy. Division disk stamped PEACH RM 2 1976 and is epoxied to a Malapai boulder flush with ground.

Reference Mark 1 is an ADOT Hwy. Division disk stamped PEACH RM 1 1976 and is epoxied to a Malapai boulder flush with ground.

To reach the station from the junction of U.S. Hwy. 666 & 70, 10 miles east of Safford, go east on Hwy. 666 to Mile Post 148.70 to a cutbank at a curve in Hwy. and station on north side of Hwy.

\*Refers to notes in manuals of triangulation and state publications of triangulation. †Direction-angle measured clockwise, referred to initial station.  
 ‡To nearest meter only, when no trigonometric leveling is being done.

DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: RHY ADOT STATE: ARIZONA COUNTY: GRAHAM  
 NEAREST TOWN: CLIFTON QUADRANGLE: 321091  
 CHIEF OF PARTY: T. TAYLOR YEAR: 1976 DESCRIBED BY: M.P. 112

NOTE: HEIGHT OF TELESCOPE ABOVE STATION MARK 1.5 METERS. HEIGHT OF LIGHT ABOVE STATION MARK 1.5 METERS.

2	SURFACE-STATION MARK, UNDERGROUND-STATION MARK	DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION	DISTANCE		DIRECTION <sup>1</sup>
			FEET	METERS	
			BEARING		
	GO. LINE MK. FD. GGBS				00 00 00.00
Desc. RM 1		SE	72.25	22.020	151 59 45.3
Desc. RM 2		N	43.53	13.270	300 59 27.2

Detailed description:

The station is about 24.5 miles east-southeast of Safford, 17.5 miles south of Clifton and 1.25 miles north of U.S. Hwy. 70 near the top of a ridge on Rhyolite Peak.

The station is an ADOT Hwy. Division disk stamped RHY 1976 and is epoxied in a drill hole in a rock which is flush with the ground. A rock cairn and witness post is 4 feet to the north.

Reference Mark 1 is an ADOT Hwy. Division disk stamped RM 1 1976 and is epoxied to a 5 X 4 foot rock that projects 6 inches above ground.

Reference Mark 2 is a ADOT Hwy. Division disk stamped RM 2 1976 and is epoxied to a 2 foot X 6 inch rock that projects 6 inches above ground.

To reach the station from the junction of U.S. Hwys. 666 and 70 10 miles east of Safford, travel east-southeast on U.S. Hwy. 70 to Mile Post 365.67 and a road on the left that leads to a Microwave Station. Turn left and follow Microwave road for 1.25 miles to a sharp right turn, go around curve then turn left off road and across country to a southwest nose of a ridge and end of truck travel. Pack north-easterly to top of ridge and continue north up ridge to within 200 feet of summit. Station is just a little left of ridge you climbed. The station is north-northeast of microwave station. About a 20 minute pack.

NSF  
'83 D.L.L.

<sup>1</sup>Refers to notes in manuals of triangulation and state publications of triangulation. <sup>2</sup>Direction-angle measured clockwise, referred to initial station.  
<sup>3</sup>To nearest meter only, when no trigonometric leveling is being done.

DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: ROCK ADOT  
NEAREST TOWN: SAFFORD  
CHIEF OF PARTY: T. TAYLOR

STATE: ARIZONA  
QUADRANGLE NO.: 321091  
YEAR: 1976

COUNTY: GRAHAM  
DESCRIBED BY: M. P.

112

NOTE	HEIGHT OF TELESCOPE ABOVE STATION MARK 1.5 METERS; HEIGHT OF LIGHT ABOVE STATION MARK 1.5 METERS.		DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION			
	SURFACE-STATION MARK, UNDERGROUND-STATION MARK		BEARING	DISTANCE		DIRECTION
				FEET	METERS	
2						
	SLICK ADOT ✓					00 00 00
Desc	RM 1 ✓		ENE	36.42	11.103	139 50 39 ✓
Desc	RM 2 ✓		WSW	42.05	12.816	327 53 03 ✓

Detailed description:

The station is about 23 miles east southeast of Safford in the south right-of-way of U.S. Hwy. 70 on the bank of a Hwy. cut. The station is an ADOT Hwy. Division disk stamped ROCK 1976 and is epoxied in a drill hole in bedrock at ground level. The station is 95 feet south of U.S. Hwy. 70 centerline above a Hwy. cut, 6 feet north of R/W fence line and marked with a witness post and sign 3 feet south.

Reference Mark 1 is an ADOT Hwy. Division disk stamped ROCK RM 1 1976 and is epoxied to a 3 foot X 3 foot bedrock about 12 inches above ground level and north of R/W fence line.

Reference Mark 2 is an Hwy. Department disk stamped P&M HWY. 70 1199 M.P. 363.30 and is epoxied to a rock about 4 feet north of R/W fence.

To reach the station from the junction of U.S. Hwys. 70 & 666, 10 miles east of Safford, go east southeast on U.S. Hwy. 70 to mile post 363.31 to station on the right above a Hwy. cut.

OK '83  
D.L.L.

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE

\*Refers to notes in manuals of triangulation and state publications of triangulation. †Direction-angle measured clockwise, referred to initial station.  
‡To nearest meter only, when no trigonometric leveling is being done.

DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: SHAM ADOT STATE: ARIZONA COUNTY: GREENLEE  
 NEAREST TOWN: SAFFORD QUADRANGLE NO.: 321091  
 CHIEF OF PARTY: T. TAYLOR YEAR: 1976 DESCRIBED BY: M.P. 112

NOTE: HEIGHT OF TELESCOPE ABOVE STATION MARK 1.5 METERS. HEIGHT OF LIGHT ABOVE STATION MARK 1.5 METERS.

SURFACE-STATION MARK, UNDERGROUND-STATION MARK	OBJECT	BEARING	DISTANCE		DIRECTION
			FEET	METERS	
	ASH PEAK				00 00 00.00
	RM 2	N	42.31	12.898	132 46 32
	RM 1	E	42.77	13.035	312 29 51

1b  
7a

Desc  
Desc

The station is about 25.5 miles east southeast of Safford in the south R/W of U.S. Hwy. 70 about 200 feet east of the County line.

The station is an ADOT Hwy. Division disk stamped SHAM 1976 and is set in a 10 inch diameter concrete monument projecting 3 inches. The station is 200 feet east of County Line, 5 foot north of south R/W fence, 95 feet south of Hwy. centerline and marked with a witness post and sign 4.3 feet south.

Reference Mark 2 is an ADOT Hwy. Division disk stamped SHAM RM 2 1976 and is set in a 10 inch diameter concrete monument projecting 3 inches and is 5 foot north of south R/W fence line.

Reference Mark 1 is an ADOT Hwy. Division disk stamped SHAM RM 1 1976 and is set in a 10 inch diameter concrete monument projecting 4 inches and is 4 feet north of R/W fenceline.

To reach the station from the junction of U.S. Hwy. 666 & 70, 10 miles east of Safford, travel east southeast on Hwy. 70 to mile post 367 and station in the south R/W.

OK '83  
D.L.L.

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE

Refers to notes in manuals of triangulation and state publications of triangulation. Direction-angle measured clockwise, referred to initial station. To nearest meter only, when no trigonometric leveling is being done.

DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: SLICK  
NEAREST TOWN: SAFFORD  
CHIEF OF PARTY: T. TAYLOR

STATE: ARIZONA COUNTY: GRAHAM  
QUADRANGLE NO.: 321091  
YEAR: 1976 DESCRIBED BY: M.P.

117

NOTE: HEIGHT OF TELESCOPE ABOVE STATION MARK 1.5 METERS; HEIGHT OF LIGHT ABOVE STATION MARK 1.5 METERS.  
SURFACE-STATION MARK, UNDERGROUND-STATION MARK DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION

1b 7a	OBJECT	BEARING	DISTANCE		DIRECTION
			FEET	METERS	
Desc	SETH -				00 00 00
Desc	RM 2 -	NW -	39.51	12.043	18 35 20
Desc	RM 1 -	SE -	39.85	12.145	198 33 05

The station is about 21 miles east southeast of Safford in the south R/W of U.S. Hwy. 70.

The station is an ADOT Hwy. Division disk stamped SLICK 1976 and is set in a 10 inch diameter concrete monument. The disk is 95 feet south of Hwy. centerline just north of R/W fence and is marked by a witness post and sign 3 feet south.

Reference Mark 1 is an ADOT Hwy. Division disk stamped SLICK RM 1 1976 and is set in a 10 inch diameter concrete monument inside south R/W fence.

Reference Mark 2 is an ADOT Hwy. Division disk stamped SLICK RM 2 1976 and is set in a 10 inch diameter concrete monument inside south R/W fence.

To reach the station from the junction of U.S. Hwy. 666 & 70, 10 miles east of Safford, drive southeast on U.S. Hwy. 70 to Mile Post 361.24 and station in right (south) R/W.

OK 183  
D.L.L.

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE

Refers to notes in manuals of triangulation and state publications of triangulation. Direction-angle measured clockwise, referred to initial station. To nearest meter only, when no trigonometric leveling is being done.



AA Form 16-1  
1961

DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: THUMB ADOT  
NEAREST TOWN: SAFFORD  
CHIEF OF PARTY: T. TAYLOR

STATE: ARIZONA COUNTY: GRAHAM  
QUADRANGLE NO.: 321091  
YEAR: 1976 DESCRIBED BY: M. P.

112

NOTE: HEIGHT OF TELESCOPE ABOVE STATION MARK 1.5 METERS. HEIGHT OF LIGHT ABOVE STATION MARK 1.5 METERS.

SURFACE-STATION MARK, UNDERGROUND-STATION MARK	DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION				
	OBJECT	BEARING	DISTANCE		DIRECTION
			FEET	METERS	
	MIKE ADOT ✓				00 00 00.0
Desc RM 1 ✓		E	23.50	7.164	148 55 09
Desc RM 2 ✓		S	38.302	11.677	254 00 40

The station is about 21 miles east of Safford, 14.5 miles west southwest of Clifton on the north side of U.S. Hwy. 666 on a rocky bluff.

The station is an ADOT Hwy. Division disk stamped THUMB 1976 and is epoxied in a drill hole in a rock. Station is 180 feet north of Hwy. centerline located on a rocky bluff marked with a witness post and sign 7 feet north.

Reference Mark 1 is an ADOT Hwy. Division disk stamped THUMB RM 1 1976 and is epoxied to granite bedrock.

Reference Mark 2 is an ADOT Hwy. Division disk stamped THUMB RM 2 1976 and is epoxied to a rock ledge.

To reach the station from the junction of U.S. Hwy. 666 & 70, 10 miles east of Safford, go east on U.S. 666 to mile post 143.61 and station on the left (north) above a rocky bluff.

OK '83 D.L.L.

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE

Refer to notes in manuals of triangulation and state publications of triangulation. † Direction-angle measured clockwise, referred to initial station.  
\* to nearest meter only, when no trigonometric leveling is being done.



DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: TOLLGATE ADOT STATE: ARIZONA COUNTY: GRAHAM  
 NEAREST TOWN: SAFFORD QUADRANGLE NO.: 321091  
 CHIEF OF PARTY: T. TAYLOR YEAR: 1976 DESCRIBED BY: M.P.

112

NOTE: HEIGHT OF TELESCOPE ABOVE STATION MARK 1.5 METERS, HEIGHT OF LIGHT ABOVE STATION MARK 1.5 METERS.

SURFACE-STATION MARK, UNDERGROUND-STATION MARK	DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION	BEARING	DISTANCE		DIRECTION
			FEET	METERS	
YUMA ADOT /					00 00 00.0
RM 1 /		N	37.273	11.361	107 41 30
RM 2 /		ENE	24.405	7.439	174 07 34

Desc  
Desc

The station is about 18 miles east of Safford along the south side of U.S. Hwy. 666 on a rocky ridge.

The station is an ADOT Hwy. Division disk stamped TOLLGATE 1976 and is epoxied in a drill hole in rock outcrop flush with the ground. Station is about 800 feet south of Hwy. 666 centerline on top of a rocky ridge marked with a witness post and sign 6.5 feet to the northeast.

Reference Mark 1 is an ADOT Hwy. Division disk stamped TOLLGATE RM 1 1976 and is epoxied to a flat bedrock.

Reference Mark 2 is an ADOT Hwy. Division disk stamped TOLLGATE RM 2 1976 and is epoxied to a rock outcrop.

To reach the station from the junction of U.S. Hwy. 666 & 70, 10 miles east of Safford, go east on U.S. 666 to mile post 140.6 and station is on a rocky ridge 800 feet south of Hwy. centerline. To get within 500 feet of station with a vehicle, go through R/W fence gate at Mile Post 139.35 and turn immediately left and follow dim tracks along fence for 0.25 mile to a trail up ridge and continue for 1.2 miles just short of top of ridge and end of truck travel. Pack northeast up slope to station on rock outcrop just north of highest point of ridge. A 5 minute pack.

NSF  
83 D.L.A.

Refers to notes in manuals of triangulation and state publications of triangulation. Direction-angle measured clockwise, referred to initial station. To nearest meter only, when no trigonometric leveling is being done.

DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: TRAIL ADOT  
NEAREST TOWN: CLIFTON  
CHIEF OF PARTY: T. TAYLOR

STATE: ARIZONA COUNTY: GREENLEE  
QUADRANGLE NO.: 321091  
YEAR: 1976 DESCRIBED BY: M. P.

112.

NOTE: HEIGHT OF TELESCOPE ABOVE STATION MARK 1.5 METERS. HEIGHT OF LIGHT ABOVE STATION MARK 1.5 METERS.

1b 7a	SURFACE-STATION MARK, UNDERGROUND-STATION MARK	OBJECT	BEARING	DISTANCE		DIRECTION
				DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION		
				FEET	METERS	
		MESA ADOT				00 00 00.00
Desc	RM 1	/	SE	43.81	13.353	19 23 14
Desc	RM 2	/	SW	44.22	13.477	134 40 34

The station is about 24.5 miles east of Safford, 12.5 miles south of Clifton and about 1200 feet north of U.S. Hwy. 666.

The station is an ADOT Hwy. Division disk stamped TRAIL 1976 and is set in a 10 inch diameter concrete monument. The station is about 18 feet south of a trail, projecting 0.5 feet above the ground and is marked with a witness post and sign 4 feet to northwest.

