GPS STATION OBSERVATION LOG April 16, 2003

Station Designation: (check applicable: __ FBN __ CBN __ PAC __ SAC __ BM) AG07 – 2004.65 TRM		Station PID, if any: —	Date (UTC): 8-Feb-06
General Location: Causeway Bridge – Turnaround #7	Airport ID, if any:	Station 4-Character ID: AG07	Day of Year: 039
Project Name: EPCT 6	Project Number: GPS Week 1361	Station Serial # (SSN):	Session ID:(A,B,C etc) 2

NAD83 Latitude: 30° 09 03.09	NAD83 Longitude: 90° 07 54.16	NAD83 Ellipsoidal Height: -23.538 meters NAVD88 Orthometric Ht.: 2.938 meters GEOID99 Geoid Height: meters	Agency Full Name: Tidal, Inc Operator Full Name: John Purpura Phone #: (703) 574-2336 e-mail address:
Observation Session Times (UTC): Sched. Start _____ Stop _____ Actual Start 20:29 Stop 22:00	Epoch Interval: 15 Seconds Elevation Mask = 13 Degrees		

Receiver Brand & Model: Trimble 4000SSE P/N: 21000-31 S/N: 3363A04305 Firmware Version: ☐ CamCorder Battery, ☐ 12V DC, ☐ 110V AC, ☐ Other	Antenna Code*, Brand & Model: Compact G/Ce w/ GP. Plane P/N: 22020-00 S/N: 0220022412 Cable Length, meters: Vehicle is Parked 50 meters S (direction) from antenna.	Antenna plumb before session? (Y / N) — Circle Antenna plumb after session? (Y / N) — Yes or No Antenna oriented to true North? (Y / N) — -If no, Weather observed at antenna ht. (Y / N) — explain Antenna ground plane used? (Y / N) — " Antenna radome used? (Y / N) — If yes, Eccentric occupation (>0.5 mm)? (Y / N) — describe. Any obstructions above 10°? (Y / N) — Use Radio interference source nearby (Y / N) — Vis. form

Tripod or Antenna Mount: Check one:
☑ Fixed-Leg Tripod, ☐ Collapsible-leg tripod ☐ Fixed Mount
Brand & Model: Seco
P/N:
S/N: 5715-00-40C
Last Adjustment date: 8-Feb-06

Psychrometer (if used) Brand & Model:
P/N:
S/N:
Last Calibration or check Date:

**** ANTENNA HEIGHT ****

	Before Session Begins: Meters	Before Session Begins: Feet	After Session Ends: Meters	After Session Ends: Feet
A= Datum point to Top of Tripod (Tripod Height)	2.000	6.562	2.000	6.562
B= Additional offset to ARP if any (Tribrach/Spacer)	0.063	0.206	0.063	0.206
H= Antenna Height **= A + B** = Datum Point to Antenna Reference Point (ARP)	2.063	6.768	2.063	6.768

Meters = Feet x (0.3048) Note &/or sketch **ANY** unusual conditions.
Height Entered Into Receiver = _____ meters. Be **Very Explicit** as to where and how Measured!

Barometer (if used) Brand & Model:
S/N:

Weather Data	Weather Codes	Time (UTC)	Dry-Bulb Temp Fahrenheit	Dry-Bulb Temp Celsius	WetBulb Temp Fahrenheit	WetBulb Temp Celsius	Rel. % Humidity	Atm. Pressure inches Hg	Atm. Pressure millibar
Before	01000								
Middle									
After	01000								

Remarks, Comments on Problems, Sketches, Pencil Rubbing, etc:
opus – 2.938(m) 9.639

30-09-03.05069
90-07-54.13463

Weather codes are required. Weather data are optional but encouraged. *Antenna code comes from ant_info file furnished by project coordinator.

