ANNEX I

SUMMARY OF CODES USED IN GEODETIC SURVEY POINT DESCRIPTIONS

This annex contains lists of codes that are used in the preparation of station descriptions and recovery notes pertaining to geodetic control points. The use of these codes is explained in Chapter 3, entitled <u>GEODETIC SURVEY POINT DESCRIPTIVE</u> (GEOD DESC) DATA.

DR CODE - used to identify the descriptive data by type.

ENTRY	DEFINITION
D	An original description of a newly set mark.
R	Everything else (includes recovered, not recovered, destroyed, and the first report to NGS of a pre-existing mark not in the NGS data base).

ENTRY	DEFINITION
F	A full recovery description of a survey point which you think is not included in the NGS Data Base.
М	A recovery description which does not contain a complete textual description of the mark, but may contain updates or modifications to the most current description. This is used when a mark is destroyed or not recovered , or when the text of the previous description of this mark in the NGS data base requires no update (i.e., the text is in accord with current practice, and the situation at the mark has not changed).
Т	A complete re-description of a mark which is included in the NGS data base.

<u>SPECIAL APPLICATIONS CODE</u> - used to represent certain specialized information about the control point.

ENTRY	DEFINITION
F	Fault monitoring site
N	Site not suitable for receiving satellite signals
0	Other (see descriptive text)
Р	Site determined suitable for receiving satellite signals in connection with geodetic surveys
Т	Tidal station

SHALLOW SETTINGS (LESS THAN 10 FT DEEP)	DEFAULT	STABILITY	CODE
00 - setting not listed - see description		D	
01 - unspecified shallow		D	
02 - driven into the ground		D	
03 - imbedded in the ground		D	
04 - surrounded by a mass of concrete		D	
05 - set into the top of an irregular mass of concrete		D	
07 - set into the top of a round concrete monument		С	
08 - set into the top of a square concrete monument		С	
set into the top of a prefabricated concrete post	• • •		
09 imbedded in the ground		D	
10 surrounded by a mass of concrete		D	
11 imbedded in a mass of concrete		С	
set into a prefabricated concrete block		· ·	
12 imbedded in the ground		D	
13 surrounded by a mass of concrete		D	
14 imbedded in a mass of concrete		C	
15 - a metal rod driven into the ground		D	
	. ~		
16 - a metal rod with base plate buried/screwed into the	e ground	a C	
set into the top of a metal pipe		Б.	
17 driven into the ground		D	
18 imbedded in the ground		D	
19 surrounded by a mass of concrete		D ~	
20 imbedded in a mass of concrete		С	
set in concrete at the center of a clay tile pipe	• • •		
21 fastened to a wooden pile driven into marsh		D	
22 imbedded in the ground		D	
23 surrounded by a mass of concrete		D	
24 imbedded in a mass of concrete		С	
SETTINGS IN STRUCTURES			
30 - light structures (other than listed below)		D	
31 - pavements (street, sidewalk, curb, apron, etc.)		D	
32 - retaining walls, etc.= concrete ledge		С	
33 - piles and poles (e.g. spike in utility pole)		D	
34 - footings/foundation walls of small/medium structure	es	С	
35 - mat foundations, etc. = concrete slab		С	
36 - massive structures (other than listed below)		В	
37 - massive retaining walls		В	
38 - abutments and piers of large bridges		В	
39 - tunnels		В	
40 - massive structures with deep foundations		A	
41 - large structures with foundations on bedrock		A	
UNSLEEVED DEEP SETTINGS (10 FT. +)			
45 - unspecified depth		С	
46 - copper-clad steel rod		В	
47 - galvanized steel pipe		В	
48 - galvanized steel rod		В	
49 - stainless steel rod		В	
50 - aluminum alloy rod		В	

SLEEVED DEEP SETTINGS (10 FT. +)	DEFAULT STABILITY CODE
EE unancaified nine/red in alcore	D
55 - unspecified pipe/rod in sleeve 56 - copper-clad steel rod in sleeve	B B
57 - galvanized steel pipe in sleeve	В В
58 - galvanized steel rod in sleeve	В
59 - stainless steel rod in sleeve	В
60 - aluminum alloy rod in sleeve	В
	J
SETTINGS IN ROCKS OR BOULDERS	
65 - unspecified rock	В
66 - in rock outcrop	A
67 - set into a drill hole in rock outcrop	A
68 and marked by a chiseled cross	A
69 and marked by a chiseled triangle	A
70 and marked by a chiseled circle	A
71 and marked by a chiseled square	A
73 - in a rock ledge	A
74 - set into a drill hole in a rock ledge	A
75 at the intersection of two chiseled lines	A
76 and marked by a chiseled triangle	A
77 and marked by a chiseled circle	A
78 and marked by a chiseled square	A
80 - in a boulder	C
81 - set into a drill hole in a boulder	C
82 and marked by a chiseled cross	C
83 and marked by a chiseled triangle	C
84 and marked by a chiseled circle	С
85 and marked by a chiseled square	С
87 - in a partially exposed boulder	C
88 - set into a drill hole in a partially exposed bould	
89 and marked by a chiseled cross	C
90 and marked by a chiseled triangle	C
91 and marked by a chiseled circle	C
92 and marked by a chiseled square	C
93 - in bedrock 94 - set in a drill hole in bedrock	A
set into a mass of concrete	A
95 in a depression in rock outcrop	A
96 in a depression in a rock ledge	A
97 in a depression in a boulder	C
98 in a depression in a partially exposed boulder	C
99 in a depression in the bedrock	A