Reference Mark 1 is an ADOT Hwy. Division disk stamped TRAIL RM 1 1976 and is set in a 10 inch diameter concrete monument projecting 0.5 feet.

Reference Mark 2 is an ADOT Hwy. Division disk stamped TRAIL RM 2 1976 and is set in a 10 inch diameter concrete monument.

To reach the station from the junction of U.S. Hwy. 70 & 666, 10 miles east of Safford, go east on Hwy. 666 to mile post 147.03 and a rest area on north side of Hwy. and a gate at west end of Rest Area. Pass through gate and follow track road for 0.21 mile to a fork just before a corral, take a sharp right and cross a wash and go 0.06 mile to a second fork, take left fork and continue for 0.34 mile to station on the right 18 feet south of trail and marked with a witness post and sign.

NSF '83  
D.L.L.

**FILE COPY**  
Geodetic Control Unit  
**DO NOT REMOVE**

Refer to notes in manuals of triangulation and state publications of triangulation. 1 Direction-angle measured clockwise, referred to initial station. 2 nearest meter only, when no trigonometric leveling is being done.

DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: WRIGHT ADOT  
NEAREST TOWN: SAFFORD  
CHIEF OF PARTY: T. TAYLOR

STATE: ARIZONA  
QUADRANGLE NO.: 321091  
YEAR: 1976

COUNTY: GREENLEE  
DESCRIBED BY: M.P.

112

NOTE	HEIGHT OF TELESCOPE ABOVE STATION MARK 1.5 METERS; HEIGHT OF LIGHT ABOVE STATION MARK 1.5 METERS.				
	SURFACE-STATION MARK, UNDERGROUND-STATION MARK	DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION			
	OBJECT	BEARING	DISTANCE		DIRECTION <sup>1</sup>
FEET			METERS		
1b					
7a					
	LORENZO				00 00 00.00
Desc	RM 2	WNW	40.81	12.437	00 47 39
Desc	RM 1	ESE	41.22	12.564	180 53 57

Detailed description:

The station is about 16 miles east southeast of Safford in the south right-of-way of U.S. Hwy. 70.

The station is an ADOT Hwy. Division disk stamped WRIGHT 1976 and is set in a 10 inch diameter concrete monument. The station is 196 feet south of Hwy. centerline and about 4 feet inside R/W fence and is marked by a witness post and sign 3 feet south.

Reference Mark 2 is an ADOT Hwy. Division disk stamped WRIGHT RM 2 1976 and is set in a 10 inch diameter concrete monument about 4 feet inside of south right-of-way fence line.

Reference Mark 1 is a ADOT Hwy. Division disk stamped WRIGHT RM 1 1976 and is set in a 10 inch diameter concrete monument about 4 feet inside of south right-of-way fence.

To reach the station from the junction of U.S. Hwy. 70 & 666, 10 miles east of Safford, go southeast on U.S. 70 to mile post 355.32 and the station on the right, south, about 4 feet inside of R/W fence.

NSF  
83 D.L.L.

<sup>1</sup>Refers to notes in manuals of triangulation and state publications of triangulation. <sup>2</sup>Direction-angle measured clockwise, referred to initial station.  
<sup>3</sup>To nearest meter only, when no trigonometric leveling is being done.

DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: YELLOWSTONE ADOT STATE; ARIZONA COUNTY: GRAHAM 112  
 NEAREST TOWN: SAFFORD QUADRANGLE NO.: 321091  
 CHIEF OF PARTY: T. TAYLOR YEAR: 1976 DESCRIBED BY: M. P.

NOTE: HEIGHT OF TELESCOPE ABOVE STATION MARK 1.5 METERS; HEIGHT OF LIGHT ABOVE STATION MARK 1.5 METERS.

1b 7a	SURFACE-STATION MARK, UNDERGROUND-STATION MARK	DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION				
		OBJECT	BEARING	DISTANCE		DIRECTION
				FEET	METERS	
	THUMB ADOT ✓				00 00 00.0	
Desc	RM 1 ✓	E	51.63	15.736	169 31 20 ✓	
Desc	RM 2 ✓	W	52.26	15.928	348 53 26 ✓	

The station is about 22 miles east of Safford 14.5 southwest of Clifton, on a small cutbank on north side of U.S. Hwy. 666 next to north R/W fence.

The station is an ADOT Hwy. Division disk stamped YELLOWSTONE 1976 and is set in a 10 inch diameter concrete monument. The station is 95 feet north of Hwy. 666 centerline next to north R/W fence on a small cutbank and is 105 feet east Graham - Greenlee County Line.

Reference Mark 1 is an ADOT Hwy. Division disk stamped YELLOWSTONE RM 1 1976 and is set in a 10 inch diameter concrete monument projecting 0.2 feet.

Reference Mark 2 is an ADOT Hwy. Division disk stamped YELLOWSTONE RM2 1976 and is set in a 10 inch diameter concrete monument projecting 0.4 feet.

To reach the station from the junction of U.S. Hwy. 666 & 70, 10 miles east of Safford, go east on U.S. 666 to Mile Post 144.1 and the station on the left (north) next to the north R/W fence marked by witness post and sign 1.9 feet north.

OK '83 D.L.L.

FILE COPY  
 Geodetic Control Unit  
 DO NOT REMOVE

Refer to notes in manuals of triangulation and state publications of triangulation. †Direction-angle measured clockwise, referred to initial station.  
 ‡nearest meter only, when no trigonometric leveling is being done.

DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: YUMA ADOT  
NEAREST TOWN: SAFFORD  
CHIEF OF PARTY: T. TAYLOR

STATE: ARIZONA COUNTY: GRAHAM  
QUADRANGLE NO.: 321091  
YEAR: 1975 DESCRIBED BY: M.P.

112

NOTE: HEIGHT OF TELESCOPE ABOVE STATION MARK 1.5 METERS. HEIGHT OF LIGHT ABOVE STATION MARK 1.5 METERS.

1b 7a	SURFACE-STATION MARK, UNDERGROUND-STATION MARK	OBJECT	BEARING	DISTANCE		DIRECTION
				FEET	METERS	
		TOLLGATE ADOT				00 00 00.00
Desc	RM 2 ✓		SW	40.66	12.393	174 11 43
Desc	RM 1 ✓		NE	40.90	12.465	354 13 54

The station is about 14 miles east of Safford and 5 miles east of junction of U.S. Hwy. 666 & 70 on south side of U.S. 666 inside of R/W fence.

The station is an ADOT Hwy. Division disk stamped YUMA 1976 and is set in a 10 inch diameter concrete monument. The station 95 feet south of U.S. Hwy. 666 centerline inside R/W fence and marked with a witness post and sign 2.5 feet south.

Reference Mark 1 is an ADOT Hwy. Division disk stamped YUMA RM 1 1976 and is set in a 10 inch diameter concrete monument.

Reference Mark 2 is an ADOT Hwy. Division disk stamped YUMA RM 2 1976 and is set in a 10 inch diameter concrete monument.

To reach the station from the junction of U.S. Hwy. 70 & 666, 10 miles east of Safford, travel east on U.S. 666 to mile post 136.70 to station on the right (south) along R/W fence.

NSF  
183 D.L.L.