Data File Name(s): AG0739 2.dat
(Standard NGS Format = aaaaddds.xxx)
where aaaa=4-Character ID, ddd=Day of Year, s=Session ID, xxx=file dependant extension

Updated Station Description: ☐ Attached ☐ Submitted earlier
Visibility Obstruction Form: ☐ Attached ☐ Submitted earlier
Photographs of Station: ☐ Attached ☐ Submitted earlier
Pencil Rubbing of Mark: ☐ Attached

LOG CHECKED BY:

Table of Weather Codes	CODE	PROBLEM	VISIBILITY	TEMPERATURE	CLOUD COVER	WIND
	0	did not occur	Good, over 15 miles	Normal, 32° F- 80° F	Clear, below 20%	Calm, under 5mph (8km/h)
	1	did occur	Fair, 7-15 miles	Hot, over 80°F (27 C)	Cloudy, 20% to 70%	Moderate, 5 to 15 mph
	2	- not used -	Poor, under 7 miles	Cold, below 32° F (0 C)	Overcast, over 70%	Strong, over15 mph (24km/h)

Examples: 00000 = No problem, good visibility, normal temp, clear, calm wind 12121 = Problems, poor visibility, hot, overcast, moderate wind

GPS STATION OBSERVATION LOG
April 16, 2003

Station Designation: (check applicable: __ FBN __ CBN __ PAC __ SAC __ BM) AG07 – 2004.65 TBM		Station PID, if any: —	Date (UTC): 08-FEB-06
General Location: Causeway Bridge – Turnaround #9	Airport ID, if any:	Station 4-Character ID: AG07	Day of Year: 039
Project Name: IPOT 6	Project Number: GPS-Week 1361	Station Serial # (SSN): —	Session ID:(A,B,C etc) 1

NAD83 Latitude: 30° 09' 03.09"	NAD83 Longitude: 90° 07' 54.19"	NAD83 Ellipsoidal Height: -23.511 meters NAVD88 Orthometric Ht.: 2.962 meters GEOID99 Geoid Height: meters	Agency Full Name: 3001, INC. Operator Full Name: JOHN PARRERA Phone #: (703) 574-2336 e-mail address:
Observation Session Times (UTC): Sched. Start _____ Stop _____ Actual Start 16:02 Stop 17:33	Epoch Interval= 15 Seconds Elevation Mask = 13 Degrees		

Receiver Brand & Model: TRIMBLE 4000 SE P/N: 21000-31 S/N: 3343A04305 Firmware Version: ☐ CamCorder Battery, ☑ 12V DC, ☐ 110V AC, ☐ Other	Antenna Code*, Brand & Model: TRIMBLE Comp. 4/L2 w/GRD. PLANE P/N: 22020-00 S/N: 0220024412 Cable Length, meters: 5.56 Vehicle is Parked 50 meters N (direction) from antenna.	Antenna plumb before session? (Y) N) Antenna plumb after session? (Y) N) Antenna oriented to true North? (Y) N) Weather observed at antenna ht. (Y) N) Antenna ground plane used? (Y) N) Antenna radome used? (Y / N) Eccentric occupation (>0.5 mm)? (Y) N) Any obstructions above 10°? (Y) N) Radio interference source nearby (Y) N) Circle Yes or No -If no, explain " If yes, describe. Use Vis. form

Tripod or Antenna Mount: Check one:
☑ Fixed-Leg Tripod, ☐ Collapsible-leg tripod ☐ Fixed Mount
Brand & Model: Seco
P/N: 5115-00-42 L
S/N:
Last Adjustment date: 08-FEB-2006

Psychrometer (if used) Brand & Model:
P/N:
S/N:
Last Calibration or check Date:

**** ANTENNA HEIGHT ****

	Before Session Begins: Meters	Before Session Begins: Feet	After Session Ends: Meters	After Session Ends: Feet
A= Datum point to Top of Tripod (Tripod Height)	2.000	6.562	2.000	6.562
B= Additional offset to ARP if any (Tribrach/Spacer)	0.063	0.206	0.063	0.206
H= Antenna Height **= A + B** = Datum Point to Antenna Reference Point (ARP)	2.063	6.768	2.063	6.768

Meters = Feet x (0.3048)
Height Entered Into Receiver = 2.000 meters.
Note &/or sketch **ANY** unusual conditions. Be **Very Explicit** as to where and how Measured!