MARKER TYPE CODES - (Not for Landmark stations)

A - aluminum marker (other than a disk)	E - earthenware pot
B - bolt	F - flange-encased rod
C - cap-and-bolt pair	G - glass bottle
DA - astro marker (usually a disk)	H - drill hole
DB - bench mark disk	I - metal rod
DD - survey disk	J - earthenware jug
DE - traverse station disk	K - clay tile pipe
DG - gravity station disk	L - gravity plug
DH - horizontal control disk	M - ammo shell casing
DJ - tidal station disk	N - nail
DK - gravity reference mark disk	O - chiseled circle
DM - magnetic station disk	P - pipe cap
DO - unspecified disk type (see text)	Q - chiseled square
DP - base line pier disk	R - rivet
DQ - calibration base line disk	S - spike
DR - reference mark disk	T - chiseled triangle
DS - triangulation station disk	U - concrete post
DT - topographic station disk	V - stone monument
DU - boundary marker disk	W - unmonumented
DV - vertical control disk	X - chiseled cross
DW - NOS hydrographic survey disk	Y - drill hole in brick
DZ - azimuth mark disk	Z - see description

Landmarks Not Listed:

00 - see description

Natural Objects:

- 01 lone tree
- 02 conspicuous rock 56 skeleton tower
- 03 mountain peak
- 04 rock pinnacle
- 05 rock awash

<u>Waterfront Landmarks</u> and Visual Aids

to Navigation:

- 11 piling
- 12 dolphin
- 13 lighthouse
- 14 navigation light
- 15 range marker
- 16 daybeacon
- 17 flag tower
- 18 signal mast

Aeronautical and

Electronic Aids to Navigation:

- 22 airway beacon
- 23 VOR antenna
- 24 RBN antenna
- 25 radar antenna
- 26 spherical radome
- 27 radio range mast
- 28 LORAN mast

Broadcast and <u>Communications</u>

<u>Facilities</u>:

- 41 antenna mast
- 42 radio/TV mast
- 43 radio/TV tower
- 44 microwave mast
- 45 microwave tower

Tanks and Towers:

- 51 tank
- 52 standpipe tank
- 53 elevated tank
- 54 water tower
- 55 tower
- 57 lookout tower
- 58 control tower

<u>Miscellaneous</u>

Landmarks:

- 61 pole
- 62 flagpole
- 63 stack
- 64 silo
- 65 grain elevator
 - 66 windmill
 - 67 oil derrick
 - 68 commercial sign
 - 69 regulatory sign
 - 70 monument
 - 71 boundary monument
- 72 cairn
- 73 lookout house
- 74 large cross
- 21 airport beacon 75 belfry

Features of

a Building:

- 81 gable
- 82 finial
 - 83 flagstaff
- 84 lightning rod
- 85 chimney
- 86 cupola
- 87 dome
- 88 observatory dome
- 89 spire
- 90 church spire
- 91 church cross
- 92 antenna
- 93 microwave antenna
- 94 rooftop ventilator
- 95 rooftop blockhouse

MAGNETIC CODE - used to indicate the magnetic property of the mark or monument.

- A steel rod adjacent to monument
- B bar magnet imbedded in monument
- H bar magnet set in drill hole
- I marker is a steel rod
- M marker equipped with bar magnet
- N no magnetic material
- O other see description
- P marker is a steel pipe
- R steel rod imbedded in monument
- S steel spike imbedded in monument
- T steel spike adjacent to monument

TRANSPORTATION CODE - used to indicate the mode of transportation used (or to be used) to reach the station or to reach the location where packing begins, if packing to the station site is required.

- A light airplane
- B boat
- C car (or station wagon)
- F float airplane
- H helicopter
- 0 other (see descriptive text)
- P light truck (pickup, carryall, etc.)
- T truck (larger than 3/4 ton)
- W tracked vehicle (Weasel, Snowcat, etc.)
- X four-wheel drive vehicle

AGENCY CODE - used to indicate the type of survey organization which established or recovered the geodetic control point.

- A National Agencies
- B Inter-State or Inter-Province Agencies
- C State, Province, Commonwealth, and Territorial Agencies
- D County Agencies
- E Municipal Agencies (Cities)
- F Inter-City and Inter-County Agencies
- G Railroads
- H Utility and Natural Resource Companies
- I Surveying, Engineering, and Construction Industry
- J Educational Institutions
- K Professional and Amateur Associations
- L Miscellaneous Commercial or Private Firms
- M Non-Specific Designators

<u>CONDITION CODE</u> - used to indicate the condition of the monument or mark each time the geodetic control point is recovered.

- G Good
- N Not Recovered, Not Found
- O Other (See descriptive text)
- P Poor, Disturbed, Mutilated, Requires Maintenance
- X Destroyed (See Note Below)

 $\underline{\text{STABILITY CODE}}$ - may be entered in the *26* coded record to override the software default codes in the descriptions for publication.

CODE	DEFINITION
A	Monuments expected to hold their elevations very well.
В	Monuments which generally hold their elevations fairly well.
С	Monuments which may be affected by surface ground movements.
D	Monuments of questionable or unknown vertical stability.

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