Refers to notes in manuals of triangulation and state publications of triangulation. | Direction-angle measured clockwise, referred to initial station. To nearest meter only, when no trigonometric leveling is being done.

RECOVERY NOTE, TRIANGULATION STATION

R

NAME OF STATION: ASH PEAK USFS  
 ESTABLISHED BY: R.A.M. YEAR: 1945 STATE: ARIZONA  
 RECOVERED BY: TOM TAYLOR YEAR: 1976 COUNTY: GREENLEE  
 AIRLINE DISTANCE AND DIRECTION FROM NEAREST TOWN:  
 HEIGHT OF TELESCOPE ABOVE STATION MARK 5 FEET.

BENCH MARK ALSO

112

HEIGHT OF LIGHT ABOVE STATION MARK 5 FEET.

DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION

OBJECT	BEARING	DISTANCE		DIRECTION		
		FEET	METERS			
SETH SHAM				00	00	00.00
RM 1	NNW			65	05	51.11
RM 2	SSE	21.25	6.477	231	19	19.00
	W	13.16	4.011	327	19	44.00

The station mark and reference marks 1 and 2 were recovered as described and found in good condition. The station mark has been defaced by pounding but remains solidly in place. The Azimuth mark was searched for and not recovered. Station SHAM will serve for a new Azimuth mark. The distance shown is a Geodimeter length which has been reduced to Geodetic.

To reach the station from the junction of U.S. Hwy. 70 and Arizona Hwy. 75 in Duncan, go west along U.S. 70 for 10.8 miles to a dirt road left, turn left and go south for 0.3 mile through a flat area to a road right. Turn sharp right and follow track road across a wash then go north and northwest for 0.45 mile, turn left across country and up a nose of a ridge to end of truck travel. A 45 minute pack to station.

NSF  
83 D.L.L.

Note: Care should be exercised to prevent movement of instrument by personnel or observer moving in vicinity of station during observations.

**FILE COPY**  
 Geodetic Control Unit  
**DO NOT REMOVE**

*Tom Taylor*

Name of chief of party should be inserted here. The person who actually visited the station should sign his name at the end of the recovery note.

# RECOVERY NOTE, TRIANGULATION STATION

R

NAME OF STATION: GILABOX USSES  
 ESTABLISHED BY: R.A.M.  
 RECOVERED BY: TOM TAYLOR  
 YEAR: 1935 STATE: ARIZONA  
 YEAR: 1976 COUNTY: GREENLEE  
 AIRLINE DISTANCE AND DIRECTION FROM NEAREST TOWN: About 10.5 miles SW of Clifton  
 HEIGHT OF TELESCOPE ABOVE STATION MARK 5 FEET. HEIGHT OF LIGHT ABOVE STATION MARK 5 FEET.

BENCH MARK ALSO

DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION

OBJECT	BEARING	DISTANCE		DIRECTION
		FEET	METERS	
SE COR WMIR GLO				00 00 00.00
RM 1	E	16.52	5.035	126 12 16.00
AZIMUTH MARK 1 Mile	SE			168 39 24.10
RM 2	S	23.16	7.060	200 43 24.00

The station, Reference Marks, and Azimuth Mark were recovered as described and found in good condition. Measurements to R.M. checked within 0.01 meters and angle between R.M.'s checked by 35 seconds.

To reach the station from the junction of U.S. Hwy. 666 & 70 east of Safford, go east on Hwy. 666 & 70 for 9.65 miles to junction of U.S. Hwy. 666, turn left and go 7.80 miles on Hwy. 666 to a gravel road on the left. Go left on gravel road for 2.85 miles to a cattle guard, continue for 1.0 mile and take a left fork for 0.8 mile to a cattle guard, continue for 0.5 mile to another cattle guard, continue for 1.50 miles and take a road left down a ridge. Continue for 1.90 mile to a left fork in road and continue for 0.55 mile to a gate. Pass through gate and go 0.50 mile and take a middle fork in road and go 0.35 mile to west side of a dirt tank. Continue on for 0.20 mile to a gate. From this point, the Azimuth Mark is 200 feet northeast on a small hill. Continue on for 0.5 mile to a left fork, continue on for 0.5 mile to Water Entrapment Project. Station is 500 feet to the northwest on low, rocky hill. Go around east side of trap to end of truck travel, about 300 feet from station. A truck or 4 wheel drive vehicle recommended.

Name of chief of party should be inserted here. *Tom Taylor* The person who actually visited the station should sign his name at the end of the recovery note.



RECOVERY NOTE, TRIANGULATION STATION

K

NAME OF STATION: GILLARD

ESTABLISHED BY: R.A.M.

RECOVERED BY: \*

YEAR: 1945

YEAR: 1976

STATE: ARIZONA

COUNTY: GREENLEE

BENCH MARK ALSO

LINEAL DISTANCE AND DIRECTION FROM NEAREST TOWN: 3.5 miles South of Clifton

HEIGHT OF TELESCOPE ABOVE STATION MARK 5 FEET.

HEIGHT OF LIGHT ABOVE STATION MARK 5 FEET.

DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION

OBJECT	BEARING	DISTANCE		DIRECTION		
		FEET	METERS			
GILABOX				00	00	00.00
RM 2	NW	28.66	8.736	45	40	33
Azimuth Mark 3/4 mile	NNE			146	11	42.6
RM 1	SW	36.30	11.064	298	11	34

The station mark, reference marks 1 and 2 and the Azimuth mark were recovered as described and found in good condition.

To reach the station from Clifton, go south on U.S. Hwy. 666 to mile post 160. Turn right and go west on dirt road for 0.55 mile to a right turn, keep straight ahead for 300 feet to top of a low ridge and station which is about 45 feet from road.

RECOVERY NOTE, TRIANGULATION STATION

R

NAME OF STATION: GUTHRIE USGS

ESTABLISHED BY: L.C.J.

RECOVERED BY: \* TOM TAYLOR

YEAR: 1934

YEAR: 1976

STATE: ARIZONA

COUNTY: GREENLEE

BENCH MARK ALSO

LINEAL DISTANCE AND DIRECTION FROM NEAREST TOWN: 14 miles N.W. of Duncan

HEIGHT OF TELESCOPE ABOVE STATION MARK 5 FEET.

HEIGHT OF LIGHT ABOVE STATION MARK 5 FEET.

DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION

OBJECT	BEARING	DISTANCE		DIRECTION		
		FEET	METERS			
GILABOX				00	00	00.00
RM 2	NNW	59.61	18.168	35	55	02
RM 1	NE	28.13	8.573	93	56	28
PEACH 3,240.086 meters	E			160	36	21.79

The station mark and reference marks 1 and 2 were recovered and found in good condition. The azimuth mark was searched for and not recovered. Station PEACH will serve for an Azimuth mark. The distance shown is a geodimeter length reduced to geodetic.

To reach the station from the junction of U.S. Hwys. 666 and 70 just east of Safford, travel east along U.S. 666 and 70 for 9.65 miles to road junction. Turn left toward Clifton for 7.8 miles to junction with gravel road. (formerly Hwy. 666). Turn left on gravel road 9.8 miles to a micro tower on the left, turn right and stay on the main traveled road to top of mountain and station.