Barometer (if used) Brand & Model:
S/N:

Weather Data	Weather Codes	Time (UTC)	Dry-Bulb Temp Fahrenheit	Dry-Bulb Temp Celsius	WetBulb Temp Fahrenheit	WetBulb Temp Celsius	Rel. % Humidity	Atm. Pressure inches Hg	Atm. Pressure millibar
Before	01000								
Middle									
After	01000								

Remarks, Comments on Problems, Sketches, Pencil Rubbing, etc:

OPUS-clev 9.718(ft) 2.962(m)
Lat = 30-09-03.05022
Long = 29-07-54.13450

Weather codes are required. Weather data are optional but encouraged. *Antenna code comes from ant_info file furnished by project coordinator.

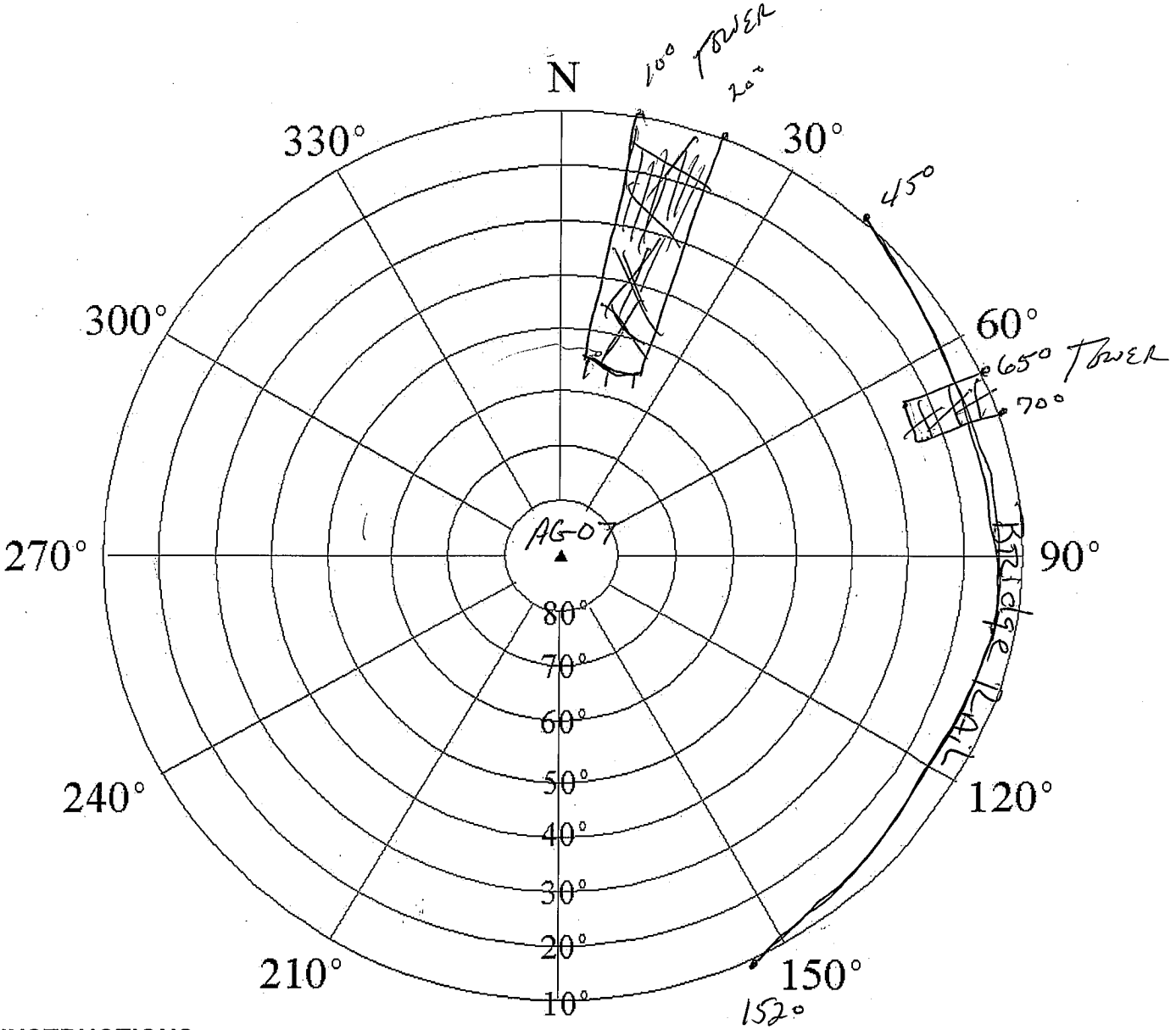
Data File Name(s): AG070391.DAT
(Standard NGS Format = aaaaddds.xxx)
where aaaa=4-Character ID, ddd=Day of Year, s=Session ID, xxx=file dependant extension

