

MEMORANDUM FOR: Jeff Olsen
NGS Project Coordinator

Chris Pearson
State Project Coordinator

FROM: Charles W. Challstrom
Director, National Geodetic Survey

SUBJECT: LETTER INSTRUCTIONS:
Illinois Federal Base Network Survey

You are hereby tasked to facilitate a geodetic survey in Illinois as described in "[Standing Instructions: State-Sponsored FBN Surveys](#)" dated December 21, 2001. Utilize the following project identifiers as appropriate:

Title:	ILLINOIS FBN, 2002
Accession number:	GPS-1731
Task Numbers:	8K6D2000 (FBN) 8K6D4000 (CORS TIES)

A proposed station list, map, observation schedule, and list of project deliverables are attached.

STATE DELIVERABLES

STATE PROJECT COORDINATOR = Christopher Pearson
 II DOT, Aerial Surveys Sec, 2300 South Dirksen Parkway, Springfield, Illinois 62764
 Telephone: 217-524-4890 SD 637, FAX 217-524-4149, Email: Chris.Pearson@noaa.gov

FILE TYPE	SOFTWARE	FILE NAME	DESCRIPTION	STATUS
R-files (raw GPS data)	receiver software receiver or TEQC	4444DDDS.XXX 4444DDDS.YYn,4444DDDS.YYo	Raw GPS observables in receiver-dependent format. Convert files to Receiver-Independent EXchange format.	
B-file (observation metadata)	CR8BB v.5.5.1 GEOID99	IL_FBN.bfl	Input observation data from observation logs. Add modeled geoid heights.	
D-file (station descriptions)	WDDPROC v.4.xx	IL_FBN.dsc	Input station data from description logs.	
Survey Forms	For each station: GPS observation logs , pencil rubbings , description log , visibility diagram .			
Photographs	Photos & formats described in " Requirements for Digital Photographs of Survey Marks & CORS Antennas "			
Field Project Report	A boilerplate report format is available.			

Detailed descriptions of project deliverables can be found in the [FGCS Bluebook Annex L](#)

NGS DELIVERABLES

NGS PROJECT COORDINATOR = Jeff Olsen, National Geodetic Survey
 N/NGS4, SSMC3-8504, 1315 East-West Highway, Silver Spring, MD 20910-3282
 Telephone: 301-713-3215, Fax: 301-713-4327, Email: Jeff.Olsen@noaa.gov

FILE TYPE	SOFTWARE	FILE NAME	DESCRIPTION	STATUS
GPS precise orbit files	IGS website	4444DDDS.YYd.Z	Precise ephemerides for GPS satellites in SP3 format.	
A-file (adjust configuration)	QQRECORD v.1.4	IL_FBN.af1	Modify A-file by adding QQ records from G-file.	
G-file (computed baselines)	PAGES v.2002.01.28	IL_FBN.gfl	Compute baselines from RINEX2 GPS data and orbit files.	
Free adjustment Constrained adjustment	ADJUST v.4.26	IL_FBN.free.adjust IL_FBN.cors.adjust	Compute ITRF positions from A-file, B-file, & G-file. Constrain ellipsoidal heights and CORS positions. Include UNIX "plotres_prompt.bsh" plots.	
Various DQA program outputs	includes COMPGB , OBSDES, NEWCHKOB, OBSCHK, WCHKDESC , etc. Explain any error messages encountered.			
Final Project Report	WordPerfect v.8	IL_FBN.wpd	See FGCS Bluebook Annex K for details.	