FILE COPY

Geodetic Control Unit

DO NOT DESTROY

## RECOVERY NOTE, TRIANGULATION STATION

R

NAME OF STATION: LORENZO  
 ESTABLISHED BY: R.A.M. YEAR: 1945 STATE: ARIZONA  
 RECOVERED BY: \* TOM TAYLOR YEAR: 1976 COUNTY: GRAHAM BENCH MARK ALSO   
 AIRLINE DISTANCE AND DIRECTION FROM NEAREST TOWN: 8 miles ESE of Solomonville  
 HEIGHT OF TELESCOPE ABOVE STATION MARK 5 FEET. HEIGHT OF LIGHT ABOVE STATION MARK FEET.

DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION						
OBJECT	BEARING	DISTANCE		DIRECTION		
		FEET	METERS			
JUDIA				°	'	"
RM 1				00	00	00.00
AZIMUTH MARK 0.25 mile	NNE	53.25	16.231	93	50	23.00
RM 2	E			166	08	28.10
	SE	49.27	15.018	195	46	47.00

The station mark, reference marks 1 and 2 and the Azimuth mark were recovered as described and found in good condition. Distances and angles check the published data. The 1967 route to the station is adequate.

## RECOVERY NOTE, TRIANGULATION STATION

R

NAME OF STATION: OMON  
 ESTABLISHED BY: R.A.M. YEAR: 1945 STATE: ARIZONA  
 RECOVERED BY: \* T. TAYLOR YEAR: 1976 COUNTY: GRAHAM BENCH MARK ALSO   
 AIRLINE DISTANCE AND DIRECTION FROM NEAREST TOWN: 16.6 miles ESE of Safford  
 HEIGHT OF TELESCOPE ABOVE STATION MARK 5 FEET. HEIGHT OF LIGHT ABOVE STATION MARK 5 FEET.

DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION						
OBJECT	BEARING	DISTANCE		DIRECTION		
		FEET	METERS			
SOL				°	'	"
RM 2				00	00	00.00
TOLLGATE 3,143.730 meters	NNW	33.68	10.266	78	03	10
RM 1	SW	19.59	5.970	169	42	21.27
				341	01	49

The station mark, reference marks 1 and 2 and the Azimuth mark were recovered as described and found in good condition. Owing to road realignment the azimuth mark is difficult to reach and station TOLLGATE is suggested for use. The distance shown is a Geodimeter length reduced to Geodetic. The published route to the station is adequate.

RECOVERY NOTE, TRIANGULATION STATION

R

NAME OF STATION: SETH  
 ESTABLISHED BY: R.A.M. YEAR: 1945 STATE: ARIZONA BENCH MARK ALSO   
 COVERED BY: TOM TAYLOR YEAR: 1976 COUNTY: GRAHAM

LINE DISTANCE AND DIRECTION FROM NEAREST TOWN:  
 HEIGHT OF TELESCOPE ABOVE STATION MARK 5 FEET. HEIGHT OF LIGHT ABOVE STATION MARK 5 FEET.

DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION

OBJECT	BEARING	DISTANCE		DIRECTION		
		FEET	METERS	'	"	''
LORENZO Azimuth Mark 1 mile	ENE			00	00	00.00
RM 1	E	38.86	11.343	152	40	29.0
RM 2	SW	62.12	18.933	293	18	37

The station mark, reference marks 1 and 2 and the Azimuth mark were recovered as described and found in good condition. Angles and Distances check the published data.

To reach the station from the junction of U.S. Hwys. 666 and 70 which is 10 miles east of Safford, travel southeast on U.S. Hwy. 70 to Mile Post 357.15 and a gate on the right. Pass through gate and go 0.07 mile to the El Paso gasline, turn left on gas line road for 1.4 miles to a high point on the gasline road. Turn right through an open area to the top of ridge and station.

RECOVERY NOTE, TRIANGULATION STATION

R

NAME OF STATION: SIDE  
 ESTABLISHED BY: R.A.M. YEAR: 1945 STATE: ARIZONA BENCH MARK ALSO   
 COVERED BY: T. TAYLOR YEAR: 1976 COUNTY: Greenlee

LINE DISTANCE AND DIRECTION FROM NEAREST TOWN: 8.7 miles SE Clifton  
 HEIGHT OF TELESCOPE ABOVE STATION MARK 5 FEET. HEIGHT OF LIGHT ABOVE STATION MARK 5 FEET.

DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION

OBJECT	BEARING	DISTANCE		DIRECTION		
		FEET	METERS	'	"	''
GUTHRIE RM 2	NW	28.57	8.704	00	00	00.00
AZIMUTH MARK 1 1/2 miles	NNE			60	44	30
RM 1	SE	58.67	17.881	163	52	54.0
				226	33	35

The station mark, reference marks 1 and 2 and the Azimuth mark were recovered as described and found in good condition. The Angles and Distances to marks check the published data.

The 1968 route to the station is adequate.

FILE COPY

Geodetic Control Unit

DO NOT DESTROY

# RECOVERY NOTE, TRIANGULATION STATION

R

NAME OF STATION: SOL  
 ESTABLISHED BY: R.A.M.      YEAR: 1945      STATE: ARIZONA  
 RECOVERED BY: T. TAYLOR      YEAR: 1976      COUNTY: GRAHAM      BENCH MARK ALSO

AIRLINE DISTANCE AND DIRECTION FROM NEAREST TOWN: 6 1/2 miles East of Solomon  
 HEIGHT OF TELESCOPE ABOVE STATION MARK 5 FEET.      HEIGHT OF LIGHT ABOVE STATION MARK 9 FEET.

DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION

OBJECT	BEARING	DISTANCE		DIRECTION
		FEET	METERS	
OMON				°   '   ''
RM 1	SE	35.85	10.927	00   00   00.0
123+55 AHD    Approx. 1/2 mile	SSE			64   37   43
RM 2	SW	58.753	17.908	91   44   49.7
				156   24   45

The station mark, reference marks 1 and 2 and the azimuth mark were recovered and found in good condition. The azimuth mark is very difficult to use due to road alignment and 123+55 AHD was established to serve for an Azimuth mark. The mark is 2.2 miles east of the Junction of U.S. Hwys. 666 & 70 in the north headwall of a bridge at mile post 133.

The published route to the station was found adequate.

*Taylor*  
 Name of chief of party should be inserted here. The person who actually visited the station should sign his name at the end of the recovery note.

Arizona (112)

Graham County

1-13 A

1927 N.A.D. (Unadj.)

B.S. Bennett, 1965

Book: PH 1094

Located about 13.6 mi. SE. of Safford; 12 mi. NW. of the Hackberry Ranch; on the S. edge of a dirt rd. about 15 ft. from the centerline of the rd.

Station mark: A 1 x 2 wooden stake driven into the ground and projecting about 6 inches.

Signal: A white flag over a fluorescent cross-target on a 2 x 3 pole centered over station mark.

Signal data:	TWF	11.0 ft.
	BWF	8.0
	TFXT	7.0
	BFXT	4.0

Photo No.: Pameled

ARIZONA ZONE EAST

V.A. Elevation: 3392 ft.