Updated Station Description: ☑ Attached ☐ Submitted earlier
Visibility Obstruction Form: ☑ Attached ☐ Submitted earlier
Photographs of Station: ☑ Attached ☐ Submitted earlier
Pencil Rubbing of Mark: ☐ Attached

LOG CHECKED BY:

Table of Weather Codes	CODE	PROBLEM	VISIBILITY	TEMPERATURE	CLOUD COVER	WIND
	0	did not occur	Good, over 15 miles	Normal, 32° F- 80° F	Clear, below 20%	Calm, under 5mph (8km/h)
	1	did occur	Fair, 7-15 miles	Hot, over 80°F (27 C)	Cloudy, 20% to 70%	Moderate, 5 to 15 mph
	2	- not used -	Poor, under 7 miles	Cold, below 32° F (0 C)	Overcast, over 70%	Strong, over15 mph (24km/h)
Examples:	00000 = No problem, good visibility, normal temp, clear, calm wind			12121 = Problems, poor visibility, hot, overcast, moderate wind		

NATIONAL GEODETIC SURVEY VISIBILITY OBSTRUCTION DIAGRAM



INSTRUCTIONS:

Identify obstructions by azimuth (magnetic) and elevation angle (above horizon) as seen from station mark.
Indicate distance and direction to nearby structures and reflective surfaces (potential multipath sources).

4-char ID: ~~AG06~~ AG07 Designation: ~~AG06~~ AG07

PID: _____ Location: Lake Pontchartrain Causeway Bridge - Mile 9

County: ~~St. Tammany~~, Jefferson Reconnaissance By: John LaPeau / M. Howard

Height above mark, meters: 2.000 Agency/Company: 3001, Inc.

Phone: (703) 574-2336 Date: 08-FEB-2006

Check if no obstructions above 10 degrees ☐

GPS STATION OBSERVATION LOG
April 16, 2003

Station Designation: (check applicable: X FBN__ CBN__ PAC__ SAC X BM) ALCO		Station PID, if any: BJ1342	Date (UTC): Feb 08, 2006
General Location: Floodwall Lake Pontchartrain, Orleans Parish	Airport ID, if any:	Station 4-Character ID: ALCO	Day of Year: 039
Project Name: IPET TO 6	Project Number: GPS-	Station Serial # (SSN): N/A	Session ID:(A,B,C etc) I

NAD83 Latitude: 30° 01' 36.523"N	NAD83 Longitude: 090° 06' 46.21"W	NAD83 Ellipsoidal Height: -24.37 meters NAVD88 Orthometric Ht.: +1.87 meters GEOID99 Geoid Height: -26.24 meters	Agency Full Name: BOD, INC Operator Full Name: VERON MCNEAL Phone #: ( ) e-mail address:

Observation Session Times (UTC):
Sched. Start ____ Stop 22:00
Actual Start 15:10 Stop 22:09
Epoch Interval= 15 Seconds
Elevation Mask = 13 Degrees

Receiver Brand & Model: Trimble 4000 SSI P/N: 24840-11 S/N: 3608A14652 Firmware Version: ☐ CamCorder Battery, ☒ 12V DC, ☐ 110V AC, ☐ Other	Antenna Code*, Brand & Model: Trimble Comp L1/L2 w/gld PLANE P/N: 22020-00 S/N: 02205049 6 Cable Length, meters: 5 15m Vehicle is Parked 30 meters S (direction) from antenna.	Antenna plumb before session? (Y) N) Antenna plumb after session? (Y) N) Antenna oriented to true North? (Y) N) Weather observed at antenna ht. (Y) N) Antenna ground plane used? (Y) N) Antenna radome used? (Y (N) Eccentric occupation (>0.5 mm)? (Y (N) Any obstructions above 10°? (Y (N) Radio interference source nearby (Y (N) Circle Yes or No -If no, explain " If yes, describe. Use Vis. form