X=709,243

Y=638,170

$\Delta \alpha = +0^{\circ}22'06''$

	LAT. 32° 45' 9.325"	LONG. 109° 29' 9.822"		
	STATION	AZIMUTH	BACK AZIMUTH	DISTANCE
Dry Mtn. (uses)		350° 12' 47.782"	170° 13' 13.399"	23828.33
Sec. Cor. 36/BS/27E		27° 57' 48.482"	207° 56' 27.543"	27293.99
Sec. Cor. 36/7S/27E		120° 12' 12.048"	300° 10' 51.331"	14736.69
Lorenzo (ctgs)		153° 5' 1.128"	333° 4' 36.097"	8724.74
Sol (ctgs)		155° 49' 24.402"	335° 48' 24.522"	23048.93
Seth (ctgs)		274° 4' 35.504"	94° 7' 18.361"	25777.60
Sec. Cor. 25/BS/28E		315° 49' 5.813"	135° 51' 2.814"	26536.13

FILE COPY  
Geodetic Control Unit  
DO NOT REMOVE

FILE COPY

3/31/65 do *valb*

NGS Form 20-45  
 (Rev. 11-63)  
 (Successor to EGS Form 2049)

FIELD GEOGRAPHIC POSITIONS

U.S. DEPARTMENT OF COMMERCE  
 NATIONAL OCEANIC and ATMOSPHERIC ADMINISTRATION

LOCALITY SPRINGVILLE-CLIFTON

NORTH AMERICAN 1927 DATUM

CLASS #1

2nd

ORDER TRIANGULATION

STATE ARIZONA

(112)

G-16247

Quad. #	STATION		LATITUDE AND LONGITUDE		AZIMUTH		BACK AZIMUTH		TO STATION	DISTANCE MP 1:2500
			..	..	..	..	..	..		
135	MORENCI #2 (USGS)	r.m.	33 05 41.32391	282 44 48.56	102 48 42.96	MULLIGAN (USSES)	11,419.905			
			109 23 03.86090	336 05 33.45	156 05 56.49	RENCI	2,702.218			
135	RENCI	r.d.	33 04 21.13033	176 38 44.40	356 38 24.00	SARDINE (ADOT)	16,513.271			
			109 22 21.64475	195 11 55.47	15 12 28.02	SHANNON #2 (USGS)	5,894.244			
135	SHANNON #2 (USGS)	r.m.	33 07 25.76662	96 23 15.10	276 22 40.42	CHASE (ADOT)	1,655.504			
			109 21 22.03260	39 22 45.70	219 21 50.08	MORENCI #2 (USGS)	4,162.100			
134	SUNSET (USGS)	r.d.	33 07 20.77903	67 56 46.30	247 51 59.19	RENCI	14,714.448			
			109 13 35.88091	125 17 01.74	305 11 06.27	GREY PK. (USGS)	20,604.568			
135	MULLIGAN (USSES)	r.d.	33 04 19.31854	212 43 20.87	32 44 36.54	SUNSET (USGS)	6,645.658			
			109 15 54.45044	90 20 52.53	270 17 21.24	RENCI	10,043.503			
135	TRAM (ADOT)	d.m.	33 05 06.10731	98 51 21.88	278 48 54.97	MORENCI #2 (ADOT)	7,062.253			
			109 18 34.77202	289 06 15.24	109 07 42.74	MULLIGAN (USSES)	4,400.961			
135	CRUZ (ADOT)	d.m.	33 10 01.59845	22 24 31.73	202 23 12.64	TRAM (ADOT)	9,845.942			
			109 16 10.04710	321 06 07.27	141 07 31.56	SUNSET (USGS)	6,364.602			
135	DORSEY (ADOT)		33 07 07.91460	14 21 22.45	194 21 02.23	TRAM (ADOT)	3,873.416			
			109 17 57.73901	207 32 24.16	27 33 23.04	CRUZ (ADOT)	6,434.896			
134	OREJANO (ADOT)		33 11 12.70302	36 19 25.34	216 17 28.41	DORSEY (ADOT)	9,358.078			
			109 14 23.91887	51 27 50.28	231 26 52.20	CRUZ (ADOT)	3,515.452			
			350 06 46.51	170 07 12.78	SUNSET (USGS)	7,252.269				
135	GILLARD	r.d.	33 00 10.65049	133 35 00.16	313 32 09.68	RENCI	11,197.531			
			109 17 08.93806	194 09 20.48	14 10 01.09	MULLIGAN (USSES)	7,900.526			
✓ 112	GILABOX (USSES)	r.d.	32 56 08.74788	190 09 17.62	10 10 14.68	RENCI	15,410.058			
			109 24 06.38966	235 27 48.78	55 31 35.95	GILLARD	13,154.933			

No check on this position.

Abbreviations used: d., described; m., marked; n., not; o., uncovered; i., lost; p., probably.  
 (Examples: n.d., not described; p. l., probably lost.)

U.S. GOVERNMENT PRINTING OFFICE: 1979 700 207

NAD 83 VALUES AVAILABLE

FILE COPY

MAR 29 1978

U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC and ATMOSPHERIC ADMINISTRATIONNOAA Form 16-45  
(2-73)  
(Formerly CAGS Form 28d)

G-1593.1

## FIELD GEOGRAPHIC POSITIONS

CLASS 1

LOCALITY SAFFORD - CLIFTON TRAVERSE

NORTH AMERICAN 1927 DATUM 2nd - ORDER TRIANGULATION. STATE ARIZONA (112)