Tripod or Antenna Mount: Check one:
☒ Fixed-Leg Tripod, ☐ Collapsible-leg tripod ☐ Fixed Mount
Brand & Model: SECO
P/N: 5115-00-yel
S/N:
Last Adjustment date: 02/08/06

Psychrometer (if used) Brand & Model:
P/N: N/A
S/N:
Last Calibration or check Date:

**** ANTENNA HEIGHT ****

	Before Session Begins: Meters	Feet	After Session Ends: Meters	Feet
A= Datum point to Top of Tripod (Tripod Height)	2.000		2.000	
B= Additional offset to ARP if any (Tribrach/Spacer)	0.063		0.063	
H= Antenna Height = A + B = Datum Point to Antenna Reference Point (ARP)	2.063		2.063	

Meters = Feet x (0.3048) UNOF
Height Entered Into Receiver = 2.000 meters.
Note &/or sketch **ANY** unusual conditions. Be **Very Explicit** as to where and how Measured!

Barometer (if used) Brand & Model:
S/N: N/A

Weather Data	Weather Codes	Time (UTC)	Dry-Bulb Temp Fahrenheit	Dry-Bulb Temp Celsius	WetBulb Temp Fahrenheit	WetBulb Temp Celsius	Rel. % Humidity	Atm. Pressure inches Hg	Atm. Pressure millibar
Before	00000								
Middle									
After									

Remarks, Comments on Problems, Sketches, Pencil Rubbing, etc:

Weather codes are required. Weather data are optional but encouraged. *Antenna code comes from ant_info file furnished by project coordinator.

Data File Name(s): ALCO 0392.DAT
(Standard NGS Format = aaaaddds.xxx)
where aaaa=4-Character ID, ddd=Day of Year, s=Session ID, xxx=file dependant extension

Updated Station Description: ☐ Attached ☐ Submitted earlier
Visibility Obstruction Form: ☐ Attached ☐ Submitted earlier
Photographs of Station: ☐ Attached ☐ Submitted earlier
Pencil Rubbing of Mark: ☐ Attached

LOG CHECKED BY:

Table of Weather Codes	CODE	PROBLEM	VISIBILITY	TEMPERATURE	CLOUD COVER	WIND
	0	did not occur	Good, over 15 miles	Normal, 32° F- 80° F	Clear, below 20%	Calm, under 5mph (8km/h)
	1	did occur	Fair, 7-15 miles	Hot, over 80°F (27 C)	Cloudy, 20% to 70%	Moderate, 5 to 15 mph
	2	- not used -	Poor, under 7 miles	Cold, below 32° F (0 C)	Overcast, over 70%	Strong, over15 mph (24km/h)

Examples: 00000 = No problem, good visibility, normal temp, clear, calm wind 12121 = Problems, poor visibility, hot, overcast, moderate wind

GPS STATION OBSERVATION LOG (01-Nov-2000)

Station Designation: GRAHAM RM (check applicable: FBN / CBN / PAC / SAC / BM)

Station PID, if any: BJ1359

Date (UTC): Feb 08, 2006

General Location: Lake Pontchartrain Floodwall Orleans

Airport ID, if any: Patrick

Station 4-Character ID: GRAH

Day of Year: 039

Project Name: IFT To 6

Project Number: GPS-

Station Serial # (SSN): N/A

Session ID:(A,B,C etc): 1

NAD83 Latitude: 30° 01' 55.26"

NAD83 Longitude: 090° 04' 37.14"

NAD83 Ellipsoidal Height: meters

NAVD88 Orthometric Ht.: meters

GEOID99 Geoid Height: meters

Agency Full Name: 3001, INC

Operator Full Name: VERRON

Phone #: ( ) mcneal

e-mail address:

Observation Session Times (UTC): Sched. Start — Stop 22100 Epoch Interval=15 Seconds

Actual Start 16:00 Stop 2200 Elevation Mask = 13 Degrees

GPS Receiver: Trimble

Manufacturer & Model: 4000 SSi

P/N: 21000-31

S/N: 3324A03158

Firmware Version:

• CamCorder Battery, • 12V DC, • 110V AC, • Other

GPS Antenna: Trimble Comp

Manufacturer & Model: L2/L2 w/Gnd Plane

P/N: 22020-00

S/N: 02200 10018

Cable Length, meters:

Vehicle is Parked 30 meters E (direction) from antenna.