STATION	LATITUDE AND LONGITUDE			AZIMUTH			BACK AZIMUTH			TO STATION	DISTANCE
	°	'	"	°	'	"	°	'	"		METERS
<del>SE COR WMIR GLO. 135</del>	<del>33</del>	<del>04</del>	<del>40.1472</del>	<del>312</del>	<del>23</del>	<del>17.60</del>	<del>132</del>	<del>23</del>	<del>33.84</del>	<del>STOVE ADOT.</del>	<del>1,045.207</del>
<del>d.m. 109</del>	<del>29</del>	<del>42.2365</del>	<del>331</del>	<del>01</del>	<del>47.88</del>	<del>151</del>	<del>04</del>	<del>50.69</del>	<del>GILABOX.</del>	<del>18,000.214</del>	
<del>STOVE ADOT. 135</del>	<del>33</del>	<del>04</del>	<del>17.2722</del>	<del>291</del>	<del>58</del>	<del>40.08</del>	<del>112</del>	<del>05</del>	<del>14.42</del>	<del>GILLARD.</del>	<del>20,247.862</del>
<del>d.m. 109</del>	<del>29</del>	<del>12.4780</del>	<del>332</del>	<del>09</del>	<del>33.28</del>	<del>152</del>	<del>12</del>	<del>19.87</del>	<del>GILABOX.</del>	<del>17,013.149</del>	
<del>STOVE RM 2 ADOT. 135</del>	<del>33</del>	<del>04</del>	<del>17.1404</del>	<del>133</del>	<del>00</del>	<del>25.80</del>	<del>313</del>	<del>00</del>	<del>09.81</del>	<del>SE COR WMIR GLO</del>	<del>1,039.129</del>
<del>d.m. 109</del>	<del>29</del>	<del>12.9408</del>	<del>251</del>	<del>20</del>	<del>12.71</del>	<del>71</del>	<del>20</del>	<del>12.96</del>	<del>STOVE ADOT.</del>	<del>12.709</del>	
<del>GILABOX. 112 ✓</del>	<del>32</del>	<del>56</del>	<del>08.8248</del>	<del>235</del>	<del>28</del>	<del>00.19</del>	<del>55</del>	<del>31</del>	<del>47.37</del>	<del>GILLARD.</del>	<del>13,154.913</del>
<del>d.r. 109</del>	<del>24</del>	<del>06.6324</del>	<del>303</del>	<del>09</del>	<del>46.11</del>	<del>123</del>	<del>12</del>	<del>38.44</del>	<del>GUTHRIE.</del>	<del>9,848.050</del>	
<del>GILLARD. 135</del>	<del>33</del>	<del>00</del>	<del>10.7072</del>	<del>317</del>	<del>17</del>	<del>41.26</del>	<del>137</del>	<del>19</del>	<del>39.35</del>	<del>SIDE.</del>	<del>8,309.086</del>
<del>d.r. 109</del>	<del>17</del>	<del>09.1660</del>	<del>310</del>	<del>58</del>	<del>03.86</del>	<del>130</del>	<del>59</del>	<del>18.48</del>	<del>RATTLER ADOT.</del>	<del>4,713.293</del>	
<del>OWL ADOT. 112 ✓</del>	<del>32</del>	<del>59</del>	<del>32.2796</del>	<del>129</del>	<del>53</del>	<del>29.46</del>	<del>309</del>	<del>52</del>	<del>59.75</del>	<del>GILLARD.</del>	<del>1,845.972</del>
<del>d.m. 109</del>	<del>16</del>	<del>14.6049</del>	<del>311</del>	<del>40</del>	<del>25.47</del>	<del>131</del>	<del>41</del>	<del>10.38</del>	<del>RATTLER ADOT.</del>	<del>2,867.832</del>	
<del>RATTLER ADOT. 111</del>	<del>32</del>	<del>58</del>	<del>30.3745</del>	<del>316</del>	<del>23</del>	<del>03.52</del>	<del>136</del>	<del>24</del>	<del>36.81</del>	<del>CABAR ADOT</del>	<del>6,458.752</del>
<del>d.m. 109</del>	<del>14</del>	<del>52.1114</del>	<del>325</del>	<del>28</del>	<del>15.99</del>	<del>145</del>	<del>28</del>	<del>59.46</del>	<del>SIDE ADOT.</del>	<del>3,661.549</del>	
<del>JUNCTION ADOT. 111</del>	<del>32</del>	<del>58</del>	<del>08.4015</del>	<del>100</del>	<del>23</del>	<del>37.21</del>	<del>280</del>	<del>22</del>	<del>19.79</del>	<del>RATTLER ADOT.</del>	<del>3,755.700</del>
<del>d.m. 109</del>	<del>12</del>	<del>29.8514</del>	<del>34</del>	<del>41</del>	<del>41.17</del>	<del>214</del>	<del>41</del>	<del>07.24</del>	<del>SIDE.</del>	<del>2,845.660</del>	
<del>SIDE. 111</del>	<del>32</del>	<del>56</del>	<del>52.4463</del>	<del>50</del>	<del>46</del>	<del>40.07</del>	<del>230</del>	<del>43</del>	<del>47.66</del>	<del>GUTHRIE.</del>	<del>10,644.660</del>
<del>d.r. 109</del>	<del>13</del>	<del>32.2100</del>	<del>342</del>	<del>14</del>	<del>51.22</del>	<del>162</del>	<del>15</del>	<del>38.43</del>	<del>APACHE.</del>	<del>7,406.030</del>	
<del>GUTHRIE. 112 ✓</del>	<del>32</del>	<del>53</del>	<del>13.836</del>	<del>341</del>	<del>55</del>	<del>27.06</del>	<del>161</del>	<del>57</del>	<del>09.18</del>	<del>ASH PEAK.</del>	<del>15,807.910</del>
<del>d.r. 109</del>	<del>18</del>	<del>49.468</del>	<del>19</del>	<del>58</del>	<del>22.42</del>	<del>199</del>	<del>57</del>	<del>45.02</del>	<del>CO LINE MK FD.</del>	<del>5,247.070</del>	
<del>CABAR ADOT 111</del>	<del>32</del>	<del>55</del>	<del>58.5506</del>	<del>1</del>	<del>18</del>	<del>15.23</del>	<del>181</del>	<del>18</del>	<del>12.66</del>	<del>APACHE ADOT.</del>	<del>5,394.770</del>
<del>d.m. 109</del>	<del>12</del>	<del>00.6155</del>	<del>82</del>	<del>32</del>	<del>40.93</del>	<del>262</del>	<del>31</del>	<del>22.28</del>	<del>CHAPMAN.</del>	<del>3,790.740</del>	

No check on this position.

Abbreviations used: d.=described; m.=marked; n.=not; r.=recovered; l.=lost; p.=probably.  
(f.=faded; d.=not described; n. l.=probably lost.)

\* U.S. GOVERNMENT PRINTING OFFICE: 1973-762-2

G-15931

FILE COPY

MAR 29 1978

FIELD GEOGRAPHIC POSITIONS

2

CLASS 1

LOCALITY SAFFORD - CLIFTON TRAVERSE

NORTH AMERICAN 1927 DATUM 2nd

ORDER TRIANGULATION.

STATE ARIZONA (112)

STATION	LATITUDE AND LONGITUDE			AZIMUTH			BACK AZIMUTH			TO STATION	DISTANCE
	°	'	"	°	'	"	°	'	"		METERS
<del>CHAPMAN ADOT 111</del>	<del>32</del>	<del>55</del>	<del>42.5608</del>	<del>212</del>	<del>38</del>	<del>04.27</del>	<del>32</del>	<del>38</del>	<del>33.13</del>	<del>SIDE</del>	<del>2,556.567</del>
d.m.	109	14	25.2880	172	19	35.57	352	19	20.98	RATTLER ADOT	5,216.334
MESA ADOT. ✓ 112	32	54	35.2227	215	12	52.47	35	13	54.92	SIDE	5,174.664
d.m.	109	15	27.0864	217	44	18.58	37	44	52.16	CHAPMAN ADOT	2,623.187
PEACH ADOT. ✓ 112	32	52	48.7002	212	47	15.54	32	47	59.72	MESA ADOT	3,903.585
d.m.	109	16	48.4325	40	59	13.47	220	58	45.75	TRAIL ADOT	2,024.255
TRAIL ADOT. ✓ 112	32	51	59.0942	215	34	38.95	35	35	50.85	MESA ADOT	5,914.186
d.m.	109	17	39.4988	349	53	48.86	169	53	54.23	WALNUT ADOT	1,465.701
WALNUT ADOT. ✓ 112	32	51	12.2521	72	58	00.05	252	56	39.35	CO LINE MK FD.	4,046.621
d.m.	109	17	29.6108								
CO LINE MK FD ✓ ADOT 112	32	50	33.7445	322	22	37.87	142	23	54.59	RHY ADOT	6,032.476
d.r.	109	19	58.3863	95	44	59.38	275	44	03.03	MIKE ADOT	2,715.613
YELLOWSTONE ✓ ADOT. 112	32	51	00.4555	331	38	50.02	151	38	59.28	CO LINE MK FD.	934.984
d.m.	109	20	15.4603	77	01	00.02	257	00	44.87	THUMB ADOT	745.371
THUMB ADOT. ✓ 112	32	50	55.0186	299	14	39.29	119	15	03.70	CO LINE MK FD.	1,341.333
d.m.	109	20	43.3910	75	56	28.70	255	55	56.75	MIKE ADOT	1,578.889
MIKE ADOT. ✓ 112	32	50	42.5642	90	14	18.79	270	13	13.89	TOLLGATE ADOT	3,112.098
d.m.	109	21	42.2874								
TOLLGATE ✓ ADOT. 112	32	50	42.9693	272	46	52.72	92	48	53.98	CO LINE MK FD.	5,821.063
d.m.	109	23	41.9601	63	40	22.02	243	39	23.28	OMON	3,143.730

\*No check on this position.