		Circle Yes or No -If no, explain
Antenna plumb before session?	(Y / N)	
Antenna plumb after session?	(Y / N)	
Antenna oriented to true North?	(Y / N)	
Weather observed at antenna ht.	(Y / N)	
Antenna ground plane used?	(Y / N)	"
Antenna radome used?	(Y / N)	If yes, describe. Use Vis. form
Eccentric occupation (>0.5 mm)?	(Y / N)	
Any obstructions above 10°?	(Y / N)	
Radio interference source nearby	(Y / N)	

Tripod or Ant. Mount: Check one:

• Fixed-Height Tripod, • Slip-Leg Tripod, • Fixed Mount

Manufacturer & Model: SECO

P/N: 5115-00-FLY

S/N:

Last Calibration date: 02-08-06

Tribrach: Check one:

• None, • Wild GDF 22, • Topcon, • Other (describe)

Last Calibration date: N/A

**** ANTENNA HEIGHT ****

(see back of form for measurement illustration)

	Before Session Begins: measure and record both Meters	AND Feet	After Session Ends: measure and record both Meters	AND Feet
A= Datum point to Top of Tripod (Tripod Height)	2.000		2.000	
B= Additional offset to ARP if any (Tribrach/Spacer)	0.063		0.063	
H= Antenna Height **= A + B** = Datum Point to Antenna Reference Point (ARP)	2.063		2.063	

Note: Meters = Feet X (0.3048) unless

Height Entered Into Receiver = 2.000 meters.

Please note &/or sketch **ANY** unusual conditions. Be **Very Explicit** as to where and how Measured!

Barometer:

Manufacturer & Model:

P/N:

S/N: N/A

Last Calibration or check Date:

Psychrometer:

Manufacturer & Model:

S/N: N/A

Weather DATA	Time (UTC)	Dry-Bulb Temp Fahrenheit	Dry-Bulb Temp Celsius	WetBulb Temp Fahrenheit	WetBulb Temp Celsius	Rel. % Humidity	Atm. Pressure inches Hg	Atm. Pressure millibar	Weather Codes *
Before	0006								
Middle									
After									
Average of Readings									* See back of form for codes

Remarks, Comments on Problems, Sketches, Pencil Rubbing, etc:

Note: Entries are Required in all Unshaded areas.

Data File Name(s): GRAH0392.DAT

(Standard NGS Format = aaaaddds.xxx)

where aaaa=4-Character ID, ddd=Day of Year, s=Session ID, xxx=file dependant extension

Updated Station Description: • Attached • Submitted earlier

Visibility Obstruction Form: • Attached • Submitted earlier

Photographs of Station: • Attached • Submitted earlier

Pencil Rubbing of Mark: • Attached

LOG CHECKED BY:

GPS STATION OBSERVATION LOG April 16, 2003

Station Designation: (check applicable: __ FBN __ CBN __ PAC __ SAC __ BM)	Station PID, if any:	Date (UTC):
G 95 (LA. HT_ Mod)	BJ0710	08-FEB-2006
General Location: / **Airport ID, if any:**	**Station 4-Character ID:**	**Day of Year:**
Norco, LA. Bonne Carre Sp. Hwy Structure	G095	039
Project Name: / **Project Number:**	**Station Serial # (SSN):**	**Session ID:(A,B,C etc)**
IPET 6 / GPS-Week 1361		1

NAD83 Latitude	NAD83 Longitude	NAD83 Ellipsoidal Height	Agency Full Name:
30 ° 00 ' 02.35269 "	90 ° 25 ' 44.92714 "	-17.94 meters	3001 Inc.
		NAVD88 Orthometric Ht.	Operator Full Name: Maurice Hansard
Observation Session Times (UTC): Sched. Start _____ Stop _____	Epoch Interval= 15 Seconds	8.27 meters	Phone #: (703) 574-2336
Actual Start 1236 Stop 2200	Elevation Mask = 13 Degrees	GEOID99 Geoid Height -26.20 meters	e-mail address:

Receiver Brand & Model: Trimble 4000SE

P/N: 21000-31
S/N: 3403A04927
Firmware Version: 7.29

☐ CamCorder Battery, ☑ 12V DC, ☐ 110V AC, ☐ Other

Antenna Code*, Brand & Model: (Trimble Comp. Yes)

P/N: 22020-00
S/N: 0220004927
Cable Length, meters: 9.35

Vehicle is Parked 20 meters E (direction) from antenna.

		Circle Yes or No -If no, explain "
Antenna plumb before session?	(Y) / N	
Antenna plumb after session?	(Y) / N	
Antenna oriented to true North?	(Y) / N	
Weather observed at antenna ht.	(Y) / N	
Antenna ground plane used?	(Y) / N	
Antenna radome used?	Y / (N)	If yes, describe. Use Vis. form
Eccentric occupation (>0.5 mm)?	Y / (N)	
Any obstructions above 10°?	(Y) / N	
Radio interference source nearby	Y / (N)	

Tripod or Antenna Mount: Check one:
☑ Fixed-Leg Tripod, ☐ Collapsible-leg tripod ☐ Fixed Mount
Brand & Model: Seco
P/N: 5115-00-Yel
S/N:
Last Adjustment date: 08 FEB 2006

Psychrometer (if used) Brand & Model:

P/N:
S/N:
Last Calibration or check Date:

** ANTENNA HEIGHT **

	Before Session Begins: Meters	Before Session Begins: Feet	After Session Ends: Meters	After Session Ends: Feet
A= Datum point to Top of Tripod (Tripod Height)	2.000	6.562	2.000	6.562
B= Additional offset to ARP if any (Tribrach/Spacer)	0.063	0.206	0.063	0.206
H= Antenna Height **= A + B** = Datum Point to Antenna Reference Point (ARP)	2.063	6.768	2.063	6.768

Meters = Feet x (0.3048)
Height Entered Into Receiver = 2.000 meters.

Note &/or sketch **ANY** unusual conditions. Be **Very Explicit** as to where and how Measured!

Barometer (if used) Brand & Model:

S/N:

Weather Data	Weather Codes	Time (UTC)	Dry-Bulb Temp Fahrenheit	Dry-Bulb Temp Celsius	WetBulb Temp Fahrenheit	WetBulb Temp Celsius	Rel. % Humidity	Atm. Pressure inches Hg	Atm. Pressure millibar
Before	01000								
Middle									
After									

Remarks, Comments on Problems, Sketches, Pencil Rubbing, etc:

Weather codes are required. Weather data are optional but encouraged. *Antenna code comes from ant_info file furnished by project coordinator.

Data File Name(s): G0950391.DAT

(Standard NGS Format = aaaaddds.xxx)
where aaaa=4-Character ID, ddd=Day of Year, s=Session ID, xxx=file dependant extension

Updated Station Description: ☐ Attached ☑ Submitted earlier
Visibility Obstruction Form: ☐ Attached ☑ Submitted earlier
Photographs of Station: ☐ Attached ☐ Submitted earlier
Pencil Rubbing of Mark: ☐ Attached

LOG CHECKED BY:

Table of Weather Codes

CODE	PROBLEM	VISIBILITY	TEMPERATURE	CLOUD COVER	WIND
0	did not occur	Good, over 15 miles	Normal, 32° F- 80° F	Clear, below 20%	Calm, under 5mph (8km/h)
1	did occur	Fair, 7-15 miles	Hot, over 80°F (27 C)	Cloudy, 20% to 70%	Moderate, 5 to 15 mph
2	- not used -	Poor, under 7 miles	Cold, below 32° F (0 C)	Overcast, over 70%	Strong, over15 mph (24km/h)

Examples: 00000 = No problem, good visibility, normal temp, clear, calm wind 12121 = Problems, poor visibility, hot, overcast, moderate wind