Abbreviations used: d.=described; m.=marked; n.=not; r.=recovered; l.=lost; p.=probably.  
 (Examples: n.d.=not described; p.l.=probably lost.)



G-15931

FILE COPY

MAR 29 1978

FIELD GEOGRAPHIC POSITIONS

3

LOCALITY SAFFORD - CLIFTON TRAVERSE CLASS 1 NORTH AMERICAN 1927 DATUM 2nd ORDER TRIANGULATION STATE ARIZONA (112)

STATION	LATITUDE AND LONGITUDE			AZIMUTH			BACK AZIMUTH			TO STATION	DISTANCE
	°	'	''	°	'	''	°	'	''		METERS
CO LINE MK AT RHY ADOT GGBS 112	32	47	59.7806	141	51	48.52	321	50	30.90	CO LINE MK FD GGBS	6,030.909
	109	17	35.1742								
SHAM ADOT. 112	32	46	19.5990	148	33	45.73	328	33	06.92	RHY.	3,575.215
d.m.	109	16	25.1780	333	08	38.06	153	09	01.94	ASH PEAK.	2,542.566
ASH PEAK. (USFS) 112	32	45	05.9609	233	59	43.59	54	02	47.70	SHELL ADOT.	10,935.725
d.r.	109	15	41.0547	233	29	28.24	53	29	28.24	CO LINE MK GGBS.	0.095
<del>SHELL ADOT. III</del>	<del>32</del>	<del>48</del>	<del>34.5212</del>	<del>122</del>	<del>05</del>	<del>27.89</del>	<del>302</del>	<del>00</del>	<del>41.24</del>	<del>GUTHRIE.</del>	<del>16,213.840</del>
<del>d.m.</del>	<del>109</del>	<del>10</del>	<del>00.9964</del>								
<del>MCKEON ADOT. III</del>	<del>32</del>	<del>50</del>	<del>20.9182</del>	<del>340</del>	<del>38</del>	<del>30.75</del>	<del>160</del>	<del>38</del>	<del>54.74</del>	<del>SHELL ADOT.</del>	<del>3,473.877</del>
<del>d.m.</del>	<del>109</del>	<del>10</del>	<del>45.2585</del>	<del>157</del>	<del>25</del>	<del>44.48</del>	<del>337</del>	<del>25</del>	<del>01.03</del>	<del>APACHE ADOT.</del>	<del>5,423.017</del>
<del>APACHE ADOT III</del>	<del>32</del>	<del>53</del>	<del>03.4715</del>	<del>338</del>	<del>40</del>	<del>16.40</del>	<del>158</del>	<del>41</del>	<del>23.84</del>	<del>SHELL ADOT.</del>	<del>8,893.629</del>
<del>d.m.</del>	<del>109</del>	<del>12</del>	<del>05.3370</del>	<del>91</del>	<del>46</del>	<del>17.59</del>	<del>271</del>	<del>42</del>	<del>38.16</del>	<del>GUTHRIE.</del>	<del>10,509.515</del>
CO LINE MK AT ASH PEAK. GGBS USFS 112	32	45	05.9627	53	29	28.24	233	29	28.24	ASH PEAK.	0.095
d.r.	109	15	41.0518								

No check on this position.

Abbreviations used: d.=described; m.=marked; n.=not; r.=recovered; l.=lost; p.=probably.  
 (Examples: n.d.=not described; p. l.=probably lost.)

*for.*

G-15931

FILE COPY

MAR 29 1978

U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC and ATMOSPHERIC ADMINISTRATION

FIELD GEOGRAPHIC POSITIONS

LOCALITY SAFFORD - CLIFTON TRAVERSE CLASS 1  
NORTH AMERICAN 1927 DATUM 2nd ORDER TRIANGULATION STATE ARIZONA (112)

STATION		LATITUDE AND LONGITUDE			AZIMUTH			BACK AZIMUTH			TO STATION	DISTANCE
		°	'	"	°	'	"	°	'	"		METERS
OMON.	112	32	49	57.6953	239	51	58.30	59	55	35.78	GUTHRIE, SOL.	12,046.635
	d.r.	109	25	30.2948	73	57	00.41	253	54	01.47		8,936.735
YUMA ADOT.	112	32	49	38.1060	251	13	32.35	71	15	35.02	TOLLGATE ADOT.	6,213.620
	d.r.	109	27	28.1857	258	51	27.53	78	52	31.44	OMON.	3,125.099
SOL.	113	32	48	37.3668	251	15	46.31	71	17	41.34	YUMA ADOT.	5,829.345
	d.r.	109	31	00.4244	285	09	25.87	105	17	43.65	ASH PEAK,	24,795.888
JUDIA ADOT.	113	32	47	29.1198	236	17	29.88	56	18	35.52	SOL.	3,789.208
	d.m.	109	33	01.5890	291	49	51.98	111	51	32.42	LORENZO,	5,201.032
LORENZO.	112	32	46	26.2965	157	28	58.29	337	28	23.44	SOL.	4,371.036
	d.r.	109	29	56.0785								
WRIGHT ADOT.	112	32	45	53.2831	104	10	41.48	284	09	17.70	LORENZO,	4,155.230
	d.m.	109	27	21.2838	290	54	30.71	110	56	14.87	SETH.	5,364.864
SETH.	88	32	44	51.0888	267	58	35.98	88	03	10.64	ASH PEAK,	13,225.399
	d.r.	109	24	08.7780	108	00	01.74	287	56	53.80	LORENZO	9,503.948
SLICK ADOT.	112	32	45	11.2474	81	28	24.84	261	26	58.89	SETH,	4,182.380
	d.m.	109	21	29.9010	261	07	09.82	81	08	16.48	ROCK ADOT.	3,245.926
ROCK ADOT.	112	32	45	27.4974	211	32	46.40	31	33	45.87	RHY ADOT.	5,462.945
	d.m.	109	19	26.6990	220	26	13.77	40	26	58.74	MICRO ADOT.	3,333.629
MICRO ADOT.	112	32	46	49.8566	198	11	53.08	18	12	07.57	RHY ADOT.	2,229.723
	d.m.	109	18	03.6112	310	46	09.43	130	47	26.58	ASH PEAK.	4,900.044
RHY ADOT	112	32	47	58.6173	230	33	33.13	50	33	34.04	CO. LINE MK GGBS?	56.430
	d.m.	109	17	36.8480	330	27	21.10	150	28	23.78	ASH PEAK,	6,113.053

\*No check on this position.

Abbreviations used: d.=described; m.=marked; n.=not; r.=recovered; l.=lost; p.=probably.  
(Examples: n.d.=not described; p. l.=probably lost.)